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(This book contains parts 20 to 39)

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CHAPTER I—FEDERAL COMMUNICATIONS COMMISSION (Continued)

SUBCHAPTER B—COMMON CARRIER SERVICES

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CROSS REFERENCE:
Excise taxes on communications services and facilities: Internal Revenue, 26 CFR Part 49.

SUPPLEMENTAL PUBLICATIONS:
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Federal Communications Commission Reports of Orders and Decisions.
Communications Act of 1934 *(with amendments and index thereto), Recap. Version, January 1974, Packets No. 1 through 6.*

MISCELLANEOUS PUBLICATIONS:
Study Guide and Reference Material for Commercial Radio Operator Examinations, May 1979 edition.

SUBCHAPTER B—COMMON CARRIER SERVICES

PART 20—COMMERCIAL MOBILE RADIO SERVICES

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AUTHORITY: 47 U.S.C. 154, 160, 251–254, 303, and 332 unless otherwise noted.

SOURCE: 59 FR 18495, Apr. 19, 1994, unless otherwise noted.

§ 20.1 Purpose.

The purpose of these rules is to set forth the requirements and conditions applicable to commercial mobile radio service providers.

§ 20.3 Definitions.

Automatic Number Identification (ANI). A system that identifies the billing account for a call. For 911 systems, the ANI identifies the calling party and may be used as a call back number.

Commercial mobile radio service. A mobile service that is:

(a)(1) provided for profit, *i.e.*, with the intent of receiving compensation or monetary gain;

(2) An interconnected service; and

(3) Available to the public, or to such classes of eligible users as to be effectively available to a substantial portion of the public; or

(b) The functional equivalent of such a mobile service described in paragraph (a) of this section.

Designated PSAP. The Public Safety Answering Point (PSAP) designated by the local or state entity that has the authority and responsibility to designate the PSAP to receive wireless 911 calls.

Incumbent Wide Area SMR Licensees. Licensees who have obtained extended implementation authorizations in the 800 MHz or 900 MHz service, either by waiver or under Section 90.629 of these rules, and who offer real-time, two-way voice service that is interconnected with the public switched network.

Handset-based location technology. A method of providing the location of wireless 911 callers that requires the use of special location-determining hardware and/or software in a portable or mobile phone. Handset-based location technology may also employ additional location-determining hardware and/or software in the CMRS network and/or another fixed infrastructure.

Interconnection or Interconnected. Direct or indirect connection through automatic or manual means (by wire, microwave, or other technologies such as store and forward) to permit the transmission or reception of messages or signals to or from points in the public switched network.

Interconnected Service. A service: (a) That is interconnected with the public switched network, or interconnected with the public switched network through an interconnected service provider, that gives subscribers the capability to communicate to or receive communication from all other users on the public switched network; or

(b) For which a request for such interconnection is pending pursuant to section 332(c)(1)(B) of the Communications Act, 47 U.S.C. 332(c)(1)(B). A mobile service offers interconnected service even if the service allows subscribers to access the public switched network only during specified hours of the day, or if the service provides general access to points on the public switched network but also restricts access in certain limited ways. Interconnected service does not include any interface between a licensee's facilities and the public switched network exclusively for a licensee's internal control purposes.

Location-capable handsets. Portable or mobile phones that contain special location-determining hardware and/or

software, which is used by a licensee to locate 911 calls.

Mobile Service. A radio communication service carried on between mobile stations or receivers and land stations, and by mobile stations communicating among themselves, and includes:

(a) Both one-way and two-way radio communications services;

(b) A mobile service which provides a regularly interacting group of base, mobile, portable, and associated control and relay stations (whether licensed on an individual, cooperative, or multiple basis) for private one-way or two-way land mobile radio communications by eligible users over designated areas of operation; and

(c) Any service for which a license is required in a personal communications service under part 24 of this chapter.

Network-based Location Technology. A method of providing the location of wireless 911 callers that employs hardware and/or software in the CMRS network and/or another fixed infrastructure, and does not require the use of special location-determining hardware and/or software in the caller's portable or mobile phone.

Private Mobile Radio Service. A mobile service that is neither a commercial mobile radio service nor the functional equivalent of a service that meets the definition of commercial mobile radio service. Private mobile radio service includes the following:

(a) Not-for-profit land mobile radio and paging services that serve the licensee's internal communications needs as defined in part 90 of this chapter. Shared-use, cost-sharing, or cooperative arrangements, multiple licensed systems that use third party managers or users combining resources to meet compatible needs for specialized internal communications facilities in compliance with the safeguards of § 90.179 of this chapter are presumptively private mobile radio services;

(b) Mobile radio service offered to restricted classes of eligible users. This includes entities eligible in the Public Safety Radio Pool and Radiolocation service.

(c) 220–222 MHz land mobile service and Automatic Vehicle Monitoring systems (part 90 of this chapter) that do not offer interconnected service or that are not-for-profit; and

(d) Personal Radio Services under part 95 of this chapter (General Mobile Services, Radio Control Radio Services, and Citizens Band Radio Services); Maritime Service Stations (excluding Public Coast stations) (part 80 of this chapter); and Aviation Service Stations (part 87 of this chapter).

Pseudo Automatic Number Identification (Pseudo-ANI). A number, consisting of the same number of digits as ANI, that is not a North American Numbering Plan telephone directory number and may be used in place of an ANI to convey special meaning. The special meaning assigned to the pseudo-ANI is determined by agreements, as necessary, between the system originating the call, intermediate systems handling and routing the call, and the destination system.

Public Safety Answering Point. A point that has been designated to receive 911 calls and route them to emergency service personnel.

Public Switched Network. Any common carrier switched network, whether by wire or radio, including local exchange carriers, interexchange carriers, and mobile service providers, that use the North American Numbering Plan in connection with the provision of switched services.

[59 FR 18495, Apr. 19, 1994, as amended at 61 FR 38402, July 24, 1996; 61 FR 40352, Aug. 2, 1996; 62 FR 18843, Apr. 17, 1997; 63 FR 2637, Jan. 16, 1998; 64 FR 60130, Nov. 4, 1999]

§ 20.5 Citizenship.

(a) This rule implements section 310 of the Communications Act, 47 U.S.C. 310, regarding the citizenship of licensees in the commercial mobile radio services. Commercial mobile radio service authorizations may not be granted to or held by:

(1) Any foreign government or any representative thereof;

(2) Any alien or the representative of any alien;

(3) Any corporation organized under the laws of any foreign government;

(4) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof

or by any corporation organized under the laws of a foreign country; or

(5) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country, if the Commission finds that the public interest will be served by the refusal or revocation of such license.

(b) The limits listed in paragraph (a) of this section may be exceeded by eligible individuals who held ownership interests on May 24, 1993, pursuant to the waiver provisions established in section 332(c)(6) of the Communications Act. Transfers of ownership to any other person in violation of paragraph (a) of this section are prohibited.

[59 FR 18495, Apr. 19, 1994, as amended at 61 FR 55580, Oct. 28, 1996]

§ 20.6 CMRS spectrum aggregation limit.

(a) *Spectrum limitation*. No licensee in the broadband PCS, cellular, or SMR services (including all parties under common control) regulated as CMRS (see 47 CFR 20.9) shall have an attributable interest in a total of more than 45 MHz of licensed broadband PCS, cellular, and SMR spectrum regulated as CMRS with significant overlap in any geographic area, except that in Rural Service Areas (RSAs), as defined in 47 CFR 22.909, no licensee shall have an attributable interest in a total of more than 55 MHz of licensed broadband PCS, cellular, and SMR spectrum regulated as CMRS with significant overlap in any RSA.

(b) *SMR spectrum*. To calculate the amount of attributable SMR spectrum for purposes of paragraph (a) of this section, an entity must count all 800 MHz and 900 MHz channels located at any SMR base station inside the geographic area (MTA or BTA) where there is significant overlap. All 800 MHz channels located on at least one of those identified base stations count as 50 kHz (25 kHz paired), and all 900 MHz channels located on at least one of those identified base stations count as 25 kHz (12.5 kHz paired); provided that any discrete 800 or 900 MHz channel shall be counted only once per licensee within the geographic area, even if the licensee in question utilizes the same channel at more than one location within the relevant geographic area. No more than 10 MHz of SMR spectrum in the 800 and 900 MHz SMR services will be attributed to an entity when determining compliance with the cap.

(c) *Significant overlap*. (1) For purposes of paragraph (a) of this section, significant overlap of a PCS licensed service area and CGSA(s) (as defined in § 22.911 of this chapter) or SMR service area(s) occurs when at least 10 percent of the population of the PCS licensed service area for the counties contained therein, as determined by the latest available decennial census figures as complied by the Bureau of the Census, is within the CGSA(s) and/or SMR service area(s).

(2) The Commission shall presume that an SMR service area covers less than 10 percent of the population of a PCS service area if none of the base stations of the SMR licensee are located within the PCS service area. For an SMR licensee's base stations that are located within a PCS service area, the channels licensed at those sites will be presumed to cover 10 percent of the population of the PCS service area, unless the licensee shows that its protected service contour for all of its base stations covers less than 10 percent of the population of the PCS service area.

(d) *Ownership attribution*. For purposes of paragraph (a) of this section, ownership and other interests in broadband PCS licensees, cellular licensees, or SMR licensees will be attributed to their holders pursuant to the following criteria:

(1) Controlling interest shall be attributable. Controlling interest means majority voting equity ownership, any general partnership interest, or any means of actual working control (including negative control) over the operation of the licensee, in whatever manner exercised.

(2) Partnership and other ownership interests and any stock interest amounting to 20 percent or more of the equity, or outstanding stock, or outstanding voting stock of a broadband

PCS, cellular or SMR licensee shall be attributed, except that ownership will not be attributed unless the partnership and other ownership interests and any stock interest amount to at least 40 percent of the equity, or outstanding stock, or outstanding voting stock of a broadband PCS, cellular or SMR licensee if the ownership interest is held by a small business or a rural telephone company, as these terms are defined in § 1.2110 of this chapter or other related provisions of the Commission's rules, or if the ownership interest is held by an entity with a non-controlling equity interest in a broadband PCS licensee or applicant that is a small business.

(3) Investment companies, as defined in 15 U.S.C. 80a–3, insurance companies and banks holding stock through their trust departments in trust accounts will be considered to have an attributable interest only if they hold 40 percent or more of the outstanding voting stock of a corporate broadband PCS, cellular or SMR licensee, or if any of the officers or directors of the broadband PCS, cellular or SMR licensee are representatives of the investment company, insurance company or bank concerned. Holdings by a bank or insurance company will be aggregated if the bank or insurance company has any right to determine how the stock will be voted. Holdings by investment companies will be aggregated if under common management.

(4) Non-voting stock shall be attributed as an interest in the issuing entity if in excess of the amounts set forth in paragraph (d)(2) of this section.

(5) Debt and instruments such as warrants, convertible debentures, options, or other interests (except non-voting stock) with rights of conversion to voting interests shall not be attributed unless and until converted, except that this provision does not apply in determining whether an entity is a small business, a rural telephone company, or a business owned by minorities and/or women, as these terms are defined in § 1.2110 of this chapter or other related provisions of the Commission's rules.

(6) Limited partnership interests shall be attributed to limited partners and shall be calculated according to both the percentage of equity paid in and the percentage of distribution of profits and losses.

(7) Officers and directors of a broadband PCS licensee or applicant, cellular licensee, or SMR licensee shall be considered to have an attributable interest in the entity with which they are so associated. The officers and directors of an entity that controls a broadband PCS licensee or applicant, a cellular licensee, or an SMR licensee shall be considered to have an attributable interest in the broadband PCS licensee or applicant, cellular licensee, or SMR licensee.

(8) Ownership interests that are held indirectly by any party through one or more intervening corporations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that if the ownership percentage for an interest in any link in the chain exceeds 50 percent or represents actual control, it shall be treated as if it were a 100 percent interest. (For example, if A owns 20% of B, and B owns 40% of licensee C, then A's interest in licensee C would be 8%. If A owns 20% of B, and B owns 51% of licensee C, then A's interest in licensee C would be 20% because B's ownership of C exceeds 50%.)

(9) Any person who manages the operations of a broadband PCS, cellular, or SMR licensee pursuant to a management agreement shall be considered to have an attributable interest in such licensee if such person, or its affiliate, has authority to make decisions or otherwise engage in practices or activities that determine, or significantly influence,

(i) The nature or types of services offered by such licensee;

(ii) The terms upon which such services are offered; or

(iii) The prices charged for such services.

(10) Any licensee or its affiliate who enters into a joint marketing arrangements with a broadband PCS, cellular, or SMR licensee, or its affiliate shall be considered to have an attributable interest, if such licensee, or its affiliate, has authority to make decisions

or otherwise engage in practices or activities that determine, or significantly influence,

(i) The nature or types of services offered by such licensee;

(ii) The terms upon which such services are offered; or

(iii) The prices charged for such services.

(e) *Divestiture*. (1) Divestiture of interests as a result of a transfer of control or assignment of authorization must occur prior to consummating the transfer or assignment, except that a licensee that meets the requirements set forth in paragraph (e)(2) of this section shall have 90 days from final grant to come into compliance with the spectrum aggregation limit.

(2) An applicant with:

(i) Controlling or attributable ownership interests in broadband PCS, cellular, and/or SMR licenses where the geographic license areas cover 20 percent or less of the applicant's service area population;

(ii) Attributable interests in broadband PCS, cellular, and/or SMR licenses solely due to management agreements or joint marketing agreements; or

(iii) Non-controlling attributable interests in broadband PCS, cellular, and/or SMR licenses, regardless of the degree to which the geographic license areas cover the applicant's service area population, shall be eligible to have its application granted subject to a condition that the licensee shall come into compliance with the spectrum limitation set out in paragraph (a) within ninety (90) days after final grant. For purposes of this paragraph, a ''non-controlling attributable interest'' is one in which the holder has less than a fifty (50) percent voting interest and there is an unaffiliated single holder of a fifty (50) percent or greater voting interest.

(3) The applicant for a license that, if granted, would exceed the spectrum aggregation limitation in paragraph (a) of this section shall certify on its application that it and all parties to the application will come into compliance with this limitation. If such an applicant is a successful bidder in an auction, it must submit with its long-form application a signed statement describing its efforts to date and future plans to come into compliance with the spectrum aggregation limitation. A similar statement must also be included with any application for assignment of licenses or transfer of control that, if granted, would exceed the spectrum aggregation limit.

(4)(i) Parties holding controlling interests in broadband PCS, cellular, and/or SMR licensees that conflict with the attribution threshold or geographic overlap limitations set forth in this section will be considered to have come into compliance if they have submitted to the Commission an application for assignment of license or transfer of control of the conflicting licensee (see §§ 24.839 (PCS), 22.39 (cellular), and 90.158 of this chapter (SMR)) by which, if granted, such parties no longer would have an attributable interest in the conflicting license. Divestiture may be to an interim trustee if a buyer has not been secured in the required period of time, as long as the applicant has no interest in or control of the trustee, and the trustee may dispose of the license as it sees fit. Where parties to broadband PCS, cellular, or SMR applications hold less than controlling (but still attributable) interests in broadband PCS, cellular, or SMR licensee(s), they shall submit a certification that the applicant and all parties to the application have come into compliance with the limitations on spectrum aggregation set forth in this section.

(ii) Applicants that meet the requirements of paragraph (e)(2) of this section must tender to the Commission within ninety (90) days of final grant of the initial license, such an assignment or transfer application or, in the case of less than controlling (but still attributable) interests, a written certification that the applicant and all parties to the application have come into compliance with the limitations on spectrum aggregation set forth in this section. If no such transfer or assignment application or certification is tendered to the Commission within ninety (90) days of final grant of the initial license, the Commission may consider the certification and the divestiture statement to be material, bad

faith misrepresentations and shall invoke the condition on the initial license or the assignment or transfer, cancelling or rescinding it automatically, shall retain all monies paid to the Commission, and, based on the facts presented, shall take any other action it may deem appropriate.

NOTE 1 TO § 20.6: For purposes of the ownership attribution limit, all ownership interests in operations that serve at least 10 percent of the population of the PCS service area should be included in determining the extent of a PCS applicant's cellular or SMR ownership.

NOTE 2 TO § 20.6: When a party owns an attributable interest in more than one cellular or SMR system that overlaps a PCS service area, the total population in the overlap area will apply on a cumulative basis.

NOTE 3 TO § 20.6: Waivers of § 20.6(d) may be granted upon an affirmative showing:

(1) That the interest holder has less than a 50 percent voting interest in the licensee and there is an unaffiliated single holder of a 50 percent or greater voting interest;

(2) That the interest holder is not likely to affect the local market in an anticompetitive manner;

(3) That the interest holder is not involved in the operations of the licensee and does not have the ability to influence the licensee on a regular basis; and

(4) That grant of a waiver is in the public interest because the benefits to the public of common ownership outweigh any potential anticompetitive harm to the market.

[64 FR 54574, Oct. 7, 1999]

§ 20.7 Mobile services.

The following are mobile services within the meaning of sections 3(n) and 332 of the Communications Act, 47 U.S.C. 153(n), 332.

(a) Public mobile services (part 22 of this chapter), including fixed operations that support the mobile systems, but excluding Rural Radio Service and Basic Exchange Telecommunications Radio Service (part 22, subpart H of this chapter);

(b) Private land mobile services (part 90 of this chapter), including secondary fixed operations, but excluding fixed services such as call box operations and meter reading;

(c) Mobile satellite services (part 25 of this chapter) including dual-use equipment, terminals capable of transmitting while a platform is moving, but excluding satellite facilities provided through a transportable platform that cannot move when the communications service is offered;

(d) Marine and aviation services (parts 80 and 87 of this chapter), including fixed operations that support these marine and aviation mobile systems;

(e) Personal radio services (part 95 of this chapter), but excluding 218–219 MHz Service;

(f) Personal communications services (part 24 of this chapter);

(g) Auxiliary services provided by mobile service licensees, and ancillary fixed communications offered by personal communications service providers;

(h) Unlicensed services meeting the definition of commercial mobile radio service in § 20.3, such as the resale of commercial mobile radio services, but excluding unlicensed radio frequency devices under part 15 of this chapter (including unlicensed personal communications service devices).

[59 FR 18495, Apr. 19, 1994, as amended at 63 FR 54077, Oct. 8, 1998]

§ 20.9 Commercial mobile radio service.

(a) The following mobile services shall be treated as common carriage services and regulated as commercial mobile radio services (including any such service offered as a hybrid service or offered on an excess capacity basis to the extent it meets the definition of commercial mobile radio service, or offered as an auxiliary or ancillary service), pursuant to Section 332 of the Communications Act, 47 U.S.C. 332:

(1) Private Paging (part 90 of this chapter), excluding not-for-profit paging systems that serve only the licensee's own internal communications needs;

(2) Stations that offer Industrial/Business Pool (§ 90.35 of this chapter) eligibles for-profit, interconnected service;

(3) Land Mobile Systems on 220–222 MHz (part 90 of this chapter), except services that are not-for-profit or do not offer interconnected service;

(4) Specialized Mobile Radio services that provide interconnected service (part 90 of this chapter);

(5) Public Coast Stations (part 80, subpart J of this chapter);

(6) Paging and Radiotelephone Service (part 22, subpart E of this chapter).

(7) Cellular Radiotelephone Service (part 22, subpart H of this chapter).

(8) Air-Ground Radiotelephone Service (part 22, subpart G of this chapter).

(9) Offshore Radiotelephone Service (part 22, subpart I of this chapter).

(10) Any mobile satellite service involving the provision of commercial mobile radio service (by licensees or resellers) directly to end users, except that mobile satellite licensees and other entities that sell or lease space segment capacity, to the extent that it does not provide commercial mobile radio service directly to end users, may provide space segment capacity to commercial mobile radio service providers on a non-common carrier basis, if so authorized by the Commission;

(11) Personal Communications Services (part 24 of this chapter), except as provided in paragraph (b) of this section;

(12) Mobile operations in the 218–219 MHz Service (part 95, subpart F of this chapter) that provide for-profit interconnected service to the public;

(13) For-profit subsidiary communications services transmitted on subcarriers within the FM baseband signal, that provide interconnected service (47 CFR 73.295 of this chapter); and

(14) A mobile service that is the functional equivalent of a commercial mobile radio service.

(i) A mobile service that does not meet the definition of commercial mobile radio service is presumed to be a private mobile radio service.

(ii) Any interested party may seek to overcome the presumption that a particular mobile radio service is a private mobile radio service by filing a petition for declaratory ruling challenging a mobile service provider's regulatory treatment as a private mobile radio service.

(A) The petition must show that: (*1*) The mobile service in question meets the definition of commercial mobile radio service; or

(*2*) The mobile service in question is the functional equivalent of a service that meets the definition of a commercial mobile radio service.

(B) A variety of factors will be evaluated to make a determination whether the mobile service in question is the functional equivalent of a commercial mobile radio service, including: consumer demand for the service to determine whether the service is closely substitutable for a commercial mobile radio service; whether changes in price for the service under examination, or for the comparable commercial mobile radio service would prompt customers to change from one service to the other; and market research information identifying the targeted market for the service under review.

(C) The petition must contain specific allegations of fact supported by affidavit(s) of person(s) with personal knowledge. The petition must be served on the mobile service provider against whom it is filed and contain a certificate of service to this effect. The mobile service provider may file an opposition to the petition and the petitioner may file a reply. The general rules of practice and procedure contained in §§1.1 through 1.52 of this chapter shall apply.

(b) Licensees of a Personal Communications Service or applicants for a Personal Communications Service license, and VHF Public Coast Station geographic area licensees or applicants, proposing to use any Personal Communications Service or VHF Public Coast Station spectrum to offer service on a private mobile radio service basis must overcome the presumption that Personal Communications Service and VHF Public Coast Stations are commercial mobile radio services.

(1) The applicant or licensee (who must file an application to modify its authorization) seeking authority to dedicate a portion of the spectrum for private mobile radio service, must include a certification that it will offer Personal Communications Service or VHF Public Coast Station service on a private mobile radio service basis. The certification must include a description of the proposed service sufficient to demonstrate that it is not within the definition of commercial mobile radio service in §20.3. Any application requesting to use any Personal Communications Service or VHF Public Coast Station spectrum to offer service on a private mobile radio service basis

will be placed on public notice by the Commission.

(2) Any interested party may file a petition to deny the application within 30 days after the date of public notice announcing the acceptance for filing of the application. The petition shall contain specific allegations of fact supported by affidavit(s) of person(s) with personal knowledge to show that the applicant's request does not rebut the commercial mobile radio service presumption. The petition must be served on the applicant and contain a certificate of service to this effect. The applicant may file an opposition with allegations of fact supported by affidavit. The petitioner may file a reply. No additional pleadings will be allowed. The general rules of practice and procedure contained in §§ 1.1 through 1.52 of this chapter and § 22.30 of this chapter shall apply.

(c) Any provider of private land mobile service before August 10, 1993 (including any system expansions, modifications, or acquisitions of additional licenses in the same service, even if authorized after this date), and any private paging service utilizing frequencies allocated as of January 1, 1993, that meet the definition of commercial mobile radio service, shall, except for purposes of § 20.5 (applicable August 10, 1993 for the providers listed in this paragraph), be treated as private mobile radio service until August 10, 1996. After this date, these entities will be treated as commercial mobile radio service providers regulated under this part.

[59 FR 18495, Apr. 19, 1994, as amended at 62 FR 18843, Apr. 17, 1997; 63 FR 40062, July 27, 1998; 64 FR 26887, May 18, 1999; 64 FR 59659, Nov. 3, 1999; 66 FR 10968, Feb. 21, 2001]

§ 20.11 Interconnection to facilities of local exchange carriers.

(a) A local exchange carrier must provide the type of interconnection reasonably requested by a mobile service licensee or carrier, within a reasonable time after the request, unless such interconnection is not technically feasible or economically reasonable. Complaints against carriers under section 208 of the Communications Act, 47 U.S.C. 208, alleging a violation of this section shall follow the requirements of §§ 1.711–1.734 of this chapter, 47 CFR 1.711–1.734.

(b) Local exchange carriers and commercial mobile radio service providers shall comply with principles of mutual compensation.

(1) A local exchange carrier shall pay reasonable compensation to a commercial mobile radio service provider in connection with terminating traffic that originates on facilities of the local exchange carrier.

(2) A commercial mobile radio service provider shall pay reasonable compensation to a local exchange carrier in connection with terminating traffic that originates on the facilities of the commercial mobile radio service provider.

(c) Local exchange carriers and commercial mobile radio service providers shall also comply with applicable provisions of part 51 of this chapter.

[59 FR 18495, Apr. 19, 1994, as amended at 61 FR 45619, Aug. 29, 1996]

§ 20.12 Resale and roaming.

(a) *Scope of section.* This section is applicable to providers of Broadband Personal Communications Services (part 24, subpart E of this chapter), Cellular Radio Telephone Service (part 22, subpart H of this chapter), and Specialized Mobile Radio Services in the 800 MHz and 900 MHz bands (included in part 90, subpart S of this chapter) if such providers offer real-time, two-way switched voice or data service that is interconnected with the public switched network and utilizes an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. The scope of paragraph (b) of this section, concerning the resale rule, is further limited so as to exclude from the requirements of that paragraph those Broadband Personal Communications Services C, D, E, and F block licensees that do not own and control and are not owned and controlled by firms also holding cellular, A, or B block licenses.

(b) *Resale.* The resale rule is applicable as follows:

(1) Each carrier subject to paragraph (b) of this section shall not restrict the resale of its services, unless the carrier

demonstrates that the restriction is reasonable.

(2) The resale requirement shall not apply to customer premises equipment, whether or not it is bundled with services subject to the resale requirement in this paragraph.

(3) This paragraph shall cease to be effective five years after the last group of initial licenses for broadband PCS spectrum in the 1850–1910 and the 1930–1990 MHz bands is awarded; *i.e.*, at the close of November 24, 2002.

(c) *Roaming*. Each carrier subject to this section must provide mobile radio service upon request to all subscribers in good standing to the services of any carrier subject to this section, including roamers, while such subscribers are located within any portion of the licensee's licensed service area where facilities have been constructed and service to subscribers has commenced, if such subscribers are using mobile equipment that is technically compatible with the licensee's base stations.

[64 FR 61027, Nov. 9, 1999, as amended at 65 FR 58482, Sept. 29, 2000]

§ 20.13 State petitions for authority to regulate rates.

(a) States may petition for authority to regulate the intrastate rates of any commercial mobile radio service. The petition must include the following:

(1) Demonstrative evidence that market conditions in the state for commercial mobile radio services do not adequately protect subscribers to such services from unjust and unreasonable rates or rates that are unjustly or unreasonably discriminatory. Alternatively, a state's petition may include demonstrative evidence showing that market conditions for commercial mobile radio services do not protect subscribers adequately from unjust and unreasonable rates, or rates that are unjustly or unreasonably discriminatory, and that a substantial portion of the commercial mobile radio service subscribers in the state or a specified geographic area have no alternative means of obtaining basic telephone service. This showing may include evidence of the range of basic telephone service alternatives available to consumers in the state.

(2) The following is a non-exhaustive list of examples of the types of evidence, information, and analysis that may be considered pertinent to determine market conditions and consumer protection by the Commission in reviewing any petition filed by a state under this section:

(i) The number of commercial mobile radio service providers in the state, the types of services offered by commercial mobile radio service providers in the state, and the period of time that these providers have offered service in the state;

(ii) The number of customers of each commercial mobile radio service provider in the state; trends in each provider's customer base during the most recent annual period or other data covering another reasonable period if annual data is unavailable; and annual revenues and rates of return for each commercial mobile radio service provider;

(iii) Rate information for each commercial mobile radio service provider, including trends in each provider's rates during the most recent annual period or other data covering another reasonable period if annual data is unavailable;

(iv) An assessment of the extent to which services offered by the commercial mobile radio service providers the state proposes to regulate are substitutable for services offered by other carriers in the state;

(v) Opportunities for new providers to enter into the provision of competing services, and an analysis of any barriers to such entry;

(vi) Specific allegations of fact (supported by affidavit of person with personal knowledge) regarding anti-competitive or discriminatory practices or behavior by commercial mobile radio service providers in the state;

(vii) Evidence, information, and analysis demonstrating with particularity instances of systematic unjust and unreasonable rates, or rates that are unjust or unreasonably discriminatory, imposed upon commercial mobile radio service subscribers. Such evidence should include an examination of the relationship between rates and costs. Additionally, evidence of a pattern of

such rates, that demonstrates the inability of the commercial mobile radio service marketplace in the state to produce reasonable rates through competitive forces will be considered especially probative; and

(viii) Information regarding customer satisfaction or dissatisfaction with services offered by commercial mobile radio service providers, including statistics and other information about complaints filed with the state regulatory commission.

(3) Petitions must include a certification that the state agency filing the petition is the duly authorized state agency responsible for the regulation of telecommunication services provided in the state.

(4) Petitions must identify and describe in detail the rules the state proposes to establish if the petition is granted.

(5) States have the burden of proof. Interested parties may file comments in support or in opposition to the petition within 30 days after public notice of the filing of a petition by a state under this section. Any interested party may file a reply within 15 days after the expiration of the filing period for comments. No additional pleadings may be filed. Except for § 1.45 of this chapter, practice and procedure rules contained in §§ 1.42–1.52 of this chapter shall apply. The provisions of §§ 1.771–1.773 of this chapter do not apply.

(6) The Commission shall act upon any petition filed by a state under this paragraph not later than the end of the nine-month period after the filing of the petition.

(7) If the Commission grants the petition, it shall authorize the state to regulate rates for commercial mobile radio services in the state during a reasonable period of time, as specified by the Commission. The period of time specified by the Commission will be that necessary to ensure that rates are just and reasonable, or not unjustly or unreasonably discriminatory.

(b) States that regulated rates for commercial mobile services as of June 1, 1993, may petition the Commission under this section before August 10, 1994, to extend this authority.

(1) The petition will be acted upon by the Commission in accordance with the provisions of paragraphs (a)(1) through (a)(5) of this section.

(2) The Commission shall act upon the petition (including any reconsideration) not later than the end of the 12-month period following the date of the filing of the petition by the state involved. Commercial mobile radio service providers offering such service in the state shall comply with the existing regulations of the state until the petition and any reconsideration of the petition are acted upon by the Commission.

(3) The provisions of paragraph (a)(7) of this section apply to any petition granted by the Commission under this paragraph.

(c) No sooner than 18 months from grant of authority by the Commission under this section for state rate regulations, any interested party may petition the Commission for an order to discontinue state authority for rate regulation.

(1) Petitions to discontinue state authority for rate regulation must be based on recent empirical data or other significant evidence demonstrating that the exercise of rate authority by a state is no longer necessary to ensure that the rates for commercial mobile are just and reasonable or not unjustly or unreasonably discriminatory.

(2) Any interested party may file comments in support of or in opposition to the petition within 30 days after public notice of the filing of the petition. Any interested party may file a reply within 15 days after the time for filing comments has expired. No additional pleadings may be filed. Except for 1.45 of this chapter, practice and procedure rules contained in § 1.42–1.52 of this chapter apply. The provisions of §§ 1.771–1.773 of this chapter do not apply.

(3) The Commission shall act upon any petition filed by any interested party under this paragraph within nine months after the filing of the petition.

§ 20.15 Requirements under Title II of the Communications Act.

(a) Commercial mobile radio services providers, to the extent applicable, must comply with sections 201, 202, 206, 207, 208, 209, 216, 217, 223, 225, 226, 227, and 228 of the Communications Act, 47

U.S.C. 201, 202, 206, 207, 208, 209, 216, 217, 223, 225, 226, 227, 228; part 68 of this chapter, 47 CFR part 68; and §§ 1.701–1.748, and 1.815 of this chapter, 47 CFR 1.701–1.748, 1.815.

(b) Commercial mobile radio service providers are not required to:

(1) File with the Commission copies of contracts entered into with other carriers or comply with other reporting requirements, or with §§ 1.781 through 1.814 and 43.21 of this chapter; except that commercial radio service providers that offer broadband service, as described in § 1.7001(a) or mobile telephony are required to file reports pursuant to §§ 1.7000 and 43.11 of this chapter to the extent that they meet the thresholds as set out in §§ 1.7001(b) and 43.11(a) of this chapter. For purposes of this section *mobile, telephony* is defined as real-time, two-way switched voice service that is interconnected with the public switched network utilizing an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless handoff of subscriber calls.

(2) Seek authority for interlocking directors (section 212 of the Communications Act);

(3) Submit applications for new facilities or discontinuance of existing facilities (section 214 of the Communications Act).

(c) Commercial mobile radio service providers shall not file tariffs for international and interstate service to their customers, interstate access service, or international and interstate operator service. Sections 1.771 through 1.773 and part 61 of this chapter are not applicable to international and interstate services provided by commercial mobile radio service providers. Commercial mobile radio service providers shall cancel tariffs for international and interstate service to their customers, interstate access service, and international and interstate operator service.

(d) Except as specified as in paragraphs (d)(1) and (2), nothing in this section shall be construed to modify the Commission's rules and policies on the provision of international service under part 63 of this chapter.

(1) Notwithstanding the provisions of § 63.21(c) of this chapter, a commercial mobile radio service provider is not required to comply with § 42.10 of this chapter.

(2) A commercial mobile radio service (CMRS) provider that is classified as dominant under § 63.10 of this chapter due to an affiliation with a foreign carrier is required to comply with § 42.11 of this chapter if the affiliated foreign carrier collects settlement payments from U.S. carriers for terminating U.S. international switched traffic at the foreign end of the route. Such a CMRS provider is not required to comply with § 42.11, however, if it provides service on the affiliated route solely through the resale of an unaffiliated facilities-based provider's international switched services.

(3) For purposes of paragraphs (d)(1) and (2) of this section, *affiliated* and *foreign carrier* are defined in § 63.09 of this Chapter.

(e) For obligations of commercial mobile radio service providers to provide local number portability, see § 52.1 of this chapter.

[59 FR 18495, Apr. 19, 1994, as amended at 61 FR 38637, July 25, 1996; 63 FR 43040, Aug. 11, 1998; 65 FR 19685, Apr. 12, 2000; 65 FR 24654, Apr. 27, 2000; 66 FR 16879, Mar. 28, 2001]

§ 20.18 911 Service.

(a) *Scope of section*. The following requirements are only applicable to Broadband Personal Communications Services (part 24, subpart E of this chapter), Cellular Radio Telephone Service (part 22, subpart H of this chapter), and Geographic Area Specialized Mobile Radio Services and Incumbent Wide Area SMR Licensees in the 800 MHz and 900 MHz bands (included in part 90, subpart S of this chapter). In addition, service providers in these enumerated services are subject to the following requirements solely to the extent that they offer real-time, two way switched voice service that is interconnected with the public switched network and utilize an in-network switching facility which enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls.

(b) *Basic 911 Service*. Licensees subject to this section must transmit all wireless 911 calls without respect to their call validation process to a Public

Safety Answering Point, provided that ''all wireless 911 calls'' is defined as ''any call initiated by a wireless user dialing 911 on a phone using a compliant radio frequency protocol of the serving carrier.''

(c) *TTY Access to 911 Services*. Licensees subject to this section must be capable of transmitting 911 calls from individuals with speech or hearing disabilities through means other than mobile radio handsets, *e.g.*, through the use of Text Telephone Devices (TTY).

NOTE TO PARAGRAPH (c): Operators of digital wireless systems must begin complying with the provisions of this paragraph on or before June 30, 2002.

(d) *Phase I enhanced 911 services*. (1) As of April 1, 1998, or within six months of a request by the designated Public Safety Answering Point as set forth in paragraph (j) of this section, whichever is later, licensees subject to this section must provide the telephone number of the originator of a 911 call and the location of the cell site or base station receiving a 911 call from any mobile handset accessing their systems to the designated Public Safety Answering Point through the use of ANI and Pseudo-ANI.

(2) When the directory number of the handset used to originate a 911 call is not available to the serving carrier, such carrier's obligations under the paragraph (d)(1) extend only to delivering 911 calls and available calling party information to the designated Public Safety Answering Point.

NOTE TO PARAGRAPH (d): With respect to 911 calls accessing their systems through the use of TTYs, licensees subject to this section must comply with the requirements in paragraphs (d)(1) and (d)(2) of this section, as to calls made using a digital wireless system, as of October 1, 1998.

(e) *Phase II enhanced 911 service*. Licensees subject to this section must provide to the designated Public Safety Answering Point Phase II enhanced 911 service, *i.e.*, the location of all 911 calls by longitude and latitude in conformance with Phase II accuracy requirements (*see* paragraph (h) of this section).

(f) *Phase-in for network-based location technologies*. Licensees subject to this section who employ a network-based location technology shall provide Phase II 911 enhanced service to at least 50 percent of their coverage area or 50 percent of their population beginning October 1, 2001, or within 6 months of a PSAP request, whichever is later; and to 100 percent of their coverage area or 100 percent of their population within 18 months of such a request or by October 1, 2002, whichever is later.

(g) *Phase-in for handset-based location technologies*. Licensees subject to this section who employ a handset-based location technology may phase in deployment of Phase II enhanced 911 service, subject to the following requirements:

(1) Without respect to any PSAP request for deployment of Phase II 911 enhanced service, the licensee shall:

(i) Begin selling and activating location-capable handsets no later than October 1, 2001;

(ii) Ensure that at least 25 percent of all new handsets activated are location-capable no later than December 31, 2001;

(iii) Ensure that at least 50 percent of all new handsets activated are location-capable no later than June 30, 2002; and

(iv) Ensure that 100 percent of all new digital handsets activated are location-capable no later than December 31, 2002, and thereafter.

(v) By December 31, 2005, achieve 95 percent penetration of location-capable handsets among its subscribers.

(2) Once a PSAP request is received, the licensee shall, in the area served by the PSAP, within six months or by October 1, 2001, whichever is later:

(i) Install any hardware and/or software in the CMRS network and/or other fixed infrastructure, as needed, to enable the provision of Phase II enhanced 911 service; and

(ii) Begin delivering Phase II enhanced 911 service to the PSAP.

(3) For all 911 calls from portable or mobile phones that do not contain the hardware and/or software needed to enable the licensee to provide Phase II enhanced 911 service, the licensee shall, after a PSAP request is received, support, in the area served by the PSAP, Phase I location for 911 calls or other

available best practice method of providing the location of the portable or mobile phone to the PSAP.

(4) Licensees employing handset-based location technologies shall ensure that location-capable portable or mobile phones shall conform to industry interoperability standards designed to enable the location of such phones by multiple licensees.

(h) *Phase II accuracy*. Licensees subject to this section shall comply with the following standards for Phase II location accuracy and reliability:

(1) For network-based technologies: 100 meters for 67 percent of calls, 300 meters for 95 percent of calls;

(2) For handset-based technologies: 50 meters for 67 percent of calls, 150 meters for 95 percent of calls.

(3) For the remaining 5 percent of calls, location attempts must be made and a location estimate for each call must be provided to the appropriate PSAP.

(i) *Reports on Phase II plans*. Licensees subject to this section shall report to the Commission their plans for implementing Phase II enhanced 911 service, including the location-determination technology they plan to employ and the procedure they intend to use to verify conformance with the Phase II accuracy requirements by November 9, 2000. Licensees are required to update these plans within thirty days of the adoption of any change. These reports and updates may be filed electronically in a manner to be designated by the Commission.

(j) *Conditions for enhanced 911 services*. The requirements set forth in paragraphs (d) through (h) of this section shall be applicable only if the administrator of the designated Public Safety Answering Point has requested the services required under those paragraphs and is capable of receiving and utilizing the data elements associated with the service, and a mechanism for recovering the Public Safety Answering Point's costs of the enhanced 911 service is in place.

(k) *Dispatch service*. A service provider covered by this section who offers dispatch service to customers may meet the requirements of this section with respect to customers who utilize dispatch service either by complying with the requirements set forth in paragraphs (b) through (e) of this section, or by routing the customer's emergency calls through a dispatcher. If the service provider chooses the latter alternative, it must make every reasonable effort to explicitly notify its current and potential dispatch customers and their users that they are not able to directly reach a PSAP by calling 911 and that, in the event of an emergency, the dispatcher should be contacted.

[63 FR 2637, Jan. 16, 1998, as amended at 64 FR 60130, Nov. 4, 1999; 64 FR 72956, Dec. 29, 1999; 65 FR 58661, Oct. 2, 2000; 65 FR 82295, Dec. 28, 2000]

§ 20.20 Conditions applicable to provision of CMRS service by incumbent Local Exchange Carriers.

(a) *Separate affiliate*. An incumbent LEC providing in-region broadband CMRS shall provide such services through an affiliate that satisfies the following requirements:

(1) The affiliate shall maintain separate books of account from its affiliated incumbent LEC. Nothing in this section requires the affiliate to maintain separate books of account that comply with part 32 of this chapter;

(2) The affiliate shall not jointly own transmission or switching facilities with its affiliated incumbent LEC that the affiliated incumbent LEC uses for the provision of local exchange service in the same in-region market. Nothing in this section prohibits the affiliate from sharing personnel or other resources or assets with its affiliated incumbent LEC; and

(3) The affiliate shall acquire any services from its affiliated incumbent LEC for which the affiliated incumbent LEC is required to file a tariff at tariffed rates, terms, and conditions. Other transactions between the affiliate and the incumbent LEC for services that are not acquired pursuant to tariff must be reduced to writing and must be made on a compensatory, arm's length basis. All transactions between the incumbent LEC and the affiliate are subject to part 32 of this chapter, including the affiliate transaction rules. Nothing in this section shall prohibit the affiliate from acquiring any

unbundled network elements or exchange services for the provision of a telecommunications service from its affiliated incumbent LEC, subject to the same terms and conditions as provided in an agreement approved under section 252 of the Communications Act of 1934, as amended.

(b) *Independence*. The affiliate required in paragraph (a) of this section shall be a separate legal entity from its affiliated incumbent LEC. The affiliate may be staffed by personnel of its affiliated incumbent LEC, housed in existing offices of its affiliated incumbent LEC, and use its affiliated incumbent LEC's marketing and other services, subject to paragraphs (a)(3) and (c) of this section.

(c) *Joint marketing*. Joint marketing of local exchange and exchange access service and CMRS services by an incumbent LEC shall be subject to part 32 of this chapter. In addition, such agreements between the affiliate and the incumbent LEC must be reduced to writing and made available for public inspection upon request at the principle place of business of the affiliate and the incumbent LEC. The documentation must include a certification statement identical to the certification statement currently required to be included with all Automated Reporting and Management Information Systems (ARMIS) reports. The affiliate must also provide a detailed written description of the terms and conditions of the transaction on the Internet within 10 days of the transaction through the affiliate's home page.

(d) Exceptions. (1) *Rural telephone companies*. Rural telephone companies are exempted from the requirements set forth in paragraphs (a), (b) and (c) of this section. A competing telecommunications carrier, interconnected with the rural telephone company, however, may petition the FCC to remove the exemption, or the FCC may do so on its own motion, where the rural telephone company has engaged in anticompetitive conduct.

(2) *Incumbent LECs with fewer than 2 percent of subscriber lines*. Incumbent LECs with fewer than 2 percent of the nation's subscriber lines installed in the aggregate nationwide may petition the FCC for suspension or modification of the requirements set forth in paragraphs (a), (b) and (c) of this section. The FCC will grant such a petition where the incumbent LEC demonstrates that suspension or modification of the separate affiliate requirement is

(i) Necessary to avoid a significant adverse economic impact on users of telecommunications services generally or to avoid a requirement that would be unduly economically burdensome, and

(ii) Consistent with the public interest, convenience, and necessity.

(e) *Definitions*. Terms used in this section have the following meanings:

Affiliate. ''Affiliate'' means a person that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership with, another person. For purposes of this section, the term ''own'' means to own an equity interest (or the equivalent thereof) of more than 10 percent.

Broadband Commercial Mobile Radio Service (Broadband CMRS). For the purposes of this section, ''broadband CMRS'' means Cellular Radiotelephone Service (part 22, subpart H of this chapter), Specialized Mobile Radio (part 90, subpart S of this chapter), and broadband Personal Communications Services (part 24, subpart E of this chapter).

Incumbent Local Exchange Carrier (Incumbent LEC). ''Incumbent LEC'' has the same meaning as that term is defined in § 51.5 of this chapter.

In-region. For the purposes of this section, an incumbent LEC's broadband CMRS service is considered ''in-region'' when 10 percent or more of the population covered by the CMRS affiliate's authorized service area, as determined by the 1990 census figures, is within the affiliated incumbent LEC's wireline service area.

Rural Telephone Company. ''Rural Telephone Company'' has the same meaning as that term is defined in § 51.5 of this chapter.

(f) *Sunset*. This section will no longer be effective after January 1, 2002.

[62 FR 63871, Dec. 3, 1997, as amended at 66 FR 10968, Feb. 21, 2001]

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AUTHORITY: Secs. 1, 2, 4, 201–205, 208, 215, 218, 303, 307, 313, 403, 404, 410, 602, 48 Stat. as amended, 1064, 1066, 1070–1073, 1076, 1077, 1080, 1082, 1083, 1087, 1094, 1098, 1102; 47 U.S.C. 151, 154, 201–205, 208, 215, 218, 303, 307, 313, 314, 403, 404, 602; 47 U.S.C. 552, 554.

SOURCE: 44 FR 60534, Oct. 19, 1979, unless otherwise noted.

Subpart A—General

§ 21.1 Scope and authority.

(a) The purpose of the rules and regulations in this part is to prescribe the manner in which portions of the radio spectrum may be made available for domestic communication common carrier and multipoint distribution service non-common carrier operations which require transmitting facilities on land or in specified offshore coastal areas within the continental shelf.

(b) The rules in this part are issued pursuant to the authority contained in Titles I through III of the Communications Act of 1934, as amended, which vest authority in the Federal Communications Commission to regulate common carriers of interstate and foreign communications, to regulate radio transmissions and issue licenses for radio stations, and to regulate all interstate and foreign communications by wire and radio necessary to the accomplishment of the purposes of the Act.

(c) Unless otherwise specified, the section numbers referenced in this part

are contained in chapter I, title 47 of the Code of Federal Regulations.

[52 FR 37776, Oct. 9, 1987]

§21.2 Definitions.

As used in this part:

Antenna power gain. The square of the ratio of the root-mean-square free space field intensity produced at one mile in the horizontal plane, in millivolts per meter for one kilowatt antenna input power to 137.6 mV/m. This ratio should be expressed in decibels (dB). (If specified for a particular direction, antenna power gain is based on the field strength in that direction only.)

Antenna power input. The radio frequency peak or RMS power, as the case may be, supplied to the antenna from the antenna transmission line and its associated impedance matching network.

Antenna structures. The antenna, its supporting structure and anything attached to it.

Assigned frequency. The centre of the frequency band assigned to a station.

Authorized bandwidth. The maximum width of the band of frequencies permitted to be used by a station. This is normally considered to be the necessary or occupied bandwidth, whichever is greater.

Authorized frequency. The frequency, or frequency range, assigned to a station by the Commission and specified in the instrument of authorization.

Authorized power. The maximum power a station is permitted to use. This power is specified by the Commission in the station's authorization.

Bandwidth occupied by an emission. The band of frequencies comprising 99 percent of the total radiated power extended to include any discrete frequency on which the power is at least 0.25 percent of the total radiated power.

Basic Trading Area (BTA). The geographic areas by which the Multipoint Distribution Service is licensed. BTA boundaries are based on the Rand McNally 1992 Commercial Atlas and Marketing Guide, 123rd Edition, pp. 36–39, and include six additional BTA-like areas as specified in §21.924(b).

Bit rate. The rate of transmission of information in binary (two state) form in bits per unit time.

Booster service area. A geographic area to be designated by an applicant for a booster station, within which the booster station shall be entitled to protection against interference as set forth in this part. The booster service area must be specified by the applicant so as to not overlap the booster service area of any other booster authorized to or proposed by the applicant. However, a booster station may provide service to receive sites outside of its booster service area, at the licensee's risk of interference.

BTA authorization holder. The individual or entity authorized by the Commission to provide Multipoint Distribution Service to the population of a BTA.

BTA service area. The area within the boundaries of a BTA to which a BTA authorization holder may provide Multipoint Distribution Service. This area excludes the protected service areas of incumbent MDS stations and previously proposed and authorized ITFS facilities, including registered receive sites.

Carrier. In a frequency stabilized system, the sinusoidal component of a modulated wave whose frequency is independent of the modulating wave; or the output of a transmitter when the modulating wave is made zero; or a wave generated at a point in the transmitting system and subsequently modulated by the signal; or a wave generated locally at the receiving terminal which when combined with the side bands in a suitable detector, produces the modulating wave.

Carrier frequency. The output of a transmitter when the modulating wave is made zero.

Channel. Unless otherwise specified, a channel under this part shall refer to a 6 MHz frequency block assigned pursuant to §§21.901(b) or 74.902(a) of this chapter.

Communication common carrier. Any person engaged in rendering communication service for hire to the public.

Control point. A control point is an operating position at which an operator responsible for the operation of the transmitter is stationed and which

is under the control and supervision of the licensee.

Control station. A fixed station whose transmissions are used to control automatically the emissions or operations of another radio station at a specified location, or to transmit automatically to an alarm center telemetering information relative to the operation of such station.

Coordination distance. For the purpose of this part, the expression ''coordination distance'' means the distance from an earth station, within which there is a possibility of the use of a given transmitting frequency at this earth station causing harmful interference to stations in the fixed or mobile service, sharing the same band, or of the use of a given frequency for reception at this earth station receiving harmful interference from such stations in the fixed or mobile service.

Digital modulation. The process by which some characteristic (frequency, phase, amplitude or combinations thereof) of a carrier frequency is varied in accordance with a digital signal, e.g. one consisting of coded pulses or states.

Documented complaint. A complaint that a party is suffering from non-consensual interference. A documented complaint must contain a certification that the complainant has contacted the operator of the allegedly offending facility and tried to resolve the situation prior to filing. The complaint must then specify the nature of the interference, whether the interference is constant or intermittent, when the interference began and the site(s) most likely to be causing the interference. The complaint should be accompanied by a videotape or other evidence showing the effects of the interference. The complaint must contain a motion for a temporary order to have the interfering station cease transmitting. The complaint must be filed with the Secretary's office and served on the allegedly offending party.

Domestic fixed public service. A fixed service, the stations of which are open to public correspondence, for radiocommunications originating and terminating solely at points all of which lie within:

(a) The State of Alaska;

(b) The State of Hawaii;

(c) The contiguous 48 States and the District of Columbia; or

(d) A single possession of the United States. Generally, in cases where service is afforded on frequencies above 72 MHz, radio-communications between the contiguous 48 States (including the District of Columbia) and Canada or Mexico, or radiocommunications between the State of Alaska and Canada, are deemed to be in the domestic fixed public service.

Domestic public radio services. The land mobile and domestic fixed public services the stations which are open to public correspondence.

NOTE: Part 80 of this chapter is applicable to the maritime services and fixed stations associated with the maritime services; part 87 of this chapter is applicable to aeronautical services.

Earth station. A station located either on the earth's surface or within the major portion of the earth's atmosphere and intended for communications:

(a) With one or more space stations; or

(b) With one or more stations of the same kind by means of one or more reflecting satellites or other objects in space.

Effective radiated power (ERP). The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

Equivalent Isotropically Radiated Power (EIRP). The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna. This product may be expressed in watts or dB above 1 watt (dBW).

Facsimile. A form of telegraphy for the transmission of fixed images, with or without half-tones, with a view to their reproduction in a permanent form.

Fixed earth station. An earth station intended to be used at a specified fixed point.

Fixed station. A station in the fixed service.

Frequency tolerance. The maximum permissible departure by the centre frequency of the frequency band occupied by an emission from the assigned

frequency or, by the characteristic frequency of an emission from the reference frequency. The frequency tolerance is expressed as a percentage or in Hertz.

Harmful interference. Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service.

Incumbent. An MDS station that was authorized or proposed before September 15, 1995, including those stations that are subsequently modified, renewed or reinstated.

Landing area. A landing area means any locality, either of land or water, including airports and intermediate landing fields, which is used, or approved for use for the landing and takeoff of aircraft, whether or not facilities are provided for the shelter, servicing, or repair of aircraft, or for receiving or discharging passengers or cargo.

Microwave frequencies. As used in this part, this term refers to frequencies of 890 MHz and above.

Multichannel Multipoint Distribution Service (MMDS). Those Multipoint Distribution Service Channels that use the frequency band 2596 MHz to 2644 MHz and associated 125 kHz channels.

Multipoint Distribution Service (MDS). A domestic public radio service rendered on microwave frequencies from one or more fixed stations transmitting to multiple receiving facilities located at fixed points. MDS also may encompass transmissions from response stations to response station hubs or associated fixed stations.

Multipoint Distribution Service response station. A fixed station operated by an MDS licensee, the lessee of MDS channel capacity or a subscriber of either to communicate with a response station hub or associated MDS station. A response station under this part may share facilities with other MDS response stations and/or one or more Instructional Television Fixed Service (ITFS) response stations authorized pursuant to §74.939 of this chapter or §74.940 of this chapter.

Necessary bandwidth of emission. For a given class of emission, the width of the frequency band that is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

NOTE: The necessary bandwidth for an emission may be calculated using the formulas in §2.202 of this chapter.

Partitioned service area authorization holder. The individual or entity authorized by the Commission to provide Multipoint Distribution Service to the population of a partitioned service area.

Partitioned service area (PSA). The area within the coterminous boundaries of one of more counties or other geopolitical subdivisions, drawn from a BTA, to which an authorization holder may provide Multipoint Distribution Service or the area remaining in a BTA upon partitioning any portion of that BTA. This area excludes the protected service areas of incumbent MDS stations and previously proposed and authorized ITFS stations, including registered receive sites.

Private line service. A service whereby facilities for communication between two or more designated points are set aside for the exclusive use or availability for use of a particular customer and authorized users during stated periods of time.

Public correspondence. Any telecommunication which the offices and stations, by reason of their being at the disposal of the public, must accept for transmission.

Radio station. A separate transmitter or a group of transmitters under simultaneous common control, including the accessory equipment required for carrying on a radiocommunication service.

Radiocommunication. Telecommunication by means of radio waves.

Rated power output. The term ''rated power output'' of a transmitter means the normal radio frequency power output capability (Peak or Average Power) of a transmitter, under optimum conditions of adjustment and operation, specified by its manufacturer.

Record communication. Any transmission of intelligence which is reduced to visual record form at the point of reception.

Reference frequency. A frequency having a fixed and specified position with respect to the assigned frequency. The

displacement of this frequency with respect to the assigned frequency has the same absolute value and sign that the displacement of the characteristic frequency has with respect to the center of the frequency band occupied by the emission.

Relay station. A fixed station used for the reception and retransmission of the signals of another station or stations.

Repeater station. A fixed station established for the automatic retransmission of radiocommunications received from one or more stations and directed to a specified receiver site.

Response station hub. A fixed facility licensed to an MDS licensee, and operated by an MDS licensee or the lessee of an MDS facility, for the reception of information transmitted by one or more MDS response stations that utilize digital modulation. A response station hub licensed under this part may share facilities with other MDS response station hubs, ITFS response station hubs authorized pursuant to § 74.939 of this chapter, MDS signal booster stations, ITFS signal booster stations, MDS stations, and/or ITFS stations.

Response station hub license. A blanket license authorizing the operation of a single response station hub at a specific location and the operation of a specified number of associated digital response stations of one or more classes at unspecified locations within one or more regions of the response service area.

Sectorization. The use of an antenna system at an MDS station, booster station and/or response station hub that is capable of simultaneously transmitting multiple signals over the same frequencies to different portions of the service area and/or simultaneously receiving multiple signals over the same frequencies from different portions of the service area.

Signal Booster Station. An MDS station licensed for use in accordance with § 21.913 that operates on one or more MDS channels. Signal booster stations are intended to augment service as part of a distributed transmission system where signal booster stations retransmit the signals of one or more MDS stations and/or originate transmissions on MDS channels. A signal booster station licensed under this part may share facilities with other MDS signal booster stations, ITFS signal booster stations authorized pursuant to § 74.985 of this chapter, MDS response station hubs and/or ITFS response station hubs.

Standby transmitter. A transmitter installed and maintained for use in lieu of the main transmitter only during periods when the main transmitter is out of service for maintenance or repair.

Symbol rate. Modulation rate in bauds. This rate may be higher than the transmitted bit rate as in the case of coded pulses or lower as in the case of multilevel transmission.

Television. A form of telecommunication for transmission of transient images of fixed or moving objects.

Television STL station (studio transmitter link). A fixed station used for the transmission of television program material and related communications from a studio to the transmitter of a television broadcast station.

[61 FR 26671, May 28, 1996, as amended at 63 FR 65100, Nov. 25, 1998; 64 FR 63730, Nov. 22, 1999]

Subpart B—Applications and Licenses

GENERAL FILING REQUIREMENTS

§ 21.3 Station authorization required.

(a) No person shall use or operate apparatus for the transmission of energy or communications or signals by radio except under, and in accordance with, an appropriate authorization granted by the Federal Communications Commission. Except as otherwise provided herein, no construction or modification of a station may be commenced without an authorization from the Commission. Authorizations for domestic public fixed radio services are governed by the provisions of this part.

(b) If construction and or operation may have a significant environmental impact as defined by § 1.1307 of the Commission's rules, the requisite environmental assessment as prescribed in § 1.1311 of this chapter must be filed with the application and Commission

environmental review must be completed before construction of the station is initiated. See §1.1312 of this chapter.

[52 FR 37777, Oct. 9, 1987, as amended at 55 FR 20397, May 16, 1990; 61 FR 26673, May 28, 1996]

§21.4 Eligibility for station license.

A station license may not be granted to or held by:

(a) Any alien or the representative of any alien.

(b) Any foreign government or the representative thereof.

(c) Any corporation organized under the laws of any foreign government.

(d) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by: aliens or their representatives; a foreign government or representatives thereof; or any corporation organized under the laws of a foreign country.

(e) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens or their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign government, if the Commission finds that the public interest will be served by the refusal or revocation of such license.

[44 FR 60534, Oct. 19, 1979, as amended at 61 FR 55580, Oct. 28, 1996]

§21.5 Formal and informal applications.

(a) Except for an authorization under any of the proviso clauses of section 308(a) of the Communications Act of 1934 (47 U.S.C. 308(a)), the Commission shall grant the following authorizations only upon written application: Station licenses; modifications of station licenses; renewals of station licenses; extensions of time to construct; transfers and assignments of station licenses or of any rights thereunder.

(b) Except as may be otherwise permitted by this part, a separate written application shall be filed for each instrument of authorization requested. Applications may be:

(1) ''Formal applications'' where the Commission has prescribed in this part a standard form; or

(2) ''Informal applications'' (normally in letter form) where the Commission has not prescribed a standard form.

(c) An informal application will be accepted for filing only if:

(1) A standard form is not prescribed or clearly applicable to the authorization requested;

(2) It is a document submitted, in duplicate, with a caption which indicates clearly the nature of the request, radio service involved, location of the station, and the application file number (if known); and

(3) It contains all the technical details and informational showings required by the rules and states clearly and completely the facts involved and authorization desired.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37777, Oct. 9, 1987]

§21.6 Filing of applications, fees, and number of copies.

(a) As prescribed by §§21.7 and 21.11 of this part, standard formal application forms applicable to the radio services included in this part may be obtained from either:

(1) Federal Communications Commission, Washington, DC 20554; or

(2) Any of the Commission's field operations offices, the addresses of which are listed in §0.121.

(b) Applications requiring fees as set forth in part 1, subpart G of this chapter must be filed in accordance with §0.401(b) of this chapter. Applications not requiring fees shall be submitted to: Federal Communications Commission, Washington, DC 20554.

(c) All correspondence or amendments concerning a submitted application shall clearly identify the radio service, the name of the applicant, station location, and the Commission file number (if known) or station call sign of the application involved. All correspondence or amendments concerning a submitted application may be sent directly to the Mass Media Bureau.

(d) Except as otherwise specified, all applications, amendments, and correspondence shall be submitted in duplicate, including exhibits and attachments thereto, and shall be signed as prescribed by § 1.743.

(e) Each application shall be accompanied by the appropriate fee prescribed by, and submitted in accordance with, subpart G of part 1 of this chapter.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 10230, Mar. 31, 1987; 52 FR 37777, Oct. 9, 1987; 58 FR 19774, Apr. 16, 1993; 61 FR 26673, May 28, 1996]

§ 21.7 Standard application form for domestic public fixed radio service licenses.

Except for the Multipoint Distribution Service, FCC Form 494 (''Application for a New and Modified Microwave Radio Station License Under Part 21'') shall be submitted and a license granted for each station prior to commencement of any proposed station construction. FCC Form 494 also shall be submitted to amend any license application, to modify any license pursuant to §§ 21.40(a) and 21.41, to notify the Commission of modifications made pursuant to § 21.42, and to delete licensed facilities. FCC Form 494A shall be submitted to certify completion of construction.

[52 FR 37777, Oct. 9, 1987, as amended at 60 FR 36551, July 17, 1995]

§§ 21.8–21.10 [Reserved]

§ 21.11 Miscellaneous forms.

(a) *Licensee qualifications.* FCC Form 430 (''Licensee Qualification Report'') must be filed annually, no later than March 31 for the end of the preceding calendar year, unless the licensee operates solely on a common carrier basis and service was not offered at any time during the preceding year. Each annual filing must include all changes of information required by FCC Form 430 that occurred during the preceding year. In those cases in which there has been no change in any of the required information, the applicant or licensee, in lieu of submitting a new form, may so notify the Commission by letter.

(b) *Additional time to construct*—FCC Form 701 (''Application for Additional Time to Construct Radio Station'') shall be filed in duplicate by a licensee prior to the expiration of the time for construction noted in a license if a licensee seeks to modify the license by extending the period of construction.

(c) *Renewal of station license.* Except for renewal of special temporary authorizations, FCC Form 405 (''Application for Renewal of Station License'') must be filed in duplicate by the licensee between thirty (30) and sixty (60) days prior to the expiration date of the license sought to be renewed. Whenever a group of station licenses in the same radio service are to be renewed simultaneously, a single ''blanket'' application may be filed to cover the entire group, if the application identifies each station by call sign and station location and if two copies are provided for each station affected. Applicants should note also any special renewal requirements under the rules for each radio service.

(d) *Assignment of license.* FCC Form 305 (''Application for Consent to Assignment of Radio Station Construction Authorization or License (for Stations in Services Other than Broadcast)'') must be submitted to assign voluntarily (as by, for example, contract or other agreement) or involuntarily (as by, for example, death, bankruptcy, or legal disability) the station license or conditional license. In the case of involuntary assignment, the application must be filed within 30 days of the event causing the assignment. FCC Form 305 also must be used for nonsubstantial (*pro forma*) assignments. In addition, FCC Form 430 must be submitted by the proposed assignee unless such assignee has a current and substantially accurate report on file with the Commission. Whenever a group of station licenses or conditional licenses in the same radio service is to be assigned to a single assignee, a single ''blanket'' application may be filed to cover the entire group, if the application identifies each station by call sign and station location and if two copies are provided for each station affected. The assignment must be completed within 45 days from the date of authorization. Upon consummation of an approved assignment, the Commission must be notified by letter of the

date of consummation within 10 days of its occurrence.

(e) *Partial assignment of license.* In the microwave services, authorization for assignment from one company to another of only a part or portions of the facilities (transmitters) authorized under an existing license (as distinguished from an assignment of the facilities in their entirety) may be granted upon application:

(1) By the assignee on FCC Form 494 and

(2) By the assignor on FCC Form 494 for deletion of the assigned facilities, indicating concurrence in the assignee's request.

The assignment shall be consummated within 45 days from the date of authorization. In the event that consummation does not occur, FCC Form 494 shall be submitted to return the assignor's license to its original condition.

EDITORIAL NOTE: At 63 FR 65100, Nov. 25, 1999, paragraphs (f) and (g) were redesignated as paragraphs (e) and (f) and newly designated paragraph (e) was revised. However, paragraph (e) already exists. The text of the newly redesignated paragraph (e) follows.

(e) *Transfer of control of corporation holding a conditional license or license.* FCC Form 306 (''Application for Consent to Transfer of Control'') must be submitted in order to voluntarily or involuntarily transfer control (de jure or de facto) of a corporation holding any conditional licenses or licenses. In the case of involuntary transfer of control, the application must be filed within 30 days of the event causing the transfer of control. FCC Form 306 also must be used for nonsubstantial (*pro forma*) transfers of control. In addition, FCC Form 430 must be submitted by the proposed transferee unless such transferee has a current and substantially accurate report on file with the Commission. Whenever control of a corporation holding a group of station licenses or conditional licenses in the same radio service is to be transferred to a single transferee, a single ''blanket'' application may be filed to cover the entire transfer, if the application identifies each station by call sign and station location and if two copies are provided for each station affected. The transfer must be completed within 45 days from the date of authorization. Upon consummation of an approved transfer, the Commission must be notified by letter of the date of consummation within 10 days of its occurrence.

(f) *Antenna Structure Registration.* FCC Form 854 (Application for Antenna Structure Registration) accompanied by a final Federal Aviation Administration (FAA) determination of ''no hazard'' must be filed by the antenna structure owner to receive an antenna structure registration number. Criteria used to determine whether FAA notification and registration is required for a particular antenna structure are contained in Part 17 of this chapter.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 27554, July 22, 1987; 52 FR 37777, Oct. 9, 1987; 56 FR 57815, Nov. 14, 1991; 61 FR 4364, Feb. 6, 1996; 63 FR 65100, Nov. 25, 1998; 64 FR 63730, Nov. 22, 1999]

§21.12 [Reserved]

§21.13 General application requirements.

(a) Each application for a license or for consent to assignment or transfer of control shall:

(1) Disclose fully the real party (or parties) in interest, including (as required) a complete disclosure of the identify and relationship of those persons or entities directly or indirectly owning or controlling (or both) the applicant;

(2) Demonstrate the applicant's legal, financial, technical, and other qualifications to be a permittee or licensee;

(3) Submit the information required by the Commission's Rules, requests, and application forms;

(4) Except for applications in the Multipoint Distribution Service filed on or after September 15, 1995, state specifically the reasons why a grant of the proposal would serve the public interest, convenience, and necessity.

(5) Be maintained by the applicant substantially accurate and complete in all significant respects in accordance with the provisions of §1.65 of this chapter; and

(6) Show compliance with the special requirements applicable to each radio service and make all special showings that may be applicable (*e.g.*, those required by secs. 21.900, 21.912 and 21.913).

(b) Applications filed in the Multipoint Distribution Service shall not cross-reference previously filed material.

(c) In addition to the general application requirements of §§ 21.13 through 21.17 of this part, applicants shall submit any additional documents, exhibits, or signed written statements of fact:

(1) As may be required by the other parts of the Commission's Rules, and the other subparts of Part 21 (particularly Subpart C and those subparts applicable to the specific radio service involved); and

(2) As the Commission, at any time after the filing of an application and during the term of any authorization, may require from any applicant, permittee, or licensee to enable it to determine whether a radio authorization should be granted, denied, or revoked.

(d) Except when the Commission has declared explicitly to the contrary, an informational requirement does not in itself imply the processing treatment of decisional weight to be accorded the response.

(e) All applicants are required to indicate at the time their application is filed whether an authorization of the facilities is categorically excluded as defined by § 1.1306 of the Commission's rules. If answered affirmatively, an Environmental Assessment as described by § 1.1311, need not be filed with the application.

(f) Whenever an individual applicant, or a partner (in the case of a partnership) or a full time manager (in the case of a corporation) will not actively participate in the day-to-day management and operation of proposed facilities, the applicant or licensee will submit a statement containing the reasons therefor and disclosing the details of the proposed operation, including a demonstration of how control over the radio facilities will be retained by the applicant. If the operation of a radio station is to be accomplished by contractual arrangement with an entity unrelated to an applicant or licensee, the applicant or licensee shall file a copy of the agreement or contract which shall demonstrate that:

(1) The operation is accomplished according to general instructions provided for by the applicant;

(2) The applicant retains effective control over the radio facilities and their operations; and

(3) The applicant assumes full responsibility for both the quality of service and for contractor compliance with the Commission's Rules.

[44 FR 60534, Oct. 19, 1979, as amended at 47 FR 29244, July 6, 1982; 51 FR 15003, Apr. 22, 1986; 52 FR 37778, Oct. 9, 1987; 55 FR 46008, Oct. 31, 1990; 58 FR 19774, Apr. 16, 1993; 58 FR 44894, Aug. 25, 1993; 60 FR 36551, July 17, 1995; 61 FR 26673, May 28, 1996]

§ 21.14 [Reserved]

§ 21.15 Technical content of applications.

Applications shall contain all technical information required by the application form and any additional information necessary to fully describe the proposed facilities and to demonstrate compliance with all technical requirements of the rules governing the radio service involved (see subparts C, F and K as appropriate). The following paragraphs describe a number of technical requirements.

(a)(1) Except in the case of applicants for Multipoint Distribution Service, applicants proposing a new station location (including receive-only stations and passive repeaters) must indicate whether the station site is owned. If it is not owned, its availability for the proposed radio station site must be demonstrated. Under ordinary circumstances, this requirement will be considered satisfied if the site is under lease or under written option to buy or lease.

(2) Where any lease or agreement to use land limits or conditions in any way the applicant's access or use of the site to provide public service, a copy of the lease or agreement (which clearly indicates the limitations or conditions) must be filed with the application, except in the case of applicants for stations in the Multipoint Distribution Service. Multipoint Distribution Service applicants must instead certify compliance with the limitations and conditions contained in the lease or option agreement.

(3) Except for BTA and PSA authorization holders, Multipoint Distribution Service applicants proposing a new station location must certify the proposed station site will be available to the applicant for timely construction of the facilities during the initial construction period.

(4) An applicant's failure to include a certification required under this Section will result in dismissal of the application. The submission of a false certification will subject the applicant to all remedies available to the Commission, including the dismissal with prejudice of all applications filed by the offending applicant and the revocation of authorizations of the offending applicant. Also, if evidence of intent exists, the case will be referred to the Department of Justice for criminal prosecution under 18 U.S.C. 1001. In addition, the submission of an intentionally falsified certification will be treated as a reflection on an applicant's basic qualifications to become or to remain a licensee.

(b) [Reserved]

(c) Each application involving a new or modified transmitting antenna supporting structure, passive facility, or the addition or removal of a transmitting antenna, or the repositioning of an authorized antenna for a station must be accompanied by a vertical profile sketch of the total structure depicting its structural nature and clearly indicating the ground elevation (above sea level) at the structure site, the overall height of the structure above ground (including obstruction lights when required, lightning rods, etc.) and, if mounted on a building, its overall height above the building. The proposed antenna on the structure must be clearly identified and its height above-ground (measured to the center of radiation) clearly indicated. Alternatively, applicants in the Multipoint Distribution Service who filed applications on or after September 15, 1995, may provide this information in the MDS long-form application.

(d) Each application proposing a new or modified antenna structure for a station (including a passive repeater or signal booster station) so as to change its overall height shall indicate whether any necessary notification of the FAA has been made. Complete information as to rules concerning the construction, marking and lighting of antenna structures is contained in part 17 of this chapter. See also §21.111 if the structure is used by more than one station.

(e) *Antenna Structure Registration Number*. Applications proposing construction of a new antenna structure or alteration of the overall height of an existing antenna structure, where FAA notification prior to such construction or alteration is required by part 17 of this chapter, must include the FCC Antenna Structure Registration Number for the affected structure. If no such number has been assigned at the time the application is filed, the applicant must state in the application whether or not the antenna structure owner has notified the FAA of the proposed construction or alteration and applied to the FCC for an Antenna Structure Registration Number in accordance with Part 17 of this chapter of this structure for the antenna structure in question.

(f) Except for applicants in the Multipoint Distribution Service who filed applications on or after September 15, 1995, an applicant proposing construction of one or more new stations or modification of existing stations where substantial changes in the operation or maintenance procedures are involved must submit a showing of the general maintenance procedures involved to insure the rendition of good public communications service. The showing should include but need not be limited to the following.

(1) Location and telephone number (if known) of the maintenance center for a point to point microwave system. In lieu of providing the location and telephone number of the maintenance on a case by case basis, a licensee may file a complete list for all operational stations with the Commission and the Engineer-In-Charge of the appropriate radio district on an annual basis or at more frequent intervals as necessary to keep the information current.

(2) The manner in which technical personnel are made aware of malfunction at any of the stations and the appropriate time required for them to reach any of the stations in the event of an emergency. If fault alarms are to

be used, the items to be alarmed shall be specified as well as the location of the alarm center.

(g) Applications in the Multipoint Distribution Service filed before September 15, 1995, proposing a new or replacement antenna (excluding omni-directional antennas) shall include an antenna radiation pattern showing the antenna power gain distribution in the horizontal plane expressed in decibels, unless such pattern is known to be on file with the Commission in which case the applicant may reference in its application the FCC-ID number that indicates that the pattern is on file with the Commission. Multipoint Distribution Service applicants who filed applications on or after September 15, 1995 must provide related information in completing an MDS long-form application.

(h) Except for applications in the Multipoint Distribution Service filed on or after September 15, 1995, each application in the Point-to-Point Radio, Local Television Transmission and Digital Electronic Message Service (excluding user stations) proposing a new or replacement antenna (excluding omni-directional antennas) shall include an antenna radiation pattern showing the antenna power gain distribution in the horizontal plane expressed in decibels, unless such pattern is known to be on file with the Commission in which case the applicant may reference in its application the FCC–ID number that indicates that the pattern is on file with the Commission. Multipoint Distribution Service applicants who filed applications on or after September 15, 1995 must provide related information in completing an MDS long-form application.

[44 FR 60534, Oct. 19, 1979, as amended at 46 FR 23449, Apr. 27, 1981; 52 FR 37778, Oct. 9, 1987; 58 FR 11797, Mar. 1, 1993; 60 FR 36551, July 17, 1995; 60 FR 57366, Nov. 15, 1995; 61 FR 4364, Feb. 6, 1996; 61 FR 26673, May 28, 1996]

§ 21.16 [Reserved]

§ 21.17 Certification of financial qualifications.

Each application for a new license and each application for a major modification of an existing station shall contain a certification that the applicant has or will have the financial ability to meet the expected costs of constructing the facilities within the time allowed and the estimated operating expenses for a period of twelve months.

[52 FR 37778, Oct. 9, 1987]

§ 21.18 [Reserved]

§ 21.19 Waiver of rules.

Waivers of these rules may be granted upon application or on the Commission's own motion. A request for waiver shall contain a statement of reasons sufficient to justify a waiver. A waiver will not be granted except upon an affirmative showing that:

(a) The underlying purpose of the rule will not be served, or would be frustrated, by its application in the particular case, and that grant of the waiver is otherwise in the public interest; or

(b) The unique facts and circumstances of a particular case render application of the rule inequitable, unduly burdensome or otherwise contrary to the public interest. Applicants must also show the lack of a reasonable alternative.

[52 FR 37778, Oct. 9, 1987]

§ 21.20 Defective applications.

(a) Unless the Commission shall otherwise permit, an application will be unacceptable for filing and will be returned to the applicant with a brief statement as to the omissions or discrepancies if:

(1) The application is defective with respect to completeness of answers to questions, informational showings, execution, or other matters of a formal character; or

(2) The application does not substantially comply with the Commission's rules, regulations, specific requests for additional information, or other requirements.

(b) By way of illustration only, and not in any way limiting the scope of paragraph (a), the following are examples of common deficiencies which result in defective applications under paragraph (a):

(1) The application is not properly executed;

(2) The submitted filing fee (if a filing fee is required) is insufficient;

(3) The application does not demonstrate how the proposed radio facilities will serve the public interest, convenience or necessity;

(4) The application does not demonstrate compliance with the special requirements applicable to the radio service involved;

(5) The application does not certify the availability of the proposed station site.

(6) The application does not include the environmental assessment required for any significant environmental impact under the Commission's environmental rules (part 1, subpart I);

(7) The application does not specify the polarization and, where applicable, the antenna orientation azimuth and distance;

(8) The application does not include all necessary exhibits;

(9) The application is filed after the cutoff date prescribed in § 21.31 or § 21.914 of this part; or

(10) The application proposes the use of a frequency not allocated to such use.

(c) Applications considered defective under paragraph (a) of this section may be accepted for filing if:

(1) The application is accompanied by a request which sets forth the reasons in support of a waiver of (or an exception to), in whole or in part, any specific rule, regulation, or requirement with which the application is in conflict; or

(2) The Commission, upon its own motion, waives (or allows an exception to), in whole or in part, any rule, regulation or requirement.

(d) If an applicant is requested by the Commission to file any documents or any supplementary or explanatory information not specifically required in the prescribed application form, a failure to comply with such request within a specified time period will be deemed to render the application defective and will subject it to dismissal.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 5294, Feb. 20, 1987; 52 FR 37779, Oct. 9, 1987; 55 FR 46009, Oct. 31, 1990; 58 FR 11797, Mar. 1, 1993; 61 FR 26674, May 28, 1996]

EFFECTIVE DATE NOTE: At 66 FR 47896, Sept. 14, 2001, § 21.20 was amended by removing the word ''or'' at the end of paragraph (b)(9), and by removing the period and by adding ''; or'' at the end of paragraph (b)(10), and by adding a new paragraph (b)(11), effective Dec. 3, 2001. For the convenience of the user, the added text is set forth as follows:

§ 21.20 Defective applications.

* * * * *

(b) * * *

(11) The application does not contain the FCC Registration Number (FRN) as required under subpart W of part 1 of this part.

* * * * *

§ 21.21 Inconsistent or conflicting applications.

While an application is pending and undecided, no subsequent inconsistent or conflicting application may be filed by the same applicant, the applicant's successor or assignee, or on behalf or for the benefit of the same applicant, the applicant's successor or assignee.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37779, Oct. 9, 1987]

§ 21.22 Repetitious applications.

(a) Where an applicant has been afforded an opportunity for a hearing with respect to a particular application for a new station, or for an extension or enlargement of a service or facilities, and the Commission has, after hearing or default, denied the application or dismissed it with prejudice, the Commission will not consider a like application involving service of the same kind to the same area by the same applicant, or by the applicant's successor or assignee, or on behalf of or for the benefit of the original parties in interest, until after the lapse of 12 months from the effective date of the Commission's order. The Commission may, for good cause shown, waive the requirements of this section.

(b) Where an appeal has been taken from the action of the Commission denying a particular application, another application for the same class of station and for the same area, in whole or in part, filed by the same applicant or by the applicant's successor or assignee, or on behalf or for the benefit of the original parties in interest, will not

be considered until the final disposition of such appeal.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37779, Oct. 9, 1987]

§ 21.23 Amendment of applications.

(a)(1) Any pending application may be amended as a matter of right if the application has not been designated for hearing, or for comparative evaluation pursuant to § 21.35, or for the random selection process, provided, however, that the amendments must comply with the provisions of § 21.29 as appropriate and the Commission has not otherwise forbidden the amendment of pending applications.

(2) A Multipoint Distribution Service application tentatively selected for qualification review by the random selection process may be amended as a matter of right up to 14 days after the date of the public notice announcing the tentative selection, provided, however, that the amendments must comply with the provisions of § 21.29 as appropriate and the Commission has not otherwise forbidden the amendment of pending applications.

(3) Provided, however, applications may not be amended if the amendments seek more than a *pro forma* change of ownership or control (bankruptcy, death or legal disability) of a pending Multipoint Distribution Service application and any amendment or application will be dismissed if the amendment or application seeks more than a *pro forma* change of ownership or control.

(b) Requests to amend an application designated for hearing or for comparative evaluation or for tentative selection for qualification review by the random selection process may be granted only if a written petition demonstrating good cause is submitted and properly served on the parties of record, except that Multipoint Distribution Service applications tentatively selected in a random selection process may be amended as a matter of right as provided in paragraph (a) of this section. Provided, however, requests to amend applications will not be granted that seek more than a *pro forma* change of ownership or control (bankruptcy, death or legal disability) of a pending Multipoint Distribution Service application and any application seeking more than a *pro forma* change of ownership or control will be dismissed.

(c) The Commission will classify amendments on a case-by-case basis. Whenever previous amendments have been filed, the most recent amendment will be classified by reference to how the information in question stood as of the latest Public Notice issued which concerned the application. An amendment will be deemed to be a major amendment subject to § 21.27 and § 21.31 under any of the following circumstances:

(1) If in the Multipoint Distribution Service, the amendment results in a substantial modification of the engineering proposal such as (but not necessarily limited to):

(i) A change in, or addition of, a radio frequency channel;

(ii) A change in polarization of the transmitted signal;

(iii) A change in type of transmitter emission or an increase in emission bandwidth of more than ten (10) percent;

(iv) A change in the geographic coordinates of a station's transmitting antenna of more than ten (10) seconds of latitude or longitude, or both;

(v) Any change which increases the antenna height by 3.0 meters (10 feet) or more;

(vi) Any technical change which would increase the effective radiated power in any horizontal or vertical direction by more than one and one-half (1.5) dB; or

(vii) Any changes or combination of changes which would cause harmful electrical interference to an authorized facility or result in a mutually exclusive conflict with another pending application.

(2) Except during the sixty (60) day amendment period provided for in § 21.27(d), any amendment to an application for a new or modified response station hub, booster station or point-to-multipoint I channel(s) station or to an application for a modified main station that reflects any change in the technical specifications of the proposed facility, includes any new or modified analysis of potential interference to

another facility or submits any interference consent from a neighboring licensee, shall result in the application being assigned a new file number and being treated as newly filed.

(3) If the amendment would convert a proposal, such that it may have a significant impact upon the environment under § 1.1307 of the Commission's rules, which would require the submission of an environmental assessment, see § 1.1311 of this chapter, and Commission environmental review, *see* §§ 1.1308 and 1.1312 of this chapter.

(4) If the amendment results in a substantial and material alteration of the proposed service.

(5) If the amendment specifies a substantial change in benefical ownership or control (*de jure* or *de facto*) of an applicant such that the change would require, in the case of an authorized station, the filing of a prior assignment or transfer of control application under section 310(d) of the Communications Act of 1934 [47 U.S.C. 310(d)]. Such a change would not be considered major where the assignment or transfer of control is for legitimate business purposes other than the acquisition of applications.

(6) If the amendment, or the cumulative effect of the amendment, is determined by the Commission otherwise to be substantial pursuant to section 309 of the Communications Act of 1934.

(d) The applicant must serve copies of any amendments or other written communications upon the following parties:

(1) Any applicant whose application appears on its face to be mutually exclusive with the application being amended, including those applicants originally served under § 21.902;

(2) Any applicant whose application has been found by the Commission, as published in a public notice, to be mutually exclusive with the application being amended; and

(3) Any party who has filed a petition to deny the application or other formal objection, when that petition or formal objection has not been resolved by the Commission.

(e) The Commission may waive the service requirements of paragraph (e) of this section and prescribe such alternative procedures as may be appropriate under the circumstances to protect petitioners' interests and to avoid undue delay in a proceeding, if an applicant submits a request for waiver which demonstrates that the service requirement is unreasonably burdensome. Requests for waiver shall be served on petitioners. Oppositions to the petition may be filed within five (5) days after the petition is filed and shall be served on the applicant. Replies to oppositions will not be entertained.

(f) Any amendment to an application shall be signed and shall be submitted in the same manner, and with the same number of copies, as was the original application. Amendments may be made in letter form if they comply in all other respects with the requirements of this chapter.

[44 FR 60534, Oct. 19, 1979, as amended at 46 FR 23450, Apr. 27, 1981; 50 FR 5992, Feb. 13, 1985; 50 FR 45614, Nov. 1, 1985; 52 FR 37779, Oct. 9, 1987; 55 FR 20397, May 16, 1990; 56 FR 57816, Nov. 14, 1991; 58 FR 11797, Mar. 1, 1993; 58 FR 44894, Aug. 25, 1993; 61 FR 26674, May 28, 1996; 64 FR 63730, Nov. 22, 1999; 65 FR 46617, July 31, 2000]

§ 21.24 [Reserved]

§ 21.25 Application for temporary authorizations.

(a) In circumstances requiring immediate or temporary use of facilities, request may be made for special temporary authority to install and/or operate new or modified equipment. Any such request may be submitted as an informal application in the manner set forth in § 21.5 and must contain full particulars as to the proposed operation including all facts sufficient to justify the temporary authority sought and the public interest therein. No such request will be considered unless the request is received by the Commission at least 10 days prior to the date of proposed construction or operation or, where an extension is sought, expiration date of the existing temporary authorization.

(b) Special temporary authorizations may be granted without regard to the 30-day public notice requirement of § 21.27(c) when:

(1) The authorization is for a period not to exceed 30 days and no application for regular application is contemplated to be filed;

(2) The authorization is for a period not to exceed 60 days pending the filing of an application for such regular operation;

(3) The authorization is to permit interim operation to facilitate completion of authorized construction or to provide substantially the same service as previously authorized; or

(4) The authorization is made upon a finding that there are extraordinary circumstances requiring operation in the public interest and that delay in the institution of such service would seriously prejudice the public interest.

(c) Temporary authorization of operations not to exceed 180 days may be granted under the standards of section 309(f) of the Communications Act where extraordinary circumstances so require. Extensions of the temporary authorization for a period of 180 days each may also be granted, but the renewal applicant bears a heavy burden to show that extraordinary circumstances warrant such an extension.

(d) In cases of emergency found by the Commission, involving danger to life or property or due to damage of equipment, or during a national emergency proclaimed by the President or declared by the Congress or during the continuance of any war in which the United States is engaged and when such action is necessary for the national defense or safety or otherwise in furtherance of the war effort, or in cases of emergency where the Commission finds that it would not be feasible to secure renewal applications from existing licensees or otherwise to follow normal licensing procedure, the Commission will grant construction permits and station licenses, or modifications or renewals thereof, during the emergency found by the Commission or during the continuance of any such national emergency or war, as special temporary licenses, only for the period of emergency or war requiring such action, without the filing of formal applications.

[44 FR 60534, Oct. 19, 1979, as amended at 48 FR 27252, June 14, 1983; 52 FR 37779, Oct. 9, 1987]

PROCESSING OF APPLICATIONS

§ 21.26 Receipt of applications.

Applications received by the Commission are given a file number for administrative convenience, which does not indicate the acceptance of the application for filing and processing. After preliminary review those applications covered by § 21.27(a) that appear complete will be put on public notice as accepted for filing. Neither the assignment of a file number nor the listing of the application on public notice as accepted for filing indicates that the application has been found acceptable for filing or precludes the subsequent return or dismissal of the application if it is found to be defective or not in substantial compliance with the Commission's rules.

[52 FR 37779, Oct. 9, 1987]

§ 21.27 Public notice period.

(a) At regular intervals, the Commission will issue a public notice listing:

(1) The acceptance for filing of applications and major amendments thereto;

(2) Significant Commission actions concerning applications;

(3) The filing of certifications of completion of construction;

(4) The receipt of applications for minor modifications made pursuant to § 21.41;

(5) Information which the Commission in its discretion believes of public significance; and

(6) Special environmental considerations as required by part 1 of this chapter.

(7) The BTAs designated for licensing through the competitive bidding process and the filing date for short-form applications for those areas;

(8) The auction winners in the competitive bidding process;

(b) A public notice will not normally be issued for any of the following applications:

(1) For authorization of a minor technical change in the facilities of a proposed or authorized station where such a change would not be classified as a major amendment to a pending application, as defined by § 21.23, or as a

minor modification to a license pursuant to §21.41;

(2) For temporary authorization pursuant to §21.25;

(3) For an authorization under any of the proviso clauses of section 308(a) of the Communications Act of 1934 (47 U.S.C. 308(a));

(4) For consent to an involuntary assignment or transfer of control of a radio authorization; or

(5) For consent to a voluntary assignment or transfer of control of a radio authorization, where the assignment or transfer does not involve a substantial change in ownership or control.

(c) Except as otherwise provided in this part (e.g., §21.41), no application that has appeared on public notice will be granted until the expiration of a period of thirty days following the issuance of the public notice listing the application, or any major amendment thereto, or until the expiration of a period of thirty days following the issuance of a public notice identifying the tentative selectee of a random selection process, whichever is later.

(d) Notwithstanding any other provisions of this part, effective as of September 17, 1998, there shall be one one-week window, at such time as the Commission shall announce by public notice, for the filing of applications for high-power signal booster station, response station hub and I channels point-to-multipoint transmissions licenses, during which all applications shall be deemed to have been filed as of the same day for purposes of §§21.909, 21.913 and 74.939(l) of this chapter. Following the publication of a public notice announcing the tendering for filing of applications submitted during that window, applicants shall have a period of sixty (60) days to amend their applications, provided such amendments do not result in any increase in interference to any previously proposed or authorized station, or to facilities proposed during the window, absent consent of the applicant for or conditional licensee or licensee of the station that would receive such interference. At the conclusion of that sixty (60) day period, the Commission shall publish a public notice announcing the acceptance for filing of all applications submitted during the initial window, as amended during the sixty (60) day period. All petitions to deny such applications must be filed within sixty (60) days of such second public notice. On the sixty-first (61st) day after the publication of such second public notice, applications for new or modified response station hub, booster station and I channels point-to-multipoint transmissions licenses may be filed and will be processed in accordance with the provisions of §§21.909, 21.913 and 74.939(l) of this chapter. Notwithstanding §21.31, each application submitted during the initial window shall be granted on the sixty-first (61st) day after the Commission shall have given such public notice of its acceptance for filing, unless prior to such date either a party in interest timely files a formal petition to deny or for other relief pursuant to §21.30(a), or the Commission notifies the applicant that its application will not be granted. Where an application is granted pursuant to the provisions of this paragraph, the conditional licensee or licensee shall maintain a copy of the application at the transmitter site or response station hub until such time as the Commission issues a license.

[52 FR 37779, Oct. 9, 1987, as amended at 54 FR 10327, Mar. 13, 1989; 60 FR 36552, July 17, 1995; 61 FR 26674, May 28, 1996; 63 FR 65101, Nov. 25, 1998; 64 FR 4054, Jan. 27, 1999]

§21.28 Dismissal and return of applications.

(a) Except as provided under paragraph (c) of this section and under §21.29, any application may be dismissed without prejudice as a matter of right if the applicant requests its dismissal prior to designation for hearing or prior to selection of the comparative evaluation procedure of §21.35. An applicant's request for return of its application after it has been accepted for filing will be considered to be a request for dismissal without prejudice. Requests for dismissal shall comply with the provisions of §21.29 as appropriate.

(b) A request to dismiss an application without prejudice will be considered after designation for hearing, after selection of the comparative evaluation procedure of §21.35, or after selection as a tentative selectee in a random selection proceeding, only if:

(1) A written petition is submitted to the Commission and, in the case of applications designated for hearing or comparative evaluation, is properly served upon all parties of record;

(2) The petition is submitted before the issuance date of a public notice of Commission action denying the application; and

(3) The petition complies with the provisions of § 21.29 (whenever applicable) and demonstrates good cause.

(c) Except as provided under § 21.29, an application designated for inclusion in the random selection process may be dismissed without prejudice as a matter of right if the applicant requests its dismissal at least 2 days prior to a random selection proceeding. An applicant's request for return of its application after it has been accepted for filing will be considered to be a request for dismissal without prejudice. Requests for dismissal shall comply with the provisions of § 21.29 as appropriate.

(d) The Commission will dismiss an application for failure to prosecute or for failure to respond substantially within a specified time period to official correspondence or requests for additional information. Dismissal will be without prejudice prior to designation for hearing, selection of the comparative evaluation procedure of § 21.35, or tentative selection by the random selection process, but may be with prejudice for unsatisfactory compliance with § 21.29, or after designation for hearing, selection of the comparative evaluation process, or selection as a tentative selectee in a random selection proceeding.

(e) The Commission will dismiss an application filed by a cable television company which fails to comply with the provisions of § 21.912 of this part.

(f) A Multipoint Distribution Service application will be dismissed if the applicant seeks to change ownership or control, except in the case of a *pro forma* change of ownership or control (bankruptcy, death, or legal disability).

[44 FR 60534, Oct. 19, 1979, as amended at 50 FR 5993, Feb. 13, 1985; 55 FR 46009, Oct. 31, 1990; 58 FR 11797, Mar. 1, 1993]

§ 21.29 Ownership changes and agreements to amend or to dismiss applications or pleadings.

(a) Except as provided in paragraph (b) of this section, applicants or any other parties in interest to pending applications shall comply with the provisions of this section whenever:

(1) They participate in any agreement (or understanding) which involves any consideration promised or received, directly or indirectly, including any agreement (or understanding) for merger of interests or the reciprocal withdrawal of applications; and

(2) The agreement (or understanding) may result in either:

(i) A proposed substantial change in beneficial ownership or control *(de jure* or *de facto)* of an applicant such that the change would require, in the case of an authorized station, the filing of a prior assignment or transfer of control application under section 310(d) of the Communications Act of 1934 [47 U.S.C. 310(d)], or

(ii) Proposed withdrawal, amendment or dismissal of any application(s), amendment(s), petition(s), pleading(s), or any combination thereof, which would thereby permit the grant without hearing, comparative evaluation under of § 21.35, or random selection of an application previously in contested status.

(b) The provisions of this section shall not be applicable to any engineering agreement (or understanding) which:

(1) Resolves frequency conflicts with authorized stations or other pending applications without the creation of new or increased frequency conflicts; and

(2) Does not involve any consideration promised or received, directly or indirectly (including any merger of interests or reciprocal withdrawal of applications), other than the mutual benefit of resolving the engineering conflict.

(c) For any agreement subject to this section, the applicant of an application which would remain pending pursuant to such an agreement will be considered responsible for the compliance by all parties with the procedures of this section. Failure of the parties to comply with the procedures of this section

shall constitute a defect in those applications which are involved in the agreement and remain in a pending status.

(d) The principals to any agreement or understanding subject to this section shall comply with the standards of paragraph (e) of this section in accordance with the following procedure:

(1) Within ten (10) days after entering into the agreement, the parties thereto shall jointly notify the Commission in writing of the existence and general terms of such agreement, the identity of all of the participants and the applications involved;

(2) Within thirty (30) days after entering into the agreement, the parties thereto shall file any proposed application amendments, motions, or requests together with a copy of the agreement which clearly sets forth all terms and provisions, and such other facts and information as necessary to satisfy the standards of paragraph (e) of this section. Such submission shall be accompanied by the certification by affidavit of each principal to the agreement declaring that the statements made are true, complete, and correct to the best of their knowledge and belief, and are made in good faith.

(3) The Commission may request any further information which in its judgment it believes is necessary for a determination under paragraph (e) of this section.

(e) The Commission will grant an application (or applications) involved in the agreement (or understanding) only if it finds upon examination of the information submitted, and upon consideration of such other matters as may be officially noticed, that the agreement is consistent with the public interest, and the amount of any monetary consideration and the cash value of any other consideration promised or received is not in excess of those legitimate and prudent costs directly assignable to the engineering, preparation, filing and advocacy of the withdrawn, dismissed, or amended application(s), amendment(s), petition(s), pleading(s), or any combination thereof. Where such costs represent the applicant's in-house efforts, these costs shall include only directly assignable costs and shall exclude general overhead expenses. [The treatment to be accorded such consideration for interstate rate making purposes will be determined at such time as the question may arise in an appropriate rate proceeding.] An itemized accounting shall be submitted to support the amount of consideration involved except where such consideration (including the fair market value of any non-cash consideration) promised or received does not exceed one thousand dollars ($1,000.00). Where consideration involves a sale of facilities or merger of interests, the accounting shall clearly identify that portion of the consideration allocated for such facilities or interests and a detailed description thereof, including estimated fair market value. The Commission will not presume an agreement (or understanding) to be prima facie contrary to the public interest solely because it incorporates a mutual agreement to withdraw pending application(s), amendment(s), petition(s), pleading(s), or any combination thereof.

(f) Notwithstanding § 21.29(e), amendments will not be granted that seek more than a *pro forma* change of ownership or control (bankruptcy, death, or legal disability) of a pending Multipoint Distribution Service application, and any Multipoint Distribution Service application will be dismissed that seeks more than a *pro forma* change of ownership or control.

[44 FR 60534, Oct. 19, 1979, as amended at 50 FR 5993, Feb. 13, 1985; 58 FR 11797, Mar. 1, 1993]

§ 21.30 Opposition to applications.

(a) Petitions to deny (including petitions for other forms of relief) and responsive pleadings for Commission consideration must:

(1) Identify the application or applications (including applicant's name, station location, Commission file numbers and radio service involved) with which it is concerned;

(2) Be filed in accordance with the pleading limitations, filing periods, and other applicable provisions of §§ 1.41 through 1.52, and 1.821 through 1.825;

(3) Contain specific allegations of fact (except for those of which official notice may be taken), which shall be supported by affidavit of a person or

persons with personal knowledge thereof, and which shall be sufficient to demonstrate that the petitioner (or respondent) is a party in interest and that a grant of, or other Commission action regarding, the application would be prima facie inconsistent with the public interest;

(4) Except as provided in § 21.902(i)(6) regarding Instructional Television Fixed Service licensees and conditional licensees, in § 21.909 regarding MDS response station hubs and in § 21.913 regarding MDS booster stations, be filed within thirty (30) days after the date of public notice announcing the acceptance for filing of any such application or major amendment thereto, or identifying the tentative selectee of a random selection proceeding in the Multichannel Multipoint Distribution Service or for Multipoint Distribution Service H-channel stations (unless the Commission otherwise extends the filing deadline); and

(5) Contains a certificate of service showing that it has been mailed to the applicant no later than the date of filing thereof with the Commission.

(b) The Commission will classify as informal objections:

(1) Any petition to deny not filed in accordance with paragraph (a) of this section;

(2) Any petition to deny (or for other forms of relief) an application to which the thirty (30) day public notice period of § 21.27(c) does not apply; or

(3) Any comments on, or objections to, the grant of an application when the comments or objections do not conform to either paragraph (a) of this section or other Commission rules and requirements.

(c) The Commission will consider informal objections, but will not necessarily discuss them specifically in a formal opinion if:

(1) The informal objection is filed at least one day before Commission action on the application; and

(2) The informal objection is signed by the submitting person (or his representative) and discloses his interest.

[44 FR 60534, Oct. 19, 1979, as amended at 50 FR 5993, Feb. 13, 1985; 50 FR 45614, Nov. 1, 1985; 52 FR 37779, Oct. 9, 1987; 55 FR 46009, Oct. 31, 1990; 56 FR 57816, Nov. 14, 1991; 63 FR 65101, Nov. 25, 1998]

§ 21.31 Mutually exclusive applications.

(a) Except with respect to applications for new or modified response stations hubs, booster stations, and point-to-multipoint I channel stations, and to applications for modified main stations, filed on the same day or during the same window, the Commission will consider applications to be mutually exclusive if their conflicts are such that grant of one application would effectively preclude by reason of harmful electrical interference, or other practical reason, the grant of one or more of the other applications.

(b) An application will be entitled to be included in a random selection process or to comparative consideration with one or more conflicting applications only if:

(1) The application is mutually exclusive with the other application; and

(2) The application is received by the Commission in a condition acceptable for filing by whichever ''cut-off'' date is earlier:

(i) Sixty (60) days after the date of the public notice listing the first of the conflicting applications as accepted for filing; or

(ii) One (1) business day preceding the day on which the Commission takes final action on the previously filed application (should the Commission act upon such application in the interval between thirty (30) and sixty (60) days after the date of its public notice).

(c) Whenever three or more applications are mutually exclusive, but not uniformly so, the earliest filed application established the date prescribed in paragraph (b)(2) of this section, regardless of whether or not subsequently filed applications are directly mutually exclusive with the first filed application. [For example, applications A, B, and C are filed in that order. A and B are directly mutually exclusive, B and C are directly mutually exclusive. In order to be considered comparatively with B, C must be filed within the ''cut-off'' period established by A even though C is not directly mutually exclusive with A.]

(d) An application otherwise mutually exclusive with one of more previously filed applications, but filed after the appropriate date prescribed in

paragraph (b)(2) of this section, will be returned without prejudice and will be eligible for refiling only after final action is taken by the Commission with respect to the previously filed application (or applications).

(e) For the purposes of this section, any application (whether mutually exclusive or not) will be considered to be a newly filed application if it is amended by a major amendment (as defined by §21.23), except under any of the following circumstances:

(1) The application has been designated for comparative hearing, or for comparative evaluation (pursuant to §21.35), and the Commission or the presiding officer accepts the amendment pursuant to §21.23(b);

(2) The amendment resolves frequency conflicts with authorized stations or other pending applications which would otherwise require resolution by hearing, by comparative evaluation pursuant to §21.35, or by random selection pursuant to §21.33 provided that the amendment does not create new or additional frequency conflicts;

(3) The amendment reflects only a change in ownership or control found by the Commission to be in the public interest, and for which a requested exemption from the ''cut-off'' requirements of this section is granted, unless the amendment is for more than a *pro forma* change of ownership or control (bankruptcy, death or legal disability) of a pending Multipoint Distribution Service application in which event the application will be dismissed;

(4) The amendment reflects only a change in ownership or control which results from an agreement under §21.29 whereby two or more applicants entitled to comparative consideration of their applications join in one (or more) of the existing applications and request dismissal of their other application (or applications) to avoid the delay and cost of comparative consideration, unless the amendment is for one (or more) pending Multipoint Distribution Service application (or applications) in which event the application (or applications) will be dismissed;

(5) The amendment corrects typographical, transcription, or similar clerical errors which are clearly demonstrated to be mistakes by reference to other parts of the application, and whose discovery does not create new or increased frequency conflicts; or

(6) The amendment does not create new or increased frequency conflicts, and is demonstrably necessitated by events which the applicant could not have reasonably foreseen at the time of filing, such as, for example:

(i) The loss of a transmitter or receiver site by condemnation, natural causes, or loss of lease or option;

(ii) Obstruction of a proposed transmission path caused by the erection of a new building or other structure; or

(iii) The discontinuance or substantial technological obsolescence of specified equipment, whenever the application has been pending before the Commission for two or more years from the date of its filing.

[44 FR 60534, Oct. 19, 1979, as amended at 45 FR 65600, Oct. 3, 1980; 45 FR 70468, Oct. 24, 1980; 50 FR 5993, Feb. 13, 1985; 52 FR 27554, July 22, 1987; 52 FR 37780, Oct. 9, 1987; 55 FR 10462, Mar. 21, 1990; 58 FR 11797, Mar. 1, 1993; 61 FR 26674, May 28, 1996; 63 FR 65101, Nov. 25, 1998; 64 FR 63730, Nov. 22, 1999; 65 FR 46617, July 31, 2000]

§21.32 Consideration of applications.

(a) Applications for an instrument of authorization will be granted if, upon examination of the application and upon consideration of such other matters as it may officially notice, the Commission finds that the grant will serve the public interest, convenience, and necessity.

(b) The grant shall be without a formal hearing if, upon consideration of the application, any pleadings of objections filed, or other matters which may be officially noticed, the Commission finds that:

(1) The application is acceptable for filing, and is in accordance with the Commission's rules, regulations, and other requirements;

(2) The application is not subject to comparative consideration (pursuant to §21.31) with another application (or applications), except where the competing applicants have chosen the comparative evaluation procedure of §21.35 and a grant is appropriate under that procedure;

(3) A grant of the application would not cause harmful electrical interference to an authorized station;

(4) There are no substantial and material questions of fact presented; and

(5) The applicant is legally, technically, financially and otherwise qualified, and a grant of the application would serve the public interest.

(c) If the Commission should grant without a formal hearing an application for an instrument of authorization which is subject to a petition to deny filed in accordance with § 21.30, the Commission will deny the petition by the issuance of a Memorandum Opinion and Order which will concisely report the reasons for the denial and dispose of all substantial issues raised by the petition.

(d) Whenever the Commission, without a formal hearing, grants any application in part, or subject to any terms or conditions other than those normally applied to applications of the same type, it shall inform the applicant of the reasons therefor, and the grant shall be considered final unless the Commission should revise its action (either by granting the application as originally requested, or by designating the application for a formal evidentiary hearing) in response to a petition for reconsideration which:

(1) Is filed by the applicant within thirty (30) days from the date of the letter or order giving the reasons for the partial or conditioned grant;

(2) Rejects the grant as made and explains the reasons why the application should be granted as originally requested; and

(3) Returns the instrument of authorization.

(e) The Commission will designate an application for a formal hearing, specifying with particularity the matters and things in issue, if, upon consideration of the application, any pleadings or objections filed, or other matters which may be officially noticed, the Commission determines that:

(1) A substantial and material question of fact is presented;

(2) The Commission is unable for any reason to make the findings specified in paragraph (a) of this section and the application is acceptable for filing, complete, and in accordance with the Commission's rules, regulations, and other requirements.

(3) The application is entitled to comparative consideration (under § 21.31) with another application (or applications); or

(4) The application is entitled to comparative consideration (pursuant to § 21.31) and the applicants have chosen the comparative evaluation procedure of § 21.35 but the Commission deems such procedure to be inappropriate.

(f) The Commission may grant, deny, or take other action with respect to an application designated for a formal hearing pursuant to paragraph (e) of this section or part 1 of this chapter.

(g) Whenever the public interest would be served thereby the Commission may grant one or more mutually exclusive applications expressly conditioned upon final action on the applications, and then either conduct a random section process (in specified services under this rules part), designate all of the mutually exclusive applications for a formal evidentiary hearing or (whenever so requested) follow the comparative evaluation procedures of § 21.35, as appropriate, if it appears:

(1) That some or all of the applications were not filed in good faith, but were filed for the purpose of delaying or hindering the grant of another application;

(2) That the public interest requires the prompt establishment of radio service in a particular community or area;

(3) That a delay in making a grant to any applicant until after the conclusion of a hearing or a random selection proceeding on all applications might jeopardize the rights of the United States under the provision of an international agreement to the use of the frequency in question; or

(4) That a grant of one application would be in the public interest in that it appears from an examination of the remaining applications that they cannot be granted because they are in violation of provisions of the Communications Act, other statutes, or of the provisions of this chapter.

(h) Reconsideration or review of any final action taken by the Commission

will be in accordance with subpart A of part 1 of this chapter.

[44 FR 60534, Oct. 19, 1979, as amended at 50 FR 5993, Feb. 13, 1985]

§ 21.33 Grants by random selection.

(a) If an application for an authorization for a Multichannel Multipoint Distribution Service (MMDS) station or for a Multipoint Distribution Service (MDS) H-channel station is mutually exclusive with another such application, and satisfies the requirements of §§ 21.31 and 21.914, the applicant may be included in the random selection process set forth in §§ 1.821, 1.822 and 1.824 of this chapter.

(b) Renewal applications shall not be included in a random selection process.

(c) If Multipoint Distribution Service applicants enter into settlements, the applicants in the settlement must be represented by one application only and will not receive the cumulative number of chances in the random selection process that the individual applicants would have had if no settlement had been reached.

[58 FR 11798, Mar. 1, 1993, as amended at 61 FR 26674, May 28, 1996]

§ 21.34 [Reserved]

§ 21.35 Comparative evaluation of mutually exclusive applications.

(a) In order to expedite action on mutually exclusive applications in services under this rules part where the competitive bidding process or random selection process do not apply, the applicants may request the Commission to consider their applications without a formal hearing in accordance with the summary procedure outlined in paragraph (b) in this section if:

(1) The applications are entitled to comparative consideration pursuant to § 21.31;

(2) The applications have not been designated for formal evidentiary hearing; and

(3) The Commission determines, initially or at any time during the procedure outlined in paragraph (b) of this section, that such procedure is appropriate, and that, from the information submitted and consideration of such other matters as may be officially noticed, there are no substantial and material questions of fact presented (other than those relating to the comparative merits of the applications) which would preclude a grant under paragraphs (a) and (b) of § 21.32.

(b) Provided that the conditions of paragraph (a) of this section are satisfied, applicants may request the Commission to act upon their mutually exclusive applications without a formal hearing pursuant to the summary procedure outlined below:

(1) To initiate the procedure, each applicant will submit to the Commission a written statement containing:

(i) A waiver of the applicant's right to a formal hearing;

(ii) A request and agreement that, in order to avoid the delay and expense of a comparative formal hearing, the Commission should exercise its judgment to select from among the mutually exclusive applications that proposal (or proposals) which would best serve the public interest; and

(iii) The signature of a principal (and the principal's attorney if represented).

(2) After receipt of the written requests of all of the applicants the Commission (if it deems this procedure appropriate) will issue a notice designating the comparative criteria upon which the applications are to be evaluated and will request each applicant to submit, within a specified period of time, additional information concerning the applicant's proposal relative to the comparative criteria.

(3) Within thirty (30) days following the due date for filing this information, the Commission will accept concise and factual argument on the competing proposals from the rival applicants, potential customers, and other knowledgeable parties in interest.

(4) Within fifteen (15) days following the due date for the filing of comments, the Commission will accept concise and factual replies from the rival applicants.

(5) From time to time during the course of this procedure the Commission may request additional information from the applicants and hold informal conferences at which all competing applicants shall have the right to be represented.

(6) Upon evaluation of the applications, the information submitted, and

such other matters as may be officially noticed the Commission will issue a decision granting one (or more) of the proposals which it concludes would best serve the public interest, convenience and necessity. The decision will report briefly and concisely the reasons for the Commission's selection and will deny the other application(s). This decision shall be considered final.

[44 FR 60534, Oct. 19, 1979, as amended at 50 FR 5994, Feb. 13, 1985; 52 FR 37780, Oct. 9, 1987; 60 FR 36552, July 17, 1995]

§§ 21.36–21.37 [Reserved]

LICENSE TRANSFERS, MODIFICATIONS, CONDITIONS AND FORFEITURES

§ 21.38 Assignment or transfer of station authorization.

(a) No station license, or any rights thereunder, shall be transferred, assigned, or disposed of in any manner, voluntarily or involuntarily, directly or indirectly, or by transfer of control of any corporation or any other entity holding any such license, to any person except upon application to the Commission and upon finding by the Commission that the public interest, convenience and necessity will be served thereby.

(b) For purposes of this section, transfers of control requiring Commission approval shall include any and all transactions that:

(1) Change the party controlling the affairs of the licensee, or

(2) Affect any change in a controlling interest in the ownership of the licensee, including changes in legal or equitable ownership, or

(c) Requests for transfer of control or assignment authority shall be submitted on the application form prescribed by § 21.11 of this chapter, and shall be accompanied by the applicable showings required by §§ 21.13, 21.15, 21.17 and 21.39 of this chapter.

(d) The Commission shall be promptly notified in writing when a licensee is voluntarily or involuntarily placed in bankruptcy or receivership and when an individual licensee, a member of a partnership which is a licensee, or a person directly or indirectly in control of a corporation which is a licensee, dies or becomes legally disabled. Within thirty days after the occurrence of such bankruptcy, receivership, death or legal disability, an application of involuntary assignment of such license, or involuntary transfer of control of such corporation, shall be filed with the Commission, requesting assignment or transfer to a successor legally qualified under the laws of the place having jurisdiction over the assets involved.

(e) The assignor of a station licensed under this part may retain no right of reversion or reassignment of the license and may not reserve the right to use the facilities of the station for any period whatsoever. No assignment of license will be granted or authorized if there is a contract or understanding, express or implied, pursuant to which a right of reversion or reassignment of the license or right to use the facilities are retained as partial or full consideration for the assignment or transfer.

(f) No special temporary authority, or any rights thereunder, shall be assigned or otherwise disposed of, directly or indirectly, voluntarily or involuntarily, without prior Commission approval.

(g) An applicant for voluntary transfer of control or assignment under this section where the subject license was acquired by the transferor or assignor through a system of random selection shall, together with its application for transfer of control or assignment, file with the Commission the associated contracts for sale, option agreements, management agreements, or other documents disclosing the total consideration that the applicant would receive in return for the transfer or assignment of its license. This information should include not only a monetary purchase price, but also any future, contingent, in-kind, or other consideration (e.g., management or consulting contracts either with or without an option to purchase; below-market financing).

[52 FR 37780, Oct. 9, 1987, as amended at 54 FR 11953, Mar. 23, 1989; 59 FR 9101, Feb. 25, 1994]

§ 21.39 Considerations involving transfer or assignment applications.

(a) A Multipoint Distribution Service conditional license may not be assigned or transferred prior to the completion of construction of the facility and the timely filing of the certification of completion of construction. However, consent to the assignment or transfer of control of a Multipoint Distribution Service conditional license may be given prior to the completion of construction and the timely filing of the certification of completion of construction where:

(1) The assignment or transfer does not involve a substantial change in ownership or control of the authorized Multipoint Distribution Service facilities; or

(2) The assignment or transfer of control is involuntary due to the licensee's bankruptcy, death, or legal disability.

(b) The Commission will review a proposed transaction to determine if the circumstances indicate ''trafficking'' in licenses whenever applications (except those involving *pro forma* assignment or transfer of control) for consent to assignment of a license, or for transfer of control of a licensee, involve facilities that were:

(1) Authorized following a comparative hearing and have been operated less than one year, or;

(2) Involve facilities that have not been constructed, or;

(3) Involve facilities that were authorized following a random selection proceeding in which the successful applicant received preference and that have been operated for less than one year.

At its discretion, the Commission may require the submission of an affirmative, factual showing (supported by affidavits of a person or persons with personal knowledge thereof) to demonstrate that the proposed assignor or transferor has not acquired an authorization or operated a station for the principal purpose of profitable sale rather than public service. This showing may include, for example, a demonstration that the proposed assignment or transfer is due to changed circumstances (described in detail) affecting the licensee subsequent to the acquisition of the license, or that the proposed transfer of radio facilities is incidental to a sale of other facilities or merger of interests.

(c) If a proposed transfer of radio facilities is incidental to a sale of other facilities or merger of interests, any showing requested under paragraph (a) of this section shall include an additional exhibit which:

(1) Discloses complete details as to the sale of facilities or merger of interests;

(2) Segregates clearly by an itemized accounting, the amount of consideration involved in the sale of facilities or merger of interests; and

(3) Demonstrates that the amount of consideration assignable to the facilities or business interests involved represents their fair market value at the time of the transaction.

(d) For the purposes of this section, the one year period is calculated using the following dates (as appropriate):

(1) The initial date of grant of the license, excluding subsequent modifications;

(2) The date of consummation of an assignment or transfer, if the station is acquired as the result of an assignment of license, or transfer of control of corporate licensee; or

(3) The median date of the applicable commencement dates (determined pursuant to paragraphs (c) (1) and (2) of this section) if the transaction involves two or more stations. (The median date is that date so selected such that fifty percent of the commencement dates of the total number of stations, when arranged in chronological order, lie below it and fifty percent lie above it. When the number of stations is an even number, the median date will be a value half way between the two dates closest to the theoretical median).

[44 FR 60534, Oct. 19, 1979, as amended at 48 FR 33900, July 26, 1983; 50 FR 5994, Feb. 13, 1985; 52 FR 27554, July 22, 1987. Redesignated and amended at 52 FR 37780, Oct. 9, 1987; 58 FR 11798, Mar. 1, 1993; 61 FR 26674, May 28, 1996]

§ 21.40 Modification of station license.

(a) Except as provided in §§ 21.41 and 21.42, no modification of a license issued pursuant to this part (or the facilities described thereunder) shall be made except upon application to the

Commission and upon finding by the Commission that:

(1) Such modification will promote the public interest, convenience and necessity, or

(2) That the provisions of the Communications Act of 1934 or of any treaty ratified by the United States will be more fully complied with if such application is granted.

(b) No application for modification to extend a license construction period will be granted for delays caused by lack of financing or for lack of site availability. Applications for time extensions for other reasons must include a verified statement from the application showing that the licensee has made diligent efforts to construct the facilities and:

(1) That additional time is required due to circumstances beyond the applicant's control, in which case the applicant must describe such circumstances and must set forth with specificity and justify the precise extension period requested; or

(2) That there are unique and overriding public interest concerns that justify such an extension, in which case the applicant must identify such interests and must set forth and justify a precise extension period.

(c) Notwithstanding the provisions of paragraph (b), when a station license has been assigned or transferred pursuant to § 21.38, any extension of time will be limited so that the time left to construct after Commission grant of the transfer or assignment will be no more than the time remaining for construction at the date of the filing of the application for transfer or assignment.

[52 FR 37780, Oct. 9, 1987]

§ 21.41 Special processing of applications for minor facility modifications.

(a) Unless an applicant is notified to the contrary by the Commission, as of the twenty-first day following the date of public notice, any application that meets the requirements of paragraph (b) of this section and proposes only the change specified in paragraph (c) of this section shall be deemed to have been authorized by the Commission.

(b) An application may be considered under the procedures of this section only if:

(1) It is in the Multipoint Distribution Service;

(2) The cumulative effect of all such applications made within any 60 days period does not exceed the appropriate values prescribed by paragraph (c) of this section;

(3) The facilities to be modified are not located within 56.3 kilometers (35 miles) of the Canadian or Mexican border;

(4) It is acceptable for filing, is consistent with all of the Commission's rules, and does not involve a waiver request;

(5) It specifically requests consideration pursuant to this section;

(6) Frequency notification procedures are complied with and a copy of the application has been served on those who also were served under § 21.902; and

(7) In the Multipoint Distribution Service, the modified facility would not produce a power flux density that exceeds -73 dBW/m^2, pursuant to §§ 21.902 and 21.939 at locations on the boundaries of protected service areas to which there is an unobstructed signal path.

(c) The modifications that may be authorized under the procedures of this section are:

(1) Changes in a transmitter and existing transmitter operating characteristics, or protective configuration of transmitter, provided that:

(i) In the Multipoint Distribution Service, any increase in EIRP is one and one-half dB or less over the previously-authorized power value; or

(ii) The necessary bandwidth is not increased by more than 10% of the previously authorized necessary bandwidth.

(2) Changes in the height of an antenna, provided that:

(i) In Multipoint Distribution Service, any increase in antenna height is less than 3.0 meters above the previously authorized height; and

(ii) The overall height of the antenna structure is not increased as a result of the antenna extending above the height of the previously authorized structure, except when the new height of the antenna structure is 6.1 meters

or less (above ground or man-made structure, as appropriate) after the change is made.

(3) Change in the geographical coordinates of a transmit station by ten seconds or less of latitude, longitude or both, provided that when notice to the FAA of proposed construction is required by part 17 of this chapter for antenna structure at the previously authorized coordinates (or will be required at the new location) the applicant must comply with the provisions of § 21.15(d).

(d) Upon grant of an application under the procedure of this section and at such time that construction begins, the applicant must keep a complete copy of the application (including the filing date) with the station license if construction is commenced prior to the receipt of the authorization.

[52 FR 37780, Oct. 9, 1987, as amended at 55 FR 46009, Oct. 31, 1990; 58 FR 44894, Aug. 25, 1993; 60 FR 36552, July 17, 1995; 61 FR 4364, Feb. 6, 1996; 61 FR 26674, May 28, 1996]

§ 21.42 Certain modifications not requiring prior authorization.

(a) Equipment in an authorized radio station may be replaced without prior authorization or notification if:

(1) The replacement equipment is identical (i.e., same manufacturer and model number) with the replacement equipment; or

(2) The replacement transmitter, transmitting antenna, transmission line loss and/or devices between the transmitter and antenna, or combinations of the above, do not change the EIRP of a station in any direction.

(b) Licensees of fixed stations in the Multipoint Distribution Service may make the facility changes listed in paragraph (c) of this section without obtaining prior Commission authorization, if:

(1) The Multipoint Distribution Service licensee serves a copy of the notification described in paragraph (b)(3) of this section on those who were served under § 21.902, and

(2) The cumulative effect of all facility changes made within any 60 day period does not exceed the appropriate values prescribed by paragraph (c) of this section, and

(3) The Commission is notified of changes made to facilities by the submission of a completed FCC Form 304 within thirty (30) days after the changes are made.

(4) In the Multipoint Distribution Service, the modified facility would not produce a power flux density at the protected service area boundary that exceeds -73 dBW/m^2, pursuant to §§ 21.902 and 21.939.

(c) Modifications that may be made without prior authorization under paragraph (b) of this section are:

(1) Change or modification of a transmitter, when:

(i) The replacement or modified transmitter is certificated for use under this part and is installed without modification from the certificated configuration;

(ii) The type of modulation is not changed;

(iii) The frequency stability is equal to or better than the previously authorized frequency stability; and

(iv) The necessary bandwidth and the output power do not exceed the previously authorized values.

(2) Addition or deletion of a transmitter for protection without changing the authorized power output (e.g. hot standby transmitters);

(3) Change to an antenna when the new antenna conforms with § 21.906 and the EIRP resulting from the new antenna does not exceed that resulting from the previously authorized antenna by more than one dB in any direction.

(4) Any technical changes that would decrease the effective radiated power.

(5) Change to the height of an antenna, when:

(i) The new height (measured at the center-of-radiation) is within ±1.5 meters (5 feet) of the previously authorized height; and

(ii) The overall height of the antenna structure is not increased as a result of the antenna extending above the height of the previously authorized structure, except when the new height of the antenna structure is 6.1 meters (20 feet) or less (above ground or man-made structure, as appropriate) after the change is made.

(6) Decreases in the overall height of an antenna structure, provided that,

when notice to the FAA of proposed construction was required by part 17 of this chapter for the antenna structure at the previously authorized height, the applicant must comply with the provisions of § 21.15 (d) and (e).

(7) Changes to the transmission line and other devices between the transmitter and the antenna when the effective radiated power of the station is not increased by more than one dB.

(8) A change to a sectorized antenna system comprising an array of directional antennas, provided that such system does not change polarization or result in an increase in radiated power by more than one dB in any horizontal or vertical direction; provided, however, that notice of such change is provided to the Commission on FCC Form 331 within ten (10) days of installation.

(d) Licensees may correct erroneous information on a license which does not involve a major change (i.e., a change that would be classified as a major amendment as defined by § 21.23) without obtaining prior Commission approval by filing a completed FCC Form 494, or for the Multipoint Distribution Service licensees, by filing the MDS long-form application.

[52 FR 37781, Oct. 9, 1987, as amended at 58 FR 44894, Aug. 25, 1993; 60 FR 36552, July 17, 1995; 60 FR 57366, Nov. 15, 1995; 61 FR 4364, Feb. 6, 1996; 61 FR 26674, May 28, 1996; 63 FR 36603, July 7, 1998; 63 FR 49870, Sept. 18, 1998; 63 FR 65101, Nov. 25, 1998; 64 FR 4054, Jan. 27, 1999; 65 FR 46617, July 31, 2000]

§ 21.43 Period of construction; certification of completion of construction.

(a) Except for Multipoint Distribution Service station licenses granted to BTA and PSA authorization holders, each license for a radio station for the services included in this part shall specify as a condition therein the period during which construction of facilities will be completed and the station made ready for operation. Construction may not commence until the grant of a license, and must be completed by the date specified in the license as the termination date of the construction period. Except as may be limited by § 21.45(b) or otherwise determined by the Commission for any particular application, the maximum construction period for all stations licensed under this part shall be a maximum of 12 months from the date of the license grant.

(b) Each license for a radio station for the services included in this part shall also specify as a condition therein that upon the completion of construction, each licensee must file with the Commission a certification of completion of construction using FCC Form 494A, certifying that the facilities as authorized have been completed and that the station is now operational and ready to provide service to the public, and will remain operational during the license period, unless the license is submitted for cancellation.

[52 FR 37782, Oct. 9, 1987, as amended at 60 FR 36552, July 17, 1995; 61 FR 26675, May 28, 1996]

§ 21.44 Forfeiture and termination of station authorization.

(a) A license shall be automatically forfeited in whole or in part without further notice to the licensee upon:

(1) The expiration of the construction period specified therein, where applicable, or after such additional time as may be authorized by the Commission, unless within 5 days after that date certification of completion of construction has been filed with the Commission pursuant to § 21.43;

(2) The expiration of the license period specified therein, unless prior thereto an application for renewal of such license has been filed with the Commission; or

(3) The voluntary removal or alteration of the facilities, so as to render the station not operational for a period of 30 days or more.

(b) A license forfeited in whole or in part under the provisions of paragraph (a)(1) or (a)(2) may be reinstated if the Commission, in its discretion, determines that reinstatement would best serve the public interest, convenience and necessity. Petitions for reinstatement filed pursuant to this subsection will be considered only if:

(1) The petition is filed within 30 days of the expiration date set forth in paragraph (a)(1) or (a)(2) of this section, whichever is applicable;

(2) The petition explains the failure to timely file such notification or application as would have prevented automatic forfeiture; and

(3) The petition sets forth with specificity the procedures which have been established to insure timely filings in the future.

(c) A special temporary authorization shall automatically terminate upon the expiration date specified therein, or upon failure to comply with any special terms or conditions set forth therein. Operation may be extended beyond such termination date only after application and upon specific authorization by the Commission.

[52 FR 37782, Oct. 9, 1987, as amended at 60 FR 36552, July 17, 1995]

§ 21.45 License period.

(a)(1) Licenses for stations in the Multipoint Distribution Service will be issued for a period not to exceed 10 years, except that licenses for developmental stations will be issued for a period not to exceed one year. The expiration date of developmental licenses shall be one year from the date of the grant thereof. Unless otherwise specified by the Commission, the expiration of regular licenses shall be on the following date in the year of expiration.

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(2) When a license is granted subsequent to the last renewal date of the class of license involved, the license shall be issued only for the unexpired period of the current license term of such class.

(b) The Commission reserves the right to grant or renew station licenses in these services for a shorter period of time than that generally prescribed for such stations if, in its judgment, public interest, convenience, or necessity would be served by such action.

(c) Upon the expiration or termination of any station license, any related conditional authorization, which bears a later expiration date, shall be automatically terminated concurrently with the related station license, unless it shall have been determined by the Commission that the public interest, convenience or necessity would be served by continuing in effect said conditional authorization.

[44 FR 60534, Oct. 19, 1979, as amended at 46 FR 23450, Apr. 27, 1981; 48 FR 27253, June 14, 1983; 61 FR 26675, May 28, 1996]

§ 21.50 Transition of the 2.11–2.13 and 2.16–2.18 GHz bands from Domestic Public Fixed Radio Services to emerging technologies.

(a) Licensees proposing to implement services using emerging technologies (ET Licensees) may negotiate with Domestic Public Fixed Radio Service licensees (Existing Licensees) in these bands for the purpose of agreeing to terms under which the Existing Licensees would relocate their operations to other fixed microwave bands or to other media, or alternatively, would accept a sharing arrangement with the ET Licensee that may result in an otherwise impermissible level of interference to the existing licensee's operations. ET Licensees may also negotiate agreements for relocation of the Existing Licensees' facilities within the 2 GHz band in which all interested parties agree to the relocation of the Existing Licensee's facilities elsewhere within these bands. ''All interested parties'' includes the incumbent licensee, the emerging technology provider or representative requesting and paying for the relocation, and any emerging technology licensee of the spectrum to which the incumbent's facilities are to be relocated.

(b) Domestic Public Fixed Radio licensees in bands allocated for licensed emerging technology services will maintain primary status in these bands until two years after the Commission commences acceptance of applications for an emerging technology services, and until one year after an emerging technology service licensee initiates negotiations for relocation of the fixed microwave licensee's operations or, in bands allocated for unlicensed emerging technology services, until one year after an emerging technology unlicensed equipment supplier or representative initiates negotiations for relocation of the fixed microwave licensee's operations. When it is necessary for an emerging technology provider or representative of unlicensed device manufacturers to negotiate with a fixed microwave licensee with operations in spectrum adjacent to that of the emerging technology provider, the transition schedule of the entity requesting the move will apply.

(c) The Commission will amend the operating license of the fixed microwave operator to secondary status only if the following requirements are met:

(1) The service applicant, provider, licensee, or representative using an emerging technology guarantees payment of all relocation costs, including all engineering, equipment, site and FCC fees, as well as any reasonable, additional costs that the relocated fixed microwave licensee might incur as a result of operation in another fixed microwave band or migration to another medium;

(2) The emerging technology service entity completes all activities necessary for implementing the replacement facilities, including engineering and cost analysis of the relocation procedure and, if radio facilities are used, identifying and obtaining, on the incumbents' behalf, new microwave frequencies and frequency coordination; and

(3) The emerging technology service entity builds the replacement system and tests it for comparability with the existing 2 GHz system.

(d) The 2 GHz microwave licensee is not required to relocate until the alternative facilities are available to it for a reasonable time to make adjustments, determine comparability, and ensure a seamless handoff.

(e) If within one year after the relocation to new facilities the 2 GHz microwave licensee demonstrates that the new facilities are not comparable to the former facilities, the emerging technology service entity must remedy the defects or pay to relocate the microwave licensee back to its former or equivalent 2 GHz frequencies.

[58 FR 46549, Sept. 2, 1993, as amended at 59 FR 19645, Apr. 25, 1994]

Subpart C—Technical Standards

§ 21.100 Frequencies.

The frequencies available for use in the service covered by this part are listed in subpart K. Assignment of frequencies will be made only in such a manner as to facilitate the rendition of communication service on an interference-free basis in each service area. Unless otherwise indicated, each frequency available for use by stations in this service will be assigned exclusively to a single applicant in any service area. All applicants for, and licensees of, stations in this service shall cooperate in the selection and use of the frequencies assigned in order to minimize interference and thereby obtain the most effective use of the authorized facilities. In the event harmful interference occurs or appears likely to occur between two or more radio systems and such interference cannot be resolved between the licensees thereof, the Commission may, after notice and opportunity for hearing, require the licensees to make such changes in operating techniques or equipment as it may deem necessary to avoid such interference.

[61 FR 26675, May 28, 1996]

§ 21.101 Frequency tolerance.

(a) The carrier frequency of each transmitter authorized in these services shall be maintained within the following percentage of the reference frequency except as otherwise provided in paragraph (b) of this section or in the applicable subpart of this part (unless otherwise specified in the instrument of station authorization the reference frequency shall be deemed to be the assigned frequency):

Frequency range (MHz)	Frequency tolerance for fixed stations (percent)
2,150 to 2,162 [1] [2]	0.001
2,596 to 2,680 [2]	0.005

[1] Beginning Aug. 9, 1975, this tolerance will govern the marketing of equipment pursuant to §§ 2.803 and 2.805 of this chapter and the issuance of all authorizations for new radio equipment. Until that date new equipment may be authorized with a frequency tolerance of 0.03 percent in the frequency range 2,200 to 10,500 MHz and equipment so authorized may continue to be used for its life provided that it does not cause interference to the operation of any other licensee. Equipment authorized in the frequency range 2,450 to 10,500 MHz prior to June 23, 1969, at a tolerance of 0.05 percent may continue to be used until February 1, 1976 provided it does not cause interference to the operation of any other licensee.

[2] Beginning January 21, 2000, the equipment authorized to be used at all MDS main stations, and at all MDS booster stations authorized pursuant to § 21.913(b) of this part, shall maintain a frequency tolerance of 0.001%. MDS booster stations authorized pursuant to § 21.913(e) of this part and MDS response stations authorized pursuant to § 21.909 of this part shall employ transmitters with sufficient frequency stability to ensure that the emission is, at all times, within the required emission mask.

(b) As an additional requirement in any band where the Commission makes assignments according to a specified channel plan, provisions shall be made

to prevent the emission included within the occupied bandwidth from radiating outside the assigned channel at a level greater than that specified in § 21.106.

[44 FR 60534, Oct. 19, 1979, as amended at 46 FR 23450, Apr. 27, 1981; 48 FR 50329, Nov. 1, 1983; 48 FR 50732, Nov. 3, 1983; 49 FR 37775, Sept. 26, 1984; 54 FR 10327, Mar. 13, 1989; 54 FR 24905, June 12, 1989; 55 FR 46009, Oct. 31, 1990; 56 FR 57816, Nov. 14, 1991; 61 FR 26675, May 28, 1996; 63 FR 65101, Nov. 25, 1998; 64 FR 63730, Nov. 22, 1999]

§§ 21.102–21.104 [Reserved]

§ 21.105 Bandwidth.

Each authorization issued pursuant to these rules will show, as the emission designator, a symbol representing the class of emission which shall be prefixed by a number specifying the necessary bandwidth. This figure does not necessarily indicate the bandwidth actually occupied by the emission at any instant. In those cases where part 2 of this chapter does not provide a formula for the computation of the necessary bandwidth, the occupied bandwidth may be used in the emission designator.

[49 FR 48700, Dec. 14, 1984]

§ 21.106 Emission limitations.

(a) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:

(1) When using transmissions other than those employing digital modulation techniques:

(i) On any frequency removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: At least 25 decibels;

(ii) On any frequency removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: At least 35 decibels;

(iii) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43+10 Log_{10} (mean output power in watts) decibels, or 80 decibels, whichever is the lesser attenuation.

(2) When using transmissions employing digital modulation techniques (see § 21.122(b)) in situations other than those covered by subpart K of this part:

(i) For operating frequencies below 15 GHz, in any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 50 percent up to and including 250 percent of the authorized bandwidth: As specified by the following equation but in no event less than 50 decibels. A=35+0.8(P;minus;50)+10 Log_{10} B. (Attenuation greater than 80 decibels is not required.)

where:

A=Attenuation (in decibels) below the mean output power level.

P=Percent removed from the carrier frequency.

B=Authorized bandwidth in MHz.

(ii) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43+10 Log_{10} (mean output power in watts) decibels, or 80 decibels, whichever is the lesser attenuation.

(b) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in paragraph (a) of this section.

[44 FR 60534, Oct. 19, 1979, as amended at 46 FR 23450, Apr. 27, 1981; 52 FR 23550, June 23, 1987; 61 FR 26675, May 28, 1996; 65 FR 46617, July 31, 2000]

§ 21.107 Transmitter power.

(a) The power which a station will be permitted to use in these services will be the minimum required for satisfactory technical operation commensurate with the size of the area to be served and local conditions which affect radio transmission and reception. In cases of harmful interference, the Commission may, after notice and opportunity for hearing, order a change in the effective radiated power of a station.

(b) The EIRP of a transmitter station employed in this radio service shall not exceed the values shown in the following tabulation:

Frequency range (MHz)	Maximum allowable EIRP for a fixed station (Watts)
2,150 to 2,162	[1] 2000
2,596 to 2,680	[1] 2000

[1] When a Multipoint Distribution Service station uses a non-omnidirectional antenna EIRP up to 7943 Watts may be authorized pursuant to § 21.904(b) of this Part.

[44 FR 60534, Oct. 19, 1979, as amended at 49 FR 37775, Sept. 26, 1984; 52 FR 7140, Mar. 9, 1987; 52 FR 37783, Oct. 9, 1987; 54 FR 10328, Mar. 13, 1989; 54 FR 24905, June 12, 1989; 55 FR 46009, Oct. 31, 1990; 56 FR 57816, Nov. 14, 1991; 58 FR 49224, Sept. 22, 1993; 61 FR 26675, May 28, 1996]

§ 21.108 [Reserved]

§ 21.109 Antenna and antenna structures.

(a) In the event harmful interference is caused to the operation of other stations, the Commission may, after notice and opportunity for hearing, order changes to be made in the height, orientation, gain and radiation pattern of the antenna system.

(b) The Commission may require the replacement, at the licensee's expense, of any antenna system of a permanent fixed station operating at 2500 MHz or higher upon a showing that said antenna causes or is likely to cause interference to any other authorized or proposed station.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37783, Oct. 9, 1987; 61 FR 26675, May 28, 1996]

§ 21.110 Antenna polarization.

Stations operating in the radio services included in this part are not limited as to the type of polarization of the radiated signal, provided, however, that in the event interference in excess of permissible levels is caused to the operation of other stations the Commission may, after notice and opportunity for hearing, order the licensee to change the polarization of the radiated signal. No change in polarization shall be made without prior authorization from the Commission.

[52 FR 37783, Oct. 9, 1987]

§ 21.111 Use of common antenna structure.

The simultaneous use of a common antenna structure by more than one station authorized under this part, or by one or more stations of any other service may be authorized. The owner, however, of each antenna structure required to be painted and/or illuminated under the provisions of Section 303(q) of the Communications Act of 1934, as amended, shall install and maintain the antenna structure painting and lighting in accordance with part 17 of this chapter. In the event of default by the owner, each licensee or permittee shall be individually responsible for conforming to the requirements pertaining to antenna structure painting and lighting.

[61 FR 4365, Feb. 6, 1996]

§ 21.112 Marking of antenna structures.

No owner, conditional licensee, or licensee of an antenna structure for which obstruction marking or lighting is required and for which an antenna structure registration number has been obtained, shall discontinue the required painting or lighting without having obtained prior written authorization therefor from the Commission. (For complete regulations relative to antenna marking requirements, see part 17 of this chapter.)

[61 FR 4365, Feb. 6, 1996]

§ 21.113 Quiet zones and Arecibo Coordination Zone.

Quiet zones are those areas where it is necessary to restrict radiation so as to minimize possible impact on the operations of radio astronomy or other facilities that are highly sensitive to radio frequency interference. The areas involved and procedures required are as follows:

(a) In order to minimize possible harmful interference at the National Radio Astronomy Observatory site located at Green Bank, Pocahontas County, West Virginia, and at the Naval Radio Research Observatory site at Sugar Grove, Pendleton County, West Virginia, any applicant for a station authorization other than mobile,

temporary base, or temporary fixed seeking authorization for a new station or to modify an existing station in a manner which would change either the frequency, power, antenna height or directivity, or location of such a station within the area bounded by 39°15′ N. on the north, 78°30′ W. on the east, 37°30′ N. on the south, and 80°30′ W. on the west shall, at the time of filing such application with the Commission, simultaneously notify the Director, National Radio Astronomy Observatory, Post Office Box No. 2, Green Bank, West Virginia 24944, in writing, of the technical particulars of the proposed operation. Such notification shall include the geographical coordinates of the antenna, antenna height, antenna directivity (if any), proposed frequency, type of emission, and power. In addition, the applicant shall indicate in his application to the Commission the date notification was made to the Observatory. After receipt of such applications, the Commission will allow a period of twenty (20) days for comments or objections in response to the notifications indicated. If an objection to the proposed operation is received during the 20-day period from the National Radio Astronomy Observatory for itself or on behalf of the Naval Radio Research Observatory, the Commission will consider all aspects of the problem and take whatever action is deemed appropriate.

(b) In order to minimize possible harmful interference at the Table Mountain Radio Receiving Zone of the Research Laboratories of the Department of Commerce located in Boulder County, Colorado, applicants for new or modified radio facilities in the vicinity of Boulder County, Colorado are advised to give due consideration prior to filing applications, to the need to protect the Table Mountain Radio Receiving Zone from harmful interference. To prevent degradation of this present ambient radio signal level at the site, the Department of Commerce seeks to ensure that the field strengths of any radiated signals (excluding reflected signals) received on this 728.4 hectare (1800 acre) site (in the vicinity of coordinates 40° 07′ 50″ N Latitude, 105° 15′ 40″ W Longitude) resulting from new assignments (other than mobile stations) or from the modification or relocation of existing facilities do not exceed the following values:

Frequency range	Field strength (mV/m) in authorized bandwidth of service	Power flux density [1] (dbW/m2) in authorized bandwidth of service
Below 540 kHz	10	−65.8
540 to 1600 kHz	20	−59.8
1.6 to 470 MHz	10	[2] −65.8
470 to 890 MHz	30	[2] −54.2
Above 890 MHz	1	[2] −85.8

[1] Equivalent values of power flux density are calculated assuming free space characteristic impedance of 376.7=120π ohms.

[2] Space stations shall conform to the power flux density limits at the earth's surface specified in appropriate parts of the FCC rules, but in no case should exceed the above levels in any 4 kHz band for all angles of arrival.

(1) Advance consultation is recommended particularly for those applicants who have no reliable data which indicates whether the field strength or power flux density figures in the above table would be exceeded by their proposed radio facilities (except mobile stations). In such instances, the following is a suggested guide for determining whether coordination is recommended:

(i) All stations within 2.4. kilometers (1.5 miles);

(ii) Stations within 4.8 kilometers (3 miles) with 50 watts or more average effective radiated power (ERP) in the primary plane of polarization in the azimuthal direction of the Table Mountain Radio Receiving Zone;

(iii) Stations within 16.1 kilometers (10 miles) with 1 kW or more average ERP in the primary plane of polarization in the azimuthal direction of Table Mountain Receiving Zone;

(iv) Stations within 80.5 kilometers (50 miles) with 25 kW or more average ERP in the primary plane of polarization in the azimuthal direction of Table Mountain Receiving Zone.

(2) Applicants concerned are urged to communicate with the Radio Frequency Management Coordinator, Department of Commerce, Research Support Services, NOAA R/E5X2, Boulder Laboratories, Boulder, CO 80303; telephone (303) 497–6548, in advance of filling their applications with the Commission.

(3) The Commission will not screen applications to determine whether advance consultation has taken place.

However, applicants are advised that such consultation can avoid objections from the Department of Commerce or proceedings to modify any authorization which may be granted which, in fact, delivers a signal at the site in excess of the field strength specified herein.

(c) Protection for Federal Communications Commission monitoring stations:

(1) Applicants in the vicinity of an FCC monitoring station for a radio station authorization to operate new transmitting facilities or changed transmitting facilities which would increase the field strength produced over the monitoring station over that previously authorized are advised to give consideration, prior to filing applications, to the possible need to protect the FCC stations from harmful interference. Geographical coordinates of the facilities which require protection are listed in § 0.121(c) of the Commission's Rules. Applications for stations (except mobile stations) which will produce on any frequency a direct wave fundamental field strength of *greater than 10 mV/m* in the authorized bandwidth of service (-65.8 dBW/m^2 power flux density assuming a free space characteristic impedance of 120 ohms) at the referenced coordinates, may be examined to determine extent of possible interference. Depending on the theoretical field strength value and existing root-sum-square or other ambient radio field signal levels at the indicated coordinates, a clause protecting the monitoring station may be added to the station authorization.

(2) In the event that calculated value of expected field exceeds 10 mV/m (-65.8 dBW/m^2) at the reference coordinates, or if there is any question whether field strength levels might exceed the threshold value, advance consultation with the FCC to discuss any protection necessary should be considered. Prospective applicants may communicate with: Chief, Compliance and Information Bureau, Federal Communications Commission, Washington, DC 20554, Telephone (202) 632–6980.

(3) Advance consultation is suggested particularly for those applicants who have no reliable data which indicates whether the field strength or power flux density figure indicated would be exceeded by their proposed radio facilities (except mobile stations). In such instances, the following is a suggested guide for determining whether an applicant should coordinate:

(i) All stations within 2.4 kilometers (1.5 statute miles);

(ii) Stations within 4.8 kilometers (3 statute miles) with 50 watts or more average effective radiated power (ERP) in the primary plane of polarization in the azimuthal direction of the Monitoring Stations.

(iii) Stations within 16.1 kilometers (10 miles) with 1 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station.

(iv) Stations within 80.5 kilometers (50 miles) with 25 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station.

(4) Advance coordination for stations operating above 1000 MHz is recommended only where the proposed station is in the vicinity of a monitoring station designated as a satellite monitoring facility in § 0.121(c) of the Commission's Rules and also meets the criteria outlined in paragraphs (c) (2) and (3) of this section.

(5) The Commission will not screen applications to determine whether advance consultation has taken place. However, applicants are advised that such consultation can avoid objections from the Federal Communications Commission or modification of any authorization which will cause harmful interference.

(d) Any applicant for a new permanent base or fixed station to be located on the islands of Puerto Rico, Desecheo, Mona, Vieques, and Culebra, or for a modification of an existing authorization which would change the frequency, power, antenna height, directivity, or location of a station on these islands and would increase the likelihood of the authorized facility causing interference, shall notify the Interference Office, Arecibo Observatory, Post Office Box 995, Arecibo, Puerto Rico 00613, in writing or electronically, of the technical parameters of the proposal. Applicants may wish to consult interference guidelines,

which will be provided by Cornell University. Applicants who choose to transmit information electronically should e-mail to: prcz@naic.edu

(1) The notification to the Interference Office, Arecibo Observatory shall be made prior to, or simultaneously with, the filing of the application with the Commission. The notification shall state the geographical coordinates of the antenna (NAD–83 datum), antenna height above ground, ground elevation at the antenna, antenna directivity and gain, proposed frequency and FCC Rule Part, type of emission, effective radiated power, and whether the proposed use is itinerant. Generally, submission of the information in the technical portion of the FCC license application is adequate notification. In addition, the applicant shall indicate in its application to the Commission the date notification was made to the Arecibo Observatory.

(2) After receipt of such applications, the Commission will allow the Arecibo Observatory a period of 20 days for comments or objections in response to the notification indicated. The applicant will be required to make reasonable efforts in order to resolve or mitigate any potential interference problem with the Arecibo Observatory and to file either an amendment to the application or a modification application, as appropriate. If the Commission determines that an applicant has satisfied its responsibility to make reasonable efforts to protect the Observatory from interference, its application may be granted.

(3) The provisions of this paragraph do not apply to operations that transmit on frequencies above 15 GHz.

[44 FR 60534, Oct. 19, 1979, as amended at 44 FR 77167, Dec. 31, 1979; 50 FR 39001, Sept. 26, 1985; 52 FR 37783, Oct. 9, 1987; 58 FR 44894, Aug. 25, 1993; 61 FR 8477, Mar. 5, 1996; 62 FR 55530, Oct. 27, 1997]

§§ 21.114–21.115 [Reserved]

§ 21.116 Topographical data.

Determining the location and height above sea level of the antenna site, the elevation or contour intervals shall be taken from United States Geological Survey Topographic Quadrangle Maps, United States Army Corps of Engineers maps or Tennessee Valley Authority maps, whichever is the latest, for all areas for which such maps are available. If such maps are not published for the area in question, the next best topographic information should be used. Topographic data may sometimes be obtained from State and municipal agencies. Data from Sectional Aeronautical Charts (including bench marks) or railroad depot elevations and highway elevations from road maps may be used where no better information is available. In cases where limited topographic data is available, use may be made of an altimeter in a car driven along roads extending generally radially from the transmitter site. If it appears necessary, additional data may be requested. United States Geological Survey Topographic Quadrangle Maps may be obtained from the Department of the Interior, Geological Survey, Washington, DC 20242. Sectional Aeronautical Charts are available from the Department of Commerce, Coast and Geodetic Survey, Washington, DC 20230.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37783, Oct. 9, 1987]

§ 21.117 Transmitter location.

(a) The applicant shall determine, prior to filing an application for a radio station authorization, that the antenna site specified therein is adequate to render the service proposed. In cases of questionable antenna locations, it is desirable to conduct propagation tests to indicate the field intensity which may be expected in the principal areas or at the fixed points of communication to be served, particularly where severe shadow problems may be expected. In considering applications proposing the use of such locations, the Commission may require site survey tests to be made pursuant to a developmental authorization in the particular service concerned. In such cases, propagation tests should be conducted in accordance with recognized engineering methods and should be made with a transmitting antenna simulating, as near as possible, the proposed antenna installation. Full data obtained from such surveys and its analysis, including a description of the methods used and the name, address

and qualifications of the engineer making the survey, must be supplied to the Commission.

(b) The owner of the antenna structure should locate and construct such structure as to avoid making them hazardous to air navigation. (See part 17 of this chapter for provisions relating to antenna structures.) Such installation shall be maintained in good structural condition together with any required painting or lighting.

[44 FR 60534, Oct. 19, 1979, as amended at 61 FR 4365, Feb. 6, 1996]

§ 21.118 Transmitter construction and installation.

(a) The equipment at the operating and transmitting positions shall be so installed and protected that it is not accessible to, or capable of being operated by, persons other than those duly authorized by the licensee.

(b) In any case where the maximum modulating frequency of a transmitter is prescribed by the Commission, the transmitter shall be equipped with a low-pass or band-pass modulation filter of suitable performance characteristics. In those cases where a modulation limiter is employed, the modulation filter shall be installed between the transmitter stage in which limiting is effected and the modulated stage of the transmitter.

(c) Each transmitter employed in these services shall be equipped with an appropriately labeled pilot lamp or meter which will provide continuous visual indication at the transmitter when its control circuits have been placed in a condition to activate the transmitter. Such requirement will not be applicable to MDS response stations or MDS booster stations authorized pursuant to § 21.913(e). In addition, facilities shall be provided at each transmitter to permit the transmitter to be turned on and off independently of any remote control circuits associated therewith.

(d) [Reserved]

(e) At each transmitter control point the following facilities shall be installed:

(1) A carrier operated device which will provide continuous visual indication when the transmitter is radiating, or, in lieu thereof, a pilot lamp or meter which will provide continuous visual indication when the transmitter control circuits have been placed in a condition to activate the transmitter.

(2) Facilities which will permit the operator to turn transmitter carrier on and off at will.

(f) Transmitter control circuits from any control point shall be so installed that grounding or shorting any line in the control circuit will not cause the transmitter to radiate: *Provided, however,* That this provision shall not be applicable to control circuits of stations which normally operate with continuous radiation or to control circuits which are under the effective operational control of responsible operating personnel 24 hours per day.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37783, Oct. 9, 1987; 63 FR 65101, Nov. 25, 1998]

§ 21.119 [Reserved]

§ 21.120 Authorization of transmitters.

(a) Except for transmitters used at developmental stations, each transmitter shall be a type which has been certificated by the Commission for use under the applicable rules of this part.

(b) Any manufacturer of a transmitter to be produced for use under the rules of this part may request certification by following the applicable procedures set forth in part 2 of this chapter. Type accepted and notified transmitters are included in the Commission's Radio Equipment List.

(c) Certification for an individual transmitter may also be requested by an applicant for a station authorization, pursuant to the procedures set forth in part 2 of this chapter.

[44 FR 60534, Oct. 19, 1979, as amended at 49 FR 3999, Feb. 1, 1984; 50 FR 7340, Feb. 22, 1985; 58 FR 49226, Sept. 22, 1993; 59 FR 19645, Apr. 25, 1994; 61 FR 26676, May 28, 1996; 63 FR 36603, July 7, 1998]

§ 21.121 [Reserved]

§ 21.122 Microwave digital modulation.

(a) Microwave transmitters employing digital modulation techniques and operating below 15 GHz shall, with appropriate multiplex equipment, comply with the following additional requirement: The bit rate, in bits per second,

shall be equal to or greater than the bandwidth specified by the emission designator in Hertz (e.g., to be acceptable, equipment transmitting at a 6 Mb/s rate must not require a bandwidth of greater than 6 MHz), except the bandwidth used to calculate the minimum rate shall not include any authorized guard band.

(b) For purposes of compliance with the emission limitation requirements of § 21.106(a)(2) of this part and the requirements of paragraph (a) of this section, digital modulation techniques are considered as being employed when digital modulation contributes 50 percent or more to the total peak frequency deviation of a transmitted radio frequency carrier. The total peak frequency deviation shall be determined by adding the deviation produced by the digital modulation signal and the deviation produced by any frequency division multiplex (FDM) modulation used. The deviation (D) produced by the FDM signal shall be determined in accordance with § 2.202(f) of part 2 of this chapter.

(c) Transmitters employing digital modulation techniques shall effectively eliminate carrier spikes or single frequency tones in the output signal to the degree which would be obtained without repetitive patterns occurring in the signal.

[44 FR 60534, Oct. 19, 1979, as amended at 46 FR 23451, Apr. 27, 1981; 49 FR 37775, Sept. 26, 1984; 58 FR 49226, Sept. 22, 1993; 61 FR 26676, May 28, 1996]

Subpart D—Technical Operation

§ 21.200 Station inspection.

The licensee of each station authorized in the radio services included in this part shall make the station available for inspection by representatives of the Commission at any reasonable hour.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37783, Oct. 9, 1987]

§ 21.201 Posting of station license.

(a) The instrument of authorization, a clearly legible photocopy thereof, or the name, address and telephone number of the custodian of the instrument of authorization shall be available at each station, booster station authorized pursuant to § 21.913(b) and MDS response station hub. Each operator of an MDS booster station shall post at the booster station the name, address and telephone number of the custodian of the notification filed pursuant to § 21.913(e) if such notification is not maintained at the booster station.

(b) If an MDS station, an MDS booster station or an MDS response station hub is operated unattended, the call sign and name of the licensee shall be displayed such that it may be read within the vicinity of the transmitter enclosure or antenna structure.

[64 FR 63731, Nov. 22, 1999]

§§ 21.202—21.208 [Reserved]

§ 21.209 Communications concerning safety of life and property.

(a) Handling and transmission of messages concerning the safety of life or property which is in imminent danger shall be afforded priority over other messages.

(b) No person shall knowingly cause to be transmitted any false or fraudulent message concerning the safety of life or property, or refuse upon demand immediately to relinquish the use of a radio circuit to enable the transmission of messages concerning the safety of life or property which is in imminent danger, or knowingly interfere or otherwise obstruct the transmission of such messages.

§ 21.210 Operation during emergency.

The licensee of any station in these services may, during a period of emergency in which normal communication facilities are disrupted as a result of hurricane, flood, earthquake, or similar disaster, utilize such station for emergency communication service in a manner other than that specified in the instrument of authorization: *Provided*, That (a) That as soon as possible after the beginning of such emergency use, notice be sent to the Commission at Washington, D.C. stating the nature of the emergency and the use to which the station is being put, and (b) that the emergency use of the station shall be discontinued as soon as substantially normal communication facilities are again available, and (c) that the

Commission at Washington, D.C. shall be notified immediately when such special use of the station is terminated, and (d) that, in no event, shall any station engage in emergency transmission on frequencies other than, or with power in excess of, that specified in the instrument of authorization or as otherwise expressly provided by the Commission, or by law, and (e) that the Commission may, at any time, order the discontinuance of any such emergency communication.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37784, Oct. 9, 1987]

§ 21.211 Suspension of transmission.

Transmission shall be suspended immediately upon detection by the station or operator licensee or upon notification by the Commission of a deviation from the technical requirements of the station authorization and shall remain suspended until such deviation is corrected, except for transmission concerning the immediate safety of life or property, in which case transmission shall be suspended immediately after the emergency is terminated.

Subpart E—Miscellaneous

§ 21.300 [Reserved]

§ 21.301 National defense; free service.

Any common carrier or Multipoint Distribution Service non-common carrier authorized under the rules of this part may render to any agency of the United States Government free service in connection with the preparation for the national defense. Every such carrier or Multipoint Distribution Service non-common carrier rendering any such free service shall make and file, in duplicate, with the Commission, on or before the 31st of July and on or before the 31st day of January in each year, reports covering the periods of 6 months ending on the 30th of June and the 31st of December, respectively, next prior to said dates. These reports shall show the names of the agencies to which free service was rendered pursuant to this rule, the general character of the communications handled for each agency, and the charges in dollars which would have accrued to the carrier or Multipoint Distribution Service non-common carrier for such service rendered to each agency if charges for such communications had been collected at the published tariff rates.

[52 FR 27555, July 22, 1987]

§ 21.302 Answers to notices of violation.

Any person receiving official notice of a violation of the terms of the Communications Act of 1934, as amended, any other Federal statute or Executive Order pertaining to radio or wire communications or any international radio or wire communications treaty or convention, or regulations annexed thereto to which the United States is a party, or the rules and regulations of the Federal Communications Commission, shall, within 10 days from such receipt, send a written answer to the office of the Commission originating the official notice. If an answer cannot be sent or an acknowledgment made within such 10-day period by reason of illness or other unavoidable circumstances, acknowledgment and answer shall be made at the earliest practicable date with a satisfactory explanation of the delay. The answer to each notice shall be complete in itself and shall not be abbreviated by reference to other communications or answers to other notices. If the notice relates to some violation that may be due to the physical or electrical characteristics of transmitting apparatus, the answer shall state fully what steps have been taken to prevent future violations, and, if any new apparatus is to be installed, the date such apparatus was ordered, the name of the manufacturer, and promised date of delivery. If the installation of such apparatus requires a construction permit, the file number of the application shall be given or, if a file number has not been assigned by the Commission, such identification as will permit ready reference thereto. If the notice of violation relates to inadequate maintenance resulting in improper operation of the transmitter, the name and license number of the operator performing the maintenance shall be given. If the notice of violation relates to some lack of attention to, or improper operation of, the transmitter by other employees, the reply shall set

forth the steps taken to prevent a recurrence of such lack of attention or improper operation.

§ 21.303 Discontinuance, reduction or impairment of service.

(a) If the public communication service provided by a station subject to this rule part is involuntarily discontinued, reduced or impaired for a period exceeding 48 hours, the station licensee shall promptly give notification thereof in writing to the Mass Media Bureau at Washington, DC 20554. In every such case, the licensee shall furnish full particulars as to the reasons for such discontinuance, reduction or impairment of service, including a statement as to when normal service is expected to be resumed. When normal service is resumed, prompt notification thereof shall be given in writing to the Mass Media Bureau at Washington, DC 20554.

(b) No station licensee subject to title II of the Communications Act of 1934, as amended, shall voluntarily discontinue, reduce or impair public communication service to a community or part of a community without obtaining prior authorization from the Commission pursuant to the procedures set forth in part 63 of this chapter or complying with the requirements set forth at § 21.910. In the event that permanent discontinuance of service is authorized by the Commission, the station licensee shall promptly send the station license for cancellation to the Mass Media Bureau at Washington, DC 20554, except that station licenses need not be surrendered for cancellation if the discontinuance is a result of a change of status by a Multipoint Distribution Service licensee from common carrier to non-common carrier pursuant to § 21.910.

(c) Any station licensee, not subject to title II of the Communications Act of 1934, as amended, who voluntarily discontinues, reduces or impairs public communication service to a community or a part of a community shall give written notification to the Commission within 7 days thereof. In the event of permanent discontinuance of service, the station licensee shall promptly send the station license for cancellation to the Mass Media Bureau at Washington, DC 20554, except that Multipoint Distribution Service station licenses need not be surrendered for cancellation if the discontinuance is a result of a change of status by a Multipoint Distribution Service licensee from non-common carrier to common carrier.

(d) If any radio frequency should not be used to render any service as authorized during a consecutive period of twelve months at any time after construction is completed and a certification of completion of construction has been filed, under circumstances that do not fall within the provisions of paragraph (a), (b) or (c) of this section, or, if removal of equipment or facilities has rendered the station not operational, the licensee shall, within thirty days of the end of such period of nonuse:

(1) Submit for cancellation the station license (or licenses) to the Commission at Washington, DC 20554.

(2) File an application for modification of the license (or licenses) to delete the unused frequency (or frequencies); or

(3) Request waiver of this rule and demonstrate either that the frequency will be used (as evidenced by appropriate requests for service, etc.) within six months of the end of the initial period of nonuse, or that the frequency will be converted to allow rendition of other authorized public services within one year of the end of the initial period of nonuse by the filing of appropriate applications within six months of the end of the period of nonuse.

If any frequency authorization is cancelled under this paragraph, the Commission will declare by public notice the frequency (or frequencies) vacated.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 27555, July 22, 1987; 52 FR 37784, Oct. 9, 1987; 58 FR 19774, Apr. 16, 1993; 61 FR 26676, May 28, 1996]

§ 21.304 Tariffs, reports, and other material required to be submitted to the Commission.

Sections 1.771 through 1.815 of this chapter contain summaries of certain materials and reports, including schedule of charges and accounting and financial reports, which, when applicable, must be filed with the Commission.

These requirements likewise shall apply to licensees which alternate between rendering service on a common carrier and non-common carrier basis.

[63 FR 65102, Nov. 25, 1998; 64 FR 4054, Jan. 27, 1999]

§ 21.305 Reports required concerning amendments to charters and partnership agreements.

Any amendments to charters, articles of incorporation or association, or partnership agreements shall promptly be filed at the Commission's main office in Washington, DC. Such filing shall be directed to the attention of the Chief, Common Carrier Bureau.

§ 21.306 Requirement that licensees respond to official communications.

All licensees in these services are required to respond to official communications from the Commission with reasonable dispatch and according to the tenor of such communications. Failure to do so will be given appropriate consideration in connection with any subsequent applications which the offending party may file and may result in the designation of such applications for hearing, or in appropriate cases, the institution of proceedings looking to the modification or revocation of the pertinent authorizations.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37784, Oct. 9, 1987]

§ 21.307 Equal employment opportunities.

(a) *General policy*. Equal opportunities in employment must be afforded by all common carrier and Multipoint Distribution Service non-common carrier licensees or conditional licensees to all qualified persons, and no personnel shall be discriminated against in employment because of sex, race, color, religion, or national origin.

(b) *Equal employment opportunity program*. Each licensee or conditional licensee must establish, maintain, and carry out, a positive continuing program of specific practices designed to assure equal opportunity in every aspect of employment policy and practice. Under the terms of its program, a licensee or conditional licensee must:

(1) Define the responsibility of each level of management to insure a positive application and vigorous enforcement of the policy of equal opportunity, and establish a procedure to review and control managerial and supervisory performance.

(2) Inform its employees and recognized employee organizations of the positive equal employment opportunity policy and program and enlist their cooperation.

(3) Communicate its equal employment opportunity policy and program and its employment needs to sources of qualified applicants without regard to sex, race, color, religion, or national origin, and solicit their recruitment assistance on a continuing basis.

(4) Conduct a continuing campaign to exclude every form of prejudice or discrimination based upon sex, race, color, religion, or national origin, from the licensee's or conditional licensee's personnel policies and practices and working conditions.

(5) Conduct a continuing review of job structure and employment practices and adopt positive recruitment, training, job design and other measures needed in order to insure genuine equality of opportunity to participate fully in all organizational units, occupations and levels of responsibility.

(c) *Additional information to be furnished to the Commission*. (1) Equal Employment Programs to be filed by common carrier and Multipoint Distribution Service non-common carrier licensees and conditional licensees:

(i) All licensees or conditional licensees must file a statement of their equal employment opportunity program not later than December 17, 1970, indicating specific practices to be followed in order to assure equal employment opportunity on the basis of sex, race, color, religion, or national origin in such aspects of employment practices as regards recruitment, selection, training, placement, promotion, pay, working conditions, demotion, layoff and termination.

(A) Any changes or amendments to existing programs should be filed with the Commission on April 1 of each year thereafter.

(B) If a licensee or conditional licensee has fewer than 16 full-time employees, no such statement need be filed.

(2) The program should reasonably address itself to such specific areas as set forth below, to the extent that they are appropriate in terms of licensee size, location, etc.

(i) *To assure nondiscrimination in recruiting.* (A) Posting notices in the licensee's or conditional licensee's offices informing applicants for employment of their equal employment rights and their right to notify the Equal Employment Opportunity Commission, the Federal Communications Commission, or other appropriate agency. Where a substantial number of applicants are Spanish-surnamed Americans such notice should be posted in Spanish and English.

(B) Placing a notice in bold type on the employment application informing prospective employees that discrimination because of sex, race, color, religion, or national origin is prohibited and that they may notify the Equal Employment Opportunity Commission, the Federal Communications Commission or other appropriate agency if they believe they have been discriminated against.

(C) Placing employment advertisements in media which have significant circulation among minority-group people in the recruiting area.

(D) Recruiting through schools and colleges with significant minority group enrollments.

(E) Maintaining systematic contacts with minority and human relations organizations, leaders, and spoksmen to encourage referral of qualified minority or female applicants.

(F) Encouraging present employees to refer minority or female applicants.

(G) Making known to the appropriate recruitment sources in the employer's immediate area that qualified minority members are being sought for consideration whenever the licensee or conditional licensee hires.

(ii) *To assure nondiscrimination in selection and hiring.* (A) Instructing personally those on the staff of the licensee or conditional licensee who make hiring decisions that all applicants for all jobs are to be considered without discrimination.

(B) Where union agreements exist, cooperating with the union or unions in the development of programs to assure qualified minority persons or females of equal opportunity for employment, and including an effective nondiscrimination clause in new or renegotiated union agreements.

(C) Avoiding use of selection techniques or tests which have the effect of discriminating against minority groups or females.

(iii) *To assure nondiscriminatory placement and promotions.* (A) Instructing personally those of the licensee's or conditional licensee's staff who make decisions on placement and promotion that minority employees and females are to be considered without discrimination, and that job areas in which there is little or no minority or female representation should be reviewed to determine whether this results from discrimination.

(B) Giving minority groups and female employees equal opportunity for positions which lead to higher positions. Inquiring as to the interest and skills of all lower-paid employees with respect to any of the higher-paid positions, followed by assistance, counseling, and effective measures to enable employees with interest and potential to qualify themselves for such positions.

(C) Reviewing seniority practices to insure that such practices are nondiscriminatory and do not have a discriminatory effect.

(D) Avoiding use of selection techniques or tests, which have the effect of discriminating against minority groups or females.

(iv) *To assure nondiscrimination in other areas of employment practices.* (A) Examining rates of pay and fringe benefits for present employees with equivalent duties, and adjusting any inequities found.

(B) Providing opportunity to perform overtime work on a basis that does not discriminate against qualified minority groups or female employees.

(d) *Report of complaints filed against licensees and conditional licensees.* (1) All licensees or conditional licensees must submit an annual report to the FCC no later than May 31 of each year indicating whether any complaints regarding violations by the licensee or conditional licensee or equal employment

provisions of Federal, State, Territorial, or local law have been filed before anybody having competent jurisdiction.

(i) The report should state the parties involved, the date filing, the courts or agencies before which the matters have been heard, the appropriate file number (if any), and the respective disposition or current status of any such complaints.

(ii) Any licensee or conditional licensee who has filed such information with the EEOC need not do so with the Commission, if such previous filing is indicated.

(e) *Complaints of violations of equal employment programs.* (1) Complaints alleging employment discrimination against a common carrier or Multipoint Distribution Service non-common carrier licensee or conditional licensee will be considered by the Commission in the following manner:

(i) If a complaint raising an issue of discrimination is received against a licensee or conditional licensee who is within the jurisdiction of the EEOC, it will be submitted to that agency. The Commission will maintain a liaison with that agency which will keep the Commission informed of the disposition of complaints filed against any of the common carrier or Multipoint Distribution Service non-common carrier licensees or conditional licensees.

(ii) Complaints alleging employment discrimination against a common carrier or Multipoint Distribution Service non-common carrier licensee or conditional licensee who does not fall under the jurisdiction of the EEOC but is covered by appropriate enforceable State law, to which penalties apply, may be submitted by the Commission to the respective state agency.

(iii) Complaints alleging employment discrimination against a common carrier or Multipoint Distribution Service non-common carrier licensee or conditional licensee who does not fall under the jurisdiction of the EEOC or an appropriate State law, will be accorded appropriate treatment by the FCC.

(iv) The Commission will consult with the EEOC on all matters relating to the evaluation and determination of compliance with the common carrier and Multipoint Distribution Service non-common carrier licensees or conditional licensees with the principles of equal employment as set forth herein.

(2) Complaints indicating a general pattern of disregard of equal employment practices which are received against a licensee or conditional licensee who is required to file an employment report to the Commission under § 1.815(a) of this chapter, will be investigated by the Commission.

(f) *Records available to the public*—(1) *Commission records.* A copy of every annual employment report, equal employment opportunity programs, and reports on complaints regarding violations of equal employment provisions of Federal, State, territorial, or local law, and copies of all exhibits, letters, and other documents filed as part thereof, all amendments thereto, all correspondence between the conditional licensee or licensee and the Commission pertaining to the reports after they have been filed and all documents incorporated therein by reference, are open for public inspection at the offices of the Commission.

(2) *Records to be maintained locally for public inspection by licensees or conditional licensees*—(i) *Records to be maintained.* Each common carrier or Multipoint Distribution Service non-common carrier licensee or conditional licensee required to file annual employment reports, equal employment opportunity programs, and annual reports on complaints regarding violations of equal employment provisions of Federal, State, territorial, or local law must maintain, for public inspection, in the same manner and in the same locations as required for the keeping and posting of tariffs as set forth in § 61.72 of this chapter, a file containing a copy of each such report and copies of all exhibits, letters, and other documents filed as part thereto, all correspondence between the conditional licensee or licensee and the Commission pertaining to the reports after they have been filed and all documents incorporated therein by reference.

(ii) *Period of retention.* The documents specified in paragraph (f)(2)(i) of this section shall be maintained for a period of 2 years.

(g) *Cross reference.* Applicability of cable television EEO requirements to MDS and MMDS facilities, see § 21.920.

[44 FR 60534, Oct. 19, 1979, as amended at 56 FR 57816, Nov. 14, 1991; 58 FR 42249, Aug. 9, 1993]

Subpart F—Developmental Authorizations

§ 21.400 Eligibility.

Developmental authorizations for stations in the radio services included in this part will be issued only to existing and proposed communication common carriers who are legally, financially and otherwise qualified to conduct experimentation utilizing hertzian waves for the development of engineering or operational data, or techniques, directly related to a proposed part 21 radio service or to a regularly established radio service regulated by the rules of this part.

§ 21.401 Scope of service.

Developmental authorizations may be issued for:

(a) Field strength surveys relative to or precedent to the filing of applications for licenses, in connection with the selection of suitable locations for stations proposed to be established in any of the regularly established radio services regulated by the rules of this part; or

(b) The testing of existing or authorized antennas, wave guides, or transmission paths.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37784, Oct. 9, 1987]

§ 21.402 Adherence to program of research and development.

The program of research and development, as stated by an applicant in the application for license or stated in the instrument of station authorization, shall be substantially adhered to unless the licensee is otherwise authorized by the Commission.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37784, Oct. 9, 1987]

§ 21.403 Special procedure for the development of a new service or for the use of frequencies not in accordance with the provisions of the rules in this part.

(a) An authorization for the development of a new common carrier service not in accordance with the provisions of the rules in this part may be granted for a limited time, but only after the Commission has made a preliminary determination with respect to the factors set forth in this paragraph, as each case may require. This procedure also applies to any application that involves use of a frequency which is not in accordance with the provisions of the rules in this part, although in accordance with the Table of Frequency Allocations contained in part 2 of this chapter. (An application which involves use of a frequency which is not in accordance with the Table of Frequency Allocations in part 2 of this chapter should be filed in accordance with the provisions of part 5 of this chapter, Experimental Radio Services (other than Broadcast).) The factors with respect to which the Commission will make a preliminary determination before acting on an application filed under this paragraph are as follows:

(1) That the public interest, convenience or necessity warrants consideration of the establishment of the proposed service or the use of the proposed frequency;

(2) That the proposed operation appears to warrant consideration to effect a change in the provisions of the rules in this part; and/or

(3) That some operational data should be developed for consideration in any rule making proceeding which may be initiated.

(b) Applications for stations which are intended to be used in the development of a proposed service shall be accompanied by a petition to amend the Commission's rules with respect to frequencies and such other items as may be necessary to provide for the regular establishment of the proposed service.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37784, Oct. 9, 1987]

§ 21.404 Terms of grant; general limitations.

(a) Developmental authorizations normally shall be issued for one year, or such shorter term as the Commission may deem appropriate in any particular case, and shall be subject to cancellation without hearing by the Commission at any time upon notice to the licensee.

(b) Where some phases of the developmental program are not covered by the general rules of the Commission or by the rules of this part, the Commission may specify supplemental or additional requirements or conditions in each case as it may deem necessary in the public interest, convenience or necessity.

(c) Frequencies allocated to the service toward which such development is directed will be assigned for developmental operation on the basis that no interference will be caused to the regular services of stations operating in accordance with the Commission's Table of Frequency Allocations (§ 2.106 of this chapter).

(d) The rendition of communication service for hire is not permitted under any developmental authorizations unless specifically authorized by the Commission.

(e) The grant of a developmental authorization carries with it no assurance that the developmental program, if successful, will be authorized on a permanent basis either as to the service involved or the use of the frequencies assigned or any other frequencies.

§ 21.405 Supplementary showing required.

(a) Authorizations for development of a proposed radio service in the services included in this part will be issued only upon a showing that the applicant has a definite program of research and development, the details of which shall be set forth, which has reasonable promise of substantial contribution to these services within the term of such authorization. A specific showing should be made as to the factors which qualify the applicant technically to conduct the research and development program, including a description of the nature and extent of engineering facilities that the applicant has available for such purposes.

(b) Expiring developmental authorizations may be renewed only upon the applicant's compliance with the applicable requirements of § 21.406 (a) and (b) relative to the authorization sought to be renewed and upon a factual showing that further progress in the program of research and development requires further radio transmission and that the public interest, convenience or necessity would be served by renewal of such authorization.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37784, Oct. 9, 1987]

§ 21.406 Developmental report required.

(a) Upon completion of the program of research and development, or, in any event, upon the expiration of the instrument of station authorization under which such investigations were permitted, or at such times during the term of the station authorization as the Commission may deem necessary to evaluate the progress of the developmental program, the licensee shall submit, in duplicate, a comprehensive report on the following items, in the order designated:

(1) Report on the various phases of the project which were investigated.

(2) Total number of hours of operation on each frequency assigned.

(3) Copies of any publication on the project.

(4) A listing of any patents applied for, including copies of any patents issued as a consequence of the activities carried forth under the authorization.

(5) Detailed analysis of the result obtained.

(6) Any other pertinent information.

(b) In addition to the information required by paragraph (a) of this section, the developmental report of a station authorized for the development of a proposed radio service shall include comprehensive information on the following items:

(1) Probable public support and methods of its determination.

(2) Practicability of service operations.

(3) Interference encountered.

(4) Pertinent information relative to merits of the proposed service.

(5) Propagation characteristics of frequencies used, particularly with respect to the service objective.

(6) Frequencies believed to be more suitable and reasons therefor.

(7) Type of signals or communications employed in the experimental work.

(c) Normally, developmental reports will be made a part of the Commission's public records. However, an applicant may request that the Commission withhold from the public certain reports and associated material relative to the accomplishments achieved under developmental authorization, and, if it appears that such information should be withheld, the Commission will so direct.

Subparts G—J [Reserved]

Subpart K—Multipoint Distribution Service

§ 21.900 Eligibility.

(a) Authorizations for stations in this service will be granted to existing and proposed communications common carriers and non-common carriers. An application will be granted only in cases where it can be shown that:

(1) The applicant is legally, financially, technically, and otherwise qualified to render the proposed service; and

(2) There are frequencies available to enable the applicant to render a satisfactory service; and

(3) The public interest, convenience and necessity would be served by a grant thereof.

(b) The applicant shall state whether service will be provided initially on a common carrier basis or on a non-common carrier basis. An applicant proposing to provide initially common carrier service shall state whether there is any affiliation or relationship to any intended or likely subscriber or program originator.

[63 FR 65102, Nov. 25, 1998; 64 FR 4054, Jan. 27, 1999, as amended at 64 FR 63731, Nov. 22, 1999]

EFFECTIVE DATE NOTE: At 63 FR 65103, Nov. 25, 1998, § 21.900 was revised. Paragraph (a)(2) contains information and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 21.901 Frequencies.

(a) Frequencies in the bands 2150–2162 MHz, 2596–2644 MHz, 2650–2656 MHz, 2662–2668 MHz, 2674–2680 MHz and 2686–2690 MHz are available for assignment to fixed stations in this service. Frequencies in the band 2150–2160 MHz are shared with nonbroadcast omnidirectional radio systems licensed under other parts of the Commission's Rules, and frequencies in the band 2160–2162 MHz are shared with directional radio systems authorized in other common carrier services. Frequencies in the 2596–2644 MHz band are shared with Instructional Television Fixed Service stations licensed under part 74 of the Commission's Rules. Channels I5, I13, I6 and I14, listed in § 74.939(j) of this chapter, are assigned to fixed stations in the 2596–2620 band, and are shared with Instructional Television Fixed Service Stations licensed under part 74 of the Commission's Rules to operate in this band; grandfathered channels I21, I29, I22 and I30, listed in § 74.939(j) of this chapter, are licensed under part 21 or part 74 of the Commission's Rules, as applicable.

(b) Applicants may be assigned a channel(s) according to one of the following frequency plans:

(1) At 2150–2156 MHz (designated as Channel 1), or

(2) At 2156–2162 MHz (designated as Channel 2), or

(3) At 2156–2160 MHz (designated as Channel 2A), or

(4) At 2596–2602 MHz, 2608–2614 MHz, 2620–2626 MHz, and 2632–2638 MHz (designated as Channels E1, E2, E3 and E4, respectively, with the four channels to be designated the E-group channels), and Channels I5 and I13 listed in § 74.939(j) of this chapter,[1] or

(5) At 2602–2608 MHz, 2614–2620 MHz, 2626–2632 MHz and 2638–2644 MHz (designated as Channels F1, F2, F3 and F4, respectively, with the four channels to be designated the F-group channels), and Channels I6 and I14, listed in § 74.939(j) of this chapter,[1] or

(6) At 2650–2656 MHz, 2662–2668 MHz and 2674–2680 MHz (designated as Channels H1, H2 and H3, respectively, with

the three channels to be designated the H-group channels).[1]

(c) Channel 2 will be assigned only where there is evidence that no harmful interference will occur to any authorized point-to-point facility in the 2160–2162 MHz band. Channel 2 may be assigned only if the transmitting antenna of the station is to be located within 16.1 kilometers (10 miles) of the coordinates of the following metropolitan areas:

Principal City	Coordinates
Akron, Ohio	Lat. 41°05′06″ N., long. 81°31′06″ W.
Albany-Schenectady-Troy, N.Y.	Lat. 42°39′00″ N., long. 73°45′24″ W.
Anaheim-Santa Ana-Garden Grove, Calif.	Lat. 33°46′30″ N., long. 117°54′48″ W.
Atlanta, Ga	Lat. 33°45′00″ N., long. 84°23′12″ W.
Baltimore, Md	Lat. 39°17′18″ N., long. 76°37′00″ W.
Birmingham, Ala	Lat. 33°30′42″ N., long. 86°48′24″ W.
Boston, Mass	Lat. 42°21′42″ N., long. 71°03′30″ W.
Buffalo, N.Y	Lat. 42°53′12″ N., long. 78°52′30″ W.
Chicago, Ill	Lat. 41°53′00″ N., long. 87°37′30″ W.
Cincinnati, Ohio	Lat. 39°06′00″ N., long. 84°30′48″ W.
Cleveland, Ohio	Lat. 41°29′48″ N., long. 81°42′00″ W.
Columbus, Ohio	Lat. 39°57′42″ N., long. 83°00′06″ W.
Dallas, Tex	Lat. 32°46′36″ N., long. 96°48′42″ W.
Dayton, Ohio	Lat. 39°45′24″ N., long. 84°11′42″ W.
Denver, Colo	Lat. 39°44′24″ N., long. 104°59′18″ W.
Detroit, Mich	Lat. 42°20′00″ N., long. 83°03′00″ W.
Fort Worth, Tex	Lat. 32°45′00″ N., long. 97°17′42″ W.
Gary, Ind	Lat. 41°36′00″ N., long. 87°20′00″ W.
Hartford, Conn	Lat. 41°46′00″ N., long. 72°40′30″ W.
Houston, Tex	Lat. 29°45′48″ N., long. 95°21′42″ W.
Indianapolis, Ind	Lat. 39°46′12″ N., long. 86°09′18″ W.
Kansas City, Mo	Lat. 39°06′00″ N., long. 94°34′42″ W.
Los Angeles-Long Beach, Calif.	Lat. 34°03′18″ N., long. 118°15′00″ W.
Louisville, Ky	Lat. 38°14′48″ N., long. 85°45′42″ W.
Memphis, Tenn	Lat. 35°07′30″ N., long. 90°03′24″ W.
Miami, Fla	Lat. 25°46′30″ N., long. 80°11′24″ W.
Milwaukee, Wis	Lat. 43°02′18″ N., long. 87°54′48″ W.
Minneapolis-St. Paul, Minn.	Lat. 44°59′00″ N., long. 93°15′48″ W.
New Orleans, La	Lat. 29°57′48″ N., long. 90°03′48″ W.
New York City, N.Y.-Newark-Jersey City-Paterson, N.J.	Lat. 40°42′30″ N., long. 74°00′00″ W.
Norfolk, Va	Lat. 36°50′42″ N., long. 76°17′12″ W.
Oklahoma City, Okla	Lat. 35°29′30″ N., long. 97°30′12″ W.
Philadelphia, Pa	Lat. 39°57′00″ N., long. 75°09′48″ W.
Phoenix, Ariz	Lat. 33°27′18″ N., long. 112°04′24″ W.
Pittsburgh, Pa	Lat. 40°26′12″ N., long. 80°00′30″ W.
Portland, Oreg	Lat. 45°32′06″ N., long. 122°37′12″ W.
Providence, R.I	Lat. 41°49′00″ N., long. 71°24′24″ W.
Rochester, N.Y	Lat. 43°09′30″ N., long. 77°36′30″ W.
Sacramento, Calif	Lat. 38°35′06″ N., long. 121°29′24″ W.
San Antonio, Tex	Lat. 29°25′24″ N., long. 98°29′43″ W.
San Bernardino-Riverside, Calif.	Lat. 34°06′30″ N., long. 117°18′36″ W.
San Diego, Calif	Lat. 32°42′48″ N., long. 117°09′12″ W.
San Francisco-Oakland, Calif.	Lat. 37°46′30″ N., long. 122°25′00″ W.
San Jose-Palo Alto-Sunnyvale, Calif.	Lat. 37°22′36″ N., long. 122°02′00″ W.
Seattle-Everett, Wash.	Lat. 47°35′48″ N., long. 122°19′48″ W.
St. Louis, Mo	Lat. 38°37′00″ N., long. 90°11′36″ W.
Syracuse, N.Y	Lat. 43°03′06″ N., long. 76°09′00″ W.
Tampa-St. Petersburg, Fla.	Lat. 27°57′06″ N., long. 82°27′00″ W.
Toledo, Ohio	Lat. 41°38′48″ N., long. 83°32′30″ W.
Washington, D.C	Lat. 38°53′30″ N., long. 77°02′00″ W.

[1] No 125 kHz channels are provided for Channels E3, E4, F3, F4, H1, H2 and H3, except for those grandfathered for Channels E3, E4, F3 and F4. The 125 kHz channels associated with Channels E3, E4, F3, F4, H1, H2 and H3 are allocated to the Private Operational Fixed Point-to-Point Microwave Service, pursuant to § 101.147(g) of this chapter.

(d) An MDS licensee or conditional licensee may apply to exchange evenly one or more of its assigned channels with another MDS licensee or conditional licensee in the same system, or with an ITFS licensee or conditional licensee in the same system. The licensees or conditional licensees seeking to exchange channels shall file in tandem with the Commission separate pro forma assignment of license applications, each attaching an exhibit which clearly specifies that the application is filed pursuant to a channel exchange agreement. The exchanged channel(s) shall be regulated according to the requirements applicable to the assignee.

(e) Frequencies in the band segments 18,580–18,820 MHz and 18,920–19,160 MHz that were licensed or had applications pending before the Commission as of September 18, 1998 may continue those operations for point-to-point return links from a subscriber's location on a shared co-primary basis with other services under parts 25, 74, 78 and 101 of this chapter until June 8, 2010. Prior to June 8, 2010, such stations are subject to relocation by licensees in the fixed-satellite service. Such relocation is subject to the provisions of §§ 101.85 through 101.97 of this chapter. After June 8, 2010, such operations are not entitled to protection from fixed-satellite service operations and must not cause unacceptable interference to fixed-satellite service station operations. No new licenses will be granted in these bands after June 8, 2000.

(f) MDS H-channel applications. Frequencies in the bands 2650–2656 MHz,

2662–2668 MHz, or 2674–2680 MHz must be assigned only in accordance with the following conditions: All applications for MDS H-channel stations must specify either the H1, H2, or H3 channel for which an application is filed; however, the Commission may on its own initiative assign different channels in these frequency bands if it is determined that such action would serve the public interest.

(g) Frequencies in the bands 2150–2162 MHz, 2596–2644 MHz, 2650–2656 MHz, 2662–2668 MHz and 2674–2680 MHz are available for point-to-multipoint use and/or for communications between MDS response stations and response station hubs when authorized in accordance with the provisions of § 21.909, provided that such frequencies may be employed for MDS response stations only when transmitting using digital modulation.

[44 FR 60534, Oct. 19, 1979, as amended at 48 FR 33900, July 26, 1983; 49 FR 25479, June 21, 1984; 49 FR 37777, Sept. 26, 1984; 55 FR 46009, Oct. 31, 1990; 56 FR 57598, Nov. 13, 1991; 56 FR 57817, Nov. 14, 1991; 58 FR 11798, Mar. 1, 1993; 58 FR 44895, Aug. 25, 1993; 60 FR 36552, July 17, 1995; 61 FR 26676, May 28, 1996; 63 FR 65102, Nov. 25, 1998; 64 FR 4054, Jan. 27, 1999; 64 FR 63731, Nov. 22, 1999; 65 FR 54169, Sept. 7, 2000]

§ 21.902 Interference.

(a) All applicants, conditional licensees, and licensees shall make exceptional efforts to avoid harmful interference to other users and to avoid blocking potential adjacent channel use in the same city and cochannel use in nearby cities. In areas where major cities are in close proximity, careful consideration should be given to minimum power requirements and to the location, height, and radiation pattern of the transmitting antenna. Licensees, conditional licensees, and applicants are expected to cooperate fully in attempting to resolve problems of potential interference before bringing the matter to the attention of the Commission.

(b) As a condition for use of frequency in this service, each applicant, conditional licensee, and licensee is required to:

(1) Not enter into any lease or contract or otherwise take any action that would unreasonably prohibit location of another station's transmitting antenna at any given site inside its own protected service area.

(2) Cooperate fully and in good faith to resolve interference and transmission security problems.

(3) Engineer the system to provide at least 45 dB of cochannel interference protection within the 56.33 km (35 mile) protected service area of any authorized or previously-proposed ITFS or incumbent MDS station, and at each previously-registered ITFS receive site registered as of September 17, 1998 (or the appropriate value for bandwidths other than 6 MHz.)

(4) Engineer the station to provide at least 0 dB of adjacent channel interference protection within the 56.33 km (35 mile) protected service area of any authorized or previously-proposed ITFS or incumbent MDS station, and at each previously-registered ITFS receive site registered as of September 17, 1998 (or the appropriate value for bandwidths other than 6 MHz.)

(5)(i) Engineer the station to limit the calculated free space power flux density to -73 dBW/m^2 (or the appropriate value for bandwidth other than 6 MHz) at the boundary of a 56.33 km (35 mile) protected service area, where there is an unobstructed signal path from the transmitting antenna to the boundary; or alternatively, obtain the written consent of the entity authorized for the adjoining area to exceed the -73 dBW/m^2 limiting signal strength at the common boundary.

(ii) In determining signal path conditions, the following shall be used: a 9.1 meter (30 feet) receiving antenna height, the transmitting antenna height, terrain elevations and 4/3 earth radius propagation conditions.

(6) If a proposed station is within 80 km (50 miles) of the Canadian or Mexican border, the station must be designed to meet the requirements set forth in international treaties.

(7) Notwithstanding the above, main, booster and response stations shall use the following formulas, as applicable, for determining compliance with: (1) Radiated field contour limits where bandwidths other than 6 MHz are employed at stations utilizing digital emissions; and (2) Cochannel and adjacent channel D/U ratios where the bandwidths in use at the interfering

and protected stations are unequal and both stations are utilizing digital modulation or one station is utilizing digital modulation and the other station is utilizing either 6 MHz NTSC analog modulation or 125 kHz analog modulation (I channels only).

(i) Contour limit: -73 dBW/m^2 + 10 log(X/6) dBW/m^2, where X is the bandwidth in MHz of the digital channel.

(ii) Co-channel D/U: 45 dB + 10 log(X_1/X_2) dB, where X_1 is the bandwidth in MHz of the protected channel and X_2 is the bandwidth in MHz of the interfering channel.

(iii) Adjacent channel D/U: 0 dB + 10 log(X_1/X_2), dB where X_1 is the bandwidth in MHz of the protected channel and X_2 is the bandwidth in MHz of the interfering channel.

(c) The following interference studies must be prepared:

(1) An analysis of the potential for harmful interference within the 56.33 km (35 mile) protected service areas of any authorized or previously proposed incumbent station:

(i) If the coordinates of the applicant's proposed transmitter are within 160.94 km (100 miles) of the center coordinates of any authorized or previously proposed incumbent station with protected service area of 56.33 km (35 miles) as specified in § 21.902(d); or

(ii) If the great circle path between the applicant's proposed transmitter and the protected service area of any authorized, or previously-proposed, co-channel or adjacent-channel station(s) is within 241.4 kilometers or less and 90 percent or more of the path is over water or within 16.1 kilometers of the coast or shoreline of the Atlantic Ocean, the Pacific Ocean, the Gulf of Mexico, any of the Great Lakes, or any bay associated with any of the above (see §§ 21.901(a) and 74.902 of this chapter);

(2) Applicants may design interference studies in any manner that demonstrates the avoidance of harmful interference, as defined in this subpart.

(i) In lieu of interference studies, applicants may submit in accordance with § 21.938 a written statement of no objection to the operation of the MDS station.

(ii) The Commission may direct applicants to submit interference studies of a specific nature.

(3) Except for new stations proposed in applications filed after September 15, 1995, in the case of a proposal to operate a non-colocated station within the protected service area of an authorized, or previously proposed, adjacent channel station, an analysis that identifies the areas within the protected service areas of both the authorized or previously proposed adjacent channel station and the proposed station that cannot be protected as specified in § 21.902(b)(4) and an explanation of why the proposed station cannot be colocated with the existing or previously proposed station.

(4) In the case of a proposal for use of channel 2, an analysis of the potential for harmful interference with any authorized point-to-point station located within 80.5 kilometers (50 miles) which utilizes the 2160–2162 MHz band; and

(d)(1) Subject to the limitations contained in paragraph (e) of this section, each MDS station licensee shall be protected from harmful electrical interference, as determined by the theoretical calculations, within a protected service area of which the boundary will be 56.3255 kilometers (35 miles) from the transmitter site.

(2) As of September 15, 1995, the location of these protected service area boundaries shall become fixed. The center of the circular area shall be the geographic latitude and longitude of the transmitting antenna site specified in station authorizations or previously proposed applications filed at the Commission before September 15, 1995. Subsequent transmitter site changes will not change the location of the 56.3255 kilometers (35 mile) protected service area boundaries.

(e) No MDS licensee will be protected from harmful interference caused by:

(1) Any station with an earlier filing date.

(2) Any station that was authorized before July 1984.

(3) Any multichannel MDS station whose application was pending on September 9, 1983.

(f) In addressing potential harmful interference in this service, the following definitions, procedures and other criteria shall apply:

(1) Cochannel interference is defined as the ratio of the desired signal to the undesired signal present in the desired channel, at the output of a reference receiving antenna oriented to receive the maximum desired signal. Harmful interference will be considered present when a calculation using a terrain sensitive signal propagation model determines that this ratio is less than 45 dB (or the appropriate value for bandwidths other than 6 MHz.)

(2) Adjacent channel interference is defined as the ratio of the desired signal to undesired signal present in an adjacent channel, at the output of a reference receiving antenna oriented to receive the maximum desired signal level.

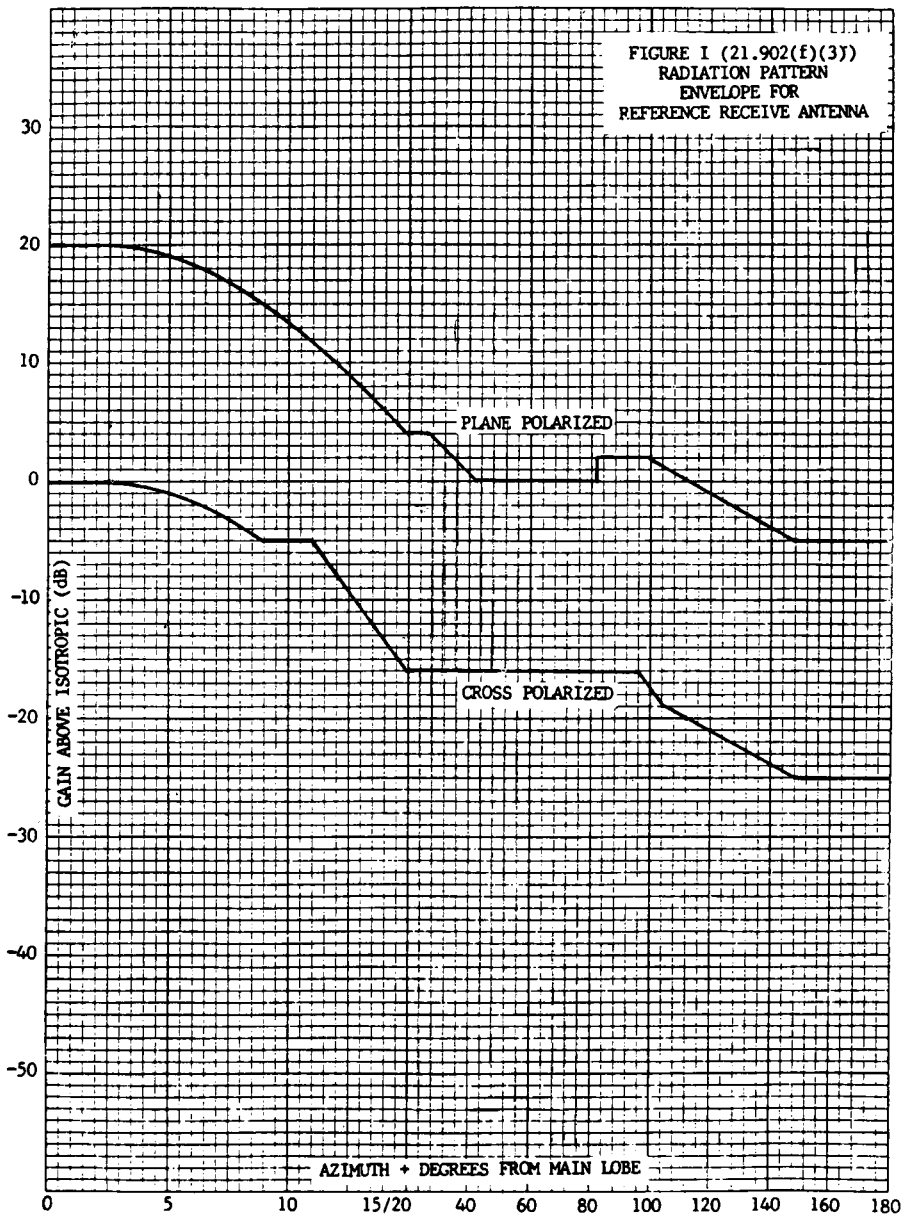
(i) Harmful interference will be considered present when a calculation using a terrain sensitive model determines that this ratio is less than 0dB (or the appropriate value for bandwidths other than 6 MHz.)

(ii) In the alternative, harmful interference will be considered present for an ITFS station constructed before May 26, 1983, when a calculation using a terrain-sensitive propagation model determines that this ratio is less than 10 dB (or the appropriate value for bandwidths other than 6 MHz.) unless:

(A) The individual receive site under consideration has been subsequently upgraded with up-to-date reception equipment, in which case the ratio shall be less than 0 dB. Absent information presented to the contrary, however, the Commission will assume that reception equipment installation occurred simultaneously with original station equipment; or

(B) The license for an MDS station is conditioned on the proffer to the affected ITFS station licensee of equipment capable of providing a ratio of 0 dB or more at no expense to the ITFS station licensee, and also conditioned, if necessary, on the proffer of installation of such equipment; and there has been no showing by the affected ITFS station licensee demonstrating good cause and that the proposed equipment will not provide a ratio of 0 dB or more, or that installation of such equipment, at no expense to the ITFS station licensee, is not possible or has not been proffered.

(3) For purposes of this section all interference calculations involving receive antenna performance shall use the reference antenna characteristics shown in figure 1.



(4) For purposes of this section, the received signal power level $(RSL)_{dBW}$ at the output of the FCC reference receiving antenna is obtained from the following formulas (or an equivalent adaptation):

$$(RSL)_{dBW}=(EIRP)_{dBW}-(L_{FS})_{dB}+(G_{AR})_{dB}$$

where the free space loss (L_{FS}) is

$(L_{FS})_{dB}=20 \log (4_d/)_{dB}$

in which the parameters are defined as follows:

$(RSL)_{dBW}$ is the received power in decibels referenced to one watt.

$(EIRP)_{dBW}$ is the equivalent isotropically radiated power in decibels above one watt.

d is the distance of the signal path in meters.

λ is the wavelength of the signal in meters.

G_{AR} is the dB gain of the reference receiving antenna above an isotropic antenna (obtained from Figure 1 of this section.)

(5) A determination of signal path conditions shall use a 9.1 meters (30 feet) receiving antenna height, the transmitting antenna height, terrain elevation, and assume 4/3 earth radius propagation conditions.

(6) An application will not be accepted for filing if cochannel or adjacent channel interference is predicted at the boundary of the 56.33 km (35 mile) protected service area of an authorized or previously proposed incumbent station based on the following criteria:

(i) Interference calculations shall be made only for directions where there is an unobstructed signal path from the site of a proposed station to the boundary of any protected area.

(ii) Calculations of received power levels in units of dBW from the proposed station will be made at one degree intervals around the protected service area.

(iii) The assumed value of the desired signal level at the boundary of an incumbent station shall be −83 dBW, which is the calculated received power in free space at a distance of 56.33 km (35 miles), given at EIRP of 2000 watts and a receiver antenna gain of 20 dBi.

(iv) Harmful interference will be considered to occur at locations along the boundary wherever the ratio between the desired signal level of −83 dBw and the received power from a proposed cochannel or adjacent channel station is less than 45 dB or 0 dB for cochannel or adjacent channel proposals, respectively.

(7) Alternatively, MDS applications will be accepted on the basis of an executed written interference agreement between potentially affected parties filed in accordance with § 21.938.

(g)(1) All interference studies prepared pursuant to paragraph (c) of this section must be served on all licensees, conditional licensees, and applicants for the stations required to be studied by this section. This service must include a copy of the FCC application and occur on or before the date the application is filed with the Commission.

(2) MDS licensees, conditional licensees and applicants of facilities with 56.33 km (35 mile) protected service areas shall notify in writing the holders of authorizations for adjoining BTAs or PSAs of application filings for modified station licenses, provided the proposed facility would produce an unobstructed signal path to any location within the adjoining BTA or PSA. This service must include a copy of the FCC application and occur on or before the date the application is filed with the Commission.

(h) For purposes of § 21.31(a), an MDS application, except for those applications filed on or after September 15, 1995, filed for a facility that would cause harmful electrical interference within the protected service area of any authorized or previously proposed station will be presumed to be mutually exclusive with the application for such authorized or previously proposed station.

(i)(1) For each application for a new station, or amendment thereto, proposing MDS facilities, filed on October 1, 1995, or thereafter, on or before the day the application or amendment is filed, the applicant must prepare an analysis demonstrating that operation of the MDS applicant's transmitter will not cause harmful electrical interference to each receive site registered as of September 17, 1998, nor within a protected service area as defined in paragraph (d)(1) of this section, of any cochannel or adjacent channel ITFS station licensed, with a conditional license, or proposed in a pending application on the day such MDS application is filed, with an ITFS transmitter site within 50 miles of the coordinates of the MDS station's proposed transmitter site.

(2) For each application described in paragraph (i)(1) of this section, the applicant must serve, by certified mail, return receipt requested, on or before the day the application or amendment

described in paragraph (i)(1) of this section is filed initially with the Commission, a copy of the complete MDS application or amendment, including each exhibit and interference study, described in paragraph (i)(1) of this section, on each ITFS licensee, conditional licensee, or applicant described in paragraph (i)(1) of this section.

(3) For each application described in paragraph (i)(1) of this section, the applicant must certify and file, with the application or amendment, its certification of its compliance with the requirements of paragraph (i)(2) of this section.

(4) For each application described in paragraph (i)(1) of this section, the applicant must file with the Commission in Washington, DC, on or before the 30th day after the application or amendment described in paragraph (i)(1) of this section is filed initially with the Commission, a written notice which contains the following:

(i) Caption—ITFS Service Notice;

(ii) Applicant's name, address, proposed service area and channel group, and application file number, if known;

(iii) A list of each ITFS licensee and conditional licensee described in paragraph (i)(1) of this section;

(iv) The address used for service to each ITFS licensee and conditional licensee described in paragraph (i)(1) of this section; and

(v) A list of the date each ITFS licensee and conditional licensee described in paragraph (i)(1) of this section received a copy of the complete application or amendment described in paragraph (i)(1) of this section; or a notation of lack of receipt by the ITFS licensee or conditional licensee of a copy of the complete application or amendment, on or before such 30th day, together with a description of the applicant's efforts for receipt by each such licensee or conditional licensee lacking receipt of the application.

(5) The public notices described in paragraph (i)(6) of this section are as follows:

(i) For initial applications for new MDS stations which participate in a lottery, this public notice is the notice announcing the selection of the applicant's application by lottery for qualification review.

(ii) For initial applications for new MDS stations which participate in a competitive bidding process, this public notice is the notice announcing the application of the winning bidder in the competitive bidding process has been accepted for filing.

(iii) For initial applications for new MDS stations which do not participate in a lottery or a competitive bidding process, this public notice is the notice announcing that the applicant's application is not mutually-exclusive with other MDS applications.

(iv) For MDS modification applications, this public notice is the notice announcing that the modification application has been accepted for filing.

(6)(i) Notwithstanding the provisions of Sections 1.824(c) and 21.30(a)(4), for each application described in paragraph (i)(1) of this section, each ITFS licensee and each ITFS conditional licensee described in paragraph (i)(1) of this section may file with the Commission, on or before the 30th day after the public notice described in paragraph (i)(5) of this section, a petition to deny the MDS application.

(ii) Except for the requirements as to the filing time deadline, this petition to deny must otherwise comply with the provisions of Section 21.30.

(iii) In addition, this ITFS petition to deny must:

(A) Identify the subject MDS application, including the applicant's name, station location, channel group, and application file number;

(B) Include a certificate of service demonstrating service on the subject MDS applicant by certified mail, return receipt requested, on or before the 30th day after the MDS public notice described in paragraph (i)(5) of this section;

(C) Include a demonstration that it made efforts to reach agreement with the MDS applicant but was unable to do so;

(D) Include an engineering analysis that operation of the proposed MDS station will cause harmful interference to its ITFS station;

(E) Include a demonstration, in those cases in which the MDS applicant's analysis is dependent upon modification(s) to the ITFS facility, that the harmful interference cannot be avoided

by the proposed substitution of new or modified equipment to be supplied and installed by the MDS applicant, at no expense to the ITFS licensee or conditional licensee; and

(F) Be limited to raising objections concerning the potential for harmful interference to its ITFS station, or concerning a failure by the MDS applicant to serve the ITFS licensee or conditional licensee with a copy of the complete application or amendment described in paragraph (i)(1) of this section.

(iv) The Commission will presume an ITFS licensee or conditional licensee described in paragraph (i)(1) of this section has no objection to operation of the MDS station, if the ITFS licensee or conditional licensee fails to file a petition to deny by the deadline prescribed in paragraph (i)(6)(i) of this section.

(j) If the initial application for facilities in the 2596–2644 frequency band was filed on September 9, 1983, an applicant proposing to modify such facilities must include with its modification application:

(1) An analysis demonstrating that the modification will not increase the size of the geographic area suffering harmful interference within the protected service area of existing or proposed co-channel or adjacent-channel facilities in the 2596–2644 MHz frequency band with a transmitter site within 80.5 km (50 miles) of the modifying station's transmitter site of the initial application for the interfered-with station was filed on September 9, 1983; and

(2) An analysis demonstrating that the modification will not cause harmful interference to any new portion of the protected service area of existing or proposed co-channel or adjacent-channel facilities in the 2596–2644 frequency band with a transmitter site within 80.5 km (50 miles) of the modifying station's transmitter site, if the initial application for the interfered-with station was filed on September 9, 1983.

(k) If an initial application for facilities in the 2596–2644 frequency band was filed on September 9, 1983, a licensee proposing to modify a constructed station may request exclusion from the interference analysis prescribed at § 21.902(c) (1) and (2) with respect to another specified application for E or F channel facilities, if the modifying licensee files as part of its modification application a demonstration that:

(1) The MDS application for which exclusion is requested was proposed by an initial application filed on September 9, 1983;

(2) The MDS application for which exclusion is requested is not yet perfected by the submission of the information necessary for processing, as of the date of filing of the modification application; and

(3) A copy of the licensee's modification application, including the demonstration specified in this paragraph, was served on the MDS applicant for which exclusion is requested, on or before the date of filing of the modification application.

(l) Specific rules relating to response station hubs, booster stations, and 125 kHz channels are set forth in §§ 21.909, 21.913, 21.940, 74.939 of this chapter, 74.940 of this chapter and 74.985 of this chapter. To the extent those specific rules are inconsistent with any rules set forth above, those specific rules shall control.

(m) The following information formats and storage media are to be used in connection with applications for new and modified MDS and ITFS stations:

(1) The data file prepared for submission to the Commission's Reference Room pursuant to the requirements set out at paragraph 74 of Appendix D to the *Report and Order* in MM Docket 97–217, FCC 98–231, must be in ASCII format on either CD–ROMs or 3.5″ diskettes. Any supplementary information submitted in connection with Appendix D may be in either ASCII or PDF format (graphics must be in PDF format) on either CD–ROMs or 3.5″ diskettes. Applicants serving such data/information on other applicants and/or licensees should do so using the same format(s) and media as used in their submission to the Commission's Reference Room.

(2) Demonstrations and certifications prepared for submission to the Commission's Reference Room may be in either hard copy or in ASCII or PDF format on CD–ROM's or 3.5″ diskettes.

(Graphics must be either hard copy or PDF format) Applicants serving such demonstrations and certifications on other applicants and/or licensees should do so using the same format(s) and media as used in their submission to the Commission's Reference Room.

[44 FR 60534, Oct. 19, 1979, as amended at 48 FR 33901, July 26, 1983; 49 FR 25479, June 21, 1984; 52 FR 27556, July 22, 1987; 55 FR 46010, Oct. 31, 1990; 56 FR 57598, Nov. 13, 1991; 56 FR 57818, Nov. 14, 1991; 56 FR 65191, Dec. 16, 1991; 58 FR 11798, Mar. 1, 1993; 58 FR 44895, Aug. 25, 1993; 60 FR 36553, July 17, 1995; 60 FR 36739, July 18, 1995; 60 FR 57367, Nov. 15, 1995; 61 FR 18098, Apr. 24, 1996; 61 FR 26676, May 28, 1996; 63 FR 65102, Nov. 25, 1998; 64 FR 63731, Nov. 22, 1999; 65 FR 46617, July 31, 2000]

EFFECTIVE DATE NOTE: At 65 FR 46617, July 31, 2000, § 21.902 was amended by adding paragraph (m). This paragraph contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 21.903 Purpose and permissible service.

(a) Multipoint Distribution Service channels are available for transmissions from MDS stations and associated MDS signal booster stations to receive locations, and from MDS response stations to response station hubs. When service is provided on a common carrier basis, subscriber supplied information is transmitted to points designated by the subscriber. When service is provided on a non-common carrier basis, transmissions may include information originated by persons other than the licensee, licensee-manipulated information supplied by other persons, or information originated by the licensee. Point-to-point radio return links from a subscriber's location to a MDS operator's facilities may also be authorized in the 18,580 through 18,820 MHz and 18,920 through 19,160 MHz bands. Rules governing such operation are contained in subpart I of part 101 of this chapter, the Point-to-Point Microwave Radio Service.

(b) Unless otherwise directed or conditioned in the applicable instrument of authorization, Multipoint Distribution Service stations may render any kind of communications service consistent with the Commission's rules on a common carrier or on a non-common carrier basis, *Provided* That:

(1) Unless service is rendered on a non-common carrier basis, the common carrier controls the operation of all receiving facilities (e.g., including any equipment necessary to convert the signal to a standard television channel, but excluding the television receiver); and

(2) Unless service is rendered on a non-common carrier basis, the common carrier's tariff allows the subscriber the option of owning the receiving equipment (except for the decoder) so long as:

(i) The customer provides the type of equipment as specified in the tariff;

(ii) Such equipment is in suitable condition for the rendition of satisfactory service; and

(iii) Such equipment is installed, maintained, and operated pursuant to the common carrier's instructions and control.

(c) The carrier's tariff shall fully describe the parameters of the service to be provided, including the degree of privacy of communications a subscriber can expect in ordinary service. If the ordinary service does not provide for complete security of transmission, the tariff shall make provision for service with such added protection upon request.

(d) An MDS licensee also may alternate, without further authorization required, between rendering service on a common carrier and non-common carrier basis, provided that the licensee notifies the Commission of any service status changes at least 30 days in advance of such changes. The notification shall state whether there is any affiliation or relationship to any intended or likely subscriber or program originator.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 27556, July 22, 1987; 61 FR 26676, May 28, 1996; 63 FR 65103, Nov. 25, 1998; 64 FR 4054, Jan. 27, 1999; 64 FR 63732, Nov. 22, 1999]

§ 21.904 EIRP limitations.

(a) The maximum EIRP of a main or booster station shall not exceed 33 dBW + 10log(X/6) dBW, where X is the actual bandwidth if other than 6 MHz, except as provided in paragraph (b) of this section.

(b)(i) If a main or booster station sectorizes or otherwise uses one or more transmitting antennas with a non-omnidirectional horizontal plane radiation pattern, the maximum EIRP in a given direction shall be determined by the following formula:

EIRP = 33 dBW + 10 log(X/6) dBW + 10 log(360/beamwidth) dBW, where X is the channel width in MHz and 10 log(360/beamwidth) ≤ 6 dB.

(ii) Beamwidth is the total horizontal plane beamwidth of the individual transmitting antenna for the station or any sector measured at the half-power points.

(c) An increase in station EIRP, above currently-authorized or previously-proposed values, to the maximum values provided in paragraphs (a) and (b) of this section may be authorized, if the requested increase would not cause harmful interference to any authorized or previously-proposed, cochannel or adjacent channel station entitled to interference protection under the Commission's rules, or if an applicant demonstrates that:

(1) A station that must be protected from interference could compensate for interference by increasing its EIRP; and

(2) The interfered-with station may increase its own EIRP consistent with the rules and without causing harmful interference to any cochannel or adjacent channel main or booster station protected service area, response station hub or BTA/PSA, for which consent for the increased interference has not been obtained; and

(3) The applicant requesting authorization of an EIRP increase agrees to pay all expenses associated with the increase in EIRP by the interfered-with station.

(d) For television transmission if the authorized bandwidth is 4.0 MHz or more for the visual and accompanying aural signal, the peak power of the accompanying aural signal must not exceed 10 percent of the peak visual power of the transmitter. The Commission may order a reduction in aural signal power to diminish the potential for harmful interference.

(e) For main, booster and response stations utilizing digital emissions with non-uniform power spectral density (*e.g.* unfiltered QPSK), the power measured within any 100 kHz resolution bandwidth within the 6 MHz channel occupied by the non-uniform emission cannot exceed the power permitted within any 100 kHz resolution bandwidth within the 6 MHz channel if it were occupied by an emission with uniform power spectral density, *i.e.*, if the maximum permissible power of a station utilizing a perfectly uniform power spectral density across a 6 MHz channel were 2000 watts EIRP, this would result in a maximum permissible power flux density for the station of 2000/60 = 33.3 watts EIRP per 100 kHz bandwidth. If a non-uniform emission were substituted at the station, station power would still be limited to a maximum of 33.3 watts EIRP within any 100 kHz segment of the 6 MHz channel, irrespective of the fact that this would result in a total 6 MHz channel power of less than 2000 watts EIRP.

[64 FR 63732, Nov. 22, 1999]

§ 21.905 Emissions and bandwidth.

(a) A station transmitting a television signal shall not exceed a bandwidth of 6 MHz (for both visual signal and accompanying aural signal), and will normally employ vestigial sideband, amplitude modulation (C3F) for the visual signal, and frequency modulation (F3E) or (G3E) for the accompanying aural signal.

(b) Quadrature amplitude modulation (QAM), digital vestigial sideband modulation (VSB), quadrature phase shift key modulation (QPSK), code division multiple access (CDMA), and orthogonal frequency division multiplex (OFDM) emissions may be employed, subject to compliance with the policies set forth in the Declaratory Ruling and Order, 11 FCC Rcd 18839 (1996). Use of OFDM also is subject to the subsequent Declaratory Ruling and Order, DA 99–554 (Mass Med. Bur. rel. Mar. 19, 1999). Other digital emissions may be added to those authorized above, including emissions with non-uniform power spectral density, if the applicant provides information in accordance with the guidelines and procedures set forth in the Declaratory Ruling and Order

which clearly demonstrates the spectral occupancy and interference characteristics of the emission. The licensee may subchannelize its authorized bandwidth, provided that digital modulation is employed and the aggregate power does not exceed the authorized power for the channel, and may utilize all or a portion of its authorized bandwidth for MDS response stations authorized pursuant to § 21.909 of this part. The licensee may also, jointly with affected adjacent channel licensees, transmit utilizing bandwidth in excess of its authorized frequencies, provided that digital modulation is employed, all power spectral density requirements set forth in this part are met and the out-of-band emissions restrictions set forth in § 21.908 of this part are met at and beyond the edges of the channels employed. The wider channels thus created may be redivided to create narrower channels.

(c) Any licensee of a station in the 2150–2162 MHz or 2596–2644 MHz, 2650–2656 MHz, 2662–2668 MHz, or 2674–2680 MHz frequency bands, after notice and opportunity for hearing, may be required to use the frequency offset technique to avoid or to minimize harmful interference to another licensed station in the 2150–2162 MHz and 2596–2544 MHz, 2650–2656 MHz, 2662–2668 MHz, and 2674–2680 MHz frequency bands or to make other changes as provided in §§ 21.100, 21.107, 21.900, 21.901, 21.902, 21.904, 21.905(a), 21.905(b), 21.906, 21.907, and 21.908 of this part.

(d) Notwithstanding the above, any digital emission which complies with the out-of-band emission restrictions of § 21.908 of this part may be used in the following circumstances:

(1) At any MDS main or booster station transmitter which is located more than 160.94 km (100 miles) from the nearest boundary of all cochannel and adjacent channel ITFS and MDS protected service areas, including Basic Trading Areas and Partitioned Service Areas; and

(2) At all MDS response station transmitters within a response service area if all points along the response service area boundary line are more than 160.94 km (100 miles) from the nearest boundary of all cochannel and adjacent channel ITFS and MDS protected service areas, including Basic Trading Areas and Partitioned Service Areas; and

(3) At any MDS transmitter where all parties entitled by this part to interference protection from that transmitter have mutually consented to the use at that transmitter of such emissions.

[44 FR 60534, Oct. 19, 1979, as amended at 49 FR 48700, Dec. 14, 1984; 55 FR 46011, Oct. 31, 1990; 56 FR 57818, Nov. 14, 1991; 63 FR 65104, Nov. 25, 1998; 64 FR 4054, Jan. 27, 1999; 64 FR 63732, Nov. 22, 1999]

§ 21.906 Antennas.

(a) Main and booster station transmitting antennas shall be omnidirectional, except that a directional antenna with a main beam sufficiently broad to provide adequate service may be used either to avoid possible interference with other users in the frequency band, or to provide coverage more consistent with distribution of potential receiving points. In lieu of an omnidirectional antenna, a station may employ an array of directional antennas in order to reuse spectrum efficiently. When an applicant proposes to employ a directional antenna, or a licensee notifies the Commission pursuant to § 21.42 of the installation of a sectorized antenna system, the applicant shall provide the Commission with information regarding the orientation of the directional antenna(s), expressed in degree of azimuth, with respect to true north, and the make and model of such antenna(s).

(b) The use of horizontal or vertical plane wave polarization, or right hand or left hand rotating elliptical polarization may be used to minimize the hazard of harmful interference between systems.

(c) Transmitting antennas located within 56.3 kilometers (35 miles) of the Canadian border should be directed so as to minimize, to the extent that is practical, emissions toward the border.

(d) Directive receiving antennas shall be used at all points other than response station hubs and response stations operating with an EIRP no greater than −6 dBW per 6 MHz channel and shall be elevated no higher than necessary to assure adequate service. Receiving antenna height shall not exceed

the height criteria of Part 17 of this chapter, unless authorization for use of a specific maximum height (above ground and mean sea level) for each location has been obtained from the Commission prior to the erection of the antenna. (See part 17 of this chapter concerning construction, marking and lighting of antenna structures.) A response station operating with an EIRP no greater than −6 dBW per 6 MHz channel may use an omnidirectional receiving antenna. However, for the purpose of interference protection, such response stations will be treated as if utilizing a receive antenna meeting the requirements of the reference receiving antenna of Figure 1 of § 21.902(f)(3).

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37786, Oct. 9, 1987; 58 FR 44896, Aug. 25, 1993; 63 FR 65104, Nov. 25, 1998; 64 FR 4054, Jan. 27, 1999; 64 FR 63733, Nov. 22, 1999; 65 FR 46617, July 31, 2000]

§ 21.907 [Reserved]

§ 21.908 Transmitting equipment.

(a) Except as otherwise provided in this section, the requirements of paragraphs (a), (b), (c), (d), and (e) of § 73.687 of this chapter shall apply to stations in this service transmitting standard television signals.

EDITORIAL NOTE: At 63 FR 65104, Nov. 25, 1999, paragraph (b) was redesignated as paragraph (a) and newly designated paragraph (a) was revised. However, paragraph (a) already exists. The text of the newly redesignated paragraph (a) follows:

(a) The maximum out-of-band power of an MDS station transmitter or booster transmitting on a single 6 MHz channel with an EIRP in excess of −9 dBW employing analog modulation shall be attenuated at the channel edges by at least 38 dB relative to the peak visual carrier, then linearly sloping from that level to at least 60 dB of attenuation at 1 MHz below the lower band edge and 0.5 MHz above the upper band edge, and attenuated at least 60 dB at all other frequencies. The maximum out-of-band power of an MDS station transmitter or booster transmitting on a single 6 MHz channel or a portion thereof with an EIRP in excess of −9 dBW (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths) employing digital modulation shall be attenuated at the 6 MHz channel edges at least 25 dB relative to the licensed average 6 MHz channel power level, then attenuated along a linear slope to at least 40 dB at 250 kHz beyond the nearest channel edge, then attenuated along a linear slope from that level to at least 60 dB at 3 MHz above the upper and below the lower licensed channel edges, and attenuated at least 60 dB at all other frequencies. Notwithstanding the foregoing, in situations where an MDS station or booster station transmits, or where adjacent channel licensees jointly transmit, a single signal over more than one contiguous 6 MHz channel utilizing digital modulation with an EIRP in excess of −9 dBW (or, when subchannels or superchannels are used, the appropriately adjusted value based upon the ratio of 6 MHz to the subchannel or superchannel bandwidth), the maximum out-of-band power shall be attenuated at the channel edges of those combined channels at least 25 dB relative to the power level of each channel, then attenuated along a linear slope from that level to at least 40 dB at 250 kHz above or below the channel edges of those combined channels, then attenuated along a linear slope from that level to at least 60 dB at 3 MHz above the upper and below the lower edges of those combined channels, and attenuated at least 60 dB at all other frequencies. However, should harmful interference occur as a result of emissions outside the assigned channel, additional attenuation may be required. A transmitter licensed prior to November 1, 1991, that remains at the station site initially licensed, and does not comply with this paragraph, may continue to be used for its life if it does not cause harmful interference to the operation of any other licensee. Any non-conforming transmitter replaced after November 1, 1991, must be replaced by a transmitter meeting the requirements of this paragraph.

(b) A booster transmitting on multiple contiguous or non-contiguous channels carrying separate signals (a ''broadband'' booster) with an EIRP in excess of −9 dBW per 6 MHz channel and employing analog, digital or a

combination of these modulations shall have the following characteristics:

(1) For broadband boosters operating in the frequency range of 2.150–2.160/2 GHz, the maximum out-of-band power shall be attenuated at the upper and lower channel edges forming the band edges by at least 25 dB relative to the licensed analog peak visual carrier or digital average power level (or, when subchannels are used, the appropriately adjusted value based on upon the ratio of the channel-to-subchannel bandwidths), then linearly sloping from that level to at least 40 dB of attenuation at 0.25 MHz above and below the band edges, then linearly sloping from that level to at least 60 dB of attenuation at 3.0 MHz above and below the band edges, and attenuated at least 60 dB at all other frequencies.

(2) For broadband boosters operating in the frequency range of 2.500–2.690 GHz, the maximum out-of-band power shall be attenuated at the upper and lower channel edges forming the band edges by at least 25 dB relative to the licensed analog peak visual carrier or digital average power level (or, when subchannels are used, the appropriately adjusted value based on upon the ratio of the channel-to-subchannel bandwidths), then linearly sloping from that level to at least 40 dB of attenuation at 0.25 MHz above and below the band edges, then linearly sloping from that level to at least 50 dB of attenuation at 3.0 MHz above and below the band edges, then linearly sloping from that level to at least 60 dB of attenuation at 20 MHz above and below the band edges, and attenuated at least 60 dB at all other frequencies.

(3) Within unoccupied channels in the frequency range of 2.500–2.690 GHz, the maximum out-of-band power shall be attenuated at the upper and lower channel edges of an unoccupied channel by at least 25 dB relative to the licensed analog peak visual carrier power level or digital average power level of the occupied channels (or, when subchannels or 125 kHz channels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths), then linearly sloping from that level to at least 40 dB of attenuation at 0.25 MHz above and below the occupied channel edges, then linearly sloping from that level to at least 50 dB of attenuation at 3.0 MHz above and below the occupied channel edges, and attenuated at least 50 dB at all other unoccupied frequencies.

(c) Boosters operating with an EIRP less than -9 dBW per 6 MHz channel shall have no particular out-of-band power attenuation requirement, except that if they cause harmful interference, their operation shall be terminated within 2 hours of notification by the Commission until the interference can be cured.

(d) The maximum out-of-band power of an MDS response station using all or part of a 6 MHz channel, employing digital modulation and transmitting with an EIRP greater than –6 dBW per 6 MHz channel shall be attenuated (as measured in accordance with paragraph (e) of this section) at the 6 MHz channel edges at least 25 dB relative to the average 6 MHz channel power level, then attenuated along a linear slope to at least 40 dB at 250 kHz beyond the nearest channel edge, then attenuated along a linear slope from that level to at least 60 dB at 3 MHz above the upper and below the lower licensed channel edges, and attenuated at least 60 dB at all other frequencies. The maximum out-of-band power of an MDS response station using all or part of a 6 MHz channel, employing digital modulation and transmitting with an EIRP no greater than –6 dBW per 6 MHz channel shall be attenuated (as measured in accordance with paragraph (e) of this section) at the channel edges at least 25 dB relative to the average 6 MHz channel transmitter output power level (P), then attenuated along a linear slope to at least 40 dB or 33+10log(P) dB, whichever is the lesser attenuation, at 250 kHz beyond the nearest channel edge, then attenuated along a linear slope from that level to at least 60 dB or 43+10log(P) dB, whichever is the lesser attenuation, at 3 MHz above the upper and below the lower licensed channel edges, and attenuated at least 60 dB or 43+10log(P) dB, whichever is the lesser attenuation, at all other frequencies. Where MDS response stations with digital modulation utilize all or part of more than one contiguous 6 MHz channel to form a larger channel (*e.g.*, a

channel of width 12 MHz), the above-specified attenuations shall be applied only at the upper and lower edges of the overall combined channel. Notwithstanding these provisions, should harmful interference occur as a result of emissions outside the assigned channel(s), additional attenuation may be required by the Commission.

(e) In measuring compliance with the out-of-band emissions limitations, the licensee shall employ one of two methods in each instance: (1) absolute power measurement of the average signal power with one instrument, with measurement of the spectral attenuation on a separate instrument; or (2) relative measurement of both the average power and the spectral attenuation on a single instrument. The formula for absolute power measurements is to be used when the average signal power is found using a separate instrument, such as a power meter; the formula gives the amount by which the measured power value is to be attenuated to find the absolute power value to be used on the spectrum analyzer or equivalent instrument at the spectral point of concern. The formula for relative power measurements is to be used when the average signal power is found using the same instrument as used to measure the attenuation at the specified spectral points, and allows different resolution bandwidths to be applied to the two parts of the measurement; the formula gives the required amplitude separation (in dB) between the flat top of the (digital) signal and the point of concern.

For absolute power measurements:

Attenuation in dB (below channel power) = $A + 10_{\log} (C_{BW} / R_{Bw})$

For relative power measurements:

Attenuation in dB (below flat top) = $A + 10_{\log} (R_{BW1} / R_{BW2})$

Where:

A = Attenuation specified for spectral point (e.g., 25, 35, 40, 60 dB)

C_{BW} = *Channel bandwidth (for absolute power measurements)*

R_{BW} = *Resolution bandwidth (for absolute power measurements)*

R_{BW1} = *Resolution bandwidth for flat top measurement (relative)*

R_{BW2} = *Resolution bandwidth for spectral point measurement (relative)*

[55 FR 46011, Oct. 31, 1990, as amended at 56 FR 57818, Nov. 14, 1991; 63 FR 65105, Nov. 25, 1998; 65 FR 46617, July 31, 2000]

§ 21.909 MDS response stations.

(a) An MDS response station is authorized to provide communication by voice, video and/or data signals with its associated MDS response station hub or MDS station. An MDS response station may be operated only by the licensee of an MDS station, by any lessee of the MDS station or response station hub, or by a subscriber of either. The authorized channel may be divided to provide distinct subchannels for each of more than one response station, provided that digital modulation is employed and the aggregate power does not exceed the authorized power for the channel. An MDS response station may also, jointly with other licensees, transmit utilizing bandwidth in excess of that authorized to the station, provided that digital modulation is employed, all power spectral density requirements set forth in this part are met, and the out-of-band emissions restrictions set forth in § 21.908(b) or paragraph (j) of this section are complied with. When a 125 kHz channel is employed, the specific channel which may be used by the response station is determined in accordance with §§ 21.901 and 74.939(j) of this chapter.

(b) MDS response stations that utilize the 2150–2162 MHz band, the 2500–2686 MHz band, and/or the 125 kHz channels may be installed and operated without an individual license, to communicate with a response station hub, provided that the conditions set forth in paragraph (g) of this section are met and that the MDS response stations' technical parameters are consistent with all applicable rules in this part and with the terms and conditions set out in the Commission's *Declaratory Ruling and Order*, 11 FCC Rcd 18839 (1996).

(c) An applicant for a response station hub license, or for modification thereto where not subject to § 21.41 or § 21.42, shall:

(1) File FCC Form 331 with Mellon Bank, and certify on that form that it has complied with the requirements of

paragraphs (c)(2) and (d) of this section and that the interference data submitted under paragraph (d) of this section is complete and accurate. Failure to certify compliance and to comply completely with the requirements of paragraphs (c)(2) and (d) of this section shall result in dismissal of the application or revocation of the response station hub license, and may result in imposition of a monetary forfeiture; and

(2) Submit the following (see § 21.902(m) for permissible formats and media) to the Commission's Reference Room:

(i) The data files required by Appendix D to the *Report and Order* in MM Docket 97–217, FCC 98–231, ''Methods For Predicting Interference From Response Station Transmitters And To Response Station Hubs And For Supplying Data on Response Station Systems''; and

(ii) The demonstrations and certifications required by paragraph (d) of this section.

(d) An applicant for a response station hub license shall prepare the following:

(1) A demonstration describing the system channel plan, to the extent that such information is not contained in the data file required in (c)(2)(i) of this section; and

(2) A demonstration that:

(i) The proposed response station hub is within a protected service area, as defined in § 21.902(d) or § 21.933, to which the applicant is entitled either:

(A) By virtue of its being the licensee of an incumbent MDS station whose channels are being converted for MDS response station use; or

(B) By virtue of its holding a Basic Trading Area or Partitioned Service Area authorization. In the case of an application for response stations to utilize one or more of the 125 kHz response channels, such demonstration shall establish that the response station hub is within the protected service area of the station authorized to utilize the associated E-Group or F-Group channel(s); and

(ii) The entire proposed response service area is within a protected service area to which the applicant is entitled either (A) by virtue of its being the licensee of an incumbent MDS station whose channels are being converted for MDS response station use; or (B) by virtue of its holding a Basic Trading Area or Partitioned Service Area authorization. In the alternative, the applicant may demonstrate that the licensee entitled to any cochannel protected service area which is overlapped by the proposed response service area has consented to such overlap. In the case of an application for response stations to utilize one or more of the 125 kHz response channels, such demonstration shall establish that the response service area is entirely within the protected service area of the station authorized to utilize the associated E-Group or F-Group channel(s), or, in the alternative, that the licensee entitled to any cochannel protected service area which is overlapped by the proposed response service area has consented to such overlap; and

(iii) The combined signals of all simultaneously operating MDS response stations within all response service areas and oriented to transmit towards their respective response station hubs, and all cochannel MDS stations and booster stations licensed to or applied for by the applicant will not generate a power flux density in excess of -73 dBW/m^2 (or the appropriately adjusted value based on the actual bandwidth used if other than 6 MHz, see § 21.902(b)(7)(i)) outside the boundaries of the applicant's protected service area, as measured at locations for which there is an unobstructed signal path, except to the extent that consent of affected licensees has been obtained or consents have been granted pursuant to paragraph (d)(3)(ii) of this section to an extension of the response service area beyond the boundaries of the protected service area; and

(iv) The combined signals of all simultaneously operating MDS response stations within all response service areas and oriented to transmit towards their respective response station hubs, and all cochannel MDS stations and booster stations licensed to or applied for by the applicant, will result in a desired to undesired signal ratio of at least 45 dB (or the appropriately adjusted value based on the actual bandwidth used if other than 6 MHz, see § 21.902(b)(7)(ii)):

(A) within the protected service area of any authorized or previously-proposed cochannel MDS or ITFS station with a 56.33 km (35 mile) protected service area with center coordinates located within 160.94 km (100 miles) of the proposed response station hub; and

(B) within the booster service area of any cochannel booster station entitled to such protection pursuant to §§ 21.913(f) or 74.985(f) of this chapter and located within 160.94 km (100 miles) of the proposed response station hub; and

(C) at any registered receive site of any authorized or previously-proposed cochannel ITFS station or booster station located within 160.94 km (100 miles) of the proposed response station hub, or, in the alternative, that the licensee of or applicant for such cochannel station or hub consents to the application; and

(v) The combined signals of all simultaneously operating MDS response stations within all response service areas and oriented to transmit towards their respective response station hubs, and all cochannel MDS stations and booster stations licensed to or applied for by the applicant, will result in a desired to undesired signal ratio of at least 0 dB (or the appropriately adjusted value based on the actual bandwidth used if other than 6 MHz, see § 21.902(b)(7)(iii)):

(A) within the protected service area of any authorized or previously-proposed adjacent channel MDS or ITFS station with a 56.33 km (35 mile) protected service area with center coordinates located within 160.94 km (100 miles) of the proposed response station hub; and

(B) within the booster service area of any adjacent channel booster station entitled to such protection pursuant to §§ 21.913(f) or 74.985(f) of this chapter and located within 160.94 km (100 miles) of the proposed response station hub; and

(C) at any registered receive site of any authorized or previously-proposed adjacent channel ITFS station or booster station located within 160.94 km (100 miles) of the proposed response station hub, or, in the alternative, that the licensee of or applicant for such adjacent channel station or hub consents to the application; and

(vi) The combined signals of all simultaneously operating MDS response stations within all response service areas and oriented to transmit towards their respective response station hub and all cochannel MDS stations and booster stations licensed to or applied for by the applicant will comply with the requirements of paragraph (i) of this section and § 74.939(i) of this chapter.

(3) A certification that the application has been served upon

(i) the holder of any cochannel or adjacent channel authorization with a protected service area which is overlapped by the proposed response service area;

(ii) the holder of any cochannel or adjacent channel authorization with a protected service area that adjoins the applicant's protected service area;

(iii) the holder of a cochannel or adjacent channel authorization for any BTA or PSA inside whose boundaries are locations for which there is an unobstructed signal path for combined signals from within the response station hub applicant's protected service area; and

(iv) every licensee of, or applicant for, any cochannel or adjacent channel, authorized or previously-proposed, incumbent MDS station with a 56.33 km (35 mile) protected service area with center coordinates located within 160.94 km (100 miles) of the proposed response station hub;

(v) every licensee of, or applicant for, any cochannel or adjacent channel, authorized or previously-proposed ITFS station (including any booster station or response station hub) located within 160.94 km (100 miles) of the proposed response station hub; and

(vi) every licensee of any non-cochannel or non-adjacent channel ITFS station (including any booster station) with one or more registered receive sites in, or within 1960 feet of the proposed response station service area.

(e) Except as set forth in § 21.27(d), applications for response station hub licenses may be filed at any time. Notwithstanding any other provision of part 21 (including § 21.31), applications for response station hub licenses meeting the requirements of paragraph (c)

of this section shall cut-off applications that are filed on a subsequent day for facilities that would cause harmful electromagnetic interference to the proposed response station hubs. A response station hub shall not be entitled to protection from interference caused by facilities proposed on or prior to the day the application for the response station hub license is filed. Response stations shall not be required to protect from interference facilities proposed on or after the day the application for the response station hub license is filed.

(f) Notwithstanding the provisions of § 21.30(b)(4) and except as set forth in § 21.27(d), any petition to deny an application for a response station hub license shall be filed no later than the sixtieth (60th) day after the date of public notice announcing the filing of such application or major amendment thereto. Notwithstanding § 21.31 and except as provided in § 21.27(d), an application for a response station hub license that meets the requirements of this section shall be granted on the sixty-first (61st) day after the Commission shall have given public notice of the acceptance for filing of it, or of a major amendment to it if such major amendment has been filed, unless prior to such date either a party in interest timely files a formal petition to deny or for other relief pursuant to § 21.30(a), or the Commission notifies the applicant that its application will not be granted. Where an application is granted pursuant to the provisions of this paragraph, the conditional licensee or licensee shall maintain a copy of the application at the response station hub until such time as the Commission issues a response station hub license.

(g) An MDS response station hub license shall be conditioned upon compliance with the following:

(1) No MDS response station shall be located beyond the response service area of the response station hub with which it communicates; and

(2) No MDS response station shall operate with a transmitter output power in excess of 2 watts; and

(3) No response station shall operate with an EIRP in excess of that specified in the application for the response station hub for the particular regional class of characteristics with which the response station is associated, and such response station shall not operate with an EIRP in excess of 33 dBW + 10log(X/6) dBW, where X is the channel width in MHz, and

(4) Each response station shall employ a transmission antenna oriented towards the response station hub with which the response station communicates and such antenna shall be no less directive than the worst-case outer envelope pattern specified in the application for the response station hub for the regional class of characteristics with which the response station is associated; and

(5) The combined out-of-band emissions of all response stations using all or part of one or multiple contiguous 6 MHz channels and employing digital modulation shall comply with § 21.908(d). The combined out-of-band emissions of all response stations using all or part of one or multiple contiguous 125 kHz channels shall comply with paragraph (j) of this section. However, should harmful interference occur as a result of emissions outside the assigned channel, additional attenuation may be required; and

(6) The response stations transmitting simultaneously at any given time within any given region of the response service area utilized for purposes of analyzing the potential for interference by response stations shall conform to the numerical limits for each class of response station proposed in the application for the response station hub license. Notwithstanding the foregoing, where a response station hub licensee subchannelizes pursuant to § 21.909(a) and limits the maximum EIRP emitted by any individual response station proportionately to the fraction of the channel that the response station occupies, the licensee may operate simultaneously on each subchannel the number of response stations specified in the license. Moreover, the licensee of a response station hub may alter the number of response stations of any class operated simultaneously in a given region, without prior Commission authorization, provided that the licensee:

(i) Files with the Commission (see § 21.902(m) for permissible format(s) and

media) a demonstration indicating the number of response stations of such class(es) to be operated simultaneously in such region and a certification that it has complied with the requirements of paragraphs (g)(6)(ii) and (iii) of this section and that the interference data submitted pursuant to paragraph (g)(6)(ii) is complete and accurate; and

(ii) Provides the Commission's Reference Room (see § 21.902(m) for permissible formats and media) with an update of the previously-filed response station data and with a demonstration that such alteration will not result in any increase in interference to the protected service area or protected receive sites of any existing or previously-proposed, cochannel or adjacent channel MDS or ITFS station or booster station, to the protected service area of any MDS Basic Trading Area or Partitioned Service Area licensee entitled to protection pursuant to paragraph (d)(3) of this section, or to any existing or previously-proposed, cochannel or adjacent channel response station hub, or response station under § 21.949 or § 74.949 of this chapter; or that the applicant for or licensee of such facility has consented to such interference; and

(iii) Serves a copy of such demonstration and certification upon each party entitled to be served pursuant to paragraph (d)(3) of this section; and

(7) Where an application is granted under this section, if a facility operated pursuant to that grant causes harmful, unauthorized interference to any cochannel or adjacent channel facility, it must promptly remedy the interference or immediately cease operations of the interfering facility, regardless of whether any petitions to deny or for other relief were filed against the application during the application process. The burden of proving that a facility operated under this section is not causing harmful, unauthorized interference lies on the licensee of the alleged interfering facility, following the filing of a documented complaint of interference by an affected party; and

(8) In the event any MDS or ITFS receive site suffers interference due to block downconverter overload, the licensee of each non-co/adjacent response station hub with a response service area within five miles of such receive site shall cooperate in good faith to expeditiously identify the source of the interference. Each licensee of a response station hub with an associated response station contributing to such interference shall bear the joint and several obligation to promptly remedy all block downconverter overload interference at any ITFS registered receive site or at any receive site within an MDS or ITFS protected service area applied for prior to the submission of the application for the response station hub license, regardless of whether the receive site suffering the interference was constructed prior to or after the construction of the response station(s) causing the downconverter overload; provided, however, that the licensee of the registered ITFS receive site or the MDS or ITFS protected service area must cooperate fully and in good faith with efforts by the response station hub licensee to prevent interference before constructing response stations and/or to remedy interference that may occur. In the event that the associated response station(s) of more than one response station hub licensee contribute(s) to block downconverter interference at an MDS or ITFS receive site, such hub licensees shall cooperate in good faith to remedy promptly the interference.

(h) Applicants must comply with Part 17 of this chapter concerning notification to the Federal Aviation Administration of proposed antenna construction or alteration for all hub stations and associated response stations.

(i) Response station hubs shall be protected from cochannel and adjacent channel interference in accordance with the following criteria:

(1) An applicant for any new or modified MDS or ITFS station (including any high-power booster station or response station hub) shall be required to demonstrate interference protection to a response station hub within 160.94 km (100 miles) of the proposed facilities. In lieu of the interference protection requirements set forth in §§ 21.902(b)(3) through (b)(5), 21.938(b)(1) and (2) and (c), and 74.903 of this chapter, such demonstration shall establish that the proposed facility will not increase the

effective power flux density of the undesired signals generated by the proposed facility and any associated main stations, booster stations or response stations at the response station hub antenna for any sector. In lieu of the foregoing, an applicant for a new MDS or ITFS main station license or for a new or modified response station hub or booster license may demonstrate that the facility will not increase the noise floor at a reception antenna of the response station hub by more than 1 dB for cochannel signals and 45 dB for adjacent channel signals, provided that:

(i) The entity submitting the application may only invoke this alternative once per response station hub reception sector; or

(ii) The licensee of the affected response station hub may consent to receive a certain amount of interference at its hub.

(2) Commencing upon the filing of an application for an MDS response station hub license and until such time as the application is dismissed or denied or, if the application is granted, a certification of completion of construction is filed, the MDS station whose channels are being utilized shall be entitled both to interference protection pursuant to §§ 21.902(b)(3) through (b)(5), 21.938(b)(1) and (2) and (c), and 74.903 of this chapter, and to protection of the response station hub pursuant to the preceding paragraph. Unless the application for the response station hub license specifies that the same frequencies also will be employed for digital and/or analog point-to-multipoint transmissions by MDS stations and/or MDS booster stations, upon the filing of a certification of completion of construction of an MDS response station hub where the channels of an MDS station are being utilized as response station transmit frequencies, the MDS station whose channels are being utilized for response station transmissions shall no longer be entitled to interference protection pursuant to §§ 21.902(b)(3) through (b)(5), 21.938(b)(1) and (2) and (c), and 74.903 of this chapter within the response service area with regard to any portion of any 6 MHz channel employed solely for response station communications. Upon the certification of completion of construction of an MDS response station hub where the channels of an MDS station are being utilized for response station transmissions and the application for the response station hub license specifies that the same frequencies will be employed for point-to-multipoint transmissions, the MDS station whose channels are being utilized shall be entitled both to interference protection pursuant to §§ 21.902(b)(3) through (b)(5), 21.938(b)(1) and (2) and (c), and 74.903 of this chapter, and to protection of the response station hub pursuant to the preceding provisions of this paragraph.

(j) 125 kHz wide response channels shall be subject to the following requirements: The 125 kHz wide channel shall be centered at the assigned frequency. If amplitude modulation is used, the carrier shall not be modulated in excess of 100%. If frequency modulation is used, the deviation shall not exceed ±25 kHz. Any emissions outside the channel shall be attenuated at the channel edges at least 35 dB below peak output power when analog modulation is employed or 35 dB below licensed average output power when digital modulation is employed (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths). Any emissions more than 125 kHz from either channel edge, including harmonics, shall be attenuated at least 60 dB below peak output power when analog modulation is employed, or at least 60 dB below licensed average output power when digital modulation is employed (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths). Notwithstanding the foregoing, in situations where adjacent channel licensees jointly transmit over more than one contiguous channel utilizing digital modulation, the maximum out-of-band power shall be attenuated at the edges of those combined channels at least 35 dB relative to the licensed average power level of each channel. Emissions more than 125 kHz from either edge of the combined channels, including harmonics, shall be attenuated at least

60 dB below peak analog power or average digital power of each channel, as appropriate.

(k) A response station may be operated unattended. The overall performance of the response station transmitter shall be checked by the hub licensee as often as necessary to ensure that it is functioning in accordance with the requirements of the Commission's rules. The licensee of a response station hub is responsible for the proper operation of all associated response station transmitters. Each response station hub licensee is responsible for maintaining, and making available to the Commission upon request, a list containing all customer names and addresses, plus the technical parameters (EIRP, emission, bandwidth, antenna pattern/ height/ orientation/ polarization) pertinent to each class of response station within the response service area.

(l) The transmitting apparatus employed at MDS response stations shall have received type certification.

(m) An MDS response station shall be operated only when engaged in communications with its associated MDS response station hub or MDS station or booster station, or for necessary equipment or system tests and adjustments. Upon initial installation, and upon relocation and reinstallation, a response station transmitter shall be incapable of emitting radiation unless, and until, it has been activated by reception of a signal from the associated MDS station or booster station. A hub station licensee shall be capable of remotely deactivating any and all response station transmitters within its RSA by means of signals from the associated MDS station or booster station. Radiation of an unmodulated carrier and other unnecessary transmissions are forbidden.

(n) All response stations utilizing an EIRP greater than 18 dBW shall be installed by the associated hub licensee or by the licensee's employees or agents. For the purposes of this section, all EIRP dBW values assume the use of a 6 MHz channel. For channel bandwidths other than 6 MHz, the EIRP dBW values should be adjusted up (channel >6 MHz) or down (channel <6 MHz) by 10 log(X/6) dBW, where X is the channel width in MHz. For response stations located within 1960 feet of an ITFS receive site registered and built prior to the filing of the application for the hub station license, the hub licensee must notify the licensee of the ITFS receive site at least one business day prior to the activation of these response stations. The notification must contain, for each response station to be activated, the following information: name and telephone number of a contact person who will be responsible for coordinating the resolution of any interference problems; street address; geographic coordinates to the nearest second; channels/subchannels (transmit only); and transmit antenna pattern, EIRP, orientation and height AMSL. (If transmit antenna pattern, EIRP, orientation or height AMSL are not known with specificity at the time of notification, the hub licensee may, instead, specify the worst-case values for the class of response station being activated.) Such notice to the ITFS licensee shall be given in writing by certified mail unless the ITFS licensee has requested delivery by email or facsimile. The ITFS licensee may waive the notification requirement on a site-specific basis or on a system-wide basis. The notification provisions of this section shall not apply if:

(1) The response station will operate at an EIRP no greater than −6 dBW; or

(2) The response station will operate at an EIRP greater than −6 dBW and no more than 18 dBW and:

(i) The channels being received at the ITFS site are neither the same as, nor directly adjacent to, the channel(s) to be transmitted from the response station; and

(ii) The hub station licensee has replaced, at its expense, the frequency downconverters used at all ITFS receive sites registered and constructed prior to the filing of the hub station application which are within 1960 feet of the hub station's response service area; and

(iii) The downconverters, at a minimum, conform to the following specifications:

(A) A frequency of operation covering the 2150–2162 MHz band or the 2500–2686 MHz band; and

(B) A third-order intercept point of 30 dBm; and

(C) A conversion gain of 32 dB, or the same conversion gain as the existing ITFS downconverter, whichever is least; and

(D) A noise figure of no greater than 2.5 dB, or no more than 1 dB greater than the noise figure of the existing ITFS downconverter, whichever is greater; and

(iv) The proposal to upgrade the ITFS downconverter was made in writing and served upon the affected ITFS licensee, conditional licensee or applicant at the same time the application for the response station hub license was served on cochannel and adjacent channel ITFS parties and no objection was made within the 60-day period allowed for petitions to deny the hub station application.

(o) Interference calculations shall be performed in accordance with Appendix D (as amended) to the *Report and Order* in MM Docket 97–217, FCC 98–231, ''Methods For Predicting Interference From Response Station Transmitters and To Response Station Hubs and For Supplying Data on Response Station Systems.'' (Note: This document is subject to change and will be updated/amended as needed without prior notification. Applicants should always utilize the most current version of the document, as found at the Commission's internet web site, http://www.fcc.gov/mmb/vsd/files/methodology.doc). Compliance with out-of-band emission limitations shall be established in accordance with § 21.908(e).

[63 FR 65105, Nov. 25, 1998; 64 FR 4054, Jan. 27, 1999, as amended at 64 FR 63733, Nov. 22, 1999; 65 FR 46618, July 31, 2000]

§ 21.910 Special procedures for discontinuance, reduction or impairment of service by common carrier licensees.

(a) Any licensee who has elected common carrier status and who seeks to discontinue service on a common carrier basis and instead provide service on a non-common carrier basis, or who otherwise intends to reduce or impair service the carrier shall notify all affected customers of the planned discontinuance, reduction or impairment on or before the date that the licensee provides notice to the Commission pursuant to § 21.903(d).

(b) Notice shall be in writing to each affected customer unless the Commission authorizes in advance, for good cause shown, another form of notice. Notice shall include the following:

(1) Name and address of carrier; and

(2) Date of planned service discontinuance, reduction or impairment; and

(3) Points or geographic areas of service affected; and

(4) How many and which channels are affected.

[64 FR 63735, Nov. 22, 1999]

§ 21.911 Annual reports.

(a) No later than March 1 of each year for the preceding calendar year, each licensee in the Multipoint Distribution Service shall file with the Commission two copies of a report which must include the following:

(1) Name and address of licensee;

(2) Station(s) call letters and primary geographic service area(s);

(3) The following statistical information, preferably in tabular form, for the licensee's station (and each channel thereof);

(i) The total number of separate subscribers served during the calendar year;

(ii) The total hours of transmission service rendered during the calendar year to all subscribers;

(iii) The total hours of transmission service rendered during the calendar year in the following categories: entertainment, education and training, public service, data transmission, and other services;

(iv) A list of each period of time during the calendar year in which a station was not operational due to removal or alteration of equipment or facilities; and

(v) A list of each period of time during the calendar year in which the station rendered no service as authorized, if the time period was a consecutive period longer than 48 hours.

(b) The licensee, by an appropriate corporate officer, controlling partner, or individual proprietor, must certify this report as to the accuracy and completeness of the information contained therein.

(c) A copy of each year's report shall be retained in the principal office of the licensee and shall be readily available to the public for reference and inspection.

[55 FR 46011, Oct. 31, 1990]

§ 21.912 Cable television company eligibility requirements and MDS/cable cross-ownership.

(a) Nothwithstanding the provisions of § 21.900 of this part, initial or modified authorizations for stations in the 2150-2162 MHz and 2596–2680 MHz frequency bands may not be granted to a cable operator if a portion of the Multipoint Distribution Service (MDS) station's protected services area is within the portion of the franchise area actually served by the cable operator's cable system. No cable operator may acquire such authorization either directly, or indirectly through an affiliate owned operated, or controlled by or under common control with a cable operator.

(b) No licensee of a station in this service may lease transmission time or capacity to a cable operator either directly, or indirectly through an affiliate owned, operated, controlled by, or under common control with a cable operator, if a portion of the Multipoint Distribution Service (MDS) station's protected services area is within the portion of the franchise area actually served by the cable operator's cable system.

(c) Applications for new stations, station modifications, assignments or transfers of control by cable operators of stations in the 2150–2162 MHz and 2596–2680 MHz frequency bands shall include a showing that no portion of the protected service area of the MDS station is within the portion of the franchise area actually served by the cable operator's cable system, or of any entity indirectly affiliated, owned, operated, controlled by, or under common control with the cable operator.

NOTE 1 TO § 21.912: In applying the provisions of this section, ownership and other interests in MDS licensees or cable television systems will be attributed to their holders and deemed cognizable pursuant to the following criteria:

(a) Except as otherwise provided herein, partnership and direct ownership interests and any voting stock interest amounting to 5% or more of the outstanding voting stock of a corporate MDS licensee or cable television system will be cognizable;

(b) Investment companies, as defined in 15 U.S.C. 80a–3, insurance companies and banks holding stock through their trust departments in trust accounts will be considered to have a cognizable interest only if they hold 20% or more of the outstanding voting stock of a corporate MDS licensee or cable television system, or if any of the officers or directors of the MDS licensee or cable television system are representatives of the investment company, insurance company or bank concerned. Holdings by a bank or insurance company will be aggregated if the bank or insurance company has any right to determine how the stock will be voted. Holdings by investment companies will be aggregated if under common management.

(c) Attribution of ownership interests in an MDS licensee or cable television system that are held indirectly by any party through one or more intervening corporations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that wherever the ownership percentage for any link in the chain exceeds 50%, it shall not be included for purposes of this multiplication. For purposes of paragraph (i) of this note, attribution of ownership interests in an MDS licensee or cable television system that are held indirectly by any party through one or more intervening organizations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, and the ownership percentage for any link in the chain that exceeds 50% shall be included for purposes of this multiplication. [For example, except for purposes of paragraph (i) of this note, if A owns 10% of company X, which owns 60% of company Y, which owns 25% of ''Licensee,'' then X's interest in ''Licensee'' would be 25% (the same as Y's interest because X's interest in Y exceeds 50%), and A's interest in ''Licensee'' would be 2.5% (0.1 x 0.25). Under the 5% attribution benchmark, X's interest in ''Licensee'' would be cognizable, while A's interest would not be cognizable. For purposes of paragraph (i) of this note, X's interest in ''Licensee'' would be 15% (0.6 x 0.25) and A's interest in ''Licensee'' would be 1.5% (0.1 x 0.6 x 0.25). Neither interest would be attributed under paragraph (i) of this note.]

(d) Voting stock interests held in trust shall be attributed to any person who holds or shares the power to vote such stock, to any person who has the sole power to sell such stock, and to any person who has the right to revoke the trust at will or to replace

the trustee at will. If the trustee has a familial, personal or extra-trust business relationship to the grantor or the beneficiary, the grantor or beneficiary, as appropriate, will be attributed with the stock interests held in trust. An otherwise qualified trust will be ineffective to insulate the grantor or beneficiary from attribution with the trust's assets unless all voting stock interests held by the grantor or beneficiary in the relevant MDS licensee or cable television system are subject to said trust.

(e) Subject to paragraph (i) of this note, holders of non-voting stock shall not be attributed an interest in the issuing entity. Subject to paragraph (i) of this note, holders of debt and instruments such as warrants, convertible debentures, options or other non-voting interests with rights of conversion to voting interests shall not be attributed unless and until conversion is effected.

(f)(1) A limited partnership interest shall be attributed to a limited partner unless that partner is not materially involved, directly or indirectly, in the management or operation of the MDS or cable television activities of the partnership and the licensee or system so certifies. An interest in a Limited Liability Company (''LLC'') or Registered Limited Liability Partnership (''RLLP'') shall be attributed to the interest holder unless that interest holder is not materially involved, directly or indirectly, in the management or operation of the MDS or cable television activities of the partnership and the licensee or system so certifies.

(2) For a licensee or system that is a limited partnership to make the certification set forth in paragraph (f)(1) of this note, it must verify that the partnership agreement or certificate of limited partnership, with respect to the particular limited partner exempt from attribution, establishes that the exempt limited partner has no material involvement, directly or indirectly, in the management or operation of the MDS or cable television activities of the partnership. For a licensee or system that is an LLC or RLLP to make the certification set forth in paragraph (f)(1) of this note, it must verify that the organizational document, with respect to the particular interest holder exempt from attribution, establishes that the exempt interest holder has no material involvement, directly or indirectly, in the management or operation of the MDS or cable television activities of the LLC or RLLP. The criteria which would assume adequate insulation for purposes of this certification are described in the Memorandum Opinion and Order in MM Docket No. 83–46, 50 FR 27438, July 3, 1985, as modified on reconsideration in the Memorandum Opinion and Order in MM Docket No. 83–46, 52 FR 1630, January 15, 1987. Irrespective of the terms of the certificate of limited partnership or partnership agreement, or other organizational document in the case of an LLC or RLLP, however, no such certification shall be made if the individual or entity making the certification has actual knowledge of any material involvement of the limited partners, or other interest holders in the case of an LLC or RLLP, in the management or operation of the MDS or cable television businesses of the partnership or LLC or RLLP.

(3) In the case of an LLC or RLLP, the licensee or system seeking installation shall certify, in addition, that the relevant state statute authorizing LLCs permits an LLC member to insulate itself as required by our criteria.

(g) Officers and directors of an MDS licensee or cable television system are considered to have a cognizable interest in the entity with which they are so associated. If any such entity engages in businesses in addition to its primary business of MDS or cable television service, it may request the Commission to waive attribution for any officer or director whose duties and responsibilities are wholly unrelated to its primary business. The officers and directors of a parent company of an MDS licensee or cable television system, with an attributable interest in any such subsidiary entity, shall be deemed to have a cognizable interest in the subsidiary unless the duties and responsibilities of the officer or director involved are wholly unrelated to the MDS licensee or cable television system subsidiary, and a statement properly documenting this fact is submitted to the Commission. [This statement may be included on the Licensee Qualification Report.] The officers and directors of a sister corporation of an MDS licensee or cable television system shall not be attributed with ownership of these entities by virtue of such status.

(h) Discrete ownership interests will be aggregated in determining whether or not an interest is cognizable under this section. An individual or entity will be deemed to have a cognizable investment if:

(1) The sum of the interests held by or through ''passive investors'' is equal to or exceeds 20 percent; or

(2) The sum of the interests other than those held by or through ''passive investors'' is equal to or exceeds 5 percent; or

(3) The sum of the interests computed under paragraph (h)(1) of this note plus the sum of the interests computed under paragraph (h)(2) of this note is equal to or exceeds 20 percent.

(i) Notwithstanding paragraphs (e) and (f) of this note, the holder of an equity or debt interest or interests in an MDS licensee or cable television system subject to the MDS/cable cross-ownership rule (''interest holder'') shall have that interest attributed if:

(1) the equity (including all stockholdings, whether voting or nonvoting, common or

preferred) and debt interest or interests, in the aggregate, exceed 33 percent of the total asset value (all equity plus all debt) of that MDS licensee or cable television system; and

(2) The interest holder also holds an interest in an MDS licensee or cable television system that is attributable under paragraphs of this note other than this paragraph (i) and which operates in any portion of the franchise area served by that cable operator's cable system.

(j) The term ''area served by a cable system'' means any area actually passed by the cable operator's cable system and which can be connected for a standard connection fee.

(k) As used in this section ''cable operator'' shall have the same definition as in § 76.5 of this chapter.

NOTE 2 TO § 21.912: The Commission will entertain requests to waive the restrictions in paragraph (a) of this section where necessary to ensure that all significant portions of the franchise area are able to obtain multichannel video service. Such waiver requests should be filed in accordance with special relief procedures set forth in § 76.7.

(d) The provisions of paragraphs (a) through (c) of this section will not apply to one MDS or MMDS channel used to provide locally-produced programming to cable headends. Locally-produced programming is programming produced in or near the cable operator's franchise area and not broadcast on a television station available within that franchise area. A cable operator will be permitted one MDS channel in an MMDS protected service area for this purpose, and no more than one MDS channel in an MMDS protected service area may be used by a cable television company or its affiliate or lessor pursuant to this paragraph. The licensee for a cable operator providing local programming pursuant to a lease must include in a notice filed with the Common Carrier Bureau a cover letter explicitly identifying itself or its lessee as a local cable operator and stating that the lease was executed to facilitate the provision of local programming. The first application or the first lease notification in an area filed with the Commission will be entitled to the exemption. The limitations on one MDS channel per party and per area include any cable/MDS operations grandfathered pursuant to paragraph (f) of this section or cable/ITFS operations grandfathered pursuant to § 74.931(e) of this chapter.[1] The cable operator must demonstrate in its MDS/MMDS application that the proposed local programming will be provided within one year from the date its application is granted. Local programming service pursuant to a lease must be provided within one year of the date of the lease or one year of grant of the licensee's application for the leased channel, whichever is later. If an MDS license for these purposes is granted and the programming is subsequently discontinued, the license will be automatically forfeited the day after local programming service is discontinued.

(e) Applications filed by cable television companies, or affiliates, for MDS channels prior to February 8, 1990, will not be subject to the prohibitions of this section. Applications filed on February 8, 1990, or thereafter will be returned. Lease arrangements between cable and MDS entities for which a lease or a firm agreement was signed prior to February 8, 1990, will also not be subject to the prohibitions of this section. Leases between cable television companies, or affiliates, and MDS/MMDS station licensees, conditional licensees, or applicansts executed on February 8, 1990, or thereafter, are invalid.

(1) Applications filed by cable operators, or affiliates, for MMDS channels prior to February 8, 1990, will not be subject to the prohibitions of this section. Except as provided in paragraph (e)(2) below, applications filed on February 8, 1990, or thereafter will be returned. Lease arrangements between cable and MDS entities for which a lease or a firm agreement was signed prior to February 8, 1990, will also not be subject to the prohibitions of this section. Except as provided in paragraph (e)(2) below, leases between cable operators, or affiliates, and MDS/MMDS station licensees, conditional licensees, or applicants executed on or before February 8, 1990, or thereafter are invalid.

(2) Applications filed by cable operators, or affiliates for MDS channels after February 8, 1990, and prior to October 5, 1992, will not be subject to the prohibition of this section, if, pursuant to the then existing overbuild or rural exceptions, the applications were allowed under the then existing cable/MMDs cross-ownership prohibitions.

Lease arrangements between cable operators and MDS entities for which a lease or firm agreement was signed after February 8, 1990, and prior to October 5, 1992, will not be subject to the prohibitions of this section, if, pursuant to the then existing rural and overbuild exceptions, the lease arrangements were allowed.

(3) The limitations on cable television ownership in this section do not apply to any cable operator in any franchise area in which a cable operator is subject to effective competition as determined under section 623(l) of the Communications Act.

(f) Interested persons may file a petition to deny an application filed pursuant to paragraph (d) of this section within 30 days after the Commission gives public notice that the application or petition has been filed. Petitions must be served upon the applicant, and must contain a complete and detailed showing, supported by affidavit, of any facts or considerations relied upon. The applicant may file an opposition to the petition to deny within 30 days after the filing of the petition, and must serve copies upon all persons who have filed petitions to deny. The Commission, after consideration of the pleadings, will determine whether the public interest, convenience and necessity would be served by the grant or denial of the application, in whole or in part. The Commission may specify other procedures, such as oral argument, evidentiary hearing or further written submission directed to particular aspects, as it deems appropriate.

NOTES: In these grandfathered situations, we will consider granting waivers to permit the use of a second MDS channel for the delivery of locally produced programming. Because allocating a second channel to this use would further reduce the channel capacity available for wireless cable service, we will require an applicant for the second channel to demonstrate, at a minimum, that it is ready and able to provide additional locally produced programming to area cable systems, and that no other practical means of delivering the programming are available to it. In considering requests for waiver, we will also take into account the competitive environment for the production and delivery of locally produced programming in the relevant markets.

[55 FR 46011, Oct. 31, 1990, as amended at 56 FR 57818, Nov. 14, 1991; 58 FR 42018, Aug. 6, 1993; 58 FR 45064, Aug. 26, 1993; 61 FR 15387, Apr. 8, 1996; 64 FR 50644, Sept. 17, 1999; 66 FR 9971, Feb. 13, 2001]

§ 21.913 Signal booster stations.

(a) An MDS booster station may reuse channels to repeat the signals of MDS stations or to originate signals on MDS channels. The aggregate power flux density generated by an MDS station and all associated signal booster stations and all simultaneously operating cochannel response stations may not exceed -73 dBW/m^2 (or the appropriately adjusted value based on the actual bandwidth used if other than 6 MHz, see § 21.902(b)(7)(i)) at or beyond the boundary of the protected service area, as defined in §§ 21.902(d) and 21.933, of the main MDS station whose channels are being reused, as measured at locations for which there is an unobstructed signal path, unless the consent of the affected cochannel licensee is obtained.

(b) A licensee or conditional licensee of an MDS station, or the capacity lessee of such MDS station upon the written consent of the licensee or conditional licensee, may secure a license for a high power signal booster station that has a maximum EIRP in excess of -9 dBW + 10 log(X/6) dBW where X is the channel width in MHz, if it complies with the out-of-band emission requirements of § 21.908. Any licensee of a high-power booster station that is a capacity lessee shall, upon termination or expiration of the capacity lease, automatically assign the booster station license to the licensee or conditional licensee of the MDS station by and upon written notice to the Commission signed by the lessee and such licensee or conditional licensee. If upon termination or expiration of the capacity lease the licensee or conditional licensee no longer desires or needs the high-power booster station license, such a license must be returned to the Commission. The applicant for a high-power station, or for modification thereto, where not subject to § 21.41 or § 21.42, shall file FCC Form 331 with Mellon Bank, and certify on that form

that the applicant has complied with the additional requirements of this paragraph (b), and that the interference data submitted under this paragraph is complete and accurate. Failure to certify compliance and to comply completely with the following requirements of this paragraph (b) shall result in dismissal of the application or revocation of the high-power MDS signal booster station license, and may result in imposition of a monetary forfeiture. The applicant is additionally required to submit (see § 21.902(m) for permissible format(s) and media) to the Commission's Reference Room the following information:

(1) A demonstration that the proposed signal booster station site is within the protected service area, as defined in §§ 21.902(d) and 21.933, of the MDS station whose channels are to be reused; and

(2) A study which demonstrates that the aggregate power flux density of the MDS station and all associated booster stations and simultaneously operating cochannel response stations licensed to or applied for by the applicant, measured at or beyond the boundary of the protected service area of the MDS station whose channels are to be reused, does not exceed -73 dBW/m^2 (or the appropriately adjusted value based on the actual bandwidth used if other than 6 MHz, see § 21.902(b)(7)(i)) at locations for which there is an unobstructed signal path, unless the consent of the affected licensees has been obtained; and

(3) In lieu of the requirements of § 21.902(c) and (i), a study which demonstrates that the proposed booster station will cause no harmful interference (as defined in § 21.902(f)) to cochannel and adjacent channel, authorized or previously-proposed ITFS and MDS stations with protected service area center coordinates as specified in § 21.902(d), to any authorized or previously-proposed response station hubs, booster stations or I channel stations associated with such ITFS and MDS stations, or to any ITFS receive sites registered as of September 17, 1998, within 160.94 kilometers (100 miles) of the proposed booster station's transmitter site. Such study shall consider the undesired signal levels generated by the proposed signal booster station, the main station, all other licensed or previously-proposed associated booster stations, and all simultaneously operating cochannel response stations licensed to or applied for by the applicant. In the alternative, a statement from the affected MDS or ITFS licensee or conditional licensee stating that it does not object to operation of the high-power MDS signal booster station may be submitted; and

(4) A description of the booster service area; and

(5) A demonstration either

(i) That the booster service area is entirely within the protected service area to which the licensee of a station whose channels are being reused is entitled by virtue of its being the licensee of an incumbent MDS station, or by virtue of its holding a Basic Trading Area or Partitioned Service Area authorization; or

(ii) That the licensee entitled to any cochannel protected service area which is overlapped by the proposed booster service area has consented to such overlap; and

(6) A demonstration that the proposed booster service area can be served by the proposed booster without interference; and

(7) A certification that copies of the materials set forth in paragraph (b) of this section have been served upon the licensee or conditional licensee of each station (including each response station hub and booster station) required to be studied pursuant to paragraph (b)(3) of this section, and upon any affected holder of a Basic Trading Area or Partitioned Service Area authorization pursuant to paragraph (b)(2) of this section.

(8) If the applicant is a capacity lessee, a certification that:

(i) The licensee or conditional licensee has provided its written consent to permit the capacity lessee to apply for the booster station license; and

(ii) The applicant and the licensee or conditional licensee have entered into a lease that is in effect at the time of such filing.

(c) Except as provided in § 21.27(d), applications for high-power MDS signal booster station licenses may be filed at any time. Notwithstanding any other provision of part 21 (including § 21.31),

applications for high-power MDS signal booster station licenses meeting the requirements of paragraph (b) of this section shall cut-off applications that are filed on a subsequent day for facilities that would cause harmful electromagnetic interference to the proposed booster stations.

(d) Notwithstanding the provisions of § 21.30(a)(4) and except as provided in § 21.27(d), any petition to deny an application for a high-power MDS signal booster station license shall be filed no later than the sixtieth (60th) day after the date of public notice announcing the filing of such application or major amendment thereto. Notwithstanding § 21.31 and except as provided in § 21.27(d), an application for a high-power MDS signal booster station license that meets the requirements of paragraph (b) of this section shall be granted on the sixty-first (61st) day after the Commission shall have given public notice of the acceptance for filing of it, or of a major amendment to it if such major amendment has been filed, unless prior to such date either a party in interest timely files a formal petition to deny or for other relief pursuant to § 21.30(a), or the Commission notifies the applicant that its application will not be granted. Where an application is granted pursuant to the provisions of this paragraph, the conditional licensee or licensee shall maintain a copy of the application at the MDS booster station until such time as the Commission issues a high-power MDS signal booster station license.

(e) A licensee or conditional licensee of an MDS station, or the capacity licensee of such MDS station upon the written consent of the licensee or conditional licensee, shall be eligible to install and operate a low power signal booster station that has a maximum EIRP of -9 dBW + log10(X/6) dBW, where X is the channel width in MHz. A low-power MDS signal booster station may operate only on one or more MDS channels that are licensed to the licensee of the MDS booster station, but may be operated by a third party with a fully-executed lease or consent agreement with the MDS conditional licensee or licensee. Any licensee of a low-power booster station that is a capacity lessee shall, upon termination or expiration of the capacity lease, automatically assign the booster station license to the licensee or conditional licensee of the MDS station by and upon written notice to the Commission signed by the lessee and such licensee or conditional licensee. If upon termination or expiration of the capacity lease the licensee or conditional licensee no longer desires or needs the low-power booster station license, such a license must be returned to the Commission. An MDS licensee, conditional licensee, or capacity lessee thereof, may install and commence operation of a low-power MDS signal booster station for the purpose of retransmitting the signals of the MDS station or for originating signals. Such installation and operation shall be subject to the condition that for sixty (60) days after installation and commencement of operation, no objection or petition to deny is filed by the licensee of a, or applicant for a previously-proposed, cochannel or adjacent channel ITFS or MDS station with a transmitter within 8.0 kilometers (5 miles) of the coordinates of the low-power MDS signal booster station. An MDS licensee, conditional licensee, or capacity lessee thereof seeking to install a low-power MDS signal booster station under this rule must submit a FCC Form 331 to the Commission within 48 hours after installation. In addition, the MDS licensee, conditional licensee, or capacity lessee must submit the following information (see § 21.902(m) for permissible format(s) and media) to the Commission's Reference Room:

(1) A description of the booster service area; and

(2) A demonstration either

(i) That the booster service area is entirely within the protected service area to which each licensee of a station whose channels are being reused is entitled by virtue of its being the licensee of an incumbent MDS station, or by virtue of its holding a Basic Trading Area or Partitioned Service Area authorization; or

(ii) That the licensee entitled to any cochannel protected service area which is overlapped by the proposed booster service area has consented to such overlap; and

(3) A demonstration that the proposed booster service area can be served by the proposed booster without interference; and

(4) A certification that:

(i) The maximum power level of the signal booster transmitter does not exceed -9 dBW + 10 log(X/6) dBW, where X is the channel width in MHz; and

(ii) Where the booster is operating on channel D4, E1, F1, E2, F2, E3, F3, E4, F4 and/or G1, no registered receiver of an ITFS E or F channel station, constructed prior to May 26, 1983, is located within a 1.61 km (1 mile) radius of the coordinates of the booster, or in the alternative, that a consent statement has been obtained from the affected ITFS licensee; and

(iii) The applicant has complied with § 1.1307 of this chapter; and

(iv) Each MDS and/or ITFS station licensee (including the licensees of booster stations and response station hubs) with protected service areas and/or registered receivers within a 8 km (5 mile) radius of the coordinates of the booster has been given notice of its installation; and

(v) The signal booster site is within the protected service area of the MDS station whose channels are to be reused; and

(vi) The aggregate power flux density of the MDS station and all associated booster stations and simultaneously operating cochannel response stations licensed to or applied for by the applicant, measured at or beyond the boundary of the protected service areas of the MDS stations whose channels are to be reused, does not exceed -73 dBW/m^2 (or the appropriately adjusted value based on the actual bandwidth used if other than 6 MHz, see § 21.902(b)(7)(i)) at locations for which there is an unobstructed signal path, unless the consent of the affected licensees has been obtained; and

(vii) The antenna structure will extend less than 6.10 meters (20 feet) above the ground or natural formation or less than 6.10 meters (20 feet) above an existing manmade structure (other than an antenna structure); and

(viii) The applicant understands and agrees that, in the event harmful interference is claimed by the filing of an objection or petition to deny, it must terminate operation within two (2) hours of notification by the Commission, and must not recommence operation until receipt of written authorization to do so by the Commission; and

(ix) If the applicant is a capacity lessee, a certification that:

(A) The licensee or conditional licensee has provided its written consent to permit the capacity lessee to apply for the booster station license; and

(B) The applicant and the licensee or conditional licensee have entered into a lease that is in effect at the time of such filing.

(f) Commencing upon the filing of an application for a high-power MDS signal booster station license and until such time as the application is dismissed or denied or, if the application is granted, a certification of completion of construction is filed, an applicant for any new or modified MDS or ITFS station (including a response station hub, high-power booster station, or I Channels station) shall demonstrate compliance with the interference protection requirements set forth in §§ 21.902 (b)(3) through (b)(5), 21.938 (b) (1) and (2) and (c), or 74.903 of this chapter with respect to any previously-proposed or authorized booster service area both using the transmission parameters of the high-power MDS signal booster station (e.g., EIRP, polarization(s) and antenna height) and the transmission parameters of the MDS station whose channels are to be reused by the high-power MDS signal booster station. Upon the filing of a certification of completion of construction of an MDS booster station applied for pursuant to paragraph (b) of this section, or upon the submission of an MDS booster station notification pursuant to paragraph (e) of this section, the MDS station whose channels are being reused by the MDS signal booster shall no longer be entitled to interference protection pursuant to §§ 21.902 (b)(3) through (b)(5), 21.938 (b) (1) and (2) and (c), and 74.903 of this chapter within the booster service area based on the transmission parameters of the MDS station whose channels are being reused. A booster station shall not be entitled to protection from interference caused by facilities proposed on or

prior to the day the application or notification for the booster station is filed. A booster station shall not be required to protect from interference facilities proposed on or after the day the application or notification for the booster station is filed.

(g) Where an application is granted under paragraph (d) of this section, if a facility operated pursuant to that grant causes harmful, unauthorized interference to any cochannel or adjacent channel facility, it must promptly remedy the interference or immediately cease operations of the interfering facility, regardless of whether any petitions to deny or for other relief were filed against the application during the application process. The burden of proving that a high-power MDS signal booster station is not causing harmful, unauthorized interference lies on the licensee of the alleged interfering facility, following the filing of a documented complaint of interference by an affected party.

(h) In the event any MDS or ITFS receive site suffers interference due to block downconverter overload, the licensee of each non-co/adjacent channel signal booster station within five miles of such receive site shall cooperate in good faith to expeditiously identify the source of the interference. Each licensee of a signal booster station contributing to such interference shall bear the joint and several obligation to remedy promptly all interference resulting from block downconverter overload at any ITFS registered receive site or at any receive site within an MDS or ITFS protected service area applied for prior to the submission of the application or notification for the signal booster station, regardless of whether the receive site suffering the interference was constructed prior to or after the construction of the signal booster station(s) causing the downconverter overload; provided, however, that the licensee of the registered ITFS receive site or the MDS or ITFS protected service area must cooperate fully and in good faith with efforts by signal booster station licensees to prevent interference before constructing the signal booster station and/or to remedy interference that may occur. In the event that more than one signal booster station licensee contributes to block downconverter interference at an MDS or ITFS receive site, such licensees shall cooperate in good faith to remedy promptly the interference.

[63 FR 65109, Nov. 25, 1998; 64 FR 4054, Jan. 27, 1999, as amended at 64 FR 63736, Nov. 22, 1999; 65 FR 46619, July 31, 2000]

EFFECTIVE DATE NOTE: At 65 FR 46619, July 31, 2000, § 24.913 was amended by revising paragraphs (b) introductory text, (b)(8), and (e)(4)(ix). These paragraphs contain information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 21.914 Mutually-exclusive MDS applications.

Notwithstanding the provisions of § 21.31 (b)(2)(i) and (ii) of this part, to be entitled to be included in a random selection process or to comparative consideration with one or more conflicting applications, an application for frequencies at 2150–2162 MHz, 2596–2644 MHz, 2650–2656 MHz, 2662–2668 MHz, or 2674–2680 MHz must be received by the Commission in a condition acceptable for filing on the same calendar day as the first of the conflicting applications is received by the Commission in a condition acceptable for filing.

[55 FR 46012, Oct. 31, 1990, as amended at 56 FR 57819, Nov. 14, 1991]

§ 21.915 One-to-a-market requirement.

Each applicant may file only a single Multipoint Distribution Service application for the same channel or channel group in each area. The stockholders, partners, owners, trustees, beneficiaries, officers, directors, or any other person or entity holding, directly or indirectly, any interest in one applicant or application for an area and channel or channel group, must not have any interest, directly or indirectly, in another applicant or application for that same area and channel or channel group.

[58 FR 11799, Mar. 1, 1993]

§ 21.920 Applicability of cable television EEO requirements to MDS and MMDS facilities.

Notwithstanding other EEO provisions within § 1.815 of this chapter and

§ 21.307, an entity that uses an owned or leased MDS, MMDS and/or ITFS facility to provide more than one channel of video programming directly to the public must comply with the equal employment opportunity requirements set forth in part 76, subparts E and U of this chapter, if such entity exercises control (as defined in part 76, subparts E and U of this chapter) over the video programming it distributes.

[58 FR 42249, Aug. 9, 1993, as amended at 65 FR 53614, Sept. 5, 2000]

§ 21.921 Basis and purpose for electronic filing and competitive bidding process.

(a) Basis. The rules for competitive biding procedures for the Multipoint Distribution Service (MDS) in this part are promulgated under the provisions of the Communications Act of 1934, as amended, which vests authority in the Federal Communications Commission to regulate radio transmission and to issue licenses for radio stations, and § 309(j) of the Act, which vests authority in the Commission to conduct competitive bidding.

(b) Purpose. This part states the conditions under which portions of the radio spectrum are made available and licensed for Multipoint Distribution Service via the competitive bidding procedures.

(c) Scope. The rules in this part apply only to authorizations and station licenses granted under the competitive bidding procedures of this section. This subpart contains some of the procedures and requirements for the issuance of authorizations to construct and operate multipoint distribution services. One also should consult part 1, subpart Q of the Commission's rules, §§ 21.1 through 21.406 and 21.900 through 21.920 of this part, and other Commission rules of importance with respect to the licensing and operation of MDS stations.

[60 FR 36554, July 17, 1995]

§ 21.922 Authorized frequencies.

The frequencies in the MDS service through the competitive bidding process are in the frequency allocations table of § 21.901 of this part.

[60 FR 36555, July 17, 1995]

§ 21.923 Eligibility.

Any individual or entity, other than those precluded by §§ 21.4 and 21.912 of this part, is eligible to receive a Basic Trading Area (BTA) authorization and a station license for each individual MDS station within the BTA. There is no restriction on the number of BTA authorizations or MDS station licenses, including multiple cochannel station licenses, sought by or awarded to a qualified individual or entity.

[60 FR 36555, July 17, 1995]

§ 21.924 Service areas.

(a) MDS service areas are regional Basic Trading Areas (BTAs) which are based on the Rand McNally 1992 Commercial Atlas & Marketing Guide, 123rd Edition, at pages 38–39. The BTA Map is available for public inspection at the Reference Information Center, Consumer Information Bureau, Federal Communications Commission, 445 12th Street, SW, Washington, DC 20554.

(b) The following additions will be available for licensing separately as BTA-like areas: American Samoa; Guam; Northern Mariana Islands; San Juan, Puerto Rico; Mayagüez/Aguadilla-Ponce, Puerto Rico; and the United States Virgin Islands.

(c) The area within the boundaries of a BTA to which a BTA authorization holder may provide Multipoint Distribution Service excludes the protected service areas of any incumbent MDS stations and previously proposed and authorized ITFS facilities, including registered receive sites.

[60 FR 36555, July 17, 1995, as amended at 60 FR 57367, Nov. 15, 1995; 64 FR 60726, Nov. 8, 1999]

§ 21.925 Applications for BTA authorizations and MDS station licenses.

(a)(1) An applicant must file a short-form application and, when necessary, the short-form application supplement, identifying each BTA service authorization sought.

(2) For purposes of conducting competitive bidding procedures, short-form applications are considered to be mutually exclusive with each other if they were filed for, and specified, the same BTA service area.

(b) Separate long-form applications must be filed for each individual MDS station license sought within the protected service area of a BTA or PSA, including:

(1) An application for each E-channel group, F-channel group, and single H, 1, and 2A channel station license sought;

(2) An application for each site where one or more MDS response station hub license(s) is/are sought, provided that the technical parameters of each MDS response station hub are the same;

(3) An application for each site where one or more MDS booster station(s) will operate with an EIRP in excess of −9 dBW (or, when subchannels or superchannels, or 125 kHz channels, are used, the appropriately adjusted value based upon the ratio of 6 MHz to the subchannel or superchannel, or 125 kHz, bandwidth);

(4) An application for authority to operate at an MDS station in the area vacated by an MDS station incumbent that has forfeited its station license; and

(5) An application for each ITFS-channel group station license sought in accordance with §§ 74.990 and 74.991 of this chapter.

(c) The Commission shall grant BTA authorizations to auction winners as set forth in § 21.958.

(d) No long-form application filed by the BTA authorization holder will be accepted prior to completion of the competitive bidding process and no long-form application will be granted until expiration of the 30-day petition to deny period following the public notice listing of the application as being accepted for filing

(e) Applicants may use the electronic filing procedures to file both the Multipoint Distribution Service short-form and long-form applications with the Commission.

[60 FR 36555, July 17, 1995, as amended at 60 FR 57367, Nov. 15, 1995; 63 FR 65112, Nov. 25, 1998]

§ 21.926 Amendments to long-form applications.

(a) A Multipoint Distribution Service long-form application may be amended as a matter of right up to the date of the public notice announcing the application has been accepted for filing provided that:

(1) The proposed amendments do not amount to more than a *pro forma* change of ownership and control;

(2) The Commission has not otherwise forbidden the amendment of pending applications.

(b) Requests to amend a long-form application placed on public notice as being accepted for filing may be granted only if a written petition demonstrating good cause is submitted and properly served on the parties of record.

[60 FR 36555, July 17, 1995]

§ 21.927 Sole bidding applicants.

Where the deadline for filing MDS short-form applications has expired and a particular BTA service area has been specified in a single short-form application only, the applicant shall be named the auction winner for that BTA authorization.

[60 FR 36555, July 17, 1995]

§ 21.928 Acceptability of short- and long-form applications.

The acceptability of short- and long-form applications will be determined according to the requirements of §§ 21.13, 21.15, 21.20, 21.21 and 21.952.

[60 FR 36555, July 17, 1995]

§ 21.929 Authorization period for station licenses.

(a)(1) A BTA authorization will be granted for a term of ten years, terminating ten years from the date of the Commission declared bidding closed in the MDS auction.

(2) A BTA authorization shall automatically terminate without further notice to the licensee upon expiration of the ten-year license term unless prior thereto an application for renewal of such license has been filed with the Commission.

(b) Notwithstanding § 21.45, each new MDS station licensed within a BTA or PSA will be granted for a term of ten years, terminating ten years from the date the Commission declared bidding closed in the MDS auction.

[60 FR 36555, July 17, 1995, as amended at 60 FR 57367, Nov. 15, 1995]

§ 21.930 Five-year build-out requirements.

(a)(1) A BTA authorization holder has a five-year build-out period, beginning on the date of the grant of the BTA authorization and terminating on the 5th year anniversary of the grant of the authorization, within which it may develop and expand MDS station operations within its service area.

(2) This period is not extended by the grant of subsequent authorizations (*i.e.*, grant of a station license or modification).

(3) Timely certifications of completion of construction for each MDS station within a BTA or partitioned service area must be filed upon completion of construction of a station.

(b) Each BTA authorization holder has the exclusive right to build, develop, expand and operate MDS stations within its BTA service area during the five-year build-out period. The Commission will not accept competing applications for MDS station licenses within the BTA service area during this period.

(c)(1) Within five years of the grant of a BTA authorization, the authorization holder must construct MDS stations to provide signals pursuant to § 21.907 that are capable of reaching at least two-thirds of the population of the applicable service area, excluding the populations within protected service areas of incumbent stations.

(2) Sixty days prior to the end of the five-year build out period, the BTA authorization holder must file with the Commission proof that demonstrates the holder has met the requirements of § 21.930(c)(1). The most recent census figures available from the U.S. Department of Commerce, Bureau of Census prior to the expiration of the authorization holder's five-year build-out period will be used to determine compliance with population-based requirements. In no event shall census figures gathered prior to 1990 be used.

(d)(1) If the Commission finds that the BTA authorization holder has demonstrated that it has met the requirements of § 21.930(c)(1), the Commission will issue a declaration that the holder has met such requirements.

(2) If the Commission finds that the BTA authorization holder has not provided a signal as required in § 21.930(c)(1), the Commission shall partition from the BTA any unserved area, using county lines as a guide, and shall re-authorize service to the unserved area pursuant to the MDS competitive bidding procedures of this subpart. Applications for such unserved areas are not acceptable for filing until a filing date is announced through a public notice.

(i) The competitive bidding procedures set forth in §§ 21.950 to 21.961 shall be followed by applicants seeking authority to provide MDS service to the unserved partitioned area.

(ii) The BTA authorization holder originally authorized to provide service is ineligible to participate in the competitive bidding process for the unserved areas partitioned from its BTA.

[60 FR 36555, July 17, 1995]

§ 21.931 Partitioned service areas (PSAs).

(a)(1) The holder of a BTA authorization may enter into contracts with eligible parties to partition any portion of its service area according to county boundaries, or according to other geopolitical subdivision boundaries, or multiple contiguous counties or geopolitical subdivisions within the BTA service area.

(2)(i) Partitioning contracts must be filed with the Commission within 30 days of the date that such agreements are reached.

(ii) The contracts must include descriptions of the areas being partitioned and include any documentation necessary to convey to the Commission the precise boundaries of the partitioned area.

(3) Parties to partitioning contracts must file concurrently with such contracts one of the following, where appropriate:

(i) An MDS long-form application for authority to operate a new MDS station within the PSA;

(ii) Applications for assignment or transfer of existing stations with the PSA; or

(iii) A statement of intention as defined in § 21.956(a) along with a completed FCC Form 430.

(b) The eligibility requirements applicable to BTA authorization holders also apply to those individuals and entities seeking PSA authorizations.

(c) Any individual or entity acquiring the rights to a partitioned area of a BTA also acquires the rights to any previously authorized individual stations located within the partitioned area that were held by the previous authorization holder, provided that grantable applications for assignment and transfer of control, FCC Forms 702 and 704, are filed for existing stations and that acceptable amendments to pending long-form applications are filed. Pending long-form applications filed by the previous authorization holder for transmitter sites within the PSA may also be dismissed without prejudice at the applicant's request.

(d) Authorizations for PSAs will be issued in accordance with § 21.958; however, when individual stations within an PSA are assigned along with the partitioned area, the authorization will be granted concurrently with the grant of the applications for assignment and transfer of the existing stations.

(e) Subsequent to issuance of the authorization for a PSA, thee partitioned area will be treated as a separate protected service area.

(f)(1) When any area within a BTA becomes a PSA, the remaining counties and other geopolitical subdivisions within that BTA will also be subsequently treated and classified as a PSA(s).

(2) At the time a BTA is partitioned, the Commission shall cancel the BTA authorization initially issued and issue a PSA authorization to the former BTA authorization holder.

(g) The duties and responsibilities imposed upon BTA authorization holders in this part and throughout the Commission's rules, such as § 21.930(c)(1), apply to the holders of PSA authorizations.

(h) The build-out period for PSAs voluntarily partitioned shall be the remainder of the five-year build-out period applicable to the BTA or PSA from which the PSA was drawn. For PSA authorizations issued pursuant to § 21.930(d)(2) and the competitive bidding process, the build-out period is five years, beginning on the date of the grant of the PSA authorization. The requirements of § 21.930(c)(1) also apply to the holders of authorizations for PSAs.

[60 FR 36556, July 17, 1995]

§ 21.932 Forfeiture of incumbent MDS station licenses.

(a) If the license for a incumbent MDS station is forfeited, absent the filing and grant of a petition for reinstatement pursuant to § 21.44(b), the 56.33 km (35 mile) protected service area of the incumbent station shall dissolve and the protected service area shall become part of the BTA or PSA surrounding it.

(b) If upon forfeiture the protected service area of a forfeited license extends across the boundaries of more than one BTA or PSA, the portions of the protected service area of the incumbent station shall merge with the overlapping BTAs or PSAs.

(c) The holder of the authorization for the BTA or PSA with which the service area of the forfeited incumbent station has merged has the exclusive right to file a long-form application to operate a station within the merged area and may modify the locations of its stations to serve the forfeited area.

[60 FR 36556, July 17, 1995]

§ 21.933 Protected service areas.

(a) The stations licensed to the holder of a BTA authorization shall have a protected service area that is coterminous with the boundaries of that BTA, subject to the exclusion of the 56.33 km (35 mile) protected service area of incumbent MDS stations and of previously proposed and authorized ITFS facilities within that BTA, even if these protected service areas extend into adjacent BTAs. The protected service area also includes registered receive sites.

(b) The stations licensed to the holder of a PSA authorization shall have a protected service area that is coterminous with the boundaries of the counties or other geopolitical subdivisions comprising the PSA, subject to the exclusion of the 56.33 km (35 mile) protected service area of incumbent MDS stations and of previously proposed and authorized ITFS facilities within that

PSA, even if these protected service areas extend into adjacent BTAs. The protected service area also includes registered receive sites.

[60 FR 57367, Nov. 15, 1995]

§ 21.934 Assignment or transfer of control of BTA authorizations.

(a)(1) A BTA or PSA authorization holder seeking approval for a transfer of control or assignment of its authorization within three years of receiving such authorization through a competitive bidding procedure must, together with its application for transfer of control or assignment, file with the Commission a statement indicating that its authorization was obtained through competitive bidding.

(2) Such applicant must also file with the Commission the associated contracts for sale, option agreements, management agreements, or other documents disclosing the total consideration that the applicant would receive in return for the transfer or assignment of its authorization. This information should include not only a monetary price, but also any future, contingent, in-kind, or other consideration (*e.g.*, management or consulting contracts either with or without an option to purchase; below market financing).

(b) Transfers of control or assignments of BTA or PSA authorizations are subject to the limitations of §§ 21.4, 21.900 and 21.912 of this subpart.

(c) The anti-trafficking provision of § 21.39 does not apply to the assignment or transfer of control of a BTA or PSA authorization, which was granted pursuant to the Commission's competitive bidding procedures.

[60 FR 36556, July 17, 1995]

§ 21.935 Assignment or transfer of control of station licenses within a BTA.

Licenses for individual stations within a BTA or PSA area issued to authorization holders may not be transferred or assigned unless they are acquired as part of a PSA.

[60 FR 36557, July 17, 1995]

§ 21.936 Cancellation of authorization.

(a) The Commission may revoke or cancel a BTA or PSA authorization for gross misconduct, misrepresentation or bad faith on the part of the authorization holder.

(b) Cancellation of a BTA or PSA authorization shall result in termination of any rights the authorization holder holds in individual proposed or authorized stations within the BTA or PSA.

[60 FR 36557, July 17, 1995]

§ 21.937 Negotiated interference protection.

(a) The level of acceptable electromagnetic interference that occurs at or within the boundaries of BTAs, PSAs, or an incumbent MDS station's 56.33 km (35 mile) protected service area can be negotiated and established by an agreement between the appropriate parties, provided that:

(1) The parties to such an agreement file with the Commission a written statement of no objection, acknowledging that the parties have agreed to accept a level of interference that does not meet the protection standards set forth in §§ 21.902 or 21.938 of the Commission's rules;

(2) The statement bears the signatures of all parties to the agreement, or the signatures of their representative agents; and

(3) The statement is filed with the Commission within 30 days of its ratification or file in conjunction with an application with which the agreement is associated, whichever is earliest.

[60 FR 36557, July 17, 1995]

§ 21.938 BTA and PSA technical and interference provisions.

(a) BTA or PSA authorization holders are expected to cooperate with one another by designing their stations in a manner that protects service in adjoining BTAs and PSAs including consideration of interference abatement techniques such as cross polarization, frequency offset, directional antennas, antenna beam tilt, EIRP decrease, reduction of antenna height, and terrain shielding.

(b) Unless the affected parties have executed a written interference agreement in accordance with § 21.937, and subject to the provisions of §§ 21.909, 21.913, 21.949, 74.939 of this chapter, 74.949 of this chapter and 74.985 of this

chapter regarding the protection of response station hubs, booster service areas and 125 kHz channels from harmful electromagnetic interference, stations licensed to a BTA or PSA authorization holder must not cause harmful electromagnetic interference to the following:

(1) The protected service area of other authorization holders in adjoining BTAs or PSAs.

(2) The 56.33 km (35 mile) protected service areas of authorized or previously proposed MDS stations (incumbents).

(3) Registered receive sites and protected service areas of authorized or previously proposed stations in the Instructional Television Fixed Service pursuant to the manner in which interference is defined in § 74.903(a).

(c)(1) ITFS applicants may locate a new station in an unused portion of a BTA or PSA where interference to a previously-proposed or authorized MDS station of a BTA or PSA authorization holder would not be predicted.

(2) With respect to ITFS applications only and for purposes of determining the existence of harmful electromagnetic interference as caused to MDS stations licensed to BTA or PSA authorization holders by subsequently proposed ITFS stations within that BTA, MDS stations licensed to BTA and PSA authorization holders and will have a protected service area of 56.33 km (35 miles), centered on the antenna site of the MDS stations.

(3) The 56.33 km (35 mile) protected service area afforded to a previously-proposed or authorized MDS station of a BTA or PSA authorization holder with respect to a subsequently proposed ITFS station is entitled to the interference protection standards of § 21.902.

(4) An ITFS station authorized before September 15, 1995 may be modified, provided the power flux density of that station does not exceed -73 dBW/m^2 (or the appropriate value for bandwidth other than 6 MHz) at locations along the 56.33 km (35 mile) circle centered on the then-existing transmitting antenna site or service area of a collocated incumbent MDS station, as applicable.

(d) Unless the affected parties have executed a written interference agreement in accordance with § 21.937, it shall be the responsibility of a BTA or PSA authorization holder to correct at its expense any condition of harmful electromagnetic interference caused to authorized MDS service at locations within other BTAs or PSAs or within the 56.33 km (35 mile) protected service areas of authorized or previously proposed ITFS and MDS stations (incumbents), or at authorized or previously proposed ITFS receive sites.

(e) Unless specifically excepted, BTA or PSA authorization holders are governed by the interference protection and other technical provisions applicable to MDS.

(f) The calculated free space power flux density from an MDS station, other than an incumbent MDS station, may not exceed -73 dBW/m^2 (or the appropriate value for bandwidth other than 6 MHz) at locations on BTA or PSA boundaries for which there is an unobstructed signal path from the transmitting antenna to the boundary, unless the applicant has obtained the written consent of the authorization holder for the affected BTA or PSA.

(g)(1) Authorization holders for BTAs or PSAs must notify authorization holders of adjoining areas of their application filings for new or modified stations; provided the proposed facility would produce an unobstructed signal path anywhere within the adjoining BTA or PSA.

(2) This service of written notification must include a copy of the FCC application and occur on or before the date the application is filed with the Commission.

(3) With regard to incumbent MDS stations, authorization holders for BTAs or PSAs must comply with the requirements of § 21.902.

(h) Where a PSA adjoins a BTA and both authorizations are held by the same individual or entity, the PSA shall be considered an extension of the protected service area of the BTA regarding the interference protection, limiting signal strength, and notification provisions of this section.

[60 FR 36557, July 17, 1995, as amended at 60 FR 57367, Nov. 15, 1995; 63 FR 65112, Nov. 25, 1998; 64 FR 63737, Nov. 22, 1999]

§ 21.939 Harmful interference abatement.

In the event harmful interference occurs or appears to occur, after notice and an opportunity for a hearing, Commission staff may require any Multipoint Distribution Service conditional licensee or licensee to:

(a) Modify the station to use cross polarization, frequency offset techniques, directional antenna, antenna beam tilt, or

(b) Order an equivalent isotropically radiated power decrease, a reduction of transmitting antenna height, a change of antenna location, a change of antenna radiation pattern, or a reduction in aural signal power.

[60 FR 36557, July 17, 1995]

§ 21.940 Non-subscription MDS service.

The Commission must be notified, and prior Commission approval obtained, before Multipoint Distribution Service or Multichannel Multipoint Distribution Service may be provided on a non-subscription basis.

[63 FR 29668, June 1, 1998]

§§ 21.941–21.948 [Reserved]

§ 21.949 Individually licensed 125 kHz channel MDS response stations.

(a) The provisions of § 21.909(a), (e), (h), (j), (l) and (m) and § 74.939(j) of this chapter shall also apply with respect to authorization of 125 kHz channel MDS response stations not authorized under a response station hub license. The applicant shall comply with the requirements of § 21.902 and § 21.938 where appropriate, as well as with the provisions of §§ 21.909, 21.913, 74.939 and 74.985 of this chapter regarding the protection of response stations hubs and booster (and primary) service areas from harmful electromagnetic interference, using the appropriately adjusted interference protection values based upon the ratios of the bandwidths involved.

(b) An application for a license to operate a new or modified 125 kHz channel MDS response station not under a response station hub license shall be filed with Mellon Bank on FCC Form 331. The applicant shall supply the following information and certification on that form for each response station:

(1) The geographic coordinates and street address of the MDS response station transmitting antenna; and

(2) The manufacturer's name, type number, operating frequency, and power output of the proposed MDS response station transmitter; and

(3) The type of transmitting antenna, power gain, azimuthal orientation and polarization of the major lobe of radiation in degrees measured clockwise from True North; and

(4) A sketch giving pertinent details of the MDS response station transmitting antenna installation including ground elevation of the transmitter site above mean sea level; overall height above ground, including appurtenances, of any ground-mounted tower or mast on which the transmitting antenna will be mounted or, if the tower or mast is or will be located on an existing building or other manmade structure, the separate heights above ground of the building and the tower or mast including appurtenances; the location of the tower or mast on the building; the location of the transmitting antenna on the tower or mast; and the overall height of the transmitting antenna above ground.

(5) A certification that all licensees and applicants appropriately covered under the provisions of (a), above, have been served with copies of the application.

(c) Each MDS response station licensed under this section shall comply with the following:

(1) No MDS response station shall be located beyond the protected service area of the MDS station with which it communicates; and

(2) No MDS response station shall operate with a transmitter output power in excess of 2 watts; and

(3) No MDS response station shall operate at an excess of 16 dBW EIRP.

(d) During breaks in communications, the unmodulated carrier frequency of an analog transmission shall be maintained within 35 kHz of the assigned frequency at all times. Adequate means shall be provided to insure compliance with this rule.

(e) Each MDS response station shall employ a directive transmitting antenna oriented towards the transmitter site of the associated MDS station or towards the response station hub with which the MDS response station communicates. The beamwidth between half power points shall not exceed 15° and radiation in any minor lobe of the antenna radiation pattern shall be at least 20 dB below the power in the main lobe of radiation.

(f) A response station may be operated unattended. The overall performance of the response station transmitter shall be checked by the licensee of the station or hub receiving the response signal, or by the licensee's employees or agents, as often as necessary to ensure that the transmitter is functioning in accordance with the requirements of the Commission's rules. The licensee of the station or hub receiving the response signal is responsible for the proper operation of the response station and must have reasonable and timely access to the response station transmitter. The response station shall be installed and maintained by the licensee of the associated station or hub, or the licensee's employees or agents, and protected in such manner as to prevent tampering or operation by unauthorized persons. No response station which has not been installed by an authorized person may lawfully communicate with any station or hub.

[63 FR 65112, Nov. 25, 1998; 64 FR 4055, Jan. 27, 1999, as amended at 64 FR 63737, Nov. 22, 1999]

EFFECTIVE DATE NOTE: At 63 FR 65112, Nov. 25, 1998, § 21.949 was added. Paragraphs (b) and (f) contain information and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 21.950 MDS subject to competitive bidding.

Mutually exclusive MDS initial applications are subject to competitive bidding. The general procedures set forth in 47 CFR chapter I, part 1, subpart Q are applicable to competitive bidding proceedings used to select among mutually exclusive MDS applicants, unless otherwise provided in 47 CFR chapter I, part 21, subpart K.

[60 FR 36557, July 17, 1995]

§ 21.951 MDS competitive bidding procedures.

(a) The following competitive bidding procedures will generally be used in MDS auctions. Additional, specific procedures may be set forth by public notice. The Commission may also design and test alternative procedures. *See* 47 CFR 1.2103 and 1.2104.

(1) Competitive bidding design. Simultaneous multiple round bidding will be used in MDS auctions, unless the Commission specifies by public notice the use of sequential oral (open outcry) bidding or sealed bidding (either sequential or simultaneous). Combinatorial bidding may also be used with any type of auction design.

(2) Competitive bidding mechanisms. The Commission may utilize the following mechanisms in MDS auctions:

(i) Sequencing. The Commission will establish and may vary the sequence in which the BTA service areas will be auctioned.

(ii) Grouping. In the event the Commission uses either a simultaneous multiple round competitive bidding design or combinational bidding, the Commission will determine which BTA service areas will be auctioned simultaneously or in combination.

(iii) Reservation price. The Commission may establish a reservation price, either disclosed or undisclosed, below which a BTA service area subject to auction will not be awarded.

(iv) Minimum bid increments. The Commission will, by announcement before or during an MDS auction, require minimum bid increments in dollar or percentage terms.

(v) Stopping rules. The Commission will establish stopping rules before or during multiple round MDS auctions in order to terminate an auction within a reasonable time.

(vi) Activity Rules. The Commission will establish activity rules which require a minimum amount of bidding activity. In the event that the Commission establishes an activity rule in connection with a simultaneous multiple round auction, the Commission will allow bidders to request and to receive automatically waivers of such rule, the number of which will be determined by the Commission.

(vii) Suggested minimum bid. The Commission may establish suggested minimum bids on each BTA service area subject to auction. Bids below the suggested minimum bid would count as activity under the activity rule only if no bids at or above the suggested minimum bid are received.

(b) Identities of bidders. The Commission will generally release information concerning the identities of bidders before each auction but may choose, on an auction-by-auction basis, to withhold the identity of the bidders associated with bidder identification numbers. The Commission will announce by public notice before the MDS auction where the bidders' identities will be revealed.

(c) Commission control of auction. The Commission may delay, suspend, or cancel an MDS auction in the event of a natural disaster, technical obstacle, evidence of security breach, unlawful bidding activity, administrative necessity, or for any other reason that affects the fair and efficient conduct of the competitive bidding. The Commission also has the authority, at its sole discretion, to resume the competitive bidding starting from the beginning of the current or some previous round or cancel the competitive bidding in its entirety.

[60 FR 36557, July 17, 1995]

§ 21.952 Bidding application procedures.

(a) Short-form applications. To participate in MDS auctions, all applicants must submit short-form applications, along with all required certifications and exhibits specified by such forms, pursuant to the provisions of § 1.2105(a) and any Commission public notices. See 47 CFR 1.2105(a).

(b) Filing of short-form applications. Prior to any MDS auction, the Commission will issue a public notice announcing the availability of BTA service areas and, in the event that mutually exclusive short-form applications (as defined by § 21.925(a)(2)) are filed, the date of the auction for those BTA service areas. This public notice also will specify the date on or before which applicants intending to participate in an MDS auction must file their short-form applications in order to be eligible for that auction, and it will contain information necessary for completion of the application as well as other important information such as the material which must accompany the forms, any filing fee that must accompany the application or any upfront payment that will need to be submitted, and the location where the application must be filed.

(c) Modification and dismissal of short-form applications.

(1) Any short-form application that is not signed in some manner or form, including by electronic means, and does not contain all requisite certifications is unacceptable for filing and cannot be corrected subsequent to any applicable filing deadline. Such short-form application will be dismissed with prejudice.

(2) The Commission will provide bidders a limited opportunity to cure certain defects specified herein and to resubmit an amended short-form application. For MDS, we classify all amendments to a short-form application as major, except those to correct minor errors or defects, such as typographical errors, or those to reflect ownership changes or formation of bidding consortia or joint bidding arrangements specifically permitted under § 21.953. A short-form application may be modified to make minor amendments. However, applicants who fail to correct defects in their short-form applications in a timely manner as specified by public notice will have their applications dismissed with no opportunity for resubmission.

(3) A short-form application will be considered to be a newly filed application if it is amended by a major amendment and may not be resubmitted after applicable filing deadlines.

[60 FR 36558, July 17, 1995]

§ 21.953 Prohibition of collusion.

(a) Except as provided in paragraphs (b), (c) and (d) of this section, after the filing of short-form applications, all applicants in an MDS auction are prohibited from cooperating, collaborating, discussing or disclosing in any manner the substance of their bids or bidding strategies, or discussing or negotiating settlement agreements, with other applicants until after the winning bidder makes the required down

payment, unless such applicants are members of a bidding consortium or other joint bidding arrangement identified on the applicant's short-form application. Communications among applicants concerning matters unrelated to the MDS auction will be permitted after the filing of short-form applications.

(b) Applicants may modify their short-form applications to reflect formation of consortia or changes in ownership at any time before or during an auction, provided such changes do not result in a change in control of the applicant, and provided that the parties forming consortia or entering into ownership agreements have not applied for the same BTA service area.

(c) After the filing of short-form applications, applicants may make agreements to bid jointly for BTA service areas, provided the parties to the agreement have not applied for the same service areas.

(d) After the filing of short-form applications, a holder of a non-controlling attributable interest in an entity submitting a short-form application may, under the circumstances specified in § 1.2105(c)(4), acquire an ownership interest in, form a consortium with, or enter into a joint bidding arrangement with, other applicants for the same BTA service areas. See 47 CFR 1.2105(c)(4).

(e) To reflect the changes in ownership or in the membership of consortia or joint bidding arrangements specified in paragraphs (b), (c) and (d) of this section, applicants must amend their short-form applications by submitting a revised short-form application, filed within two business days of any such change; such modifications will not be considered major amendments of the applications within the meaning of § 21.952(c)(2). However, any amendment which results in the change of control of an applicant will be considered a major amendment of the short-form.

(f) For purposes of this section, the terms ''applicant'' and ''bids or bidding strategies'' are defined as set forth in 47 CFR 1.2105(c)(5).

[60 FR 36558, July 17, 1995]

§ 21.954 Submission of up front payments.

(a) The Commission will require applicants to submit an upfront payment prior to the MDS auction. The amount of the upfront payment for each BTA service area being auctioned and the procedures for submitting it will be set forth in a public notice. Upfront payments may be made by wire transfer or by cashier's check drawn in U.S. dollars from a financial institution whose deposits are insured by the Federal Deposit Insurance Corporation and must be made payable to the Federal Communications Commission. No interest will be paid on upfront payments.

(b) For MDS auctions, the Commission will require each applicant to submit an upfront payment equal to the largest combination of activity units (as defined in the Commission's activity rules established pursuant to § 21.951(a)(2)(vi)) associated with the BTAs on which the applicant anticipates being active in any single round or bidding. Applicants who are small businesses eligible for reduced upfront payments will be required to submit an upfront payment amount in accordance with § 21.960(c). If an upfront payment is not in compliance with the Commission's rules, or if insufficient funds are tendered to constitute a valid upfront payment, the applicant shall have a limited opportunity to correct its submission to bring it up to the minimum valid upfront payment prior to the auction. An applicant who fails to submit a sufficient upfront payment to qualify it to bid on any BTA service area being auctioned will be ineligible to bid, its application will be dismissed, and any upfront payment it has made will be returned.

(c) The upfront payment(s) of a bidder will be credited toward any down payment required for the BTA service areas on which the bidder is the winning bidder. Where the upfront payment amount exceeds the required down payment of a winning bidder, the Commission may refund the excess amount after determining that no bid withdrawal payments are owned by that bidder. In the event a payment is assessed pursuant to § 21.959(a) for bid withdrawal or default, upfront payments or down payments on deposit

with the Commission will be used to satisfy the bid withdrawal or default payment before being applied toward any additional payment obligations that the winning bidder may have.

[60 FR 36559, July 17, 1995]

§ 21.955 Submission of down payments.

(a) After bidding has ended on all BTA service areas, the Commission will identify and notify the winning bidders and declare the bidding closed in the MDS auction. Within five (5) business days after being notified that it is a winning bidder on a particular BTA service area(s), a winning bidder must submit to the Commission's lockbox bank such additional funds as are necessary to bring its total deposits (upfront payment plus down payment) up to twenty (20) percent of its winning bid(s). This down payment may be made by wire transfer or by cashier's check in U.S. dollars from a financial institution whose deposits are insured by the Federal Deposit Insurance Corporation and must be made payable to the Federal Communications Commission.

(b) Winning bidders who are small businesses eligible for installment payments under § 21.960(b) are only required to bring their total deposits up to ten (10) percent of their winning bids. Such small businesses must pay the remainder of the twenty (20) percent down payment within five (5) business days following release of the public notice stating that their BTA authorizations are ready to be issued.

(c) Down payments will be held by the Commission until the winning bidder has been issued its BTA authorization and has paid the remaining balance of its winning bid, in which case it will not be returned, or until the winning bidder is found unqualified to be a station licensee or has defaulted, in which case it will be returned, less applicable default payments. No interest will be paid on any down payment.

[60 FR 36559, July 17, 1995]

§ 21.956 Filing of long-form applications or statements of intention.

(a)(1) Within 30 business days of being notified of its status as a winning bidder, each winning bidder for a BTA service area will be required to submit either:

(i) An initial long-form application for an MDS station license, along with any required exhibits; or

(ii) A statement of intention with regard to the BTA service area, along with any required exhibits, showing the encumbered nature of the BTA, identifying all previously authorized or proposed MDS and ITFS facilities, and describing in detail the winning bidder's plan for obtaining the previously authorized and/or proposed MDS stations within the BTA.

(2) A winning bidder that fails to submit either the initial long-form application or statement of intention as required under this section, and fails to establish good cause for any late-filed application or statement, shall be deemed to have defaulted and will be subject to the payments set forth in § 21.959(a).

(b) Each initial long-form application for an MDS station license within an auction winner's BTA service area, and each statement of intention with regard to an auction winner's BTA service area, must also include the following:

(1) FCC Form 430;

(2) An exhibit detailing the terms and conditions and parties involved in any bidding consortia, joint venture, partnership or other agreement or arrangement the winning bidder had entered into relating to the competitive bidding process prior to the time bidding was completed (*see* 47 CFR 1.207(d));

(3) An exhibit complying with 47 CFR 1.2110(i) and 21.960(e), if the winning bidder submitting the long-form application or statement of intention claims status as a designated entity.

(c) Subsequent long-form applications for additional MDS station licenses within the BTA service areas of winning bidders may be submitted at any time during the five year build-out period and need not contain the exhibits specified in paragraphs (b)(2) through (3) of this section.

[60 FR 36559, July 17, 1995, as amended at 61 FR 18098, Apr. 24, 1996]]

§ 21.957 Petitions to deny against long-from applications; comments on statements of intention.

(a) Within thirty (30) days after the Commission gives public notice that a long-form application for an MDS station license submitted by a winning bidder within its BTA service area has been accepted for filing, petitions to deny that application may be filed. Any such petitions and oppositions thereto must comply with the requirements of 47 CFR 1.2108 and 21.30.

(b) Parties wishing to comment on or oppose the issuance of a BTA authorization issued in connection with the filing of a statement of intention by a winning bidder must do so prior to the Commission's issuance of the BTA authorization.

[60 FR 36559, July 17, 1995]

§ 21.958 Full payment and issuance of BTA authorizations.

Each winning bidder, except for small businesses eligible for installment payments under § 21.960(b), must pay the balance of its winning bid for its BTA service area(s) in a lump sum within five (5) business days following the release of the public notice stating that the BTA authorization(s) is ready to be issued. A winning bidder who submitted a long-form application for an MDS station license within its BTA service area pursuant to § 21.956(a) will receive its BTA authorization concurrent with the grant of its MDS conditional station license within its BTA service area. A winning bidder who submitted a statement of intention with regard to its BTA service area pursuant to § 21.956(a) will receive its BTA authorization following the Commission's review of its statement of intention. The Commission will issue a BTA authorization to a winning bidder within ten (10) business days following notification of receipt of full payment of the amount of the winning bid.

[60 FR 36559, July 17, 1995]

§ 21.959 Withdrawal, default and disqualification.

(a) When the Commission conducts an MDS simultaneous multiple round auction, the Commission will impose additional payment requirements on bidders who withdraw high bids during the course of an auction, who default on down or full payments due after an auction closes, or who are disqualified. The withdrawal and default payments set forth below will be deducted from any upfront payments or down payments that the withdrawing, defaulting or disqualified bidder has deposited with the Commission.

(1) Bid withdrawal prior to close of auction. A bidder who withdraws a high bid during the course of an auction will be subject to a payment equal to the difference between the amount bid and the amount of the winning bid the next time the license is offered by the Commission. No withdrawal payment will be assessed if the subsequent winning bid exceeds the withdrawn bid.

(2) *Default or disqualification after close of auction. See* § 1.2104 (g)(2) of this chapter.

(b) If the Commission were to conduct a sequential oral (open outcry) auction or sealed bid auction for MDS, the Commission may modify the payments set forth in paragraph (a) of this section to be paid in the event of bid withdrawal, default or disqualification; provided, however, that such payments shall not exceed the payments specified in paragraph (a) of this section.

(1) In the case of sealed bidding:

(i) If a bid is withdrawn before the Commission releases the initial public notice announcing the winning bidder(s), no bid withdrawal payment will be assessed.

(ii) If a bid is withdrawn after the Commission release the initial public notice announcing the winning bidder(s), the bid withdrawal payment will be equal to the difference between the high bid amount and the amount of the next highest bid. Losing bidders will only be subject to this bid withdrawal payment for a period of thirty (30) days after the Commission release the initial public notice announcing the winning bidders.

(2) In the case of oral sequential (open outcry) bidding:

(i) If a bid is withdrawn before the bidder has declared the bidding to be closed for the BTA service area bid on, no bid withdrawal payment will be assessed.

(ii) If a bid is withdrawn after the Commission has declared the bidding to be closed for the BTA service area bid on, the bid withdrawal payment of paragraphs (a) (1) and (2) of this section will apply.

(c) If a winning bidder withdraws it bid after the Commission has declared competitive bidding closed or fails to remit the required down payment within five (5) business days after the Commission has declared competitive bidding closed, the bidder will be deemed to have defaulted, its application will be dismissed, and it will be liable for the default payment specified in paragraph (a)(2) of this section. In such event, the Commission may either reauction the BTA service area to existing or new applicants or offer it to the other highest bidders (in descending order) at their final bids.

(d) A winning bidder who is found unqualified to be an MDS station licensee, fails to remit the balance of its winning bid in a timely manner, or defaults or is disqualified for any reason after having made the required down payment, will be deemed to have defaulted and will be liable for the payment set forth in paragraph (a)(2) of this section. In such event, the Commission will generally conduct another auction for the BTA service area, affording new parties an opportunity to file applications for such service area.

(e) Bidders who are found to have violated the antitrust laws or the Commission's rules in connection with their participation in the MDS competitive bidding process may be subject, in addition to any other applicable sanctions, to loss of their upfront payment, down payment or full bid amount, and may be prohibited from participating in future auctions.

[60 FR 36560, July 17, 1995, as amended at 63 FR 2348, Jan. 15, 1998]

§ 21.960 Designated entity provisions for MDS.

(a) *Designated entities*. As specified in this section, designated entities that are winning bidders for BTA service areas are eligible for special incentives in the auction process. See 47 CFR 1.2110.

(b) *Installment payments*. Small businesses and small business consortia may elect to pay the full amount of their winning bids for BTA service areas in installments over a ten (10) year period running from the date that their BTA authorizations are issued.

(1) Each eligible winning bidder paying for its BTA authorization(s) on an installment basis must deposit by wire transfer or cashier's check in the manner specified in § 21.955 sufficient additional funds as are necessary to bring its total deposits to ten (10) percent of its winning bid(s) within five (5) business days after the Commission has declared it the winning bidder and closed the bidding. Failure to remit the required payment will make the bidder liable for the payments set forth in § 21.959(a)(2).

(2) Within five (5) business days following release of the public notice stating that the BTA authorization of a winning bidder eligible for installment payments is ready to be issued, the winning bidder shall pay another ten (10) percent of its winning bid, thereby commencing the eligible bidder's installment payment plan. The Commission will issue the BTA authorization to the eligible winning bidder within ten (10) business days following notification of receipt of this additional ten (10) percent payment. Failure to remit the required payment will make the bidder liable for the payments set forth in § 21.959(a)(2).

(3) Upon issuance of a BTA authorization to a winning bidder eligible for installment payments, the Commission will notify such eligible BTA authorization holder of the terms of its installment payment plan. For MDS, such installment payment plans will:

(i) Impose interest based on the rate of ten (10) year U.S. Treasury obligations at the time of issuance of the BTA authorization, plus two and one half (2.5) percent;

(ii) Allow installment payments for a ten (10) year period running from the date that the BTA authorization is issued;

(iii) Begin with interest-only payments for the first two (2) years; and

(iv) Amortize principal and interest over the remaining years of the ten (10) year period running from the date that the BTA authorization is issued.

(4) Conditions and obligations. *See* § 1.2110(f)(4) of this chapter.

(5) Unjust enrichment. (i) If an eligible BTA authorization holder that utilizes installment financing under this paragraph seeks to assign or transfer control of its BTA authorization to an entity not meeting the eligibility standards for installment payments, the holder must make full payment of the remaining unpaid principal and any unpaid interest accrued through the date of assignment or transfer as a condition of approval. If an eligible BTA authorization holder that utilizes installment financing under this subsection seeks to partition, pursuant to § 21.931, a portion of its BTA containing one-third or more of the population of the area within its control in the licensed BTA to an entity not meeting the eligibility standards for installment payments, the holder must make full payment of the remaining unpaid principal and any unpaid interest accrued through the date of partition as a condition of approval.

(ii) If a BTA authorization holder that utilizes installment financing under this subsection seeks to make any change in ownership structure that would result in the holder losing eligibility for installment payments, the holder shall first seek Commission approval and must make full payment of the remaining unpaid principal and any unpaid interest accrued through the date of the change in ownership structure as a condition of approval. Increases in gross revenues that result from revenues from operations, business development or expanded service shall not be considered changes in ownership structure under this paragraph.

(c) *Reduced upfront payments*. A prospective bidder that qualifies as a small business, or as a small business consortia, is eligible for a twenty-five (25) percent reduction in the amount of the upfront payment required by § 21.954. To be eligible to bid on a particular BTA, a small business will be required to submit an upfront payment equal to seventy-five (75) percent of the upfront payment amount specified for that BTA in the public notice listing the upfront payment amounts corresponding to each BTA service area being auctioned.

(d) *Bidding credits*. A winning bidder that qualifies as a small business, or as a small business consortia, may use a bidding credit of fifteen (15) percent to lower the cost of its winning bid on any of the BTA authorizations awarded in the MDS auction.

(1) Unjust enrichment. *See* § 1.2111 of this chapter.

(2) [Reserved]

(e) *Short-form application certification; Long-form application or statement of intention disclosure*. An MDS applicant claiming designated entity status shall certify on its short-form application that it is eligible for the incentives claimed. A designated entity that is a winning bidder for a BTA service area(s) shall, in addition to information required by § 21.956(b), file an exhibit to either its initial long-form application for an MDS station license, or to its statement of intention with regard to the BTA, which discloses the gross revenues for each of the past three years of the winning bidder and its affiliates. This exhibit shall describe how the winning bidder claiming status as a designated entity satisfies the designated entity eligibility requirements, and must list and summarize all agreements that affect designated entity status, such as partnership agreements, shareholder agreements, management agreements and other agreements, including oral agreements, which establish that the designated entity will have both *de facto* and *de jure* control of the entity. *See* 47 CFR 1.2110(i).

(f) *Records maintenance*. All holders of BTA authorizations acquired by auction that claim designated entity status shall maintain, at their principal place of business or with their designated agent, an updated documentary file of ownership and revenue information necessary to establish their status. Holders of BTA authorizations or their successors in interest shall maintain such files for a ten (10) year period running from the date that their BTA authorizations are issued. The files must be made available to the Commission upon request.

(g) *Audits*. BTA authorization holders claiming eligibility under designated entity provisions shall be subject to audits by the Commission, using in-

house or contract resources. Selection for an audit may be random, on information, or on the basis of other factors. Consent to such audits is part of the certification included in the short-form application. Such consent shall include consent to the audit of the holders' books, documents and other material (including accounting procedures and practices), regardless of form or type, sufficient to confirm that such holders' representations are, and remain, accurate. Such consent shall also include inspection at all reasonable times of the facilities, or parts thereof, engaged in providing and transacting business or keeping records regarding licensed MDS offerings, and shall also include consent to the interviewing of principals, employees, customers, and suppliers of the BTA authorization holders.

[60 FR 36560, July 17, 1995, as amended at 60 FR 57367, Nov. 15, 1995; 63 FR 2348, Jan. 15, 1998]

§ 21.961 Definitions applicable to designated entity provisions.

(a) Scope. The definitions in this section apply to § 21.960, unless otherwise specified in that section.

(b) Small business; consortium of small businesses.

(1) A small business is an entity that together with its affiliates has average annual gross revenues that are not more than $40 million for the preceding three calendar years.

(2) *Aggregation of gross revenues.*

(i) Except as specified in paragraph (b)(2)(ii) of this section, the gross revenues of the applicant (or BTA authorization holder) and its affiliates shall be considered on a cumulative basis and aggregated for purposes of determining whether the applicant (or holder) is a small business.

(ii) Where an applicant (or BTA authorization holder) is a consortium of small businesses, the gross revenues of each small business shall not be aggregated.

(3) A small business consortium is a conglomerate organization formed as a joint venture between mutually-independent business firms, each of which individually satisfies the definition of a small business.

(c) Gross revenues shall mean all income received by an entity, whether earned or passive, before any deductions are made for costs of doing business (*e.g.*, cost of goods sold), as evidenced by audited financial statements for the preceding relevant number of calendar years, or, if audited financial statements were not prepared on a calendar-year basis, for the preceding relevant number of fiscal years. If an entity was not in existence for all or part of the relevant period, gross revenues shall be evidenced by the audited financial statements of the entity's predecessor-in-interest or, if there is no identifiable predecessor-in-interest, unaudited financial statements certified by the applicant as accurate.

(d) The definition of an affiliate of an applicant is set forth in 47 CFR 1.2110(b)(4).

[60 FR 36562, July 17, 1995, as amended at 60 FR 57368, Nov. 15, 1995]

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AUTHORITY: 47 U.S.C. 154, 222, 303, 309, and 332.

SOURCE: 59 FR 59507, Nov. 17, 1994, unless otherwise noted.

Subpart A—Scope and Authority

§ 22.1 Basis and purpose.

This section contains a concise general statement of the basis and purpose of the rules in this part, pursuant to 5 U.S.C. 553(c).

(a) *Basis*. These rules are issued pursuant to the Communications Act of 1934, as amended, 47 U.S.C. 151 *et. seq*.

(b) *Purpose*. The purpose of these rules is to establish the requirements and conditions under which domestic common carrier radio stations may be licensed and used in the Public Mobile Services.

§ 22.3 Authorization required.

Stations in the Public Mobile Services must be used and operated only in accordance with the rules in this part and with a valid authorization granted by the FCC under the provisions of this part.

(a) The holding of an authorization does not create any rights beyond the terms, conditions and period specified in the authorization. Authorizations may be granted upon proper application, provided that the FCC finds that the applicant is qualified in regard to citizenship, character, financial, technical and other criteria, and that the public interest, convenience and necessity will be served. See 47 U.S.C. 301, 308, and 309.

(b) Authority for subscribers to operate mobile or fixed stations in the Public Mobile Services, except for certain stations in the Rural Radiotelephone Service and the Air-Ground Radiotelephone Service, is included in the authorization held by the common carrier providing service to them. Subscribers are not required to apply for, and the FCC does not accept applications from subscribers for, individual mobile or fixed station authorizations in the Public Mobile Services, except as follows:

(1) Individual authorizations are required to operate general aviation airborne mobile stations in the Air-Ground Radiotelephone Service. See § 22.821.

(2) Individual authorizations are required to operate rural subscriber stations in the Rural Radiotelephone Service, except as provided in § 22.703.

§ 22.5 Citizenship.

The rules in this section implement section 310 of the Communications Act of 1934, as amended (47 U.S.C. § 310), in regard to the citizenship of licensees in the Public Mobile Services.

(a) *Foreign governments*. The FCC will not grant an authorization in the Public Mobile Services to any foreign government or any representative thereof.

(b) *Alien ownership or control*. The FCC will not grant an authorization in the Public Mobile Services to:

(1) Any alien or the representative of any alien;

(2) Any corporation organized under the laws of any foreign government;

(3) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country;

(4) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country, if the FCC finds that the public interest will be served by the refusal or revocation of such license.

[59 FR 59507, Nov. 17, 1994, as amended at 61 FR 55580, Oct. 28, 1996]

§ 22.7 General eligibility.

Except as otherwise provided in this part, existing and proposed common carriers are eligible to hold authorizations in the Public Mobile Services. Applications are granted only if the applicant is legally, financially, technically and otherwise qualified to render the proposed service.

§ 22.99 Definitions.

Terms used in this part have the following meanings:

Air-Ground Radiotelephone Service. A radio service in which common carriers are authorized to offer and provide radio telecommunications service for hire to subscribers in aircraft.

Airborne station. A mobile station in the Air-Ground Radiotelephone Service authorized for use on aircraft while in flight or on the ground.

Antenna structure. A structure comprising an antenna, the tower or other structure that exists solely to support antennas, and any surmounting appurtenances (attachments such as beacons or lightning rods).

Antenna. A device that converts radio frequency electrical energy to radiated electromagnetic energy and vice versa; in a transmitting station, the device from which radio waves are emitted.

Authorized bandwidth. The necessary or occupied bandwidth of an emission, whichever is more.

Authorized spectrum. The spectral width of that portion of the electromagnetic spectrum within which the emission power of the authorized transmitter(s) must be contained, in accordance with the rules in this part. The authorized spectrum comprises one channel bandwidth or the bandwidths of two or more contiguous channels.

Auxiliary test transmitter. A fixed transmitter used to test Public Mobile systems.

Base transmitter. A stationary transmitter that provides radio telecommunications service to mobile and/or fixed receivers, including those associated with mobile stations.

Blanketing interference. Disturbance in consumer receivers located in the immediate vicinity of a transmitter, caused by currents directly induced into the consumer receiver's circuitry by the relatively high field strength of the transmitter.

Build-out transmitters. In the Cellular Radiotelephone Service, transmitters added to the first cellular system authorized on a channel block in a cellular market during the five year build-out period in order to expand the coverage of the system within the market.

Cardinal radials. Eight imaginary straight lines extending radially on the ground from an antenna location in the following azimuths with respect to true North: 0°, 45°, 90°, 135°, 180°, 225°, 270°, 315°.

Carrier frequency. The frequency of the unmodulated electrical wave at the output of an amplitude modulated (AM), frequency modulated (FM) or phase modulated (PM) transmitter.

Cell. The service area of an individual transmitter location in a cellular system.

Cellular Geographic Service Area. The geographic area served by a cellular system, within which that system is

entitled to protection and adverse effects are recognized, for the purpose of determining whether a petitioner has standing. See § 22.911.

Cellular markets. Standard geographic areas used by the FCC for administrative convenience in the licensing of cellular systems. See § 22.909.

Cellular Radiotelephone Service. A radio service in which common carriers are authorized to offer and provide cellular service for hire to the general public. This service was formerly titled Domestic Public Cellular Radio Telecommunications Service.

Cellular repeater. In the Cellular Radiotelephone Service, a stationary transmitter or device that automatically re-radiates the transmissions of base transmitters at a particular cell site and mobile stations communicating with those base transmitters, with or without channel translation.

Cellular service. Radio telecommunication services provided using a cellular system.

Cellular system. An automated high-capacity system of one or more multichannel base stations designed to provide radio telecommunication services to mobile stations over a wide area in a spectrally efficient manner. Cellular systems employ techniques such as low transmitting power and automatic hand-off between base stations of communications in progress to enable channels to be reused at relatively short distances. Cellular systems may also employ digital techniques such as voice encoding and decoding, data compression, error correction, and time or code division multiple access in order to increase system capacity.

Center frequency. The frequency of the middle of the bandwidth of a channel.

Central office transmitter. A fixed transmitter in the Rural Radiotelephone Service that provides service to rural subscriber stations.

CGSA. See *Cellular Geographic Service Area*.

Channel. The portion of the electromagnetic spectrum assigned by the FCC for one emission. In certain circumstances, however, more than one emission may be transmitted on a channel. See, for example, § 22.161.

Channel bandwidth. The spectral width of a channel, as specified in this part, within which 99% of the emission power must be contained.

Channel block. A group of channels that are assigned together, not individually.

Channel pair. Two channels that are assigned together, not individually. In this part, channel pairs are indicated by an ellipsis between the center frequencies.

Communications channel. In the Cellular Radiotelephone and Air-ground Radiotelephone Services, a channel used to carry subscriber communications.

Construction period. The period between the date of grant of an authorization and the date of required commencement of service.

Control channel. In the Cellular Radiotelephone Service and the Air-ground Radiotelephone Service, a channel used to transmit information necessary to establish or maintain communications. In the other Public Mobile Services, a channel that may be assigned to a control transmitter.

Control point. A location where the operation of a public mobile station is supervised and controlled by the licensee of that station.

Control transmitter. A fixed transmitter in the Public Mobile Services that transmits control signals to one or more base or fixed stations for the purpose of controlling the operation of the base or fixed stations, and/or transmits subscriber communications to one or more base or fixed stations that retransmit them to subscribers.

Dead spots. Small areas within a service area where the field strength is lower than the minimum level for reliable service. Service within dead spots is presumed.

Dispatch service. A radiotelephone service comprising communications between a dispatcher and one or more mobile units. These communications normally do not exceed one minute in duration and are transmitted directly through a base station, without passing through mobile telephone switching facilities.

Effective radiated power (ERP). The effective radiated power of a transmitter (with antenna, transmission line,

duplexers etc.) is the power that would be necessary at the input terminals of a reference half-wave dipole antenna in order to produce the same maximum field intensity. ERP is usually calculated by multiplying the measured transmitter output power by the specified antenna system gain, relative to a half-wave dipole, in the direction of interest.

Emission. The electromagnetic energy radiated from an antenna.

Emission designator. An internationally accepted symbol for describing an emission in terms of its bandwidth and the characteristics of its modulation, if any. See § 2.201 of this chapter for details.

Emission mask. The design limits imposed, as a condition or certification, on the mean power of emissions as a function of frequency both within the authorized bandwidth and in the adjacent spectrum.

Equivalent isotropically radiated power (EIRP). The equivalent isotropically radiated power of a transmitter (with antenna, transmission line, duplexers etc.) is the power that would be necessary at the input terminals of a reference isotropic radiator in order to produce the same maximum field intensity. An isotropic radiator is a theoretical lossless point source of radiation with unity gain in all directions. EIRP is usually calculated by multiplying the measured transmitter output power by the specified antenna system gain, relative to an isotropic radiator, in the direction of interest.

Extension. In the Cellular Radiotelephone Service, an area within the service area boundary of a cellular system, but outside of the market boundary. See §§ 22.911(c) and 22.912.

Facsimile service. Transmission of still images from one place to another by means of radio.

Fill-in transmitters. Transmitters added to a station, in the same area and transmitting on the same channel or channel block as previously authorized transmitters, that do not expand the existing service area, but are established for the purpose of improving reception in dead spots.

Five year build-out period. A five year period during which the licensee of the first cellular system authorized on each channel block in each cellular market may expand the system within that market. See § 22.947.

Fixed transmitter. A stationary transmitter that communicates with other stationary transmitters.

Frequency. The number of cycles occurring per second of an electrical or electromagnetic wave; a number representing a specific point in the electromagnetic spectrum.

Ground station. In the Air-ground Radiotelephone Service, a stationary transmitter that provides service to airborne mobile stations.

Height above average terrain (HAAT). The height of an antenna above the average elevation of the surrounding area.

In-building radiation systems. Supplementary systems comprising low power transmitters, receivers, indoor antennas and/or leaky coaxial cable radiators, designed to improve service reliability inside buildings or structures located within the service areas of stations in the Public Mobile Services.

Initial cellular applications. Applications for authority to construct and operate a new cellular system, excluding applications for interim operating authority.

Interfering contour. The locus of points surrounding a transmitter where the predicted median field strength of the signal from that transmitter is the maximum field strength that is not considered to cause interference at the service contour of another transmitter.

Interoffice transmitter. A fixed transmitter in the Rural Radiotelephone Service that communicates with other interoffice transmitters for the purpose of interconnecting rural central offices.

Meteor burst propagation mode. A long distance VHF radio communication path occurring as a result of the refraction of electromagnetic waves by ionized meteor trails.

Mobile station. One or more transmitters that are capable of operation while in motion.

Necessary bandwidth. The calculated spectral width of an emission. Calculations are made using procedures set forth in part 2 of this chapter. The bandwidth so calculated is considered

to be the minimum necessary to convey information at the desired rate with the desired accuracy.

Occupied bandwidth. The measured spectral width of an emission. The measurement determines occupied bandwidth as the difference between upper and lower frequencies where 0.5% of the emission power is above the upper frequency and 0.5% of the emission power is below the lower frequency.

Offshore central transmitter. A fixed transmitter in the Offshore Radiotelephone Service that provides service to offshore subscriber stations.

Offshore Radiotelephone Service. A radio service in which common carriers are authorized to offer and provide radio telecommunication services for hire to subscribers on structures in the offshore coastal waters of the Gulf of Mexico.

Offshore subscriber station. One or more fixed and/or mobile transmitters in the Offshore Radiotelephone Service that receive service from offshore central transmitters.

Pager. A small radio receiver designed to be carried by a person and to give an aural, visual or tactile indication when activated by the reception of a radio signal containing its specific code. It may also reproduce sounds and/or display messages that were also transmitted. Some pagers also transmit a radio signal acknowledging that a message has been received.

Paging geographic area authorization. An authorization conveying the exclusive right to establish and expand one or more stations throughout a paging geographic area or, in the case of a partitioned geographic area, throughout a specified portion of a paging geographic area, on a specified channel allocated for assignment in the Paging and Radiotelephone Service. These are subject to the conditions that no interference may be caused to existing co-channel stations operated by other licensees within the paging geographic area and that no interference may be caused to existing or proposed co-channel stations of other licensees in adjoining paging geographic areas.

Paging geographic areas. Standard geographic areas used by the FCC for administrative convenience in the licensing of stations to operate on channels allocated for assignment in the Paging and Radiotelephone Service. *See* § 22.503(b).

Paging and Radiotelephone Service. A radio service in which common carriers are authorized to offer and provide paging and radiotelephone service for hire to the general public. This service was formerly titled Public Land Mobile Service.

Paging service. Transmission of coded radio signals for the purpose of activating specific pagers; such transmissions may include messages and/or sounds.

Partitioned cellular market. A cellular market with two or more authorized cellular systems on the same channel block during the five year build-out period, as a result of settlements during initial licensing or contract(s) between the licensee of the first cellular system and the licensee(s) of the subsequent systems. See § 22.947(b).

Public Mobile Services. Radio services in which common carriers are authorized to offer and provide mobile and related fixed radio telecommunication services for hire to the public.

Radio common carrier. A telecommunications common carrier that provides radio communications services but is not engaged in the business of providing landline local exchange telephone service.

Radio telecommunication services. Communication services provided by the use of radio, including radiotelephone, radiotelegraph, paging and facsimile service.

Radiotelegraph service. Transmission of messages from one place to another by means of radio.

Radiotelephone service. Transmission of sound from one place to another by means of radio.

Repeater. A fixed transmitter that retransmits the signals of other stations.

Roamer. A mobile station receiving service from a station or system in the Public Mobile Services other than one to which it is a subscriber.

Rural Radiotelephone Service. A radio service in which common carriers are authorized to offer and provide radio telecommunication services for hire to

subscribers in areas where it is not feasible to provide communication services by wire or other means.

Rural subscriber station. One or more fixed transmitters in the Rural Radiotelephone Service that receive service from central office transmitters.

Service area. The geographic area considered by the FCC to be reliably served by a station in the Public Mobile Services.

Service contour. The locus of points surrounding a transmitter where the predicted median field strength of the signal from that transmitter is the minimum field strength that is considered sufficient to provide reliable service to mobile stations.

Service to subscribers. Service to at least one subscriber that is not affiliated with, controlled by or related to the providing carrier.

Signal booster. A stationary device that automatically reradiates signals from base transmitters without channel translation, for the purpose of improving the reliability of existing service by increasing the signal strength in dead spots.

Station. A station equipped to engage in radio communication or radio transmission of energy (47 U.S.C. 153(k)).

Telecommunications common carrier. An individual, partnership, association, joint-stock company, trust or corporation engaged in rendering radio telecommunications services to the general public for hire.

Temporary fixed station. One or more fixed transmitters that normally do not remain at any particular location for longer than 6 months.

Universal licensing system. The Universal Licensing System (ULS) is the consolidated database, application filing system, and processing system for all Wireless Radio Services. ULS supports electronic filing of all applications and related documents by applicants and licensees in the Wireless Radio Services, and provides public access to licensing information.

Unserved areas. With regard to a channel block allocated for assignment in the Cellular Radiotelephone Service: Geographic area in the District of Columbia, or any State, Territory or possession of the United States of America that is not within the CGSA of any cellular system authorized to transmit on that channel block. With regard to a channel allocated for assignment in the Paging and Radiotelephone Service: Geographic area within the District of Columbia, or any State, Territory or possession of the United States of America that is not within the service contour of any base transmitter in any station authorized to transmit on that channel.

Wireline common carrier. A telecommunications common carrier that is also engaged in the business of providing landline local exchange telephone service.

[59 FR 59507, Nov. 17, 1994, as amended at 61 FR 31050, June 19, 1996; 61 FR 54098, Oct. 17, 1996; 62 FR 11628, Mar. 12, 1997; 63 FR 36603, July 7, 1998; 63 FR 68943, Dec. 14, 1998]

Subpart B—Licensing Requirements and Procedures

APPLICATIONS AND NOTIFICATIONS

§ 22.107 General application requirements.

In general, applications for authorizations, assignments of authorizations, or consent to transfer of control of licensees in the Public Mobile Services must:

(a) Demonstrate the applicant's qualifications to hold an authorization in the Public Mobile services;

(b) State how a grant would serve the public interest, convenience, and necessity;

(c) Contain all information required by FCC rules or application forms;

(d) Propose operation of a facility in compliance with all rules governing the Public Mobile service;

(e) Be amended as necessary to remain substantially accurate and complete in all significant respects, in accordance with the provisions of § 1.65 of this chapter; and,

(f) Be signed in accordance with § 1.743 of this chapter.

§ 22.131 Procedures for mutually exclusive applications.

Two or more pending applications are mutually exclusive if the grant of one application would effectively preclude the grant of one or more of the others under Commission rules governing the

Public Mobile Services involved. The Commission uses the general procedures in this section for processing mutually exclusive applications in the Public Mobile Services. Additional specific procedures are prescribed in the subparts of this part governing the individual Public Mobile Services (see §§ 22.509, 22.717, and 22.949) and in part 1 of this chapter.

(a) *Separate applications.* Any applicant that files an application knowing that it will be mutually exclusive with one or more applications should not include in the mutually exclusive application a request for other channels or facilities that would not, by themselves, render the application mutually exclusive with those other applications. Instead, the request for such other channels or facilities should be filed in a separate application.

(b) *Filing groups.* Pending mutually exclusive applications are processed in filing groups. Mutually exclusive applications in a filing group are given concurrent consideration. The Commission may dismiss as defective (pursuant to § 1.945 of this chapter) any mutually exclusive application(s) whose filing date is outside of the date range for inclusion in the filing group. The types of filing groups used in day-to-day application processing are specified in paragraph (c)(3) of this section. A filing group is one of the following types:

(1) *Renewal filing group.* A renewal filing group comprises a timely-filed application for renewal of an authorization and all timely-filed mutually exclusive competing applications (*see* § 1.935 of this chapter).

(2) *Same-day filing group.* A same-day filing group comprises all mutually exclusive applications whose filing date is the same day, which is normally the filing date of the first-filed application(s).

(3) *Thirty-day notice and cut-off filing group.* A 30-day notice and cut-off filing group comprises mutually exclusive applications whose filing date is no later than thirty (30) days after the date of the Public Notice listing the first-filed application(s) (according to the filing dates) as acceptable for filing.

(4) *Window filing group.* A window filing group comprises mutually exclusive applications whose filing date is within an announced filing window. An announced filing window is a period of time between and including two specific dates, which are the first and last dates on which applications (or amendments) for a particular purpose may be accepted for filing. In the case of a one-day window, the two dates are the same. The dates are made known to the public in advance.

(c) *Procedures.* Generally, the Commission may grant one application in a filing group of mutually exclusive applications and dismiss the other application(s) in the filing that are excluded by that grant, pursuant to § 1.945 of this chapter.

(1) *Selection methods.* In selecting the application to grant, the Commission will use competitive bidding.

(2) *Dismissal of applications.* The Commission may dismiss any application in a filing group that is defective or otherwise subject to dismissal under § 1.945 of this chapter, either before or after employing selection procedures.

(3) *Type of filing group used.* Except as otherwise provided in this part, the type of filing group used in the processing of two or more mutually exclusive applications depends upon the purpose(s) of the applications.

(i) If one of the mutually exclusive applications is a timely-filed application for renewal of an authorization, a renewal filing group is used.

(ii) If any mutually exclusive application filed on the earliest filing date is an application for modification and none of the mutually exclusive applications is a timely-filed application for renewal, a same-day filing group is used.

(iii) If all of the mutually exclusive applications filed on the earliest filing date are applications for initial authorization, a 30-day notice and cut-off filing group is used, except that, for Phase I unserved area applications in the Cellular Radiotelephone Service, a one-day window filing group is used (see § 22.949).

(4) *Disposition.* If there is only one application in any type of filing group, the Commission may grant that application and dismiss without prejudice any mutually exclusive applications not in the filing group. If there is more

than one mutually exclusive application in a filing group, the Commission disposes of these applications as follows:

(i) *Applications in a renewal filing group.* All mutually exclusive applications in a renewal filing group are designated for comparative consideration in a hearing.

(ii) *Applications in a 30-day notice and cut-off filing group.*

(A) If all of the mutually exclusive applications in a 30-day notice and cut-off filing group are applications for initial authorization, the FCC administers competitive bidding procedures in accordance with § 22.201 through § 22.227 and subpart Q of part 1 of this chapter, as applicable. After such procedures, the application of the successful bidder may be granted and the other applications may be dismissed without prejudice.

(B) If any of the mutually exclusive applications in a 30-day notice and cut-off filing group is an application for modification, the Commission may attempt to resolve the mutual exclusivity by facilitating a settlement between the applicants. If a settlement is not reached within a reasonable time, the FCC may designate all applications in the filing group for comparative consideration in a hearing. In this event, the result of the hearing disposes all of the applications in the filing group.

(iii) *Applications in a same-day filing group.* If there are two or more mutually exclusive applications in a same-day filing group, the Commission may attempt to resolve the mutual exclusivity by facilitating a settlement between the applicants. If a settlement is not reached within a reasonable time, the Commission may designate all applications in the filing group for comparative consideration in a hearing. In this event, the result of the hearing disposes of all of the applications in the filing group.

(iv) *Applications in a window filing group.* Applications in a window filing group are processed in accordance with the procedures for a 30-day notice and cut-off filing group in paragraph (c)(4)(ii) of this section.

(d) *Terminology.* For the purposes of this section, terms have the following meanings:

(1) The *filing date* of an application is the date on which that application was received in a condition acceptable for filing or the date on which the most recently filed major amendment to that application was received, whichever is later, excluding major amendments in the following circumstances:

(i) The major amendment reflects only a change in ownership or control found by the Commission to be in the public interest;

(ii) The major amendment as received is defective or otherwise found unacceptable for filing; or

(iii) The application being amended has been designated for hearing and the Commission or the presiding officer accepts the major amendment.

(2) An *application for initial authorization* is:

(i) Any application requesting an authorization for a new system or station;

(ii) Any application requesting authorization for an existing station to operate on an additional channel, unless the additional channel is for paired two-way radiotelephone operation, is in the same frequency range as the existing channel(s), and will be operationally integrated with the existing channel(s) such as by trunking;

(iii) Any application requesting authorization for a new transmitter at a location more than 2 kilometers (1.2 miles) from any existing transmitters of the applicant licensee on the requested channel or channel block; or

(iv) Any application to expand the CGSA of a cellular system (as defined in § 22.911), except during the five-year build-out period.

(v) Any ''short-form'' application (filed on FCC Form 175) requesting a new paging geographic area authorization.

[59 FR 59954, Nov. 21, 1994, as amended at 62 FR 11629, Mar. 12, 1997; 63 FR 68943, Dec. 14, 1998]

§ 22.143 Construction prior to grant of application.

Applicants may construct facilities in the Public Mobile services prior to grant of their applications, subject to

the provisions of this section, but must not operate such facilities until the FCC grants an authorization. If the conditions stated in this section are not met, applicants must not begin to construct facilities in the Public Mobile Services.

(a) *When applicants may begin construction.* An applicant may begin construction of a facility 35 days after the date of the Public Notice listing the application for that facility as acceptable for filing, except that an applicant whose application to operate a new cellular system was selected in a random selection process may begin construction of that new cellular system 35 days after the date of the Public Notice listing it as the tentative selectee.

(b) *Notification to stop.* If the FCC for any reason determines that construction should not be started or should be stopped while an application is pending, and so notifies the applicant, orally (followed by written confirmation) or in writing, the applicant must not begin construction or, if construction has begun, must stop construction immediately.

(c) *Assumption of risk.* Applicants that begin construction pursuant to this section before receiving an authorization do so at their own risk and have no recourse against the United States for any losses resulting from:

(1) Applications that are not granted;

(2) Errors or delays in issuing Public Notices;

(3) Having to alter, relocate or dismantle the facility; or

(4) Incurring whatever costs may be necessary to bring the facility into compliance with applicable laws, or FCC rules and orders.

(d) *Conditions.* Except as indicated, all pre-grant construction is subject to the following conditions:

(1) The application is not mutually exclusive with any other application, except for successful bidders and tentative selectees in the Cellular Radiotelephone Service;

(2) No petitions to deny the application have been filed;

(3) The application does not include a request for a waiver of one or more FCC rules;

(4) For any construction or alteration that would exceed the requirements of §17.7 of this chapter, the licensee has notified the appropriate Regional Office of the Federal Aviation Administration (FAA Form 7460–1), filed a request for antenna height clearance and obstruction marking and lighting specifications (FCC Form 854) with the FCC, PRB, Support Services Branch, Gettysburg, PA 17325;

(5) The applicant has indicated in the application that the proposed facility would not have a significant environmental effect, in accordance with §§1.1301 through 1.1319 of this chapter; and,

(6) Under applicable international agreements and rules in this part, individual coordination of the proposed channel assignment(s) with a foreign administration is not required.

§ 22.150 Standard pre-filing technical coordination procedure.

For operations on certain channels in the Public Mobile Services, carriers must attempt to coordinate the proposed use of spectrum with other spectrum users prior to filing an application for authority to operate a station. Rules requiring this procedure for specific channels and types of stations are contained in the subparts governing the individual Public Mobile Services.

(a) Coordination comprises two steps—notification and response. Each step may be accomplished orally or in writing.

(b) Notification must include relevant technical details of the proposal. At minimum, this should include the following:

(1) Geographical coordinates of the antenna site(s).

(2) Transmitting and receiving channels to be added or changed.

(3) Transmitting power, emission type and polarization.

(4) Transmitting antenna pattern and maximum gain.

(5) Transmitting antenna height above ground level.

(c) Applicants and licensees receiving notification must respond promptly, even if no channel usage conflicts are anticipated. If any notified party fails to respond within 30 days, the applicant may file the application without a response from that party.

(d) The 30-day period begins on the date the notification is submitted to the Commission via the ULS. If the notification is by mail, this date may be ascertained by:

(1) The return receipt on certified mail,

(2) The enclosure of a card to be dated and returned by the party being notified, or

(3) A reasonable estimate of the time required for the mail to reach its destination. In this case, the date when the 30-day period will expire must be stated in the notification.

(e) All channel usage conflicts discovered during the coordination process should be resolved prior to filing of the application. If the applicant is unable or unwilling to resolve a particular conflict, the application may be accepted for filing if it contains a statement describing the unresolved conflict and a brief explanation of the reasons why a resolution was not achieved.

(f) If a number of changes in the technical parameters of a proposed facility become necessary during the course of the coordination process, an attempt should be made to minimize the number of separate notifications. If the changes are incorporated into a completely revised notice, the items that were changed from the previous notice should be identified.

(g) In situations where subsequent changes are not numerous or complex, the party receiving the changed notification should make an effort to respond in less than 30 days. If the applicant believes a shorter response time is reasonable and appropriate, it should so indicate in the notice and suggest a response date.

(h) If a subsequent change in the technical parameters of a proposed facility could not affect the facilities of one or more of the parties that received an initial notification, the applicant is not required to coordinate that change with these parties. However, these parties must be advised of the change and of the opinion that coordination is not required.

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68944, Dec. 14, 1998]

§ 22.157 Distance computation.

The method given in this section must be used to compute the distance between any two locations, except that, for computation of distance involving stations in Canada and Mexico, methods for distance computation specified in the applicable international agreement, if any, must be used instead. The method set forth in this paragraph is considered to be sufficiently accurate for distances not exceeding 475 km (295 miles).

(a) Convert the latitudes and longitudes of each reference point from degree-minute-second format to degree-decimal format by dividing minutes by 60 and seconds by 3600, then adding the results to degrees.

$$\mathrm{LATX}_{dd} = \mathrm{DD} + \frac{\mathrm{MM}}{60} + \frac{\mathrm{SS}}{3600}$$

$$\mathrm{LONX}_{dd} = \mathrm{DDD} + \frac{\mathrm{MM}}{60} + \frac{\mathrm{SS}}{3600}$$

(b) Calculate the mean geodetic latitude between the two reference points by averaging the two latitudes:

$$\mathrm{ML} = \frac{\mathrm{LAT1}_{dd} + \mathrm{LAT2}_{dd}}{2}$$

(c) Calculate the number of kilometers per degree latitude difference for the mean geodetic latitude calculated in paragraph (b) of this section as follows:

$$\mathrm{KPD}_{lat} = 111.13209 - 0.56605 \cos 2\mathrm{ML} + 0.00120 \cos 4\mathrm{ML}$$

(d) Calculate the number of kilometers per degree of longitude difference for the mean geodetic latitude calculated in paragraph (b) of this section as follows:

$$\mathrm{KPD}_{lon} = 111.41513 \cos \mathrm{ML} - 0.09455 \cos 3\mathrm{ML} + 0.00012 \cos 5\mathrm{ML}$$

(e) Calculate the North-South distance in kilometers as follows:

$$\mathrm{NS} = \mathrm{KPD}_{lat} \times (\mathrm{LAT1}_{dd} - \mathrm{LAT2}_{dd})$$

(f) Calculate the East-West distance in kilometers as follows:

$$EW = KPD_{lon} \times (LON1_{dd} - LON2_{dd})$$

(g) Calculate the distance between the locations by taking the square root of the sum of the squares of the East-West and North-South distances:

$$DIST = \sqrt{NS^2 + EW^2}$$

(h) Terms used in this section are defined as follows:

(1) $LAT1_{dd}$ and $LON1_{dd}$ are the coordinates of the first location in degree-decimal format.

(2) $LAT2_{dd}$ and $LON2_{dd}$ are the coordinates of the second location in degree-decimal format.

(3) ML is the mean geodetic latitude in degree-decimal format.

(4) KPD_{lat} is the number of kilometers per degree of latitude at a given mean geodetic latitude.

(5) KPD_{lon} is the number of kilometers per degree of longitude at a given mean geodetic latitude.

(6) NS is the North-South distance in kilometers.

(7) DIST is the distance between the two locations, in kilometers.

§ 22.159 Computation of average terrain elevation.

Average terrain elevation must be calculated by computer using elevations from a 30 second point or better topographic data file. The file must be identified. If a 30 second point data file is used, the elevation data must be processed for intermediate points using interpolation techniques; otherwise, the nearest point may be used. In cases of dispute, average terrain elevation determinations can also be done manually, if the results differ significantly from the computer derived averages.

(a) Radial average terrain elevation is calculated as the average of the elevation along a straight line path from 3 to 16 kilometers (2 and 10 miles) extending radially from the antenna site. If a portion of the radial path extends over foreign territory or water, such portion must not be included in the computation of average elevation unless the radial path again passes over United States land between 16 and 134 kilometers (10 and 83 miles) away from the station. At least 50 evenly spaced data points for each radial should be used in the computation.

(b) Average terrain elevation is the average of the eight radial average terrain elevations (for the eight cardinal radials).

(c) For locations in Dade and Broward Counties, Florida, the method prescribed above may be used or average terrain elevation may be assumed to be 3 meters (10 feet).

§ 22.161 Application requirements for ASSB.

Applications for base stations employing amplitude compandored single sideband modulation (ASSB) must contain the following information:

(a) The application must describe fully the modulation characteristics, emission and occupied bandwidth, and specify the center frequency of the emission for each channel, carrier frequency, and pilot channels, if any. The emission must fall completely within a channel assignable for two-way operation in the Paging and Radiotelephone Service, Rural Radiotelephone Service or Offshore Radiotelephone Service.

(b) The application must contain interference studies between stations within an authorized bandwidth, whether FM-to-ASSB, ASSB-to-FM, or ASSB-to-ASSB in accordance with the following: For ASSB stations, the transmitter nearest to the protected station must be used. The effective radiated power in the direction of the protected station must be the sum of the peak effective radiated power of all transmitters in the group, in the direction of the protected station. The antenna center of radiation height above average terrain must be the highest antenna center of radiation height of any transmitter in the group in the direction of the protected station. The channel of the group is assumed to be the same as that of the protected station (co-channel), and studies must be made in accordance with § 22.567.

§ 22.165 Additional transmitters for existing systems.

A licensee may operate additional transmitters at additional locations on the same channel or channel block as

its existing system without obtaining prior Commission approval provided:

(a) *International coordination*. The locations and/or technical parameters of the additional transmitters are such that individual coordination of the channel assignment(s) with a foreign administration, under applicable international agreements and rules in this part, is not required.

(b) *Antenna structure registration*. Certain antenna structures must be registered with the Commission prior to construction or alteration. Registration requirements are contained in part 17 of this chapter.

(c) *Environmental*. The additional transmitters must not have a significant environmental effect as defined by §§ 1.1301 through 1.1319 of this chapter.

(d) *Paging and Radiotelephone Service*. The provisions in this paragraph apply for stations in the Paging and Radiotelephone Service.

(1) The interfering contours of the additional transmitter(s) must be totally encompassed by the composite interfering contour of the existing station (or stations under common control of the applicant) on the same channel, except that this limitation does not apply to nationwide network paging stations or in-building radiation systems.

(2) Additional transmitters in the 43 MHz frequency range operate under developmental authority, subject to the conditions set forth in § 22.411.

(3) The additional transmitters must not operate on control channels in the 72–76 MHz, 470–512 MHz, 928 MHz, 932 MHz, 941 MHz or 959 MHz frequency ranges.

(e) *Cellular radiotelephone service*. During the five-year build-out period, the service area boundaries of the additional transmitters, as calculated by the method set forth in § 22.911(a), must remain within the market, except that the service area boundaries may extend beyond the market boundary into the area that is part of the CGSA or is already encompassed by the service area boundaries of previously authorized facilities. After the five-year build-out period, the service area boundaries of the additional transmitters, as calculated by the method set forth in § 22.911(a), must remain within the CGSA. Licensees must notify the Commission (FCC Form 601) of any transmitters added under this section that cause a change in the CGSA boundary. The notification must include full size and reduced maps, and supporting engineering, as described in § 22.953(a)(5)(i) through (iii). If the addition of transmitters involves a contract service area boundary (SAB) extension (see § 22.912), the notification must include a statement as to whether the five-year build-out period for the system on the relevant channel block in the market into which the SAB extends has elapsed and whether the SAB extends into any unserved area in the market. The notification must be made electronically via the ULS, or delivered to the filing place (see § 1.913 of this chapter) no later than 15 days after the addition is made.

(f) *Air-ground Radiotelephone Service*. Ground stations may be added to Commercial Aviation air-ground systems at previously established ground station locations, pursuant to § 22.859, subject to compliance with the applicable technical rules. This section does not apply to General Aviation air-ground stations.

(g) *Rural Radiotelephone Service*. A ''service area'' and ''interfering contours'' must be determined using the same method as for stations in the Paging and Radiotelephone Service. The service area and interfering contours so determined for the additional transmitter(s) must be totally encompassed by the similarly determined composite service area contour and predicted interfering contour, respectively, of the existing station on the same channel. This section does not apply to Basic Exchange Telecommunications Radio Systems.

(h) *Offshore Radiotelephone Service*. This section does not apply to stations in the Offshore Radiotelephone Service.

(i) *Provision of information upon request*. Upon request by the FCC, licensees must supply administrative or technical information concerning the additional transmitters. At the time transmitters are added pursuant to this section, licensees must make a record of the pertinent technical and administrative information so that

such information is readily available. See § 22.303.

[59 FR 59507, Nov. 17, 1994; 59 FR 64856, Dec. 16, 1994; as amended at 62 FR 11629, Mar. 12, 1997; 63 FR 68944, Dec. 14, 1998; 64 FR 53240, Oct. 1, 1999]

§ 22.169 International coordination of channel assignments.

Channel assignments under this part are subject to the applicable provisions and requirements of treaties and other international agreements between the United States government and the governments of Canada and Mexico.

COMPETITIVE BIDDING PROCEDURES

SOURCE: 62 FR 11629, Mar. 12, 1997, unless otherwise noted.

§ 22.201 Scope of competitive bidding rules.

Sections 22.201 through 22.227, inclusive (and, unless otherwise specified in this part, the procedures set forth in part 1, subpart Q, of this chapter), apply only to competitive bidding (''auction'') procedures for authorizations as follows:

(a) Paging geographic area authorizations issued pursuant to this part or to part 90 of this chapter.

(b) [Reserved].

§ 22.203 Competitive bidding design for paging licensing.

A simultaneous multiple round auction will be used to choose from among mutually exclusive initial applications for paging geographic area authorizations, unless the FCC specifies otherwise by Public Notice prior to the competitive bidding procedure.

§ 22.205 Competitive bidding mechanisms.

(a) *Sequencing*. The FCC will establish and may vary the sequence in which paging geographic area authorizations are auctioned.

(b) *Grouping*. The FCC will determine which licenses will be auctioned simultaneously or in combination based on interdependency and administrative circumstances.

(c) *Minimum Bid Increments*. The FCC may, by public announcement before or during an auction, require minimum bid increments in dollar or percentage terms.

(d) *Stopping Rules*. The FCC may establish stopping rules before or during an auction in order to terminate the auction within a reasonable time.

(e) *Activity Rules*. The FCC may establish activity rules which require a minimum amount of bidding activity. In the event that the FCC establishes an activity rule in connection with a simultaneous multiple round auction, each bidder may request waivers of such rule during the auction. The FCC may, by public announcement either before or during an auction, specify or vary the number of waivers available to each bidder.

§ 22.207 Withdrawal, default, and disqualification payments.

The FCC will impose payments on bidders who withdraw high bids during the course of an auction, who default on payments due after an auction terminates, or who are disqualified. When the FCC conducts a simultaneous multiple round auction, payments will be calculated as set forth in §§ 1.2104(g) and 1.2109 of this chapter. When the amount of such a payment cannot be determined, a deposit of up to 20 percent of the amount bid on the license will be required.

§ 22.209 Bidding applications (FCC Form 175 and 175–S Short-form).

Each applicant to participate in competitive bidding for paging geographic area authorizations must submit an application (FCC Forms 175 and 175–S) pursuant to the provisions of § 1.2105 of this chapter.

§ 22.211 Submission of upfront payments and down payments.

(a) The FCC will require applicants to submit an upfront payment prior to the start of a paging auction. The amount of the upfront payment for each geographic area license auctioned and the procedures for submitting it will be set forth by the Wireless Telecommunications Bureau in a Public Notice in accordance with § 1.2106 of this chapter.

(b) Each winning bidder in a paging auction must submit a down payment to the FCC in an amount sufficient to

bring its total deposits up to 20 percent of its winning bid. All winning bidders except small businesses will be required to make such payment within ten business days following the release of a Public Notice announcing the close of bidding. Small businesses must bring their deposits up to 10 percent of their winning bids within ten business days following the release of a Public Notice announcing the close of bidding, and must pay an additional 10 percent prior to licensing, by a date and time to be specified by Public Notice.

§ 22.213 Long-form application (FCC Form 601).

Each successful bidder for a paging geographic area authorization must submit a ''long-form'' application (Form 601) within ten (10) business days after being notified by Public Notice that it is the winning bidder. Applications for paging geographic area authorizations on FCC Form 601 must be submitted in accordance with § 1.2107 and § 1.2112 of this chapter, all applicable procedures set forth in the rules in this part, and any applicable Public Notices that the FCC may issue in connection with an auction. After an auction, the FCC will not accept long-form applications for paging geographic area authorizations from anyone other than the auction winners and parties seeking partitioned authorizations pursuant to agreements with auction winners under § 22.221 of this part.

[64 FR 33781, June 24, 1999]

§ 22.215 Authorization grant, denial, default, and disqualification.

(a) Each winning bidder will be required to pay the full balance of its winning bid no later than ten (10) business days following the release date of a Public Notice establishing the payment deadline. If a winning bidder fails to pay the balance of its winning bids in a lump sum by the applicable deadline as specified by the Commission, it will be allowed to make payment no later than ten (10) business days after the payment deadline, provided that it also pays a late fee equal to five (5) percent of the amount due. When a winning bidder fails to pay the balance of its winning bid by the late payment deadline, it is considered to be in default on its authorization(s) and subject to the applicable default payments. Authorizations will be awarded upon the full and timely payment of winning bids and any applicable late fees.

(b) A bidder that withdraws its bid subsequent to the close of bidding, defaults on a payment due, or is disqualified, is subject to the payments specified in § 22.207, § 1.2104(g), or § 1.2109 of this chapter, as applicable.

[59 FR 59507, Nov. 17, 1994, as amended at 64 FR 33781, June 24, 1999]

§ 22.217 Bidding credits for small businesses.

(a) A winning bidder that qualifies as a small business or a consortium of small businesses as defined in § 22.223(b)(1)(i) of this part may use a bidding credit of thirty-five (35) percent to lower the cost of its winning bid. A winning bidder that qualifies as a small business or a consortium of small businesses as defined in § 22.223(b)(1)(ii) of this part may use a bidding credit of twenty-five (25) percent to lower the cost of its winning bid.

(b) Unjust Enrichment:

(1) If a small business that utilizes a bidding credit under this section seeks to transfer control or assign an authorization to an entity that is not a small business under § 22.223(b)(1), or seeks to make any other change in ownership that would result in the licensee losing eligibility as a small business, the small business must seek FCC approval and reimburse the U.S. government for the amount of the bidding credit (plus interest at the rate imposed for installment financing at the time the license was awarded), as a condition of approval of such assignment, transfer, or other ownership change.

(2) If a small business that utilizes a bidding credit under this section seeks to transfer control or assign an authorization to a small business meeting the eligibility standards for a lower bidding credit, or seeks to make any other change in ownership that would result in the licensee qualifying for a lower bidding credit under this section, the licensee must seek FCC approval and reimburse the U.S. government for the difference between the amount of the

bidding credit obtained by the licensee and the bidding credit for which the assignee, transferee, or licensee is eligible under this section (plus interest at the rate imposed for installment financing at the time the license was awarded), as a condition of the approval of such assignment, transfer, or other ownership change.

(3) The amount of payments made pursuant to paragraphs (b)(1) and (b)(2) of this section will be reduced over time as follows: A transfer in the first two years of the license term will result in a forfeiture of 100 percent of the value of the bidding credit (or the difference between the bidding credit obtained by the original licensee and the bidding credit for which the post-transfer licensee is eligible); in year 3 of the license term the payment will be 75 percent; in year 4 the payment will be 50 percent; and in year 5 the payment will be 25 percent, after which there will be no assessment.

(4) If a small business that utilizes a bidding credit under this section partitions its authorization or disaggregates its spectrum to an entity not meeting the eligibility standards for the same bidding credit, the partitioning or disaggregating licensee will be subject to the provisions concerning unjust enrichment as set forth in § 1.2111(e) (2) and (3) of this chapter.

[59 FR 59507, Nov. 17, 1994, as amended at 64 FR 33781, June 24, 1999]

§ 22.221 Eligibility for partitioned licenses.

If partitioned licenses are being applied for in conjunction with a license(s) to be awarded through competitive bidding procedures—

(a) The applicable procedures for filing short-form applications and for submitting upfront payments and down payments contained in this chapter shall be followed by the applicant, who must disclose as part of its short-form application all parties to agreement(s) with or among other entities to partition the license pursuant to this section, if won at auction (*see* 47 CFR 1.2105(a)(2)(viii));

(b) Each party to an agreement to partition the authorization must file a long-form application (FCC Form 601) for its respective, mutually agreed-upon geographic area together with the application for the remainder of the MEA or EA filed by the auction winner.

(c) If the partitioned authorization is being applied for as a partial assignment of the MEA or EA authorization following grant of the initial authorization, request for authorization for partial assignment of an authorization shall be made pursuant to § 1.948 of this part.

[59 FR 59507, Nov. 17, 1994, as amended at 64 FR 33781, June 24, 1999]

§ 22.223 Definitions concerning competitive bidding process.

(a) *Scope*. The definitions in this section apply to §§ 22.201 through 22.227, unless otherwise specified in those sections.

(b) *Small business; consortium of small businesses*. (1) A small business is an entity that either:

(i) Together with its affiliates and controlling interests has average gross revenues that are not more than $3 million for the preceding three years; or

(ii) Together with its affiliates and controlling interests has average gross revenues that are not more than $15 million for the preceding three years.

(2) For purposes of determining whether an entity meets either the $3 million or $15 million average annual gross revenues size standard set forth in paragraph (b)(1) of this section, the gross revenues of the entity, its affiliates, and controlling interests shall be considered on a cumulative basis and aggregated.

(3) A consortium of small businesses is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition of a small business in paragraph (b)(1) of this section. Each individual member must establish its eligibility as a small business, as defined in this section. Where an applicant (or licensee) is a consortium of small businesses, the gross revenues of each small business shall not be aggregated.

(4) Applicants without identifiable controlling interests. Where an applicant (or licensee) cannot identify controlling interests under the standards

set forth in this section, the gross revenues of all interest holders in the applicant, and their affiliates, will be attributable.

(c) *Gross Revenues.* Gross revenues shall mean all income received by an entity, whether earned or passive, before any deductions are made for costs of doing business (*e.g.*, cost of goods sold). Gross revenues are evidenced by audited financial statements for the relevant number of calendar or fiscal years preceding the filing of the applicant's short-form application. If an entity was not in existence for all or part of the relevant period, gross revenues shall be evidenced by the audited financial statements of the entity's predecessor-in-interest or, if there is no identifiable predecessor-in-interest, unaudited financial statements certified by the applicant as accurate. When an applicant does not otherwise use audited financial statements, its gross revenues may be certified by its chief financial officer or its equivalent.

(d) *Affiliate.*—(1) *Basis for Affiliation.* An individual or entity is an affiliate of an applicant if such individual or entity:

(i) Directly or indirectly controls or has the power to control the applicant, or

(ii) Is directly or indirectly controlled by the applicant, or

(iii) Is directly or indirectly controlled by a third party or parties who also control or have the power to control the applicant, or

(iv) Has an ''identity of interest'' with the applicant.

(2) *Nature of control in determining affiliation.* (i) Every business concern is considered to have one or more parties who directly or indirectly control or have the power to control it. Control may be affirmative or negative and it is immaterial whether it is exercised so long as the power to control exists.

Example for paragraph (d)(2)(i). An applicant owning 50 percent of the voting stock of another concern would have negative power to control such concern since such party can block any action of the other stockholders. Also, the bylaws of a corporation may permit a stockholder with less than 50 percent of the voting stock to block any actions taken by the other stockholders in the other entity. Affiliation exists when the applicant has the power to control a concern while at the same time another person, or persons, are in control of the concern at the will of the party or parties with the power of control.

(ii) Control can arise through stock ownership; occupancy of director, officer or key employee positions; contractual or other business relations; or combinations of these and other factors. A key employee is an employee who, because of his/her position in the concern, has a critical influence in or substantive control over the operations or management of the concern.

(iii) Control can arise through management positions if the voting stock is so widely distributed that no effective control can be established.

Example for paragraph (d)(2)(iii). In a corporation where the officers and directors own various size blocks of stock totaling 40 percent of the corporation's voting stock, but no officer or director has a block sufficient to give him/her control or the power to control and the remaining 60 percent is widely distributed with no individual stockholder having a stock interest greater than 10 percent, management has the power to control. If persons with such management control of the other entity are controlling principals of the applicant, the other entity will be deemed an affiliate of the applicant.

(3) *Identity of interest between and among persons.* Affiliation can arise between or among two or more persons with an identity of interest, such as members of the same family or persons with common investments. In determining if the applicant controls or is controlled by a concern, persons with an identity of interest will be treated as though they were one person.

(i) *Spousal affiliation.* Both spouses are deemed to own or control or have the power to control interests owned or controlled by either of them, unless they are subject to a legal separation recognized by a court of competent jurisdiction in the United States.

(ii) *Kinship affiliation.* Immediate family members will be presumed to own or control or have the power to control interests owned or controlled by other immediate family members. In this context ''immediate family member'' means father, mother, husband, wife, son, daughter, brother, sister, father- or mother-in-law, son- or daughter-in-law, brother- or sister-in-law, step-father, or -mother, step-

brother, or -sister, step-son, or -daughter, half-brother or -sister. This presumption may be rebutted by showing that:

(A) The family members are estranged,

(B) The family ties are remote, or

(C) The family members are not closely involved with each other in business matters.

Example for paragraph (d)(3)(ii). A owns a controlling interest in Corporation X. A's sister-in-law, B, has a controlling interest in a paging geographic area authorization application. Because A and B have a presumptive kinship affiliation, A's interest in Corporation X is attributable to B, and thus to the applicant, unless B rebuts the presumption with the necessary showing.

(4) *Affiliation through stock ownership.* (i) An applicant is presumed to control or have the power to control a concern if he/she owns or controls or has the power to control 50 percent or more of its voting stock.

(ii) An applicant is presumed to control or have the power to control a concern even though he/she owns, controls, or has the power to control less than 50 percent of the concern's voting stock, if the block of stock he/she owns, controls, or has the power to control is large as compared with any other outstanding block of stock.

(iii) If two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, such minority holdings are equal or approximately equal in size, and the aggregate of these minority holdings is large as compared with any other stock holding, the presumption arises that each one of these persons individually controls or has the power to control the concern; however, such presumption may be rebutted by a showing that such control or power to control, in fact, does not exist.

(5) *Affiliation arising under stock options, convertible debentures, and agreements to merge.* Stock options, convertible debentures, and agreements to merge (including agreements in principle) are generally considered to have a present effect on the power to control the concern. Therefore, in making a size determination, such options, debentures, and agreements will generally be treated as though the rights held thereunder had been exercised. However, neither an affiliate nor an applicant can use such options and debentures to appear to terminate its control over another concern before it actually does so.

Example 1 for paragraph (d)(5). If company B holds an option to purchase a controlling interest in company A, who holds a controlling interest in a paging geographic area authorization application, the situation is treated as though company B had exercised its rights and had become owner of a controlling interest in company A. The gross revenues of company B must be taken into account in determining the size of the applicant.

Example 2 for paragraph (d)(5). If a large company, BigCo, holds 70% (70 of 100 outstanding shares) of the voting stock of company A, who holds a controlling interest in a paging geographic area authorization application, and gives a third party, SmallCo, an option to purchase 50 of the 70 shares owned by BigCo, BigCo will be deemed to be an affiliate of company A, and thus the applicant, until SmallCo actually exercises its options to purchase such shares. In order to prevent BigCo from circumventing the intent of the rule which requires such options to be considered on a fully diluted basis, the option is not considered to have present effect in this case.

Example 3 for paragraph (d)(5). If company A has entered into an agreement to merge with company B in the future, the situation is treated as though the merger has taken place.

(6) *Affiliation under voting trusts.* (i) Stock interests held in trust shall be deemed controlled by any person who holds or shares the power to vote such stock, to any person who has the sole power to sell such stock, and to any person who has the right to revoke the trust at will or to replace the trustee at will.

(ii) If a trustee has a familial, personal or extra-trust business relationship to the grantor or the beneficiary, the stock interests held in trust will be deemed controlled by the grantor or beneficiary, as appropriate.

(iii) If the primary purpose of a voting trust, or similar agreement, is to separate voting power from beneficial ownership of voting stock for the purpose of shifting control of or the power to control a concern in order that such concern or another concern may meet the Commission's size standards, such voting trust shall not be considered

valid for this purpose regardless of whether it is or is not recognized within the appropriate jurisdiction.

(7) *Affiliation through common management.* Affiliation generally arises where officers, directors, or key employees serve as the majority or otherwise as the controlling element of the board of directors and/or the management of another entity.

(8) *Affiliation through common facilities.* Affiliation generally arises where one concern shares office space and/or employees and/or other facilities with another concern, particularly where such concerns are in the same or related industry or field of operations, or where such concerns were formerly affiliated, and through these sharing arrangements one concern has control, or potential control, of the other concern.

(9) *Affiliation through contractual relationships.* Affiliation generally arises where one concern is dependent upon another concern for contracts and business to such a degree that one concern has control, or potential control, of the other concern.

(10) *Affiliation under joint venture arrangements.* (i) A joint venture for size determination purposes is an association of concerns and/or individuals, with interests in any degree or proportion, formed by contract, express or implied, to engage in and carry out a single, specific business venture for joint profit for which purpose they combine their efforts, property, money, skill and knowledge, but not on a continuing or permanent basis for conducting business generally. The determination whether an entity is a joint venture is based upon the facts of the business operation, regardless of how the business operation may be designated by the parties involved. An agreement to share profits/losses proportionate to each party's contribution to the business operation is a significant factor in determining whether the business operation is a joint venture.

(ii) The parties to a joint venture are considered to be affiliated with each other.

(e) *Controlling interest.* (1) For purposes of this section, controlling interest includes individuals or entities with *de jure* and *de facto* control of the applicant. *De jure* control is greater than 50 percent of the voting stock of a corporation, or in the case of a partnership, the general partner. *De facto* control is determined on a case-by-case basis. An entity must disclose its equity interest and demonstrate at least the following indicia of control to establish that it retains *de facto* control of the applicant:

(i) The entity constitutes or appoints more than 50 percent of the board of directors or management committee;

(ii) The entity has authority to appoint, promote, demote, and fire senior executives that control the day-to-day activities of the licensee; and

(iii) The entity plays an integral role in management decisions.

(2) *Calculation of certain interests.* (i) Ownership interests shall be calculated on a fully diluted basis; all agreements such as warrants, stock options and convertible debentures will generally be treated as if the rights thereunder already have been fully exercised.

(ii) Partnership and other ownership interests and any stock interest equity, or outstanding stock, or outstanding voting stock shall be attributed as specified below.

(iii) Stock interests held in trust shall be attributed to any person who holds or shares the power to vote such stock, to any person who has the sole power to sell such stock, and, to any person who has the right to revoke the trust at will or to replace the trustee at will. If the trustee has a familial, personal, or extra-trust business relationship to the grantor or the beneficiary, the grantor or beneficiary, as appropriate, will be attributed with the stock interests held in trust.

(iv) Non-voting stock shall be attributed as an interest in the issuing entity.

(v) Limited partnership interests shall be attributed to limited partners and shall be calculated according to both the percentage of equity paid in and the percentage of distribution of profits and losses.

(vi) Officers and directors of an entity shall be considered to have an attributable interest in the entity. The officers and directors of an entity that controls a licensee or applicant shall be considered to have an attributable interest in the licensee or applicant.

(vii) Ownership interests that are held indirectly by any party through one or more intervening corporations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that if the ownership percentage for an interest in any link in the chain exceeds 50 percent or represents actual control, it shall be treated as if it were a 100 percent interest.

(viii) Any person who manages the operations of an applicant or licensee pursuant to a management agreement shall be considered to have an attributable interest in such applicant or licensee if such person or its affiliate pursuant to paragraph (d) of this section has authority to make decisions or otherwise engage in practices or activities that determine, or significantly influence,

(A) The nature or types of services offered by such an applicant or licensee;

(B) The terms upon which such services are offered; or

(C) The prices charged for such services.

(ix) Any licensee or its affiliate who enters into a joint marketing arrangement with an applicant or licensee, or its affiliate, shall be considered to have an attributable interest, if such applicant or licensee, or its affiliate, has authority to make decisions or otherwise engage in practices or activities that determine, or significantly influence,

(A) The nature or types of services offered by such an applicant or licensee;

(B) The terms upon which such services are offered; or

(C) The prices charged for such services.

[59 FR 59507, Nov. 17, 1994, as amended at 64 FR 33781, June 24, 1999]

§ 22.225 Certifications, disclosures, records maintenance and audits.

(a) *Short-form applications: certifications and disclosure.* In addition to certifications and disclosures required by part 1, subpart Q, of this chapter, each applicant for a paging license which qualifies as a small business or consortium of small businesses shall append the following information as an exhibit to its FCC Form 175:

(1) The identity of the applicant's controlling interests and affiliates, and, if a consortium of small businesses, the members of the joint venture; and

(2) The applicant's gross revenues, computed in accordance with § 22.223.

(b) *Long form applications: certifications and disclosure.* Each applicant submitting a long-form application for a paging geographic area authorization and qualifying as a small business shall, in an exhibit to its long-form application:

(1) Disclose separately and in the aggregate the gross revenues, computed in accordance with § 22.223, for each of the following: the applicant, the applicant's affiliates, the applicant's controlling interests, and, if a consortium of small businesses, the members of the joint venture;

(2) List and summarize all agreements or other instruments (with appropriate references to specific provisions in the text of such agreements and instruments) that support the applicant's eligibility as a small business under §§ 22.217 through 22.223, including the establishment of *de facto* and *de jure* control; such agreements and instruments include, but are not limited to, articles of incorporation and bylaws, shareholder agreements, voting or other trust agreements, franchise agreements, and any other relevant agreements, including letters of intent, oral or written; and

(3) List and summarize any investor protection agreements, including rights of first refusal, supermajority clauses, options, veto rights, and rights to hire and fire employees and to appoint members to boards of directors or management committees.

(c) *Records maintenance.* All winning bidders qualifying as small businesses shall maintain at their principal place of business an updated file of ownership, revenue, and asset information, including any documents necessary to establish eligibility as a small business and/or consortium of small businesses under § 22.223. Licensees (and their successors-in-interest) shall maintain such

files for the term of the license. Applicants that do not obtain the license(s) for which they applied shall maintain such files until the grant of such license(s) is final, or one year from the date of the filing of their short-form application (FCC Form 175), whichever is earlier.

(d) *Audits*. (1) Applicants and licensees claiming eligibility as a small business or consortium of small businesses under §§ 22.217 through 22.223 shall be subject to audits by the Commission. Selection for audit may be random, on information, or on the basis of other factors.

(2) Consent to such audits is part of the certification included in the short-form application (FCC Form 175). Such consent shall include consent to the audit of the applicant's or licensee's books, documents and other material (including accounting procedures and practices) regardless of form or type, sufficient to confirm that such applicant's or licensee's representations are, and remain, accurate. Such consent shall include inspection at all reasonable times of the facilities, or parts thereof, engaged in providing and transacting business, or keeping records regarding licensed paging service and shall also include consent to the interview of principals, employees, customers and suppliers of the applicant or licensee.

(e) *Definitions*. The terms affiliate, small business, consortium of small businesses, gross revenues, and controlling interest used in this section are defined in § 22.223.

[59 FR 59507, Nov. 17, 1994, as amended at 64 FR 33782, June 24, 1999]

§ 22.227 Petitions to deny and limitations on settlements.

(a) Procedures regarding petitions to deny long-form applications in the paging service will be governed by §§ 1.2108(b) through 1.2108(d) of this chapter, § 22.130, and § 90.163.

(b) The consideration that an individual or an entity will be permitted to receive for agreeing to withdraw an application or a petition to deny will be limited by the provisions set forth in § 22.129, § 90.162, and § 1.2105(c) of this chapter.

Subpart C—Operational and Technical Requirements

OPERATIONAL REQUIREMENTS

§ 22.301 Station inspection.

Upon reasonable request, the licensee of any station authorized in the Public Mobile Services must make the station and station records available for inspection by authorized representatives of the Commission at any reasonable hour.

[59 FR 59955, Nov. 21, 1994]

§ 22.303 Retention of station authorizations; identifying transmitters.

The current authorization for each station, together with current administrative and technical information concerning modifications to facilities pursuant to § 22.163 and added facilities pursuant to § 22.165 must be retained as a permanent part of the station records. A clearly legible photocopy of the authorization must be available at each regularly attended control point of the station, or in lieu of this photocopy, licensees may instead make available at each regularly attended control point the address or location where the licensee's current authorization and other records may be found. The station call sign must be clearly and legibly marked on or near every transmitting facility, other than mobile transmitters, of the station.

§ 22.305 Operator and maintenance requirements.

FCC operator permits and licenses are not required to operate, repair or maintain equipment authorized in the Public Mobile Services. Station licensees are responsible for the proper operation and maintenance of their stations, and for compliance with FCC rules.

§ 22.307 Operation during emergency.

Licensees of stations in the Public Mobile services may, during a period of emergency in which normal communications facilities are disrupted as a result of hurricane, flood, earthquake or other natural disaster, civil unrest,

widespread vandalism, national emergencies or emergencies declared by Executive Order of the President, use their stations to temporarily provide emergency communications services in a manner or configuration not normally allowed by this part, provided that such operations comply with the provisions of this section.

(a) *Technical limitations.* Public Mobile stations providing temporary emergency communications service must not transmit:

(1) On channels other than those authorized for normal operations.

(2) With power in excess of that authorized for normal operations;

(3) Emission types other than those authorized for normal operations.

(b) *Discontinuance.* Temporary emergency use of Public Mobile stations must be discontinued as soon as normal communication facilities are restored. The FCC may, at any time, order the discontinuance of any such emergency communication services.

§ 22.313 Station identification.

The licensee of each station in the Public Mobile Services must ensure that the transmissions of that station are identified in accordance with the requirements of this section.

(a) Station identification is not required for transmission by:

(1) Stations in the Cellular Radiotelephone Service;

(2) General aviation ground stations in the Air-ground Radiotelephone Service;

(3) Rural subscriber stations using meteor burst propagation mode communications in the Rural Radiotelephone Service;

(4) Stations using Basic Exchange Telephone Radio Systems in the Rural Radiotelephone Service;

(5) Nationwide network paging stations operating on 931 MHz channels; or,

(6) Stations operating pursuant to paging geographic area authorizations.

(b) For all other stations in the Public Mobile Services, station identification must be transmitted each hour within five minutes of the hour, or upon completion of the first transmission after the hour. Transmission of station identification may be temporarily delayed to avoid interrupting the continuity of any public communication in progress, provided that station identification is transmitted at the conclusion of that public communication.

(c) Station identification must be transmitted by telephony using the English language or by telegraphy using the international Morse code, and in a form that can be received using equipment appropriate for the modulation type employed, and understood without the use of unscrambling devices, except that, alternatively, station identification may be transmitted digitally, provided that the licensee provides the Commission with information sufficient to decode the digital transmission to ascertain the call sign. Station identification comprises transmission of the call sign assigned by the Commission to the station, however, the following may be used in lieu of the call sign.

(1) For transmission from subscriber operated transmitters, the telephone number or other designation assigned by the carrier, provided that a written record of such designations is maintained by the carrier;

(2) For general aviation airborne mobile stations in the Air-Ground Radiotelephone Service, the official FAA registration number of the aircraft;

(3) For stations in the Paging and Radiotelephone Service, a call sign assigned to another station within the same system.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59955, Nov. 21, 1994; 62 FR 11633, Mar. 12, 1997]

§ 22.317 Discontinuance of station operation.

If the operation of a Public Mobile Services station is permanently discontinued, the licensee shall send authorization for cancellation by electronic filing via the ULS on FCC Form 601. For purposes of this section, any station that has not provided service to subscribers for 90 continuous days is considered to have been permanently discontinued, unless the applicant notified the FCC otherwise prior to the end of the 90 day period and provided a date on which operation will resume, which

date must not be in excess of 30 additional days.

[59 FR 59507, Nov. 17, 1994, as amended at 61 FR 54099, Oct. 17, 1996; 63 FR 68944, Dec. 14, 1998]

§ 22.321 Equal employment opportunities.

Public Mobile Services licensees shall afford equal opportunity in employment to all qualified persons, and personnel must not be discriminated against in employment because of sex, race, color, religion, or national origin.

(a) *Equal employment opportunity program.* Each licensee shall establish, maintain, and carry out a positive continuing program of specific practices designed to assure equal opportunity in every aspect of employment policy and practice.

(1) Under the terms of its program, each licensee shall:

(i) Define the responsibility of each level of management to insure a positive application and vigorous enforcement of the policy of equal opportunity, and establish a procedure to review and control managerial and supervisory performance.

(ii) Inform its employees and recognized employee organizations of the positive equal employment opportunity policy and program and enlist their cooperation.

(iii) Communicate its equal employment opportunity policy and program and its employment needs to sources of qualified applicants without regard to sex, race, color, religion or national origin, and solicit their recruitment assistance on a continuing basis.

(iv) Conduct a continuing campaign to exclude every form of prejudice or discrimination based upon sex, race, color, religion, or national origin, from the licensee's personnel policies and practices and working conditions.

(v) Conduct a continuing review of job structure and employment practices and adopt positive recruitment, training, job design and other measures needed in order to ensure genuine equality of opportunity to participate fully in all organizational units, occupations and levels of responsibility.

(2) The program must reasonably address specific concerns through policies and actions as set forth in this paragraph, to the extent that they are appropriate in consideration of licensee size, location and other factors.

(i) *To assure nondiscrimination in recruiting.* (A) Posting notices in the licensee's offices informing applicants for employment of their equal employment rights and their right to notify the Equal Employment Opportunity Commission (EEOC), the Federal Communications Commission (FCC), or other appropriate agency. Where a substantial number of applicants are Spanish-surnamed Americans, such notice should be posted in both Spanish and English.

(B) Placing a notice in bold type on the employment application informing prospective employees that discrimination because of sex, race, color, religion or national origin is prohibited, and that they may notify the EEOC, the FCC or other appropriate agency if they believe they have been discriminated against.

(C) Placing employment advertisements in media which have significant circulation among minority groups in the recruiting area.

(D) Recruiting through schools and colleges with significant minority group enrollments.

(E) Maintaining systematic contacts with minority and human relations organizations, leaders and spokespersons to encourage referral of qualified minority or female applicants.

(F) Encouraging present employees to refer minority or female applicants.

(G) Making known to the appropriate recruitment sources in the employer's immediate area that qualified minority members are being sought for consideration whenever the licensee hires.

(ii) *To assure nondiscrimination in selection and hiring.* (A) Instructing employees of the licensee who make hiring decisions that all applicants for all jobs are to be considered without discrimination.

(B) Where union agreements exist, cooperating with the union or unions in the development of programs to assure qualified minority persons or females of equal opportunity for employment, and including an effective nondiscrimination clause in new or renegotiated union agreements.

(C) Avoiding use of selection techniques or tests that have the effect of discriminating against minority groups or females.

(iii) *To assure nondiscriminatory placement and promotion.* (A) Instructing employees of the licensee who make decisions on placement and promotion that minority employees and females are to be considered without discrimination, and that job areas in which there is little or no minority or female representation should be reviewed to determine whether this results from discrimination.

(B) Giving minority groups and female employees equal opportunity for positions which lead to higher positions. Inquiring as to the interest and skills of all lower-paid employees with respect to any of the higher-paid positions, followed by assistance, counseling, and effective measures to enable employees with interest and potential to qualify themselves for such positions.

(C) Reviewing seniority practices to insure that such practices are nondiscriminatory and do not have a discriminatory effect.

(D) Avoiding use of selection techniques or tests that have the effect of discriminating against minority groups or females.

(iv) *To assure nondiscrimination in other areas of employment practices.* (A) Examining rates of pay and fringe benefits for present employees with equivalent duties and adjusting any inequities found.

(B) Providing opportunity to perform overtime work on a basis that does not discriminate against qualified minority groups or female employees.

(b) *EEO statement.* Each licensee having 16 or more full-time employees shall file with the FCC, no later than May 31st following the grant of that licensee's first Public Mobile Services authorization, a statement describing fully its current equal employment opportunity program, indicating specific practices to be followed in order to assure equal employment opportunity on the basis of sex, race, color, religion or national origin in such aspects of employment practices as regards recruitment, selection, training, placement, promotion, pay, working conditions, demotion, layoff and termination. Any licensee having 16 or more full-time employees that changes its existing equal employment opportunity program shall file with the FCC, no later than May 31st thereafter, a revised statement reflecting the change(s).

NOTE TO PARAGRAPH (b) OF § 22.321: Licensees having 16 or more full-time employees that were granted their first Public Mobile Services authorization prior to January 1, 1995, and do not have a current EEO statement on file with the FCC, must file such statement, required by paragraph (b) of this section, no later than May 31, 1995.

(c) *Report of complaints filed against licensees.* Each licensee, regardless of how many employees it has, shall submit an annual report to the FCC no later than May 31st of each year indicating whether any complaints regarding violations by the licensee or equal employment provisions of Federal, State, Territorial, or local law have been filed before anybody having competent jurisdiction.

(1) The report should state the parties involved, the date filing, the courts or agencies before which the matters have been heard, the appropriate file number (if any), and the respective disposition or current status of any such complaints.

(2) Any licensee who has filed such information with the EEOC may file a notification of such filing with the FCC in lieu of a report.

(d) *Complaints of violations of Equal Employment Programs.* Complaints alleging employment discrimination against a common carrier licensee are considered by the FCC in the following manner:

(1) If a complaint raising an issue of discrimination is received against a licensee who is within the jurisdiction of the EEOC, it is submitted to that agency. The FCC maintains a liaison with that agency that keeps the FCC informed of the disposition of complaints filed against common carrier licensees.

(2) Complaints alleging employment discrimination against a common carrier licensee who does not fall under the jurisdiction of the EEOC but is covered by appropriate enforceable State law, to which penalties apply, may be submitted by the FCC to the respective State agency.

(3) Complaints alleging employment discrimination against a common carrier licensee who does not fall under the jurisdiction of the EEOC or an appropriate State law, are accorded appropriate treatment by the FCC.

(4) The FCC will consult with the EEOC on all matters relating to the evaluation and determination of compliance by the common carrier licensees with the principles of equal employment as set forth herein.

(5) Complaints indicating a general pattern of disregard of equal employment practices which are received against a licensee that is required to file an employment report to the FCC under § 1.815(a) of this chapter are investigated by the FCC.

(e) *FCC records*. A copy of every annual employment report, equal employment opportunity program statement, reports on complaints regarding violation of equal employment provisions of Federal, State, Territorial, or local law, and copies of all exhibits, letters, and other documents filed as part thereof, all amendments thereto, all correspondence between the licensee and the FCC pertaining to the reports after they have been filed and all documents incorporated therein by reference, are open for public inspection at the offices of the FCC.

(f) *Licensee records*. Each licensee required to file annual employment reports (pursuant to § 1.815(a) of this chapter), equal employment opportunity program statements, and annual reports on complaints regarding violations of equal employment provisions of Federal, State, Territorial, or local law shall maintain for public inspection a file containing a copy of each such report and copies of all exhibits, letters, and other documents filed as part thereto, all correspondence between the licensee and the FCC pertaining to the reports after they have been filed and all documents incorporated therein by reference. The documents must be retained for a period of 2 years.

§ 22.323 Incidental communication services.

Carriers authorized to operate stations in the Public Mobile radio services may use these stations to provide other communications services incidental to the primary public mobile service for which the authorizations were issued, provided that:

(a) The costs and charges of subscribers who do not wish to use incidental services are not increased as a result of provision of incidental services to other subscribers;

(b) The quality of the primary public mobile service does not materially deteriorate as a result of provision of incidental services, and neither growth nor availability of the primary public mobile service is significantly diminished as a result of provision of incidental services; and

(c) The provision of the incidental services is not inconsistent with the Communications Act of 1934, as amended, or with FCC rules and policies.

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68944, Dec. 14, 1998; 65 FR 49202, Aug. 11, 2000]

§ 22.325 Control points.

Each station in the Public Mobile Services must have at least one control point and a person on duty who is responsible for station operation. This section does not require that the person on duty be at the control point or continuously monitor all transmissions of the station. However, the control point must have facilities that enable the person on duty to turn off the transmitters in the event of a malfunction.

TECHNICAL REQUIREMENTS

§ 22.351 Channel assignment policy.

The channels allocated for use in the Public Mobile Services are listed in the applicable subparts of this part. Channels and channel blocks are assigned in such a manner as to facilitate the rendition of service on an interference-free basis in each service area. Except as otherwise provided in this part, each channel or channel block is assigned exclusively to one common carrier in each service area. All applicants for, and licensees of, stations in the Public Mobile Services shall cooperate in the selection and use of channels in order to minimize interference and obtain the most efficient use of the allocated spectrum.

§ 22.352 Protection from interference.

Public Mobile Service stations operating in accordance with FCC rules that provide technical channel assignment criteria for the radio service and channels involved, all other applicable FCC rules, and the terms and conditions of their authorizations are normally considered to be non-interfering. If the FCC determines, however, that interference that significantly interrupts or degrades a radio service is being caused, it may, in accordance with the provisions of sections 303(f) and 316 of the Communications Act of 1934, as amended, (47 U.S.C. 303(f), 316), require modifications to any Public Mobile station as necessary to eliminate such interference.

(a) *Failure to operate as authorized.* Any licensee causing interference to the service of other stations by failing to operate its station in full accordance with its authorization and applicable FCC rules shall discontinue all transmissions, except those necessary for the immediate safety of life or property, until it can bring its station into full compliance with the authorization and rules.

(b) *Intermodulation interference.* Licensees should attempt to resolve such interference by technical means.

(c) *Situations in which no protection is afforded.* Except as provided elsewhere in this part, no protection from interference is afforded in the following situations:

(1) *Interference to base receivers from base or fixed transmitters.* Licensees should attempt to resolve such interference by technical means or operating arrangements.

(2) *Inteference to mobile receivers from mobile transmitters.* No protection is provided against mobile-to-mobile interference.

(3) *Interference to base receivers from mobile transmitters.* No protection is provided against mobile-to-base interference.

(4) *Interference to fixed stations.* Licensees should attempt to resolve such interference by technical means or operating arrangements.

(5) *Anomalous or infrequent propagation modes.* No protection is provided against interference caused by tropospheric and ionospheric propagation of signals.

(6) *Facilities for which the Commission is not notified.* No protection is provided against interference to the service of any additional or modified transmitter operating pursuant to §§1.929 or 22.165, unless and until the licensee modifies its authorization using FCC Form 601.

(7) *In-building radiation systems.* No protection is provided against interference to the service of in-building radiation systems (see § 22.383).

[59 FR 59507, Nov. 17, 1994, as amended at 62 FR 11633, Mar. 12, 1997; 63 FR 68944, Dec. 14, 1998]

§ 22.353 Blanketing interference.

Licensees of Public Mobile Services stations are responsible for resolving cases of blanketing interference in accordance with the provisions of this section.

(a) Except as provided in paragraph (c) of this section, licensees must resolve any cases of blanketing interference in their area of responsibility caused by operation of their transmitter(s) during a one-year period following commencement of service from new or modified transmitter(s). Interference must be resolved promptly at no cost to the complainant.

(b) The area of responsibility is that area in the immediate vicinity of the transmitting antenna of stations where the field strength of the electromagnetic radiation from such stations equals or exceeds 115 dBμV/m. To determine the radial distance to the boundary of this area, the following formula must be used:

$$d = 0.394 \times \sqrt{p}$$

where d is the radial distance to the boundary, in kilometers

p is the radial effective radiated power, in kilowatts

The maximum effective radiated power in the pertinent direction, without consideration of the antenna's vertical radiation pattern or height, must be used in the formula.

(c) Licensees are not required to resolve blanketing interference to mobile

receivers or non-RF devices or blanketing interference occurring as a result of malfunctioning or mistuned receivers, improperly installed consumer antenna systems, or the use of high gain antennas or antenna booster amplifiers by consumers.

(d) Licensees that install transmitting antennas at a location where there are already one or more transmitting antennas are responsible for resolving any new cases of blanketing interference in accordance with this section.

(e) Two or more licensees that concurrently install transmitting antennas at the same location are jointly responsible for resolving blanketing interference cases, unless the FCC can readily determine which station is causing the interference, in which case the licensee of that station is held fully responsible.

(f) After the one year period of responsibility to resolve blanketing interference, licensees must provide upon request technical information to complainants on remedies for blanketing interference.

§ 22.355 Frequency tolerance.

Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table C–1 of this section.

TABLE C–1.—FREQUENCY TOLERANCE FOR TRANSMITTERS IN THE PUBLIC MOBILE SERVICES

Frequency range (MHz)	Base, fixed (ppm)	Mobile ≤3 watts (ppm)	Mobile ≤3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929	5.0	n/a	n/a
929 to 960	1.5	n/a	n/a
2110 to 2220	10.0	n/a	n/a

[61 FR 54099, Oct. 17, 1996]

§ 22.357 Emission types.

Any authorized station in the Public Mobile Services may transmit any emission type provided that the resulting emission complies with the appropriate emission mask. See §§ 22.359, 22.861 and 22.917.

[61 FR 54099, Oct. 17, 1996]

§ 22.359 Emission masks.

Unless otherwise indicated in the rules governing a specific radio service, all transmitters intended for use in the Public Mobile Services must be designed to comply with the emission masks outlined in this section. If an emission outside of the authorized bandwidth causes harmful interference, the FCC may, at its discretion, require greater attenuation than specified in this section.

(a) *Analog modulation.* For transmitters other than those employing digital modulation techniques, the mean or peak envelope power of adjacent channel emissions must be attenuated below the output mean or peak envelope power of the total emission (P, in Watts) in accordance with the following schedule:

(1) On any frequency removed from the center frequency of the assigned channel by more than 50 percent up to and including 100 percent of the authorized bandwidth:

at least 25 dB:

(2) On any frequency removed from the center frequency of the assigned channel by more than 100 percent up to and including 250 percent of the authorized bandwidth:

at least 35 dB:

(3) On any frequency removed from the center frequency of the assigned channel by more than 250 percent of the authorized bandwidth:

at least 43 + 10 log P dB, or 80 dB, whichever is the lesser attenuation.

(b) *Digital modulation.* For transmitters not equipped with an audio low pass filter and for transmitters employing digital modulation techniques, the mean or peak envelope power of sideband emissions must be attenuated below the mean or peak envelope power of the total emission (P, in Watts) in accordance with the following schedule:

(1) For transmitters that operate in the frequency ranges 35 to 44 MHz, 72 to 73 MHz, 75.4 to 76.0 MHz and 152 to 159 MHz,

(i) On any frequency removed from the center frequency of the assigned channel by a displacement frequency f_d

(in kHz) of more than 5 kHz but not more than 10 kHz:

at least 83 log (f_d÷5) dB;

(ii) On any frequency removed from the center frequency of the assigned channel by a displacement frequency f_d (in kHz) of more than 10 kHz but not more than 250 percent of the authorized bandwidth:

at least 29 log f_d2÷11) dB or 50 dB, whichever is the lesser attenuation;

(iii) On any frequency removed from the center frequency of the assigned channel by more than 250 percent of the authorized bandwidth:

at least 43 + 10 log P dB, or 80 dB, whichever is the lesser attenuation.

(2) For transmitters that operate in the frequency ranges 450 to 512 MHz and 929 to 932 MHz,

(i) On any frequency removed from the center frequency of the assigned channel by a displacement frequency f_d (in kHz) of more than 5 kHz but not more than 10 kHz:

at least 83 log (f_d÷5) dB;

(ii) On any frequency removed from the center frequency of the assigned channel by a displacement frequency f_d (in kHz) of more than 10 kHz but not more than 250 percent of the authorized bandwidth:

at least 116 log (f_d÷6.1) dB, or 50 + 10 log P dB, or 70 dB, whichever is the lesser attenuation;

(iii) On any frequency removed from the center frequency of the assigned channel by more than 250 percent of the authorized bandwidth:

at least 43 + 10 log P dB, or 80 dB, whichever is the lesser attenuation.

(c) *Measurement procedure.* Either peak or average power may be used, provided that the same technique is used for both the adjacent channel or sideband emissions and the total emission. The resolution bandwidth of the measuring instrument must be set to 300 Hz for measurements on any frequency removed from the center frequency of the assigned channel by no more than 250 percent of the authorized bandwidth and 30 kHz for measurements on any frequency removed from the center frequency of the assigned channel by more than 250 percent of the authorized bandwidth.

§ 22.361 Standby facilities.

Licensees of stations in the Public Mobile Services may install standby transmitters for the purpose of continuing service in the event of failure or during required maintenance of regular transmitters without obtaining separate authorization, provided that operation of the standby transmitters would not increase the service areas or interference potential of the stations, and that such standby transmitters use the same antenna as the regular transmitters they temporarily replace.

TABLE C–2.—TECHNICAL REQUIREMENTS FOR DIRECTIONAL ANTENNAS

Frequency range	Maximum beamwidth	Suppression
35 to 512 MHz	80°	10 dB
512 to 1500 MHz	20°	13 dB
1500 to 2500 MHz	12°	13 dB

[59 FR 59507, Nov. 17, 1994; 60 FR 9889, Feb. 22, 1995]

§ 22.363 Directional antennas.

Fixed transmitters for point-to-point operation must use a directional transmitting antenna with the major lobe of radiation in the horizontal plane directed toward the receiving antenna or passive reflector of the station for which the transmissions are intended. Directional antennas used in the Public Mobile Services must meet the technical requirements given in Table C–2 to § 22.361.

(a) Maximum beamwidth is for the major lobe at the half power points.

(b) Suppression is the minimum attenuation for any secondary lobe referenced to the main lobe.

(c) An omnidirectional antenna may be used for fixed transmitters where there are two or more receive locations at different azimuths.

§ 22.365 Antenna structures; air navigation safety.

Licensees that own their antenna structures must not allow these antenna structures to become a hazard to air navigation. In general, antenna

structure owners are responsible for registering antenna structures with the FCC if required by part 17 of this chapter, and for installing and maintaining any required marking and lighting. However, in the event of default of this responsibility by an antenna structure owner, each FCC permittee or licensee authorized to use an affected antenna structure will be held responsible by the FCC for ensuring that the antenna structure continues to meet the requirements of part 17 of this chapter. See § 17.6 of this chapter.

(a) *Marking and lighting.* Antenna structures must be marked, lighted and maintained in accordance with Part 17 of this chapter and all applicable rules and requirements of the Federal Aviation Administration.

(b) *Maintenance contracts.* Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) may enter into contracts with other entities to monitor and carry out necessary maintenance of antenna structures. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) that make such contractual arrangements continue to be responsible for the maintenance of antenna structures in regard to air navigation safety.

[61 FR 4365, Feb. 6, 1996]

§ 22.367 Wave polarization.

Public mobile station antennas must be of the correct type and properly installed such that the electromagnetic emissions have the polarization required by this section.

(a) *Vertical.* Waves radiated by the following must be vertically polarized:

(1) Base, mobile, dispatch, and auxiliary test transmitters in the Paging and Radiotelephone Service;

(2) Transmitters in the Offshore Radiotelephone Service;

(3) Transmitters on channels in the 72–76 MHz frequency range;

(4) Base, mobile and auxiliary test transmitters in the Cellular Radiotelephone Service;

(5) Control and repeater transmitters on channels in the 900–960 MHz frequency range;

(6) Rural subscriber stations communicating with base transmitters in the Paging and Radiotelephone Service pursuant to § 22.563.

(7) Ground and airborne mobile transmitters in the Air-ground Radiotelephone Service.

(b) *Horizontal.* Waves radiated by transmitters in the Public Mobile Services, other than transmitters required by paragraph (a) of this section to radiate a vertically polarized wave must be horizontally polarized, except as otherwise provided in paragraphs (c) and (d) of this section.

(c) *Circular.* If communications efficiency would be improved and/or interference reduced, the FCC may authorize transmitters other than those listed in paragraphs (a)(1) through (a)(7) of this section to radiate a circularly polarized wave.

(d) *Any polarization.* Public Land Mobile stations transmitting on channels higher than 960 MHz are not limited as to wave polarization.

§ 22.371 Disturbance of AM broadcast station antenna patterns.

Public Mobile Service licensees that construct or modify towers in the immediate vicinity of AM broadcast stations are responsible for measures necessary to correct disturbance of the AM station antenna pattern which causes operation outside of the radiation parameters specified by the FCC for the AM station, if the disturbance occurred as a result of such construction or modification.

(a) *Non-directional AM stations.* If tower construction or modification is planned within 1 kilometer (0.6 mile) of a non-directional AM broadcast station tower, the Public Mobile Service licensee must notify the licensee of the AM broadcast station in advance of the planned construction or modification. Measurements must be made to determine whether the construction or modification affected the AM station antenna pattern. The Public Mobile Service licensee is responsible for the installation and continued maintenance of any detuning apparatus necessary to restore proper non-directional performance of the AM station tower.

(b) *Directional AM stations.* If tower construction or modification is planned within 3 kilometers (1.9 miles)

of a directional AM broadcast station array, the Public Mobile Service licensee must notify the licensee of the AM broadcast station in advance of the planned construction or modification. Measurements must be made to determine whether the construction or modification affected the AM station antenna pattern. The Public Mobile Service licensee is responsible for the installation and continued maintenance of any detuning apparatus necessary to restore proper performance of the AM station array.

§ 22.373 Access to transmitters.

Unless otherwise provided in this part, the design and installation of transmitters in the Public Mobile Services must meet the requirements of this section.

(a) Transmitters and control points, other than those used with in-building radiation systems, must be installed such that they are readily accessible only to persons authorized by the licensee to operate or service them.

(b) Transmitters must be designed and installed such that any adjustments or controls that could cause the transmitter to deviate from its authorized operating parameters are readily accessible only to persons authorized by the licensee to make such adjustments.

(c) Transmitters (other than hand-carried or pack-carried mobile transmitters) and control points must be equipped with a means of indicating when the control circuitry has been put in a condition that should cause the transmitter to radiate.

(d) Transmitters must be designed such that they can be turned off independently of any remote control circuits.

(e) Transmitters used with in-building radiation systems must be installed such that, to the extent possible, they are readily accessible only to persons authorized by the licensee to access them.

(f) Transmitters used with in-building radiation systems must be designed such that, in the event an unauthorized person does gain access, that person can not cause the transmitter to deviate from its authorized operating parameters in such a way as to cause interference to other stations.

§ 22.377 Certification of transmitters.

Except as provided in paragraph (b) of this section, transmitters used in the Public Mobile Services, including those used with signal boosters, in-building radiation systems and cellular repeaters, must be certificated for use in the radio services regulated under this part. Transmitters must be certificated when the station is ready for service, not necessarily at the time of filing an application.

(a) The FCC may list as certificated only transmitters that are capable of meeting all technical requirements of the rules governing the service in which they will operate. The procedure for obtaining certification is set forth in part 2 of this chapter.

(b) Transmitters operating under a developmental authorization (see subpart D of this part) do not have to be certificated.

(c) In addition to the technical standards contained in this part, transmitters intended for operation in the Cellular Radiotelephone Service must be designed to comply with the technical requirements contained in the cellular system compatibility specification (see § 22.933) and the electronic serial number rule (see § 22.919).

[59 FR 59507, Nov. 17, 1994, as amended at 61 FR 31051, June 19, 1996; 63 FR 36603, July 7, 1998]

§ 22.379 Replacement of equipment.

Licensees may replace any equipment in Public Mobile Service stations without applying for authorization or notifying the FCC, provided that:

(a) If a transmitter is replaced, the replacement transmitter must be certificated for use in the Public Mobile Services;

(b) The antenna structure must not become a hazard to air navigation and its height must not be not increased;

(c) The interference potential of the station must not be increased;

(d) The Effective radiated power, emission type, antenna radiation pattern and center of radiation height above average terrain are not changed.

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 36603, July 7, 1998]

§ 22.381 Auxiliary test transmitters.

Auxiliary test transmitters may be used only for testing the performance of fixed receiving equipment located remotely from the control point. Auxiliary test transmitters may transmit only on channels designated for mobile transmitters.

§ 22.383 In-building radiation systems.

Licensees may install and operate in-building radiation systems without applying for authorization or notifying the FCC, provided that the locations of the in-building radiation systems are within the protected service area of the licensee's authorized transmitter(s) on the same channel or channel block.

Subpart D—Developmental Authorizations

§ 22.401 Description and purposes of developmental authorizations.

Communications common carriers may apply for, and the FCC may grant, authority to construct and operate one or more transmitters subject to the rules in this subpart and other limitations, waivers and/or conditions that may be prescribed. Authorizations granted on this basis are developmental authorizations. In general, the FCC grants developmental authorizations in situations and circumstances where it cannot reasonably be determined in advance whether a particular transmitter can be operated or a particular service can be provided without causing interference to the service of existing stations. For example, the FCC may grant developmental authorizations for:

(a) Field strength surveys to evaluate the technical suitability of antenna locations for stations in the Public Mobile Services;

(b) Experimentation leading to the potential development of a new Public Mobile Service or technology; or,

(c) Stations transmitting on channels in certain frequency ranges, to provide a trial period during which it can be individually determined whether such stations can operate without causing excessive interference to existing services.

§ 22.403 General limitations.

The provisions and requirements of this section are applicable to all developmental authorizations.

(a) Developmental authorizations are granted subject to the condition that they may be cancelled by the FCC at any time, upon notice to the licensee, and without the opportunity for a hearing.

(b) Except as otherwise indicated in this subpart, developmental authorizations normally terminate one year from the date of grant. The FCC may, however, specify a different term.

(c) Stations operating under developmental authorizations must not interfere with the services of regularly authorized stations.

(d) A grant of a developmental authorization does not provide any assurance that the FCC will grant an application for regular authorization to operate the same transmitter(s), even if operation during the developmental period has not caused interference and/or the developmental program is successful.

§ 22.409 Developmental authorization for a new Public Mobile Service or technology.

The FCC may grant applications for developmental authority to construct and operate transmitters for the purpose of developing a new Public Mobile Service or a new technology not regularly authorized under this part, subject to the requirements of this section. Such applications may request the use of any portion of the spectrum allocated for Public Mobile Services in the Table of Frequency Allocations contained in part 2 of this chapter, regardless of whether that spectrum is regularly available under this part. Requests to use any portion of the spectrum for a service or purpose other than that indicated in the Table of Frequency Allocations in part 2 of this

chapter may be made only in accordance with the provisions of part 5 of this chapter.

(a) *Preliminary determination.* The FCC will make a preliminary determination with respect to the factors in paragraphs (a)(1) through (a)(3) of this section before acting on an application for developmental authority pursuant to this section. These factors are:

(1) That the public interest, convenience or necessity warrants consideration of the establishment of the proposed service or technology;

(2) That the proposal appears to have potential value to the public that could warrant the establishment of the new service or technology;

(3) That some operational data should be developed for consideration in any rule making proceeding which may be initiated to establish such service or technology.

(b) *Petition required.* Applications for developmental authorizations pursuant to this section must be accompanied by a petition for rule making requesting the FCC to amend its rules as may be necessary to provide for the establishment of the proposed service or technology.

(c) *Application requirements.* Authorizations for developmental authority pursuant to this section will be issued only upon a showing that the applicant has a definite program of research and development which has reasonable promise of substantial contribution to the services authorized by this part. The application must contain an exhibit demonstrating the applicant's technical qualifications to conduct the research and development program, including a description of the nature and extent of engineering facilities that the applicant has available for such purpose. Additionally, the FCC may, in its discretion, require a showing of financial qualification.

(d) *Communication service for hire prohibited.* Stations authorized under developmental authorizations granted pursuant to this section must not be used to provide communication service for hire, unless otherwise specifically authorized by the FCC.

(e) *Adherence to program.* Carriers granted developmental authorization pursuant to this section must substantially adhere to the program of research and development described in their application for developmental authorization, unless the FCC directs otherwise.

(f) *Report requirements.* Upon completion of the program of research and development, or upon the expiration of the developmental authorization under which such program was permitted, or at such times during the term of the station authorization as the FCC may deem necessary to evaluate the progress of the developmental program, the licensee shall submit a comprehensive report, containing:

(1) A description of the progress of the program and a detailed analysis of any result obtained;

(2) Copies of any publications produced by the program;

(3) A listing of any patents applied for, including copies of any patents issued;

(4) Copies of any marketing surveys or other measures of potential public demand for the new service;

(5) A description of the carrier's experiences with operational aspects of the program including—

(i) The duration of transmissions on each channel or frequency range and the technical parameters of such transmissions; and,

(ii) Any interference complaints received as a result of operation and how these complaints were investigated and resolved.

(g) *Confidentiality.* Normally, applications and developmental reports are a part of the FCC's public records. However, an applicant or licensee may request that the FCC withhold from public records specific exhibits, reports and other material associated with a developmental authorization.

(h) *Renewal.* Expiring developmental authorizations issued pursuant to this section may be renewed if the carrier—

(1) Shows that further progress in the program of research and development requires additional time to operate under developmental authorization;

(2) Complied with the reporting requirements of paragraph (f) of this section; and,

(3) Immediately resolved to the FCC's satisfaction all complaints of interference caused by the station operating under developmental authority.

[59 FR 59507, Nov. 17, 1994, as amended at 61 FR 54099, Oct. 17, 1996]

§ 22.411 Developmental authorization of 43 MHz paging transmitters.

Because of the potential for interference to the intermediate frequency stages of receivers in broadcast television sets and video recorders, 43 MHz paging channels are assigned only under developmental authorizations subject to the requirements of this section, except as provided in paragraph (d) of this section.

(a) *Carrier responsibility*. Carriers so authorized shall operate the 43 MHz paging service under developmental authority for a period of two years. During the two year developmental period, carriers must resolve any broadcast television receiver intermediate frequency interference problems that may occur as a result of operation of the 43 MHz paging transmitter(s). Carriers shall inform subscribers receiving service on the channels assigned under developmental authority during the developmental period that this service could be terminated by the FCC on short notice if such action were to become necessary to eliminate interference. Carriers shall notify the appropriate FCC Field Office, in advance, of the date on which service to subscribers is to begin.

(b) *Periodic surveys*. To determine the extent of any interference to broadcast television receivers resulting from operation of 43 MHz paging stations authorized pursuant to this section, carriers shall conduct semi-annual surveys during the first two years of operation. The first such survey is to begin on the date when service to subscribers commences. For each survey, the carrier shall contact at least 25 television viewers to determine whether they have experienced interference.

(1) The carrier shall contact viewers located throughout the geographic area encompassed by a 3 kilometer (2 mile) radius of the 43 MHz paging transmitter antenna site. The carrier must not attempt to obtain a misleading survey by contacting only viewers less likely to be experiencing interference. For example, the carrier must not contact only the viewers located most distant from the paging transmitter antenna site. Instead, the carrier shall contact viewers located near the paging transmitter antenna site.

(2) The carrier shall not, in subsequent surveys, contact viewers who were contacted in a previous survey; provided that, in the event that all of the viewers within 3 kilometers (2 miles) have been contacted, viewers located near the paging transmitter antenna site shall be contacted again.

(c) *Periodic reports*. Following each survey, the carrier shall submit to the FCC a written report disclosing and evaluating the extent of any interference. These reports must include:

(1) The number of the report (1 to 4);

(2) The station call sign;

(3) The file number of the application that resulted in the developmental authorization;

(4) An exact description of the transmitter location(s);

(5) The date(s) and time of day when the survey was conducted;

(6) The survey method used (e.g. telephone, on-site, etc.);

(7) The names, addresses and telephone numbers of the viewers contacted;

(8) If interference resulted from operation of the 43 MHz paging station, a summary of how the interference problem was resolved;

(9) The names and telephone numbers of any technical personnel consulted and/or employed to resolve interference problems.

(d) *Exceptions*. The FCC may grant a regular authorization in the Paging and Radiotelephone Service for a 43 MHz paging station in the following circumstances:

(1) After the two-year developmental period, provided that broadcast TV interference complaints have been resolved by the carrier in a satisfactory manner. Licensees that hold a developmental authorization for a 43 MHz paging station and wish to request a regular authorization must file an application using FCC Form 601 via the ULS prior to the expiration of the developmental period.

(2) In the case of the assignment of or a transfer of control of a regular authorization of a 43 MHz paging station in the Paging and Radiotelephone Service, provided that the station has been in continuous operation providing service with no substantial interruptions.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 63 FR 68944, Dec. 14, 1998]

§ 22.413 Developmental authorization of 72–76 MHz fixed transmitters.

Because of the potential for interference with the reception by broadcast television sets and video recorders of full service TV stations transmitting on TV Channels 4 and 5, 72–76 MHz channels are assigned for use within 16 kilometers (10 miles) of the antenna of any full service TV station transmitting on TV Channel 4 or 5 only under developmental authorizations subject to the requirements of this section, except as provided in paragraph (b) of this section.

(a) *Carrier responsibility*. Carriers so authorized shall operate the 72–76 MHz fixed station under developmental authority for a period of at least six months. During the developmental period, carriers must resolve any broadcast television receiver interference problems that may occur as a result of operation of the 72–76 MHz transmitter(s).

(b) *Exceptions*. The FCC may grant a regular authorization in the Paging and Radiotelephone Service for a 72–76 MHz fixed station under the following circumstances:

(1) After six months of operation under developmental authorization, and provided that broadcast TV interference complaints have been resolved by the carrier in a satisfactory manner. Licensees that hold a developmental authorization for a 72–76 MHz fixed station and wish to request a regular authorization must file an application using FCC Form 601 via the ULS prior to the expiration of the developmental authorization.

(2) In the case of the assignment of or a transfer of control of a regular authorization of a 72–76 MHz fixed station in the Paging and Radiotelephone Service, the FCC may grant such assignment or consent to such transfer of control provided that the station has been in continuous operation providing service with no substantial interruptions.

(3) If a proposed 72–76 MHz fixed transmitter antenna is to be located within 50 meters (164 feet) of the antenna of the full service TV station transmitting on TV Channel 4 or 5, the FCC may grant a regular authorization instead of a developmental authorization.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 63 FR 68944, Dec. 14, 1998]

§ 22.415 Developmental authorization of 928–960 MHz fixed transmitters.

Channels in the 928–929 MHz and 952–960 MHz ranges may be assigned under developmental authorizations to fixed transmitters in point-to-multipoint systems at locations that are short-spaced (i.e. do not meet the 113 kilometer (70 mile) separation requirement of § 22.625), subject to the requirements of this section.

(a) *Carrier responsibility*. Applications for developmental authorizations pursuant to this section must contain an engineering analysis that shows that no interference will be caused or received. Carriers so authorized shall operate the short-spaced transmitter for a period of one year.

(b) *Exceptions*. The FCC may grant a regular authorization in the Paging and Radiotelephone Service for a short-spaced fixed station under the following circumstances:

(1) After one year of operation under developmental authorization, and provided that no interference has been caused. Licensees that hold a developmental authorization and wish to request a regular authorization must file an application using FCC Form 601 prior to the expiration of the developmental authorization.

(2) In the case of the assignment of or a transfer of control of a regular authorization of a short-spaced fixed station in the Paging and Radiotelephone Service, the FCC may grant such assignment or consent to such transfer of control provided that the station has been in continuous operation providing

service and no interference has been caused.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 63 FR 68944, Dec. 14, 1998]

§ 22.417 Developmental authorization of meteor burst systems.

Because of the potential for interference to other 42–46 MHz operations, central office and rural subscriber stations in Alaska are authorized to use meteor burst propagation modes to provide rural radiotelephone service only under developmental authorizations subject to the requirements of this section, except as provided in paragraph (b) of this section. See also §§ 22.725(c) and 22.729.

(a) *Carrier responsibility*. Carriers and subscribers so authorized shall operate the station under developmental authority for a period of at least one year.

(b) *Exceptions*. The FCC may grant a regular authorization in the Rural Radiotelephone Service for a central office or rural subscriber to use meteor burst propagation modes to provide rural radiotelephone service under the following circumstances:

(1) After six months of operation under developmental authorization, and provided that no interference has been caused to other operations. Licensees that hold a developmental authorization to use meteor burst propagation modes to provide rural radiotelephone service and wish to request a regular authorization must file an application using FCC Form 601 prior to the expiration of the developmental authorization.

(2) In the case of the assignment of or a transfer of control of a regular authorization of a central office or rural subscriber station authorizing the use of meteor burst propagation modes in the Rural Radiotelephone Service, the FCC may grant such assignment or consent to such transfer of control provided that the station has been in operation providing service with no substantial interruptions.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 63 FR 68944, Dec. 14, 1998]

Subpart E—Paging and Radiotelephone Service

§ 22.501 Scope.

The rules in this subpart govern the licensing and operation of public mobile paging and radiotelephone stations. The licensing and operation of these stations are also subject to rules elsewhere in this part that apply generally to the Public Mobile Services. However, in case of conflict, the rules in this subpart govern.

§ 22.503 Paging geographic area authorizations.

The FCC considers applications for and issues paging geographic area authorizations in the Paging and Radiotelephone Service in accordance with the rules in this section. Each paging geographic area authorization contains conditions requiring compliance with paragraphs (h) and (i) of this section.

(a) *Channels*. The FCC may issue a paging geographic area authorization for any channel listed in § 22.531 of this part or for any channel pair listed in § 22.561 of this part.

(b) *Paging geographic areas*. The paging geographic areas are as follows:

(1) The Nationwide paging geographic area comprises the District of Columbia and all States, Territories and possessions of the United States of America.

(2) Major Economic Areas (MEAs) and Economic Areas (EAs) are defined below. EAs are defined by the Department of Commerce, Bureau of Economic Analysis. *See* Final Redefinition of the MEA Economic Areas, 60 FR 13114 (March 10, 1995). MEAs are based on EAs. In addition to the Department of Commerce's 172 EAs, the FCC shall separately license Guam and the Northern Mariana Islands, Puerto Rico and the United States Virgin Islands, and American Samoa, which have been assigned FCC-created EA numbers 173–175, respectively, and MEA numbers 49–51, respectively.

(3) The 51 MEAs are composed of one or more EAs as defined in the following table:

MEAs	EAs
1 (Boston)	1–3.
2 (New York City)	4–7, 10.

MEAs	EAs
3 (Buffalo)	8.
4 (Philadelphia)	11–12.
5 (Washington)	13–14.
6 (Richmond)	15–17, 20.
7 (Charlotte-Greensboro-Greenville-Raleigh).	18–19, 21–26, 41–42, 46.
8 (Atlanta)	27–28, 37–40, 43.
9 (Jacksonville)	29, 35.
10 (Tampa-St. Petersburg-Orlando).	30, 33–34.
11 (Miami)	31–32.
12 (Pittsburgh)	9, 52–53.
13 (Cincinnati-Dayton)	48–50.
14 (Columbus)	51.
15 (Cleveland)	54–55.
16 (Detroit)	56–58, 61–62.
17 (Milwaukee)	59–60, 63, 104–105, 108.
18 (Chicago)	64–66, 68, 97, 101.
19 (Indianapolis)	67.
20 (Minneapolis-St. Paul)	106–107, 109–114, 116.
21 (Des Moines-Quad Cities)	100, 102–103, 117.
22 (Knoxville)	44–45.
23 (Louisville-Lexington-Evansville).	47, 69–70, 72.
24 (Birmingham)	36, 74, 78–79.
25 (Nashville)	71.
26 (Memphis-Jackson)	73, 75–77.
27 (New Orleans-Baton Rouge).	80–85.
28 (Little Rock)	90–92, 95.
29 (Kansas City)	93, 99, 123.
30 (St. Louis)	94, 96, 98.
31 (Houston)	86–87, 131.
32 (Dallas-Fort Worth)	88–89, 127–130, 135, 137–138.
33 (Denver)	115, 140–143.
34 (Omaha)	118–121.
35 (Wichita)	122.
36 (Tulsa)	124.
37 (Oklahoma City)	125–126.
38 (San Antonio)	132–134.
39 (El Paso-Albuquerque)	136, 139, 155–157.
40 (Phoenix)	154, 158–159.
41 (Spokane-Billings)	144–147, 168.
42 (Salt Lake City)	148–150, 152.
43 (San Francisco-Oakland-San Jose).	151, 162–165.
44 (Los Angeles-San Diego)	153, 160–161.
45 (Portland)	166–167.
46 (Seattle)	169–170.
47 (Alaska)	171.
48 (Hawaii)	172.
49 (Guam and the Northern Mariana Islands).	173.
50 (Puerto Rico and U.S. Virgin Islands).	174.
51 (American Samoa)	175.

(c) *Availability*. The FCC may determine whether to issue a paging geographic area authorization for any specific channel or channel pair in any specific paging geographic area. The FCC may replace existing site specific authorizations for facilities on a channel or channel pair located in a paging geographic area with a paging geographic area authorization for that channel or channel pair, if in its sole discretion, the FCC determines that the public interest would be served by such replacement.

(d) *Filing windows*. The FCC accepts applications for paging geographic area authorizations only during filing windows. The FCC issues Public Notices announcing in advance the dates of the filing windows, and the specific paging geographic areas and channels for which applications may be accepted.

(e) *One grant per geographic area*. The FCC may grant one and only one application for a paging geographic area authorization for any specific channel or channel pair in any specific paging geographic area defined in paragraph (b) of this section. Selection from among mutually exclusive applications for a paging geographic area authorization will be made in accordance with the procedures in §§22.131 and 22.200 through 22.299. If after the selection process but prior to filing a ''long form'' application, a successful bidder decides to partition the paging geographic area, the FCC may require and accept multiple ''long form'' applications from the consortium members.

(f) *Exclusive right to expand*. During the term of a paging geographic area authorization, the FCC does not accept, from anyone other than the paging geographic area licensee, any major application for authorization to operate a facility that would serve unserved area within the paging geographic area specified in that paging geographic area authorization, on the channel specified in that paging geographic area authorization, unless any extension of the interfering contour of the proposed facility falls:

(1) Within the composite interfering contour of another licensee; or,

(2) Into unserved area and the paging geographic area licensee consents to such extension.

(g) *Subsequent applications not accepted*. During the term of a paging geographic area authorization, the FCC does not accept any application for authorization relating to a facility that is or would be located within the paging geographic area specified in that paging geographic area authorization, on the channel specified in that paging geographic area authorization, except in the following situations:

(1) FCC grant of an application authorizing the construction of the facility could have a significant environmental effect as defined by § 1.1307 of this chapter. *See* § 22.115(a)(5).

(2) Specific international coordination procedures are required, prior to assignment of a channel to the facility, pursuant to a treaty or other agreement between the United States government and the government of Canada or Mexico. *See* § 22.169.

(3) The paging geographic area licensee or another licensee of a system within the paging geographic area applies to assign its authorization or for FCC consent to a transfer of control.

(h) *Adjacent geographic area coordination required.* Before constructing a facility for which the interfering contour (as defined in § 22.537 or § 22.567 of this part, as appropriate for the channel involved) would extend into another paging geographic area, a paging geographic area licensee must obtain the consent of the relevant co-channel paging geographic area licensee, if any, into whose area the interfering contour would extend. Licensees are expected to cooperate fully and in good faith attempt to resolve potential interference problems before bringing matters to the FCC. In the event that there is no co-channel paging geographic area licensee from whom to obtain consent in the area into which the interfering contour would extend, the facility may be constructed and operated subject to the condition that, at such time as the FCC issues a paging geographic area authorization for that adjacent geographic area, either consent must be obtained or the facility modified or eliminated such that the interfering contour no longer extends into the adjacent geographic area.

(i) *Protection of existing service.* All facilities constructed and operated pursuant to a paging geographic area authorization must provide co-channel interference protection in accordance with § 22.537 or § 22.567, as appropriate for the channel involved, to all authorized co-channel facilities of exclusive licensees within the paging geographic area. Non-exclusive licensees on the thirty-five exclusive 929 MHz channels are not entitled to exclusive status, and will continue to operate under the sharing arrangements established with the exclusive licensees and other non-exclusive licensees that were in effect prior to February 19, 1997. MEA, EA, and nationwide geographic area licensees have the right to share with non-exclusive licensees on the thirty-five exclusive 929 MHz channels on a non-interfering basis.

(j) *Site location restriction.* The transmitting antenna of each facility constructed and operated pursuant to a paging geographic area authorization must be located within the paging geographic area specified in the authorization.

(k) *Coverage requirements.* Failure by an MEA or EA licensee to meet either the coverage requirements in paragraphs (k)(1) and (k)(2) of this section, or alternatively, the substantial service requirement in paragraph (k)(3) of this section, will result in automatic termination of authorizations for those facilities that were not authorized, constructed, and operating at the time the geographic area authorization was granted. MEA and EA licensees have the burden of showing when their facilities were authorized, constructed, and operating, and should retain necessary records of these sites until coverage requirements are fulfilled. For the purpose of this paragraph, to ''cover'' area means to include geographic area within the composite of the service contour(s) determined by the methods of §§ 22.537 or 22.567 as appropriate for the particular channel involved. Licensees may determine the population of geographic areas included within their service contours using either the 1990 census or the 2000 census, but not both.

(1) No later than three years after the initial grant of an MEA or EA geographic area authorization, the licensee must construct or otherwise acquire and operate sufficient facilities to cover one third of the population in the paging geographic area. The licensee must notify the FCC at the end of the three-year period pursuant to § 1.946 of this chapter, either that it has satisfied this requirement or that it plans to satisfy the alternative requirement to provide substantial service in accordance with paragraph (k)(3) of this section.

(2) No later than five years after the initial grant of an MEA or EA geographic area authorization, the licensee must construct or otherwise acquire and operate sufficient facilities to cover two thirds of the population in the paging geographic area. The licensee must notify the FCC at the end of the five year period pursuant to § 1.946 of this chapter, either that it has satisfied this requirement or that it has satisfied the alternative requirement to provide substantial service in accordance with paragraph (k)(3) of this section.

(3) As an alternative to the coverage requirements of paragraphs (k)(1) and (k)(2) of this section, the paging geographic area licensee may demonstrate that, no later than five years after the initial grant of its paging geographic area authorization, it provides substantial service to the paging geographic area. ''Substantial service'' means service that is sound, favorable, and substantially above a level of mediocre service that would barely warrant renewal.

[62 FR 11633, Mar. 12, 1997, as amended at 63 FR 68945, Dec. 14, 1998; 64 FR 33782, June 24, 1999]

§ 22.507 Number of transmitters per station.

This section concerns the number of transmitters licensed under each station authorization in the Paging and Radiotelephone Service, other than paging geographic area authorizations.

(a) *Operationally related transmitters.* Each station must have at least one transmitter. There is no limit to the number of transmitters that a station may comprise. However, transmitters within a station should be operationally related and/or should serve the same general geographical area. Operationally related transmitters are those that operate together as a system (*e.g.*, trunked systems, simulcast systems), rather than independently.

(b) *Split of large systems.* The FCC may split wide-area systems into two or more stations for administrative convenience. Except for nationwide paging and other operationally related transmitters, transmitters that are widely separated geographically are not licensed under a single authorization.

(c) *Consolidation of separate stations.* The FCC may consolidate site-specific contiguous authorizations upon request (FCC Form 601) of the licensee, if appropriate under paragraph (a) of this section. Paging licensees may include remote, stand-alone transmitters under the single system-wide authorization, if the remote, stand-alone transmitter is linked to the system via a control/repeater facility or by satellite. Including a remote, stand-alone transmitter in a system-wide authorization does not alter the limitations provided under § 22.503(f) on entities other than the paging geographic area licensee. In the alternative, paging licensees may maintain separate site-specific authorizations for stand-alone or remote transmitters. The earliest expiration date of the authorizations that make up the single system-wide authorization will determine the expiration date for the system-wide authorization. Licensees must file timely renewal applications for site-specific authorizations included in a single system-wide authorization request until the request is approved. Renewal of the system-wide authorization will be subject to § 1.949 of this chapter.

(d) *Replacement of site-by-site authorizations with single authorization.* After a paging geographic area authorization for a channel has been issued, the FCC may, on its own motion, replace the authorization(s) of any other licensee (for facilities located within that paging geographic area on that channel) with a single replacement authorization.

[62 FR 11634, Mar. 12, 1997, as amended at 63 FR 68945, Dec. 14, 1998; 64 FR 33784, June 24, 1999]

§ 22.509 Procedures for mutually exclusive applications in the Paging and Radiotelephone Service.

Mutually exclusive applications in the Paging and Radiotelephone Service, including those that are mutually exclusive with applications in the Rural Radiotelephone Service, are processed in accordance with § 22.131 and with this section.

(a) Applications in the Paging and Radiotelephone Service may be mutually exclusive with applications in the Rural Radiotelephone Service if they

seek authorization to operate facilities on the same channel in the same area, or the technical proposals are otherwise in conflict. See § 22.567.

(b) A modification application in either service filed on the earliest filing date may cause all later-filed mutually exclusive applications of any type in either service to be ''cut off'' (excluded from a same-day filing group) and dismissed, pursuant to § 22.131(c)(3)(ii) and § 22.131(c)(4).

[59 FR 59956, Nov. 21, 1994; as amended at 61 FR 54099, Oct. 17, 1996; 64 FR 33784, June 24, 1999]

§ 22.511 Construction period for the Paging and Radiotelephone Service.

The construction period for stations in the Paging and Radiotelephone Service is one year.

§ 22.513 Partitioning and disaggregation.

MEA and EA licensees may apply to partition their authorized geographic service area or disaggregate their authorized spectrum at any time following grant of their geographic area authorizations. Nationwide geographic area licensees may apply to partition their authorized geographic service area or disaggregate their authorized spectrum at any time as of August 23, 1999.

(a) *Application required.* Parties seeking approval for partitioning and/or disaggregation shall apply for partial assignment of a license pursuant to § 1.948 of this chapter.

(b) *Partitioning.* In the case of partitioning, requests for authorization for partial assignment of a license must include, as attachments, a description of the partitioned service area and a calculation of the population of the partitioned service area and the authorized geographic service area. The partitioned service area shall be defined by 120 sets of geographic coordinates at points at every 3 degrees azimuth from a point within the partitioned service area along the partitioned service area boundary unless either an FCC-recognized service area is used (e.g., MEA or EA) or county lines are followed. The geographical coordinates must be specified in degrees, minutes, and seconds to the nearest second latitude and longitude, and must be based upon the 1983 North American Datum (NAD83). In the case where FCC-recognized service areas or county lines are used, applicants need only list the specific area(s) through use of FCC designations or county names that constitute the partitioned area.

(c) *Disaggregation.* Spectrum may be disaggregated in any amount.

(d) *Combined partitioning and disaggregation.* Licensees may apply for partial assignment of authorizations that propose combinations of partitioning and disaggregation.

(e) *License term.* The license term for a partitioned license area and for disaggregated spectrum shall be the remainder of the original licensee's license term as provided for in § 1.955 of this chapter.

(f) *Coverage requirements for partitioning.* (1) Parties to a partitioning agreement must satisfy at least one of the following requirements:

(i) The partitionee must satisfy the applicable coverage requirements set forth in § 22.503(k)(1), (2) and (3) for the partitioned license area; or

(ii) The original licensee must meet the coverage requirements set forth in § 22.503(k)(1), (2) and (3) for the entire geographic area. In this case, the partitionee must meet only the requirements for renewal of its authorization for the partitioned license area.

(2) Parties seeking authority to partition must submit with their partial assignment application a certification signed by both parties stating which of the above options they select.

(3) Partitionees must submit supporting documents showing compliance with their coverage requirements as set forth in § 22.503(k)(1), (2) and (3).

(4) Failure by any partitionee to meet its coverage requirements will result in automatic cancellation of the partitioned authorization without further Commission action.

(g) *Coverage requirements for disaggregation.* (1) Parties to a disaggregation agreement must satisfy at least one of the following requirements:

(i) Either the disaggregator or disaggregatee must satisfy the coverage requirements set forth in § 22.503

(k)(1), (2) and (3) for the entire license area; or

(ii) Parties must agree to share responsibility for meeting the coverage requirements set forth in § 22.503 (k)(1), (2) and (3) for the entire license area.

(2) Parties seeking authority to disaggregate must submit with their partial assignment application a certification signed by both parties stating which of the above requirements they meet.

(3) Disaggregatees must submit supporting documents showing compliance with their coverage requirements as set forth in § 22.503 (k)(1), (2) and (3).

(4) Parties that accept responsibility for meeting the coverage requirements and later fail to do so will be subject to automatic license cancellation without further Commission action.

[64 FR 33784, June 24, 1999]

§ 22.515 Permissible communications paths.

Mobile stations may communicate only with and through base stations. Base stations may communicate only with mobile stations and receivers on land or surface vessels.

§ 22.527 Signal boosters.

Licensees may install and operate signal boosters on channels listed in § 22.531 only in accordance with the provisions of § 22.165 governing additional transmitters for existing systems. Licensees must not allow any signal booster that they operate to cause interference to the service or operation of any other authorized stations or systems.

[61 FR 31051, June 19, 1996]

§ 22.529 Application requirements for the Paging and Radiotelephone Service.

In addition to information required by subparts B and D of this part, applications for authorization in the Paging and Radiotelephone Service contain required information as described in the instructions to the form. Site coordinates must be referenced to NAD83 and be correct to +-1 second.

(a) *Administrative information.* The following information, associated with Form 601, is required as indicated. Each application of any type, including applications for paging geographic area authorizations, must contain one and only one Schedule A.

(1) The purpose of the filing is required for each application of any type.

(2) The geographic area designator, channel and geographic area name are required only for each application for a paging geographic area authorization.

(3) The FCC control point number, if any, the location (street address, city or town, state), the telephone number and an indication of the desired database action are required only for each application proposing to add or delete a control point.

(4) The FCC location number, file number and location (street address, city or town, state) of authorized facilities that have not been constructed are required only for each application requesting an extension of time to construct those facilities.

(b) *Technical data.* The following data, associated with FCC Form 601, are required as indicated for each application. Applications for a paging geographic area authorization must not contain Schedule B. Other type of applications may contain as many Schedule Bs as are necessary for the intended purpose.

(1) For each transmitting antenna site to be added, deleted or modified, the following are required: an indication of the desired database action, the Commission location number, if any, the street address or other description of the transmitting antenna site, the city, county and state, the geographic coordinates (latitude and longitude), correct to ±1 second, of the transmitting antenna site (NAD83), and in the case of a proposed relocation of a transmitting antenna, the Commission location number and geographic coordinates, correct to ±1 second, of the transmitting antenna site (NAD83) to which the geographic coordinates of the current location are referenced.

(2) For each transmitting antenna site to be added, deleted or modified, the following supplementary information is required: An indication as to whether or not the transmitting antenna site is within 200 kilometers (124 miles) of the U.S.-Mexico border, and an indication as to whether or not the

transmitting antenna site is North of Line A or East of Line C. Line A and Line C are defined in § 2.1 of this chapter. For each adjacent geographic area within 200 kilometers (124 miles) of each transmitting antenna site to be added, deleted or modified, the geographic area designator and name, and the shortest distance (in kilometers) to the boundary of that geographic area.

(3) The height (in meters) above average terrain of the center of radiation of the antenna, the beamwidth of the main lobe of the horizontal radiation pattern of the electric field of the antenna, the height (in meters) to the tip of the antenna above ground level, a polar plot of the horizontal gain pattern of the antenna, the antenna gain in the maximum lobe and the electric field polarization of the wave emitted by the antenna when installed as proposed.

(i) The center frequency of the requested channel, the transmitter classification (e.g. base, fixed mobile), the designator for any non-standard emission type to be used, including bandwidth and modulation type, and the maximum effective radiated power.

(ii) For each of the eight cardinal radials, the antenna height above the average elevation along the radial, and the effective radiated power of each transmitter in the direction of the radial.

(iii) For each transmitter proposed to transmit on a channel reserved for point-to-multipoint operation involving transmission to four or more points of communications (i.e. base transmitters), the following is required for each point of communication: an indication of the desired database action, the location (city or town, state), and the geographical coordinates (latitude and longitude, NAD 83).

(c) Upon request by an applicant, licensee, or the Commission, a part 22 applicant or licensee of whom the request is made shall furnish the antenna type, model, and the name of the antenna manufacturer to the requesting party within ten (10) days of receiving written notification.

[62 FR 11635, Mar. 12, 1997, as amended at 63 FR 68945, Dec. 14, 1998; 64 FR 53240, Oct. 1, 1999]

EFFECTIVE DATE NOTE: At 64 FR 53240, Oct. 1, 1999, § 22.529 was amended by adding paragraph (c). This paragraph contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

PAGING OPERATION

§ 22.531 Channels for paging operation.

The following channels are allocated for assignment to base transmitters that provide paging service, either individually or collectively under a paging geographic area authorization. Unless otherwise indicated, all channels have a bandwidth of 20 kHz and are designated by their center frequencies in MegaHertz.

Low VHF Channels			
35.20	35.46	43.20	43.46
35.22	35.50	43.22	43.50
35.24	35.54	43.24	43.54
35.26	35.56	43.26	43.56
35.30	35.58	43.30	43.58
35.34	35.60	43.34	43.60
35.38	35.62	43.38	43.62
35.42	35.66	43.42	43.66
High VHF Channels			
152.24	152.84	158.10	158.70
UHF Channels			
931.0125	931.2625	931.5125	931.7625
931.0375	931.2875	931.5375	931.7875
931.0625	931.3125	931.5625	931.8125
931.0875	931.3375	931.5875	931.8375
931.1125	931.3625	931.6125	931.8625
931.1375	931.3875	931.6375	931.8875
931.1625	931.4125	931.6625	931.9125
931.1875	931.4375	931.6875	931.9375
931.2125	931.4625	931.7125	931.9625
931.2375	931.4875	931.7375	931.9875

(a) The 43 MHz channels may be assigned under developmental authorizations, pursuant to the requirements of § 22.411.

(b) Channels 931.8875, 931.9125, and 931.9375 MHz may be assigned only to transmitters providing nationwide network paging service.

(c) Upon application using FCC Form 601, common carriers may be authorized to provide one-way paging service using the leased subcarrier facilities of broadcast stations licensed under part 73 of this chapter.

(d) Occasionally in case law and other formal and informal documents,

the low VHF channels have been referred to as ''lowband'' channels, and the high VHF channels have been referred to as ''guardband'' channels.

(e) Pursuant to the U.S.-Canada Interim Coordination Considerations for 929–932 MHz, as amended, only the following UHF channels may be assigned in the continental United States North of Line A or in the State of Alaska East of Line C, within the indicated longitudes:

(1) From longitude W.73° to longitude W.75° and from longitude W.78° to longitude W.81°:

931.0125	931.1125	931.1875	931.2625
931.0375	931.1375	931.2125	931.8625
931.0625	931.1625	931.2375	

(2) From longitude W.81° to longitude W.85°:

931.0125	931.2125	931.3875	931.5875
931.0375	931.2375	931.4125	931.6125
931.0625	931.2625	931.4625	931.6375
931.1125	931.2875	931.4875	931.8625
931.1375	931.3125	931.5125	
931.1625	931.3375	931.5375	
931.1875	931.3625	931.5625	

(3) Longitudes other than specified in paragraphs (e)(1) and (e)(2) of this section:

931.0125	931.1625	931.2875	931.4125
931.0375	931.1875	931.3125	931.4625
931.0625	931.2125	931.3375	931.8625
931.1125	931.2375	931.3625	
931.1375	931.2625	931.3875	

(4) At any longitude, with authorization condition requiring coordinated, shared use and equal access by licensees in both countries:

931.4375	931.8875	931.9125	931.9375

(f) For the purpose of issuing paging geographic authorizations, the paging geographic areas used for UHF channels are the MEAs, and the paging geographic areas used for the low and high VHF channels are the EAs (see § 22.503(b)).

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 62 FR 11635, Mar. 12, 1997; 63 FR 68945, Dec. 14, 1998; 64 FR 33784, June 24, 1999]

§ 22.535 Effective radiated power limits.

The effective radiated power (ERP) of transmitters operating on the channels listed in § 22.531 must not exceed the limits in this section.

(a) *Maximum ERP*. The ERP must not exceed the applicable limits in this paragraph under any circumstances.

Frequency range (MHz)	Maximum ERP (Watts)
35–36	600
43–44	500
152–159	1400
931–932	3500

(b) *Basic power limit*. Except as provided in paragraph (d) of this section, the ERP of transmitters on the VHF channels must not exceed 500 Watts.

(c) *Height-power limit*. Except as provided in paragraph (d) of this section, the ERP of transmitters on the VHF channels must not exceed the amount that would result in an average distance to the service contour of 32.2 kilometers (20 miles). The average distance to the service contour is calculated by taking the arithmetic mean of the distances determined using the procedures specified in § 22.537 for the eight cardinal radial directions, excluding cardinal radial directions for which 90% or more of the distance so calculated is over water.

(d) *Encompassed interfering contour areas*. Transmitters are exempt from the basic power and height-power limits of this section if the area within their interfering contours is totally encompassed by the interfering contours of operating co-channel base transmitters controlled by the same licensee. For the purpose of this paragraph, operating transmitters are authorized transmitters that are providing service to subscribers.

(e) *Adjacent channel protection*. The ERP of transmitters must not exceed 500 Watts if they:

(1) Transmit on a channel in the 152–159 MHz frequency range and are located less than 5 kilometers (3.1 miles) from any station licensed in the Private Radio Services that receives on an adjacent channel; or,

(2) Transmit on channel 158.10 or 158.70 MHz and are located less than 5 kilometers (3.1 miles) from any station licensed in the Public Mobile Services that receives on either of the following adjacent channels: 158.07 MHz or 158.67 MHz.

(f) *Signal boosters*. The effective radiated power of signal boosters must not

exceed 5 watts ERP under any normal operating condition.

[59 FR 59507, Nov. 17, 1994, as amended at 61 FR 31051, June 19, 1996]

§ 22.537 Technical channel assignment criteria.

The rules in this section establish technical assignment criteria for the channels listed in § 22.531. These criteria permit channel assignments to be made in a manner such that reception by public paging receivers of signals from base transmitters, within the service area of such base transmitters, is protected from interference caused by the operation of independent co-channel base transmitters.

(a) *Contour overlap*. The FCC may grant an application requesting assignment of a channel to a proposed base transmitter only if:

(1) The interfering contour of the proposed transmitter does not overlap the service contour of any protected co-channel transmitter controlled by a carrier other than the applicant, unless that carrier has agreed in writing to accept any interference that may result from operation of the proposed transmitter; and,

(2) The service contour of the proposed transmitter does not overlap the interfering contour of any protected co-channel transmitter controlled by a carrier other than the applicant, unless the applicant agrees to accept any interference that may result from operation of the protected co-channel transmitter; and,

(3) The area and/or population to which service would be provided by the proposed transmitter is substantial, and service gained would exceed that lost as a result of agreements to accept interference.

(b) *Protected transmitter*. For the purposes of this section, protected transmitters are authorized transmitters for which there is a current FCC public record and transmitters proposed in prior-filed pending applications.

(c) *VHF service contour*. For paging stations transmitting on the VHF channels, the distance from the transmitting antenna to the service contour along each cardinal radial is calculated as follows:

$d=1.243\times h^{0.40}\times p^{0.20}$

where d is the radial distance in kilometers

h is the radial antenna HAAT in meters

p is the radial ERP in Watts

(1) Whenever the actual HAAT is less than 30 meters (98 feet), 30 must be used as the value for h in the above formula.

(2) The value used for p in the above formula must not be less than 27 dB less than the maximum ERP in any direction or 0.1 Watt, whichever is more.

(3) The distance from the transmitting antenna to the service contour along any radial other than the eight cardinal radials is routinely calculated by linear interpolation of distance as a function of angle. However, in resolving petitions to deny, the FCC may calculate the distance to the service contour using the formula in paragraph (c) of this section with actual HAAT and ERP data for the inter-station radial and additional radials above and below the inter-station radial at 2.5° intervals.

(d) *VHF interfering contour*. For paging stations transmitting on the VHF channels, the distance from the transmitting antenna to the interfering contour along each cardinal radial is calculated as follows:

$d=6.509\times h^{0.28}\times p^{0.17}$

where d is the radial distance in kilometers

h is the radial antenna HAAT in meters

p is the radial ERP in Watts

(1) Whenever the actual HAAT is less than 30 meters (98 feet), 30 must be used as the value for h in the above formula.

(2) The value used for p in the above formula must not be less than 27 dB less than the maximum ERP in any direction or 0.1 Watt, whichever is more.

(3) The distance from the transmitting antenna to the interfering contour along any radial other than the eight cardinal radials is routinely calculated by linear interpolation of distance as a function of angle. In resolving petitions to deny, however, the FCC may calculate the distance to the interfering contour using the formula in paragraph (d) of this section with actual HAAT and ERP data for the inter-station radial and additional radials

above and below the inter-station radial at 2.5° intervals.

(e) *931 MHz service contour*. For paging stations transmitting on the 931 MHz channels, the service contour is a circle, centered on the transmitting antenna, with a radius determined from Table E–1 of this section.

TABLE E–1.—931 MHZ PAGING SERVICE RADII

Service radius km (miles)	Effective radiated power (Watts)					
Antenna HAAT meters (feet)	0–125	126–250	251–500	501–1000	1001–1860	1861–3500
0–177 (0–581)	32.2 (20)	32.2 (20)	32.2 (20)	32.2 (20)	32.2 (20)	32.2 (20)
178–305 (582–1001)	32.2 (20)	32.2 (20)	32.2 (20)	32.2 (20)	37.0 (23)	41.8 (26)
306–427 (1002–1401)	32.2 (20)	32.2 (20)	37.0 (23)	41.8 (26)	56.3 (35)	56.3 (35)
428–610 (1402–2001)	32.2 (20)	37.0 (23)	41.8 (26)	56.3 (35)	56.3 (35)	56.3 (35)
611–861 (2002–2825)	37.0 (23)	41.8 (26)	41.8 (26)	56.3 (35)	83.7 (52)	83.7 (52)
862–1219 (2826–3999)	41.8 (26)	56.3 (35)	56.3 (35)	83.7 (52)	83.7 (52)	83.7 (52)
1220+ (4000+)	56.3 (35)	56.3 (35)	83.7 (52)	83.7 (52)	83.7 (52)	83.7 (52)

(f) *931 MHz interfering contour*. For paging stations transmitting on the 931 MHz channels, the interfering contour is a circle, centered on the transmitting antenna, with a radius determined from Table E–2 of this section.

TABLE E–2.—931 MHZ PAGING INTERFERING RADII

Interfering radius km (miles)	Effective radiated power (Watts)					
Antenna HAAT meters (feet)	0–125	126–250	251–500	501–1000	1001–1860	1861–3500
0–177 (0–581)	80.5 (50)	80.5 (50)	80.5 (50)	80.5 (50)	80.5 (50)	80.5 (50)
178–305 (582–1001)	80.5 (50)	80.5 (50)	80.5 (50)	80.5 (50)	88.5 (55)	96.6 (60)
306–427 (1002–1401)	80.5 (50)	80.5 (50)	88.5 (55)	96.6 (60)	130.4 (81)	130.4 (81)
428–610 (1402–2001)	80.5 (50)	88.5 (55)	96.6 (60)	130.4 (81)	130.4 (81)	130.4 (81)
611–861 (2002–2825)	88.5 (55)	96.6 (60)	96.6 (60)	130.4 (81)	191.5 (119)	191.5 (119)
862–1219 (2826–3999)	96.6 (60)	130.4 (81)	130.4 (81)	191.5 (119)	191.5 (119)	191.5 (119)
1220+ (4000+)	130.4 (81)	130.4 (81)	191.5 (119)	191.5 (119)	191.5 (119)	191.5 (119)

(g) *In-building radiation systems*. The locations of in-building radiation systems must be within the service contour(s) of the licensee's authorized transmitter(s) on the same channel. In-building radiation systems are not protected facilities, and therefore do not have service or interfering contours.

(h) *Signal boosters on 931 MHz channels*. For the purpose of compliance with § 22.165 and notwithstanding paragraphs (e) and (f) of this section, signal boosters operating on the 931 MHz channels with an antenna HAAT not exceeding 30 meters (98 feet) are deemed to have as a service contour a circle with a radius of 1.0 kilometer (0.6 mile) and as an interfering contour a circle with a radius of 10 kilometers (6.2 miles).

[59 FR 59507, Nov. 17, 1994, as amended at 61 FR 31051, June 19, 1996]

§ 22.539 Additional channel policies.

The rules in this subsection govern the processing of applications for a paging channel when the applicant has applied for or been granted an authorization for other paging channels in the

same geographic area. This section applies to applications proposing to use the channels listed in § 22.531, excluding the nationwide network paging channels and broadcast station subcarriers, or the channels listed in § 22.561, where the application proposes to use those channels to provide paging service only. The general policy of the Commission is to assign one paging channel in an area to a carrier per application cycle. That is, a carrier must apply for one paging channel, receive the authorization, construct the station, provide service to the subscribers, and notify the Commission of commencement of service to subscribers by using FCC Form 601 before applying for an additional paging channel in that area. This notification must be sent by electronic filing via the ULS.

(a) *VHF transmitters in same area.* Any transmitter on any VHF channel listed in § 22.531 is considered to be in the same geographic area as another transmitter on any other VHF channel listed in § 22.531 if:

(1) One transmitter location is within the service area of the other transmitter; or,

(2) The area within the overlap of the service contours of the two transmitters constitutes 50 percent or more of the service area of either of the transmitters.

(b) *931 MHz transmitters in same area.* Any transmitter on any 931 MHz channel is considered to be in the same geographic area as another transmitter on any channel listed in § 22.531 if it is located less than 64.4 kilometers (40 miles) from the transmitter. Likewise, any transmitter on any channel listed in § 22.531 is considered to be in the same geographic area as another transmitter on any 931 MHz channel if it is located less than 64.4 kilometers (40 miles) from that transmitter.

(c) *Initial channel.* The FCC will not assign more than one channel for new paging stations. Paging stations are considered to be new if there are no authorized transmitters on any channel listed in § 22.531 controlled by the applicant in the same geographic area.

(d) *Additional channel.* Applications for transmitters to be located in the same geographic area as an authorized station controlled by the applicant, but to operate on a different channel, are considered as requesting an additional channel for the authorized station, unless paragraph (e) of this section applies.

(e) *Additional transmitters on same channel.* Notwithstanding other provisions of this section, the following applications are not considered to be requests for an additional paging channel:

(1) Applications for transmitters to be located in the same geographic area as an authorized station controlled by the applicant, and to operate on the same paging channel;

(2) Applications for transmitters to be located within a paging geographic area for which the applicant holds the paging geographic area authorization for the requested channel; and,

(3) Applications for paging geographic area authorizations.

(f) *Amendment of pending application.* If the FCC receives and accepts for filing an application for a transmitter to be located in the same geographic area as a transmitter proposed in a pending application previously filed by the applicant, but on a different channel, the subsequent application is considered as a major amendment to change the technical proposal of the prior application, unless paragraph (e) applies. The filing date of any application so amended is the date the FCC received the subsequent application.

(g) *Dismissal of premature applications for additional channel.* If the FCC receives an application requesting an additional channel for an authorized station prior to receiving notification that the station is providing service to subscribers on the authorized channel(s), the FCC may dismiss that application without prejudice in accordance with § 22.128.

[59 FR 59507, Nov. 17, 1994, as amended at 62 FR 11635, Mar. 12, 1997; 63 FR 68945, Dec. 14, 1998]

§ 22.551 Nationwide network paging service.

The rules in this section govern the application for and provision of nationwide network paging service on the channels reserved specifically for such service in § 22.531(b).

(a) *Nationwide network providers; organizers.* If and when a nationwide network paging channel becomes available for assignment, the FCC will issue a Public Notice inviting applications from eligibles seeking to provide or organize a nationwide network paging service. The Public Notice will provide complete details regarding application requirements and procedures.

(b) *Licensing.* The FCC may issue a paging geographic area authorization to the nationwide network provider or organizer. All transmissions of nationwide network messages on the channels reserved for such service in § 22.531(b) are authorized solely under the authorization(s) of the nationwide network provider or organizer, notwithstanding whether or not the messages pass through facilities owned, operated or licensed to affiliated local carriers.

[62 FR 11636, Mar. 12, 1997]

§ 22.559 Paging application requirements.

In addition to information required by subparts B and D and § 22.529, applications for authorization to operate a paging transmitter on the channels listed in § 22.531, other than applications for a paging geographic area authorization, must contain the applicable supplementary information described in this section.

(a) *Interference exhibit.* Except as provided in paragraph (b) of this section, an exhibit demonstrating compliance with § 22.537 with regard to protected transmitters is required for applications to operate a transmitter on the VHF channels. This exhibit must:

(1) Identify each protected transmitter located within 109 kilometers (68 miles) of the proposed transmitter in directions in which the distance to the interfering contour is 76.5 kilometers (47.5 miles) or less, and within 178 kilometers (111 miles) of the proposed transmitter in directions in which the distance to the interfering contour exceeds 76.5 kilometers (47.5 miles).

(2) For each protected transmitter identified, show the results of distance calculations indicating that there would be no overlap of service and interfering contours, or alternatively, indicate that the licensee of or applicant for the protected transmitter and/or the applicant, as required, have agreed in writing to accept any interference resulting from operation of the proposed transmitter.

(b) *Encompassment exhibit.* An exhibit showing that the area within the interfering contour of the proposed transmitter would be totally encompassed by interfering contours of operating co-channel base transmitters controlled by the applicant is required for applications to operate a transmitter with ERP exceeding the basic power and height-power limits of § 22.535. For VHF transmitters, this encompassment exhibit may substitute for the interference exhibit required in paragraph (a) of this section.

[59 FR 59507, Nov. 17, 1994, as amended at 62 FR 11636, Mar. 12, 1997]

ONE-WAY OR TWO-WAY MOBILE OPERATION

§ 22.561 Channels for one-way or two-way mobile operation.

The following channels are allocated for paired assignment to transmitters that provide (or support other transmitters that provide) one-way or two-way public land mobile service, either individually or collectively under a paging geographic area authorization. The paging geographic areas used for these channels are the EAs (*see* § 22.503(b)(3)). These channels may be assigned for use by mobile or base transmitters as indicated, and or by fixed transmitters (including control, repeater or other fixed transmitters). The mobile channels may also be assigned for use by base or fixed transmitters under certain circumstances (*see* § 22.567(h)). Unless otherwise indicated, all channels have a bandwidth of 20 kHz and are designated by their center frequencies in MegaHertz.

Base	Mobile	Base	Mobile
VHF Channels			
152.03	158.49	152.57	157.83
152.06	158.52	152.60	157.86
152.09	158.55	152.63	157.89
152.12	158.58	152.66	157.92
152.15	158.61	152.69	157.95
152.18	158.64	152.72	157.98
152.21	158.67	152.75	158.01

Base	Mobile	Base	Mobile
152.51	157.77	152.78	158.04
152.54	157.80	152.81	158.07
UHF Channels			
454.025	459.025	454.350	459.350
454.050	459.050	454.375	459.375
454.075	459.075	454.400	459.400
454.100	459.100	454.425	459.425
454.125	459.125	454.450	459.450
454.150	459.150	454.475	459.475
454.175	459.175	454.500	459.500
454.200	459.200	454.525	459.525
454.225	459.225	454.550	459.550
454.250	459.250	454.575	459.575
454.275	459.275	454.600	459.600
454.300	459.300	454.625	459.625
454.325	459.325	454.650	459.650

[59 FR 59507, Nov. 17, 1994; 60 FR 9889, Feb. 22, 1995, as amended at 62 FR 11636, Mar. 12, 1997]

§ 22.563 Provision of rural radiotelephone service upon request.

Channels in the frequency ranges 152.03–152.81, 157.77–158.67, 454.025–454.650 and 459.025–459.650 MHz, inclusive, are also allocated for assignment in the Rural Radiotelephone Service. Stations in the Paging and Radiotelephone Service that provide two-way public mobile service on these channels must also provide rural radiotelephone service upon request from a subscriber.

§ 22.565 Transmitting power limits.

The transmitting power of base, mobile and fixed transmitters operating on the channels listed in § 22.561 must not exceed the limits in this section.

(a) *Maximum ERP*. The effective radiated power (ERP) of base and fixed transmitters must not exceed the applicable limits in this paragraph under any circumstances.

Frequency range (MHz)	Maximum ERP (watts)
152–153	1400
157–159	150
454–455	3500
459–460	150

(b) *Basic power limit*. Except as provided in paragraph (d) of this section, the ERP of base transmitters must not exceed 500 Watts.

(c) *Height-power limits*. Except as provided in paragraph (d) of this section, the ERP of base transmitters must not exceed the amount that would result in an average distance to the service contour of 41.6 kilometers (26 miles) for VHF channels or 30.7 kilometers (19 miles) for UHF channels. The average distance to the service contour is calculated by taking the arithmetic mean of the distances determined using the procedures specified in § 22.567 for the eight cardinal radial directions, excluding cardinal radial directions for which 90% or more of the distance so calculated is over water.

(d) *Encompassed interfering contour areas*. Base transmitters are exempt from the basic power and height-power limits of this section if the area within their interfering contours is totally encompassed by the interfering contours of operating co-channel based transmitters controlled by the same licensee. For the purpose of this paragraph, operating transmitters are authorized transmitters that are providing service to subscribers.

(e) *Adjacent channel protection*. The ERP of base and fixed transmitters must not exceed 500 Watts if they transmit on channel 454.025 MHz and are located less than 7 kilometers (4.3 miles) from any Private Radio Services station receiving on adjacent channel 454.0000 MHz.

(f) *Mobile transmitters*. The transmitter output power of mobile transmitters must not exceed 60 watts.

(g) *Other transmitters*. The ERP of dispatch and auxiliary test transmitters must not exceed 100 watts.

§ 22.567 Technical channel assignment criteria.

The rules in this section establish technical assignment criteria for the channels listed in § 22.561. The criteria in paragraphs (a) through (f) of this section permit channel assignments to be made in a manner such that reception by public mobile receivers of signals from base transmitters, within the service area of such base transmitters, is protected from interference caused by the operation of independent co-channel base and fixed transmitters in the Paging and Radiotelephone Service and central office stations, including

Basic Exchange Telephone Radio Systems (BETRS), in the Rural Radiotelephone Service. Additional criteria in paragraph (g) of this section permit channel assignments to be made in a manner such that BETRS communications are protected from interference caused by the operation of independent co-channel base and fixed transmitters in the Paging and Radiotelephone Service and other central office stations in the Rural Radiotelephone Service. Separate criteria in paragraph (h) of this section apply only to assignment of the channels designated in § 22.561 as mobile channels to base and fixed transmitters, and permit these channel assignments to be made in a manner such that reception by public base and fixed receivers of signals from associated mobile and fixed transmitters is protected from interference caused by the operation of independent co-channel base and fixed transmitters.

(a) *Contour overlap.* The FCC may grant an application requesting assignment of a channel to a proposed base, fixed or central office station transmitter only if:

(1) The interfering contour of the proposed transmitter does not overlap the service contour of any protected co-channel transmitter controlled by a carrier other than the applicant, unless that carrier has agreed in writing to accept any interference that may result from operation of the proposed transmitter; and

(2) The service contour of the proposed transmitter does not overlap the interfering contour of any protected co-channel transmitter controlled by a carrier other than the applicant, unless the application contains a statement that the applicant agrees to accept any interference that may result from operation of the protected co-channel transmitter; and

(3) The area and/or population to which service would be provided by the proposed transmitter is substantial, and service gained would exceed that lost as a result of agreements to accept interference.

(b) *Protected transmitter.* For the purposes of this section, protected transmitters are authorized transmitters for which there is a current FCC public record and transmitters proposed in prior-filed pending applications, in the Paging and Radiotelephone Service and the Rural Radiotelephone Service.

(c) *VHF service contour.* For base stations transmitting on the VHF channels, the radial distance from the transmitting antenna to the service contour along each cardinal radial is calculated as follows:

$$d=1.609\times h^{0.40}\times p^{0.20}$$

where:

d is the radial distance in kilometers
h is the radial antenna HAAT in meters
p is the radial ERP in Watts

(1) Whenever the actual HAAT is less than 30 meters (98 feet), 30 must be used as the value for h in the above formula.

(2) The value used for p in the above formula must not be less than 27 dB less than the maximum ERP in any direction, or 0.1 Watt, whichever is more.

(3) The distance from the transmitting antenna to the service contour along any radial other than the eight cardinal radials is routinely calculated by linear interpolation of distance as a function of angle. However, in resolving petitions to deny, the FCC may calculate the distance to the service contour using the formula in paragraph (c) of this section with actual HAAT and ERP data for the inter-station radial and additional radials above and below the inter-station radial at 2.5° intervals.

(d) *VHF interfering contour.* For base and fixed stations transmitting on the VHF channels, the radial distance from the transmitting antenna to the interfering contour along each cardinal radial is calculated as follows:

(1) If the radial antenna HAAT is less than 150 meters:

$$d=8.577\times h^{0.24}\times p^{0.19}$$

where:

d is the radial distance in kilometers
h is the radial antenna HAAT in meters
p is the radial ERP in Watts

Whenever the actual HAAT is less than 30 meters (98 feet), 30 must be used as the value for h in the above formula.

(2) If the radial antenna HAAT is 150 meters or more:

$$d=12.306\times h^{0.23}\times p^{0.14}$$

where:

d is the radial distance in kilometers
h is the radial antenna HAAT in meters
p is the radial ERP in Watts

(3) The value used for p in the above formulas must not be less than 27 dB less than the maximum ERP in any direction, or 0.1 Watt, whichever is more.

(4) The distance from the transmitting antenna to the interfering contour along any radial other than the eight cardinal radials is routinely calculated by linear interpolation of distance as a function of angle. However, in resolving petitions to deny, the FCC may calculate the distance to the interfering contour using the appropriate formula in paragraph (d) of this section with actual HAAT and ERP data for the inter-station radial and additional radials above and below the inter-station radial at 2.5° intervals.

(e) *UHF service contour*. For base stations transmitting on the UHF channels, the radial distance from the transmitting antenna to the service contour along each cardinal radial is calculated as follows:

$$d=1.726\times h^{0.35}\times p^{0.18}$$

where:

d is the radial distance in kilometers
h is the radial antenna HAAT in meters
p is the radial ERP in Watts

(1) Whenever the actual HAAT is less than 30 meters (98 feet), 30 must be used as the value for h in the above formula.

(2) The value used for p in the above formula must not be less than 27 dB less than the maximum ERP in any direction, or 0.1 Watt, whichever is more.

(3) The distance from the transmitting antenna to the service contour along any radial other than the eight cardinal radials is routinely calculated by linear interpolation of distance as a function of angle. However, in resolving petitions to deny, the FCC may calculate the distance to the service contour using the formula in paragraph (e) of this section with actual HAAT and ERP data for the inter-station radial and addition radials above and below the below the inter-station radial at 2.5° intervals.

(f) *UHF interfering contour*. For base and fixed stations transmitting on the UHF channels, the radial distance from the transmitting antenna to the interfering contour along each cardinal radial is calculated as follows:

(1) If the radial antenna HAAT is less than 150 meters:

$$d=9.471\times h^{0.23}\times p^{0.15}$$

where:

d is the radial distance in kilometers
h is the radial antenna HAAT in meters
p is the radial ERP in Watts

Whenever the actual HAAT is less than 30 meters (98 feet), 30 must be used as the value for h in the above formula.

(2) If the radial antenna HAAT is 150 meters or more:

$$d=6.336\times h^{0.31}\times p^{0.15}$$

where:

d is the radial distance in kilometers
h is the radial antenna HAAT in meters
p is the radial ERP in Watts

(3) The value used for p in the above formula must not be less than 27 dB less than the maximum ERP in any direction, or 0.1 Watt, whichever is more.

(4) The distance from the transmitting antenna to the interfering contour along any radial other than the eight cardinal radials is routinely calculated by linear interpolation of distance as a function of angle. However, in resolving petitions to deny, the FCC may calculate the distance to the interfering contour using the appropriate formula in paragraph (f) of this section with actual HAAT and ERP data for the inter-station radial and additional radials above and below the inter-station radial at 2.5° intervals.

(g) *Protection for BETRS*. In applying the provisions of paragraph (a) of this section, if either or both of the transmitters involved is a BETRS central office station, the following contour substitutions must be used:

(1) The service contour of the BETRS central office station(s) is a circle, centered on the central office station antenna, with a radius of 40 kilometers (25 miles).

(2) The interfering contour of any station of any type, when determining whether it would overlap the service

contour of a BETRS central office station, is calculated as follows:

$d=36.364\times h^{0.2}\times p^{0.1}$

where:

d is the radial distance in kilometers

h is the radial antenna HAAT in meters

p is the radial ERP in Watts

Whenever the actual HAAT is less than 30 meters (98 feet), 30 must be used as the value for h in the above formula. The value used for p in the above formula must not be less than 27 dB less than the maximum ERP in any direction, or 0.1 Watt, whichever is more.

(h) *Assignment of mobile channels to base or fixed transmitters.* Mobile channels may be assigned to base or fixed transmitters if the following criteria are met:

(1) The paired base channel, as designated in § 22.561, is assigned to base transmitters in the same geographical area operated by the same licensee.

(2) The authorization is granted subject to the condition that no interference be caused to fixed receivers in use on or prior to the date of the grant.

§ 22.569 Additional channel policies.

The rules in this section govern the processing of applications for a mobile channel when the applicant has applied or been granted an authorization for other mobile channels in the same geographic area. This section applies to applications proposing to use the channels listed in § 22.561, except applications that propose to use these channels to provide paging service only, which are subject to § 22.539, instead of this section. The general policy of the FCC is to assign no more than two channels in an area to a carrier per application cycle. That is, a carrier must apply for no more than two channels, receive the authorization, construct the station, provide service to subscribers, and notify the FCC of commencement of service to subscribers (FCC Form 489) before applying for additional mobile channels in that area.

(a) *Transmitters in same area.* Any transmitter on any channel listed in § 22.561 is considered to be in the same geographic area as another transmitter or any other channel listed in § 22.561 if:

(1) One transmitter location is within the service area of the other transmitter; or,

(2) The area within the overlap of the service contours of the two transmitters constitutes 50 percent or more of the service area of either of the transmitters.

(b) *Initial channel.* The FCC will not assign more than two channels for new stations. Stations are considered to be new if there are no authorized transmitters on any channel listed in § 22.561 controlled by the applicant in the same geographic area.

(c) *Additional channel.* Applications for transmitters to be located in the same geographic area as an authorized station controlled by the applicant, but to operate on a different channel, are considered as requests for an additional channel for the authorized station, unless paragraph (d) of this section applies.

(d) *Additional transmitters on same channel.* Notwithstanding other provisions of this section, the following applications are not considered to be requests for an additional channel:

(1) Applications for transmitters to be located in the same geographic area as an authorized station controlled by the applicant, and to operate on the same paging channel;

(2) Applications for transmitters to be located within a paging geographic area for which the applicant holds the paging geographic area authorization for the requested channel; and,

(3) Applications for paging geographic area authorizations.

(e) [Reserved]

(f) *Dismissal of application constituting cumulative request for more than two channels.* If the FCC receives an application for a transmitter to be located in the same geographic area as a transmitter proposed in a pending application previously filed by the applicant, but on different channels such that, considered together, the applications would constitute a request for more than two channels, the FCC may dismiss the subsequent application without prejudice.

(g) *Dismissal of premature applications for additional channel.* If the FCC receives an application requesting two additional channels (or one additional

channel) for an authorized station prior to receiving notification that the station is providing service to subscribers on all (or all except one) of the authorized channels, the FCC may dismiss that application without prejudice.

[59 FR 59507, Nov. 17, 1994, as amended at 62 FR 11636, Mar. 12, 1997]

§ 22.571 Responsibility for mobile stations.

Mobile stations that are subscribers in good standing to a two-way service in the Paging and Radiotelephone Service, when receiving service from that station, are considered to be operating under the authorization of that station. Licensees are responsible for exercising effective operational control over mobile stations receiving service through their stations. Mobile stations that are subscribers in good standing to a two-way service in the Paging and Radiotelephone Service, while receiving service from a different station, are considered to be operating under the authorization of such different station. The licensee of such different station is responsible, during such temporary period, for exercising effective operational control over such mobile stations as if they were subscribers to it.

§ 22.573 Use of base transmitters as repeaters.

As an additional function, base transmitters may be used as repeaters. Licensees must be able to turn the base transmitter on or off from the control point regardless of whether a subscriber-operated transmitter is transmitting.

§ 22.575 Use of mobile channel for remote control of station functions.

Carriers may remotely control station functions (e.g. shut down or reactivate base transmitters, turn aviation obstruction warning lights on or off, etc.) using a control transmitter operating on a mobile channel, subject to the conditions in this section and in § 22.567(h).

(a) The control transmitter must be capable of overriding transmissions from subscriber-operated transmitters if necessary. Subscriber-operated transmitters must not be capable of being used to deliberately or accidentally prevent the licensee from controlling the station.

(b) The licensee must implement measures designed to prevent station functions from being controlled by persons not authorized by the licensee to control the station.

(c) The control transmitter location must be within the composite service contour of the licensee's authorized station on the paired base channel.

§ 22.577 Dispatch service.

Carriers licensed under this subpart may provide dispatch service in accordance with the rules in this section.

(a) *Installation without prior FCC approval.* A station licensee may install or remove dispatch points for subscribers without obtaining prior FCC approval. A station licensee may install or remove dispatch transmitters for subscribers without applying for specific authorization, provided that the following conditions are met.

(1) Each dispatch transmitter must be able to transmit only on the mobile channel that is paired with the channel used by the base station.

(2) The antenna of the dispatch transmitter must not exceed the criteria in § 17.7 of this chapter that determine whether the FAA must be notified of the proposed construction.

(3) The output power of the dispatch transmitter must not exceed 10 Watts.

(4) The dispatch transmitter must be incapable of overriding the functioning of any control transmitter that may be using the same channel.

(5) The dispatch transmitter must be under the continuous supervision of the licensee.

(b) *Notification.* Licensees must notify the Commission by filing FCC Form 601 whenever a dispatch transmitter is installed pursuant to paragraph (a) of this section. The notification must include the name and address of the subscriber(s) for which the dispatch transmitter was installed, the location of the dispatch transmitter, the height of antenna structure above ground and above mean sea level, the channel(s) used, and the call sign and location of the base station.

(c) *Termination without hearing.* Operation of a dispatch transmitter pursuant to paragraphs (a) and (b) of this section may be terminated by the FCC without a hearing upon notice to the licensee.

(d) Dispatch transmitters requiring authorization. A dispatch transmitter that does not meet all of the requirements of paragraph (a) of this section may be installed only upon the grant of an application for authorization by electronically filing FCC Form 601.

(e) *Permissible communications.* A dispatch transmitter operated by a subscriber may communicate only with mobile transmitters operated by that subscriber through the associated base transmitter.

[59 FR 59507, Nov. 17, 1994, as amended at 60 FR 15495, Mar. 24, 1995; 63 FR 68945, Dec. 14, 1998]

§ 22.579 Operation of mobile transmitters across U.S.-Canada border.

Mobile stations licensed by Canada may receive two-way service while in the United States from stations licensed under this part, after authorization has been granted by the FCC. Mobile stations that normally operate under the authority of base stations licensed under this part may receive two-way service while in Canada from stations licensed under this part or by Canada, upon authorization by Canada.

§ 22.589 One-way or two-way application requirements.

In addition to information required by subparts B and D and § 22.529, applications for authorization to operate a paging transmitter on the channels listed in § 22.531, other than applications for a paging geographic area authorization, must contain the applicable supplementary information described in this section.

(a) *Interference exhibit.* Except as provided in paragraph (b) of this section, an exhibit demonstrating compliance with § 22.567 with regard to protected transmitters is required. This exhibit must:

(1) For UHF channels, identify each protected transmitter located within 108 kilometers (67 miles) of the proposed transmitter in directions in which the distance to the interfering contour is 76.4 kilometers (47.5 miles) or less, and within 178 kilometers (111 miles) of the proposed transmitter in directions in which the distance to the interfering contour exceeds 76.4 kilometers (47.5 miles); and identify each protected Basic Exchange Telephone Radio System central office transmitter in the Rural Radiotelephone Service within 231 kilometers (144 miles),

(2) For VHF channels, identify each protected transmitter located within 135 kilometers (84 miles) of the proposed transmitter in directions in which the distance to the interfering contour is 93.3 kilometers (58 miles) or less, and within 178 kilometers (111 miles) of the proposed transmitter in directions in which the distance to the interfering contour exceeds 93.3 kilometers (58 miles).

(3) For each protected transmitter identified, show the results of distance calculations indicating that there would be no overlap of service and interfering contours, or alternatively, indicate that the licensee of or applicant for the protected transmitter and/or the applicant, as required, have agreed in writing to accept any interference resulting from operation of the proposed transmitter.

(b) *Encompassment exhibit.* An exhibit showing that the area within the interfering contour of the proposed transmitter would be totally encompassed by interfering contours of operating co-channel base transmitters controlled by the applicant is required for applications to operate a transmitter with ERP exceeding the basic power and height-power limits of § 22.565. This encompassment exhibit may substitute for the interference exhibit required in paragraph (a) of this section.

[59 FR 59507, Nov. 17, 1994, as amended at 62 FR 11636, Mar. 12, 1997]

POINT-TO-POINT OPERATION

§ 22.591 Channels for point-to-point operation.

The following channels are allocated for assignment to fixed transmitters that support other transmitters that provide public mobile service. Unless otherwise indicated, all channels have

a bandwidth of 20 kHz and are designated by their center frequencies in MegaHertz.

VHF Channels

72.02	72.36	72.80	75.66
72.04	72.38	72.82	75.68
72.06	72.40	72.84	75.70
72.08	72.42	72.86	75.72
72.10	72.46	72.88	75.74
72.12	72.50	72.90	75.76
72.14	72.54	72.92	75.78
72.16	72.58	72.94	75.80
72.18	72.62	72.96	75.82
72.20	72.64	72.98	75.84

VHF Channels—Continued

72.22	72.66	75.42	75.86
72.24	72.68	75.46	75.88
72.26	72.70	75.50	75.90
72.28	72.72	75.54	75.92
72.30	72.74	75.58	75.94
72.32	72.76	75.62	75.96
72.34	72.78	75.64	75.98
72.10	72.46	72.88	75.74
72.12	72.50	72.90	75.76
72.14	72.54	72.92	75.78
72.16	72.58	72.94	75.80
72.18	72.62	72.96	75.82
72.20	72.64	72.98	75.84
72.22	72.66	75.42	75.86
72.24	72.68	75.46	75.88
72.26	72.70	75.50	75.90
72.28	72.72	75.54	75.92
72.30	72.74	75.58	75.94
72.32	72.76	75.62	75.96
72.34	72.78	75.64	75.98

UHF Channels—State of Hawaii

488.250	491.250	489.750	492.750
488.750	491.750	490.250	493.250
489.250	492.250	490.750	493.750

MICROWAVE CHANNELS

[Bandwidth individually assigned]

2110.1	2160.1
2110.2	2160.2
2110.3	2160.3
2129.9	2179.9

(a) The 72–76 MHz channels may be assigned under developmental authority pursuant to the requirements of § 22.413. The 72–76 MHz channels may also be used in point-to-multipoint configurations. The 72–76 MHz channels are also allocated for assignment in the Private Radio Services (see part 90 of this chapter).

(b) Channels in the frequency ranges 2110–2130 and 2160–2180 MHz are also allocated for assignment in the broadband Personal Communications Service (see part 24 of this chapter), the Multipoint Distribution Service and the Point-to-Point Microwave Radio Service (see part 21 of this chapter). Assignment of channels in these ranges is subject to the transition rules in § 22.602.

(c) Channels in the frequency ranges 488.250–490.750 and 491.250–493.750 MHz may be assigned only to inter-island fixed stations located in the State of Hawaii.

[59 FR 59507, Nov. 17, 1994; 60 FR 9889, Feb. 22, 1995]

§ 22.593 Effective radiated power limits.

The effective radiated power of fixed stations operating on the channels listed in § 22.591 must not exceed 150 Watts. The equivalent isotropic radiated power of fixed stations operating in the frequency ranges 2110–2130 and 2160–2180 MHz must not exceed the limits set forth in part 21 of this chapter for stations operating in these frequency ranges.

§ 22.599 Assignment of 72–76 MHz channels.

Because of the potential for interference to the reception of TV Channels 4 and 5 by broadcast television sets and video recorders, assignments of the 72–76 MHz channels are subject to the following conditions:

(a) Assignments of 72–76 MHz channels for use within 129 kilometers (80 miles) of a full service TV station transmitting on TV Channel 4 or 5 are subject to the condition that the licensee must eliminate any interference caused to television reception on TV Channels 4 and 5. If the FCC notifies the licensee of an interference problem and the licensee does not resolve the problem within 90 days of such notification, operation of the interfering 72–76 MHz fixed station must be immediately discontinued.

(b) 72–76 MHz channels may be assigned for use within 16 kilometers (10 miles) of a full service TV station transmitting on TV Channel 4 or 5 under a developmental authorization, pursuant to § 22.413. However, for use within 50 meters (164 feet) of a TV station transmitting on TV Channel 4 or 5, 72–76 MHZ channels may be assigned

under a regular authorization, rather than a developmental authorization.

§ 22.601 Assignment of microwave channels.

Assignment of the microwave channels listed in § 22.591 is subject to the transition rules in § 22.602. No new systems will be authorized under this part.

(a) *Coordination required.* Before filing applications for authority to modify existing stations on these channels or major amendments to such applications, carriers must coordinate the planned channel usage, using the procedure outlined in § 22.150, with affected parties in this radio service and the Point-to-Point Microwave Service and the Multipoint Distribution Service. Affected parties are licensees and other applicants with previously filed pending applications whose stations could affect or be affected by the proposed modification of the existing station in terms of interference.

(b) *System parameters.* In designing a system modification, the applicant must select sites, equipment and channels that will avoid harmful interference to other users. All parties must cooperate fully and make reasonable efforts to resolve technical problems and conflicts that may inhibit the most effective and efficient use of the radio spectrum; however, a party receiving notification is not obligated to suggest changes or re-design a proposal in cases involving conflicts. The applicant must identify in the application all parties with which the technical proposal was coordinated. In the event that technical problems are not resolved or if an affected party does not respond to coordination efforts within 30 days after notification, an explanation must be contained in the application. Where technical conflicts are resolved by an agreement between the parties that requires special procedures to reduce the likelihood of harmful interference (such as the use of artificial site shielding), or would result in a reduction of quality or capacity of either system, the details thereof must be contained in the application.

(c) *Bandwidth.* Applicants must request the minimum emission bandwidth necessary. The FCC does not authorize bandwidths larger than 800 kHz under this part.

§ 22.602 Transition of the 2110–2130 and 2160–2180 MHz channels to emerging technologies.

The microwave channels listed in § 22.591 have been allocated for use by emerging technologies (ET) services. No new systems will be authorized under this part. The rules in this section provide for a transition period during which existing Paging and Radiotelephone Service (PARS) licensees using these channels may relocate operations to other media or to other fixed channels, including those in other microwave bands. For PARS licensees relocating operations to other microwave bands, authorization must be obtained under part 101 of this chapter.

(a) Licensees proposing to implement ET services may negotiate with PARS licensees authorized to use these channels, for the purpose of agreeing to terms under which the PARS licensees would—

(1) Relocate their operations to other fixed microwave bands or other media, or alternatively,

(2) Accept a sharing arrangement with the ET licensee that may result in an otherwise impermissible level of interference to the PARS operations.

(b) PARS operations on these channels will continue to be co-primary with other users of this spectrum until two years after the FCC commences acceptance of applications for ET services, and until one year after an ET licensee initiates negotiations for relocation of the fixed microwave licensee's operations.

(c) *Voluntary Negotiations.* During the two year voluntary negotiation period, negotiations are strictly voluntary and are not defined by any parameters. However, if the parties have not reached an agreement within one year after the commencement of the voluntary period, the PARS licensee must allow the ET licensee (if it so chooses) to gain access to the existing facilities to be relocated so that an independent third party can examine the PARS licensee's 2 GHz system and prepare an estimate of the cost and the time needed to relocate the PARS licensee to

comparable facilities. The ET licensee must pay for any such estimate.

(d) *Mandatory Negotiations.* If a relocation agreement is not reached during the two year voluntary period, the ET licensee may initiate a mandatory negotiation period. This mandatory period is triggered at the option of the ET licensee, but ET licensees may not invoke their right to mandatory negotiation until the voluntary negotiation period has expired. Once mandatory negotiations have begun, a PARS licensee may not refuse to negotiate and all parties are required to negotiate in good faith. Good faith requires each party to provide information to the other that is reasonably necessary to facilitate the relocation process. In evaluating claims that a party has not negotiated in good faith, the FCC will consider, *inter alia,* the following factors:

(1) Whether the ET licensee has made a *bona fide* offer to relocate the PARS licensee to comparable facilities in accordance with Section 101.75(b) of this chapter;

(2) If the PARS licensee has demanded a premium, the type of premium requested (*e.g.,* whether the premium is directly related to relocation, such as system-wide relocations and analog-to-digital conversions, versus other types of premiums), and whether the value of the premium as compared to the cost of providing comparable facilities is disproportionate (*i.e.,* whether there is a lack of proportion or relation between the two);

(3) What steps the parties have taken to determine the actual cost of relocation to comparable facilities;

(4) Whether either party has withheld information requested by the other party that is necessary to estimate relocation costs or to facilitate the relocation process. Any party alleging a violation of our good faith requirement must attach an independent estimate of the relocation costs in question to any documentation filed with the Commission in support of its claim. An independent cost estimate must include a specification for the comparable facility and a statement of the costs associated with providing that facility to the incumbent licensee.

(e) *Involuntary period.* After the periods specified in paragraph (b) of this section have expired, ET licensees may initiate involuntary relocation procedures under the Commission's rules. ET licensees are obligated to pay to relocate only the specific microwave links to which their systems pose an interference problem. Under involuntary relocation, a PARS licensee is required to relocate, provided that:

(1) The ET applicant, provider, licensee or representative guarantees payment of relocation costs, including all engineering, equipment, site and FCC fees, as well as any legitimate and prudent transaction expenses incurred by the PARS licensee that are directly attributable to an involuntary relocation, subject to a cap of two percent of the hard costs involved. Hard costs are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. ET licensees are not required to pay PARS licensees for internal resources devoted to the relocation process. ET licensees are not required to pay for transaction costs incurred by PARS licensees during the voluntary or mandatory periods once the involuntary period is initiated or for fees that cannot be legitimately tied to the provision of comparable facilities;

(2) The ET applicant, provider, licensee or representative completes all activities necessary for implementing the replacement facilities, including engineering and cost analysis of the relocation procedure and, if radio facilities are involved, identifying and obtaining, on the incumbents behalf, new channels and frequency coordination; and,

(3) The ET applicant, provider, licensee or representative builds the replacement system and tests it for comparability with the existing 2 GHz system.

(f) *Comparable Facilities.* The replacement system provided to an incumbent during an involuntary relocation must be at least equivalent to the existing PARS system with respect to the following three factors:

(1) *Throughput.* Communications throughput is the amount of information transferred within a system in a

given amount of time. If analog facilities are being replaced with analog, the ET licensee is required to provide the PARS licensee with an equivalent number of 4 kHz voice channels. If digital facilities are being replaced with digital, the ET licensee must provide the PARS licensee with equivalent data loading bits per second (bps). ET licensees must provide PARS licensees with enough throughput to satisfy the PARS licensee's system use at the time of relocation, not match the total capacity of the PARS system.

(2) *Reliability*. System reliability is the degree to which information is transferred accurately within a system. ET licensees must provide PARS licensees with reliability equal to the overall reliability of their system. For digital data systems, reliability is measured by the percent of time the bit error rate (BER) exceeds a desired value, and for analog or digital voice transmissions, it is measured by the percent of time that audio signal quality meets an established threshold. If an analog voice system is replaced with a digital voice system, only the resulting frequency response, harmonic distortion, signal-to-noise ratio and its reliability will be considered in determining comparable reliability.

(3) *Operating Costs*. Operating costs are the cost to operate and maintain the PARS system. ET licensees must compensate PARS licensees for any increased recurring costs associated with the replacement facilities (e.g. additional rental payments, increased utility fees) for five years after relocation. ET licensees may satisfy this obligation by making a lump-sum payment based on present value using current interest rates. Additionally, the maintenance costs to the PARS licensee must be equivalent to the 2 GHz system in order for the replacement system to be considered comparable.

(g) The PARS licensee is not required to relocate until the alternative facilities are available to it for a reasonable time to make adjustments, determine comparability, and ensure a seamless handoff.

(h) *The Commission's Twelve-Month Trial Period*. If, within one year after the relocation to new facilities, the PARS licensee demonstrates that the new facilities are not comparable to the former facilities, the ET applicant, provider, licensee or representative must remedy the defects or pay to relocate the PARS licensee to one of the following: its former or equivalent 2 GHz channels, another comparable frequency band, a land-line system, or any other facility that satisfies the requirements specified in paragraph (f) of this section. This trial period commences on the date that the PARS licensee begins full operation of the replacement link. If the PARS licensee has retained its 2 GHz authorization during the trial period, it must return the license to the Commission at the end of the twelve months.

(i) After April 25, 1996, all major modifications and extensions to existing PARS systems operating on channels in the 2110–2130 and 2160–2180 MHz bands will be authorized on a secondary basis to future ET operations. All other modifications will render the modified PARS license secondary to future ET operations unless the incumbent affirmatively justifies primary status and the incumbent PARS licensee establishes that the modification would not add to the relocation costs of ET licensees. Incumbent PARS licensees will maintain primary status for the following technical changes:

(1) Decreases in power;

(2) Minor changes (increases or decreases) in antenna height;

(3) Minor location changes (up to two seconds);

(4) Any data correction which does not involve a change in the location of an existing facility;

(5) Reductions in authorized bandwidth;

(6) Minor changes (increases or decreases) in structure height;

(7) Changes (increases or decreases) in ground elevation that do not affect centerline height;

(8) Minor equipment changes.

(j) *Sunset*. PARS licensees will maintain primary status in the 2110–2130 and 2160–2180 MHz bands unless and until an ET licensee requires use of the spectrum. ET licensees are not required to pay relocation costs after the relocation rules sunset (*i.e.* ten years after the voluntary period begins for the first ET licensees in the service). Once

the relocation rules sunset, an ET licensee may require the incumbent to cease operations, provided that the ET licensee intends to turn on a system within interference range of the incumbent, as determined by TIA Bulletin 10–F or any standard successor. ET licensee notification to the affected PARS licensee must be in writing and must provide the incumbent with no less than six months to vacate the spectrum. After the six-month notice period has expired, the PARS licensee must turn its license back into the Commission, unless the parties have entered into an agreement which allows the PARS licensee to continue to operate on a mutually agreed upon basis. If the parties cannot agree on a schedule or an alternative arrangement, requests for extension will be accepted and reviewed on a case-by-case basis. The Commission will grant such extensions only if the incumbent can demonstrate that:

(1) It cannot relocate within the six-month period (*e.g.*, because no alternative spectrum or other reasonable option is available), and;

(2) The public interest would be harmed if the incumbent is forced to terminate operations (*e.g.*, if public safety communications services would be disrupted).

[61 FR 29689, June 12, 1996]

§ 22.603 488–494 MHz fixed service in Hawaii.

Before filing applications for authorization of inter-island control and/or repeater stations, applicants must coordinate the planned channel usage with existing licensees and other applicants with previously filed applications, using the procedure outlined in § 22.150. Applicants and licensees shall cooperate fully and make reasonable efforts to resolve any channel usage conflicts. In situations where technical solutions to such conflicts cannot be devised, the FCC may select a channel or channels to assign or may designate the application(s) for hearing. To be acceptable for filing, applications and major technical amendments must contain a certification that coordination has been completed and an exhibit listing the name(s) of the licensees and applicants with which the planned channel usage has been coordinated.

POINT-TO-MULTIPOINT OPERATION

§ 22.621 Channels for point-to-multipoint operation.

The following channels are allocated for assignment to transmitters utilized within point-to-multipoint systems that support transmitters that provide public mobile service. Unless otherwise indicated, all channels have a bandwidth of 20 kHz and are designated by their center frequencies in MegaHertz. No new licenses will be issued for any 900 MHz frequencies in this section. See part 101, subpart O of this chapter for treatment of incumbents and for new licensing procedures. Incumbents under part 22 are subject to the restrictions of part 101, subpart O of this chapter but may make permissible modifications, transfers, assignments, or renew their licenses using procedures, forms, fees, and filing requirements of part 22.

Public Mobile Pool

(25 kHz bandwidth)

928.8625	959.8625	928.9375	959.9375
928.8875	959.8875	928.9625	959.9625
928.9125	959.9125	928.9875	959.9875

(12.5 kHz bandwidth)

928.85625	959.85625	928.93125	959.93125
928.86875	959.86875	928.94375	959.94375
928.88125	959.88125	928.95625	959.95625
928.89375	959.89375	928.96875	959.96875
928.90625	959.90625	928.98125	959.98125
928.91875	959.91875	928.99375	959.99375

Private Radio General Access Pool

(25 kHz bandwidth)

956.2625	956.3125	956.3625	956.4125
956.2875	956.3375	956.3875	956.4375
928.0125	952.0125	928.1875	952.1875
928.0375	952.0375	928.2125	952.2125
928.0625	952.0625	928.2375	952.2375
928.0875	952.0875	928.2625	952.2625
928.1125	952.1125	928.2875	952.2875
928.1375	952.1375	928.3125	952.3125
928.1625	952.1625	928.3375	952.3375

(12.5 kHz bandwidth)

956.25625	956.30625	956.35625	956.40625
956.26875	956.31875	956.36875	956.41875
956.28125	956.33125	956.38125	956.43125
956.29375	956.34375	956.39375	956.44375
928.00625	952.00625	928.18125	952.18125
928.01875	952.01875	928.19375	952.19375
928.03125	952.03125	928.20625	952.20625
928.04375	952.04375	928.21875	952.21875
928.05625	952.05625	928.23125	952.23125
928.06875	952.06875	928.24375	952.24375
928.08125	952.08125	928.25625	952.25625
928.09375	952.09375	928.26875	952.26875
928.10625	952.10625	928.28125	952.28125
928.11875	952.11875	928.29375	952.29375

928.13125	952.13125	928.30625	952.30625
928.14375	952.14375	928.31875	952.31875
928.15625	952.15625	928.33125	952.33125
928.16875	952.16875	928.34375	952.34375

Private Radio Power Pool

(25 kHz bandwidth)

928.3625	952.3625	928.6125	952.6125
928.3875	952.3875	928.6375	952.6375
928.4125	952.4125	928.6625	952.6625
928.4375	952.4375	928.6875	952.6875
928.4625	952.4625	928.7125	952.7125
928.4875	952.4875	928.7375	952.7375
928.5125	952.5125	928.7625	952.7625
928.5375	952.5375	928.7875	952.7875
928.5625	952.5625	928.8125	952.8125
928.5875	952.5875	928.8375	952.8375

(12.5 kHz bandwidth)

928.35625	952.35625	928.60625	952.60625
928.36875	952.36875	928.61875	952.61875
928.38125	952.38125	928.63125	952.63125
928.39375	952.39375	928.64375	952.64375
928.40625	952.40625	928.65625	952.65625
928.41875	952.41875	928.66875	952.66875
928.43125	952.43125	928.68125	952.68125
928.44375	952.44375	928.69375	952.69375
928.45625	952.45625	928.70625	952.70625
928.46875	952.46875	928.71875	952.71875
928.48125	952.48125	928.73125	952.73125
928.49375	952.49375	928.74375	952.74375
928.50625	952.50625	928.75625	952.75625
928.51875	952.51875	928.76875	952.76875
928.53125	952.53125	928.78125	952.78125
928.54375	952.54375	928.79375	952.79375
928.55625	952.55625	928.80625	952.80625
928.56875	952.56875	928.81875	952.81875
928.58125	952.58125	928.83125	952.83125
928.59375	952.59375	928.84375	952.84375

Public, Private, Government Shared Pool

(12.5 kHz bandwidth)

932.00625	941.00625	932.25625	941.25625
932.01875	941.01875	932.26875	941.26875
932.03125	941.03125	932.28125	941.28125
932.04375	941.04375	932.29375	941.29375
932.05625	941.05625	932.30625	941.30625
932.06875	941.06875	932.31875	941.31875
932.08125	941.08125	932.33125	941.33125
932.09375	941.09375	932.34375	941.34375
932.10625	941.10625	932.35625	941.35625
932.11875	941.11875	932.36875	941.36875
932.13125	941.13125	932.38125	941.38125
932.14375	941.14375	932.39375	941.39375
932.15625	941.15625	932.40625	941.40625
932.16875	941.16875	932.41875	941.41875
932.18125	941.18125	932.43125	941.43125
932.19375	941.19375	932.44375	941.44375
932.20625	941.20625	932.45625	941.45625
932.21875	941.21875	932.46875	941.46875
932.23125	941.23125	932.48125	941.48125
932.24375	941.24375	932.49375	941.49375

UHF Channels in Specified Urban Areas

Boston

470.0125	473.0125	482.0125	485.0125
470.0375	473.0375	482.0375	485.0375
470.0625	473.0625	482.0625	485.0625
470.0875	473.0875	482.0875	485.0875
470.1125	473.1125	482.1125	485.1125
470.1375	473.1375	482.1375	485.1375
470.1625	473.1625	482.1625	485.1625
470.1875	473.1875	482.1875	485.1875
470.2125	473.2125	482.2125	485.2125
470.2375	473.2375	482.2375	485.2375
470.2625	473.2625	482.2625	485.2625
470.2875	473.2875	482.2875	485.2875

Chicago, Cleveland

470.0125	473.0125	476.0125	479.0125
470.0375	473.0375	476.0375	479.0375
470.0625	473.0625	476.0625	479.0625
470.0875	473.0875	476.0875	479.0875
470.1125	473.1125	476.1125	479.1125
470.1375	473.1375	476.1375	479.1375
470.1625	473.1625	476.1625	479.1625
470.1875	473.1875	476.1875	479.1875
470.2125	473.2125	476.2125	479.2125
470.2375	473.2375	476.2375	479.2375
470.2625	473.2625	476.2625	479.2625
470.2875	473.2875	476.2875	479.2875

New York-Northeastern New Jersey

470.0125	470.1625	476.0125	476.1625
470.0375	470.1875	476.0375	476.1875
470.0625	470.2125	476.0625	476.2125
470.0875	470.2375	476.0875	476.2375
470.1125	470.2625	476.1125	476.2625
470.1375	470.2875	476.1375	476.2875

Dallas-Forth Worth

482.0125	482.1625	485.0125	485.1625
482.0375	482.1875	485.0375	485.1875
482.0625	482.2125	485.0625	485.2125
482.0875	482.2375	485.0875	485.2375
482.1125	482.2625	485.1125	485.2625
482.1375	482.2875	485.1375	485.2875

Detroit

476.0125	479.0125	482.0125	485.0125
476.0375	479.0375	482.0375	485.0375
476.0625	479.0625	482.0625	485.0625
476.0875	479.0875	482.0875	485.0875
476.1125	479.1125	482.1125	485.1125
476.1375	479.1375	482.1375	485.1375
476.1625	479.1625	482.1625	485.1625
476.1875	479.1875	482.1875	485.1875
476.2125	479.2125	482.2125	485.2125
476.2375	479.2375	482.2375	485.2375
476.2625	479.2625	482.2625	485.2625
476.2875	479.2875	482.2875	485.2875

Houston

488.1625	491.1625	488.2375	491.2375
488.1875	491.1875	488.2625	491.2625
488.2125	491.2125	488.2875	491.2875

Los Angeles

470.0125	473.0125	506.0625	509.0625
470.0375	473.0375	506.0875	509.0875
506.0125	509.0125	506.1125	509.1125
506.0375	509.0375	.	

Miami

470.0125	470.1625	473.0125	473.1625
470.0375	470.1875	473.0375	473.1875
470.0625	470.2125	473.0625	473.2125
470.0875	470.2375	473.0875	473.2375
470.1125	470.2625	473.1125	473.2625
470.1375	470.2875	473.1375	473.2875

Philadelphia

500.0125	503.0125	506.0125	509.0125
500.0375	503.0375	506.0375	509.0375
500.0625	503.0625	506.0625	509.0625
500.0875	503.0875	506.0875	509.0875
500.1125	503.1125	506.1125	509.1125
500.1375	503.1375	506.1375	509.1375
500.1625	503.1625	506.1625	509.1625
500.1875	503.1875	506.1875	509.1875
500.2125	503.2125	506.2125	509.2125
500.2375	503.2375	506.2375	509.2375
500.2625	503.2625	506.2625	509.2625

500.2875	503.2875	506.2875	509.2875
Pittsburgh			
470.0125	470.1625	473.0125	473.1625
470.0375	470.1875	473.0375	473.1875
470.0625	470.2125	473.0625	473.2125
470.0875	470.2375	473.0875	473.2375
470.1125	470.2625	473.1125	473.2625
470.1375	470.2875	473.1375	473.2875
San Francisco			
482.0125	485.0125	488.0125	491.0125
482.0375	485.0375	488.0375	491.0375
482.0625	485.0625	488.0625	491.0625
482.0875	485.0875	488.0875	491.0875
482.1125	485.1125	488.1125	491.1125
482.1375	485.1375	488.1375	491.1375
482.1625	485.1625	488.1625	491.1625
482.1875	485.1875	488.1875	491.1875
482.2125	485.2125	488.2125	491.2125
482.2375	485.2375	488.2375	491.2375
482.2625	485.2625	488.2625	491.2625
482.2875	485.2875	488.2875	491.2875
Washington, DC			
488.0125	491.0125	494.0125	497.0125
488.0375	491.0375	494.0375	497.0375
488.0625	491.0625	494.0625	497.0625
488.0875	491.0875	494.0875	497.0875
488.1125	491.1125	494.1125	497.1125
488.1375	491.1375	494.1375	497.1375
488.1625	491.1625	494.1625	497.1625
488.1875	491.1875	494.1875	497.1875
488.2125	491.2125	494.2125	497.2125
488.2375	491.2375	494.2375	497.2375
488.2625	491.2625	494.2625	497.2625
488.2875	491.2875	494.2875	497.2875

[59 FR 59507, Nov. 17, 1994; 60 FR 9890, Feb. 22, 1995, as amended at 61 FR 54099, Oct. 17, 1996; 65 FR 17448, Apr. 3, 2000]

§ 22.623 System configuration.

This section requires a minimum configuration for point-to-multipoint systems using the channels listed in § 22.621.

(a) *928–960 MHz*. The channels may be assigned, individually or paired, only to fixed transmitters in a system that controls at least four public mobile base transmitters that transmit on the same channel. If a 932–933 MHz channel and a 941–942 MHz channel are assigned as a pair, the 941–942 MHz channel must be assigned only to control transmitters; the 932–933 MHz channel may be assigned to control or fixed relay transmitters.

(b) *470–512 MHz*. These channels may be assigned only individually (unpaired), to control transmitters that directly control at least four public mobile base transmitters that transmit on the same channel. Fixed relay transmitters are not authorized.

(c) *Selection and assignment*. The FCC selects and assigns a channel when granting applications for authorization to operate a new station to transmit in the 470–512, 932–933 and 941–942 MHz frequency ranges. Applicants having a preference may request the assignment of a specific channel or channel pair, but the FCC may in some cases be unable to satisfy such requests.

§ 22.625 Transmitter locations.

This section governs where point-to-multipoint transmitters on the channels listed in § 22.621 may be located.

(a) *928–960 MHz*. In this frequency range, the required minimum distance separation between co-channel fixed transmitters is 113 kilometers (70 miles). However, this requirement may be waived if the applicant submits an engineering analysis that shows that no interference would be caused to either system. In such a case, a developmental authorization may be issued (see § 22.415). If no interference is experienced during the term of the developmental authorization, the licensee may apply for a regular authorization.

(b) *470–512 MHz*. The purpose of the rule in paragraph (b)(1) of this section is to define the areas in which the 470–512 MHz channels are allocated for public mobile use. The purpose of the rules in paragraphs (b)(2) and (b)(3) of this section is to reduce the likelihood that interference to television reception from public mobile operations on these channels will occur.

(1) *Control transmitter locations*. Control transmitter locations must be within 80 kilometers (50 miles) of the designated locations in this paragraph.

Urban area	N. latitude	W. longitude
Boston, MA	42°21′24.4″	71°03′22.2″
Chicago, IL	41°52′28.1″	87°38′22.2″
Cleveland, OH	41°29′51.2″	81°41′49.5″
Dallas, TX	32°47′09.5″	96°47′38.0″
Detroit, MI	42°19′48.1″	83°02′56.7″
Houston, TX	29°45′26.8″	95°21′37.8″
Los Angeles, CA	34°03′15.0″	18°14′31.3″
Miami, FL	25°46′38.6″	80°11′31.2″
New York, NY	40°45′6.4″	73°59′37.5″
Philadelphia, PA	39°56′58.4″	75°09′19.6″
Pittsburgh, PA	40°26′19.2″	79°59′59.2″
San Francisco-Oakland, CA ..	37°46′38.7″	122°24′43.9″
Washington, DC	38°53′51.4″	77°00′31.9″

Note: Coordinates are referenced to North American Datum 1983 (NAD 83).

(2) *Protection from intermodulation interference*. Control transmitter locations must be at least 1.6 kilometers (1

mile) from the main transmitter locations of all TV stations transmitting on TV channels separated by 2, 3, 4, 5, 7, or 8 TV channels from the TV channel containing the frequencies on which the control station will transmit. This requirement is intended to reduce the likelihood of intermodulation interference.

(3) *Co-channel protection from control transmitters with high antennas.* This paragraph applies only to control transmitters that utilize an antenna height of more than 152 meters (500 feet) above average terrain. The distance between the location of such a control transmitter and the applicable protected TV station location specified in this paragraph must equal or exceed the sum of the distance from the control transmitter location to the radio horizon in the direction of the specified location and 89 kilometers (55 miles—representing the distance from the main transmitter location of the TV station to its Grade B contour in the direction of the control transmitter). The protected TV station locations in this paragraph are the locations of record as of September 1974, and these do not change even though the TV stations may have been subsequently relocated.

(i) The protected TV station locations are as follows:

Control transmitter frequency range	Protected TV station location
470–476 MHz.	Washington, DC 38°57′17″ 77°00′17″
476–482 MHz.	Lancaster, PA 40°15′45″ 76°27′49″

(ii) The distance to the radio horizon is calculated using the following formula:

$$d = \sqrt{17 \times h}$$

where

d is the distance to the radio horizon in kilometers

h is the height of the antenna center of radiation above ground level in meters

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68946, Dec. 14, 1998]

§ 22.627 Effective radiated power limits.

The effective radiated power (ERP) of transmitters operating on the channels listed in § 22.621 must not exceed the limits in this section.

(a) *Maximum ERP.* The ERP must not exceed the applicable limits in this paragraph under any circumstances.

Frequency range (MHz)	Maximum ERP (watts)
470–512	1000
928–929	50
932–933	30
941–942	600
952–960	150

(b) *470–512 MHz limits.* The purpose of the rules in paragraphs (b)(1) through (b)(3) of this section is to reduce the likelihood that interference to television reception from public mobile operations on these channels will occur. The protected TV station locations specified in this section are the locations of record as of September 1974, and these do not change even though the TV stations may have been subsequently relocated.

(1) *Co-channel protection.* The ERP of control transmitters must not exceed the limits in the tables in paragraphs (b)(1)(ii) and (b)(1)(iii) of this section. The limits depend upon the height above average terrain of the control transmitter antenna and the distance between the control transmitter and the nearest protected TV station location in paragraph (b)(1)(i) of this section.

(i) The protected TV station locations are as follows (all coordinates are referenced to North American Datum 1983 (NAD83)):

Control transmitter frequency range	Protected TV station location
470–476 MHz	Jacksonville, IL, 39°45′52.2″ N. Lat. 90°30′29.5″ W. Long. Mt. Pleasant, MI, 43°34′24.1″ N. Lat. 84°46′21.1″ W. Long.

Control transmitter frequency range	Protected TV station location
476–482 MHz	Oxford, OH, 39°30′26.2″ N. Lat. 84°44′ 8.8″ W. Long.
482–488 MHz	
488–494 MHz	
494–500 MHz	
500–506 MHz	Washington, DC, 38°57′ 17.4″ N. Lat. 77°00′ 15.9″ W. Long.
506–512 MHz	
	Champaign, IL, 40°04′11.1″ N. Lat. 87° 54′45.1″ W. Long.
	Madison, WI, 43°03′01.0″ N. Lat. 89°29′ 15.4″ W. Long.
	Parkersburg, WV, 39°20′50.3″ N. Lat. 81°33′ 55.5″ W. Long.
	Fort Wayne, IN, 41°05′35.2″ N. Lat. 85°10′ 41.9″ W. Long.
	Lancaster, PA, 40°15′45.3″ N. Lat. 76°27′ 47.9″ W. Long.
	South Bend, IN, 41°36′26.2″ N. Lat. 86°27′ 48.1″ W. Long.
	Philadelphia, PA, 40°02′30.4″ N. Lat. 75°14′ 22.6″ W. Long.
	None.
	Johnstown, PA, 40°19′47.3″ N. Lat. 78°53′ 44.1″ W. Long.
	Washington, DC, 38°57′49.4″ N. Lat. 77°06′ 16.9″ W. Long.
	Waterbury, CT, 41°31′2.3″ N. Lat. 73°00′ 58.4″ W. Long.

(ii) Table E–3 and E–4 apply to control transmitters in the New York–Northeastern New Jersey and Cleveland urban areas that transmit on channels in the 476–482 MHz range and to control transmitters in the Detroit urban area that transmit on channels in the 482–488 MHz range.

(iii) Tables E–5 and E–6 apply to all control transmitters except those to which Tables E–3 and E–4 apply.

(2) *Adjacent channel protection.* The ERP of control transmitters must not exceed the limits in Table E–7. The limits depend upon the height above average terrain of the control transmitter antenna and the distance between the control transmitter and the nearest protected TV station location listed in this paragraph. The protected TV station locations are as follows (all coordinates are referenced to North American Datum 1983 (NAD83)):

Control transmitter frequency range	Protected TV station location	TV channel
470–476 MHz.	Hanover, NH, 43°42′30.3″ N. Lat. 72°09′14.3″ W. Long..	(15)
	Madison, WI, 43°03′01.0″ N. Lat. 89°29′15.4″ W. Long..	(15)
	Champaign, IL, 40°04′11.1″ N. Lat. 87°54′45.1″ W. Long..	(15)
	San Diego, CA, 32°41′48.2″ N. Lat. 116°56′13.1″ W. Long..	(15)
	Lancaster, PA, 40°15′45.3″ N. Lat. 76°27′47.9″ W. Long..	(15)
	Parkersburg, WV, 39°20′50.3″ N. Lat. 81°33′55.5″ W. Long..	(15)
476–482 MHz.	South Bend, IN, 41°36′26.2″ N. Lat. 86°27′48.1″ W. Long..	(16)
	Pittsburgh, PA, 40°26′46.2″ N. Lat. 79°57′50.2″ W. Long..	(16)
	Mt. Pleasant, MI, 43°34′24.1″ N. Lat. 84°46′21.1″ W. Long..	(14)
	Scranton, PA, 41°10′58.3″ N. Lat. 75°52′19.7″ W. Long..	(16)
482–488 MHz.	Hanover, NH, 43°42′30.3″ N. Lat. 72°09′14.3″ W. Long..	(15)
	Fort Wayne, IN, 41°05′35.2″ N. Lat. 85°10′41.9″ W. Long..	(15)
488–494 MHz.	Salisbury, MD, 38°24′15.4″ N. Lat. 75°34′43.7″ W. Long..	(16)
494–500 MHz.	Philadelphia, PA, 40°02′30.4″ N. Lat. 75°14′22.6″ W. Long..	(17)
500–506 MHz.	Washington, DC, 38°57′17.4″ N. Lat. 77°00′15.9″ W. Long..	(20)
506–512 MHz.	Harrisburg, PA, 40°20′44.3″ N. Lat. 76°52′07.9″ W. Long..	(21)

(c) *Los Angeles area.* This paragraph applies only to control transmitters in the Los Angeles urban area that utilize an antenna height of 457 or more meters (1500 or more feet) above mean sea level. The ERP of such transmitters must not exceed the following limits:

Antenna height	ERP
AMSL in meters (feet)	(Watts)
457 (1500) to 610 (2000)	155
611 (2001) to 762 (2500)	100
763 (2501) to 914 (3000)	70
915 (3001) to 1067 (3500)	50

Antenna height AMSL in meters (feet)	ERP (Watts)
1068 (3501) to 1219 (4000)	40
1220 (4001) to 1372 (4500)	30
1373 (4501) and above	25

TABLE E–3.—MAXIMUM ERP (WATTS) FOR CONTROL TRANSMITTERS (HAAT 152 METERS OR LESS)

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)									
	15 (50)	30 (100)	46 (150)	61 (200)	76 (250)	91 (300)	107 (350)	122 (400)	137 (450)	152 (500)
209 (130)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
201 (125)	1000	1000	1000	1000	1000	1000	1000	850	750	725
193 (120)	1000	1000	1000	1000	900	750	675	600	550	500
185 (115)	1000	1000	800	725	600	525	475	425	375	350
177 (110)	850	700	600	500	425	375	325	300	275	225
169 (105)	600	475	400	325	275	250	225	200	175	150
161 (100)	400	325	275	225	175	150	140	125	110	100
153 (95)	275	225	175	125	110	95	80	70	60	50
145 (90)	175	125	100	75	50	.....	.....	.....	.....	.....

See § 22.627(b)(1)(ii). This table is for antenna heights of 152 meters (500 feet) or less above average terrain. For antenna heights between those in the table, use the next higher antenna height. For distances between those in the table, use the next lower distance.

TABLE E–4.—MAXIMUM ERP (WATTS) FOR CONTROL TRANSMITTERS (HAAT MORE THAN 152 METERS)

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)					
	152 (500)	305 (1000)	457 (1500)	610 (2000)	762 (2500)	914 (3000)
209 (130)	1000	447	219	117	71	46
193 (120)	500	209	95	50	30	19
177 (110)	225	91	35	19	11	8
161 (100)	100	30	10	5	3	2
153 (95)	50	13	5	3	2	1

See § 22.627(b)(1)(ii). This table is for antenna heights of more than 152 meters (500 feet) above average terrain. For intermediate values of height and/or distance, use linear interpolation to obtain the maximum permitted ERP.

TABLE E–5.—MAXIMUM ERP (WATTS) FOR CONTROL TRANSMITTERS (HAAT 152 METERS OR LESS)

Distance to protected TV station in kilometers (miles)	Antenna Height Above Average Terrain in meters (feet)									
	15 (50)	30 (100)	46 (150)	61 (200)	76 (250)	91 (300)	107 (350)	122 (400)	137 (450)	152 (500)
261 (162)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
257 (160)	1000	1000	1000	1000	1000	1000	1000	1000	1000	800
249 (155)	1000	1000	1000	1000	1000	875	775	700	625	575
241 (150)	1000	1000	950	775	725	625	550	500	450	400
233 (145)	850	750	650	575	500	440	400	350	320	300
225 (140)	600	575	465	400	350	300	275	250	230	225
217 (135)	450	400	335	300	255	240	200	185	165	150
209 (130)	350	300	245	200	185	160	145	125	120	100
201 (125)	225	200	170	150	125	110	100	90	80	75
193 (120)	175	150	125	105	90	80	70	60	55	50

AAAAASee § 22.627(b)(1)(iii). This table applies for antenna heights of 152 meters (500 feet) or less above average terrain. For antenna heights between those in the table, use the next higher antenna height. For distances between those in the table, use the next lower distance.

TABLE E–6.—MAXIMUM ERP (WATTS) FOR CONTROL TRANSMITTERS (HAAT MORE THAN 152 METERS)

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)					
	152 (500)	305 (1000)	457 (1500)	610 (2000)	762 (2500)	914 (3000)
261 (162)	1000	501	282	170	110	71
241 (150)	400	209	110	60	36	23
225 (140)	225	102	50	28	16	10
209 (130)	100	48	21	11	7	5

TABLE E–6.—MAXIMUM ERP (WATTS) FOR CONTROL TRANSMITTERS (HAAT MORE THAN 152 METERS)—Continued

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)					
	152 (500)	305 (1000)	457 (1500)	610 (2000)	762 (2500)	914 (3000)
193 (120)	50	19	9	5	3	2

AAAAASee § 22.627(b)(1)(iii). This table is for antenna heights of more than 152 meters (500 feet) above average terrain. For intermediate values of height and/or distance, use linear interpolation to obtain the maximum permitted ERP.

TABLE E–7.—MAXIMUM ERP (WATTS) FOR CONTROL TRANSMITTERS

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)								
	30 (100)	46 (150)	61 (200)	76 (250)	91 (300)	107 (350)	122 (400)	137 (450)	152 (500)
108 (67)	1000	1000	1000	1000	1000	1000	1000	1000	1000
106 (66)	1000	1000	1000	1000	1000	1000	1000	1000	750
105 (65)	1000	1000	1000	1000	1000	1000	825	650	600
103 (64)	1000	1000	1000	1000	1000	775	625	500	400
101 (63)	1000	1000	1000	1000	440	400	350	320	300
100 (62)	1000	1000	1000	525	375	250	200	150	125
98 (61)	1000	700	450	250	200	125	100	75	50
97 (60)	1000	425	225	125	100	75	50	.....	.....

See § 22.627(b)(2). This table applies to control transmitters in the Boston, Chicago, Cleveland, Detroit, Los Angeles, New York-Northeastern New Jersey, Philadelphia, Pittsburgh and Washington, DC urban areas. This table is for antenna heights of 152 meters (500 feet) or less above average terrain. For antenna heights between those in the table, use the next higher antenna height. For distances between those in the table, use the next lower distance.

[59 FR 59507, Nov. 17, 1994; 60 FR 9890, Feb. 22, 1995; 63 FR 68946, Dec. 14, 1998]

470–512 MHz TRUNKED MOBILE OPERATION

§ 22.651 470–512 MHz channels for trunked mobile operation.

The following channels are allocated for assignment to transmitters providing trunked public mobile service within the specified urban areas. All channels have a bandwidth of 20 kHz and are designated by their center frequencies in MegaHertz.

Houston

488.0125	491.0125	488.0875	491.0875
488.0375	491.0375	488.1125	491.1125
488.0625	491.0625	488.1375	491.1375

New York-Northern New Jersey

473.0125	479.0125	473.1625	479.1625
473.0375	479.0375	473.1875	479.1875
473.0625	479.0625	473.2125	479.2125
473.0875	479.0875	473.2375	479.2375
473.1125	479.1125	473.2625	479.2625
473.1375	479.1375	473.2875	479.2875

[59 FR 59507, Nov. 17, 1994; 60 FR 9891, Feb. 22, 1995]

§ 22.653 Eligibility.

Only licensees already authorized to provide trunked mobile service or their successors in interest are eligible to apply for additional use of these channels for trunked mobile service, and then only in the urban areas already authorized.

§ 22.655 Channel usage.

The FCC is redesignating the public mobile channels in the 470–512 MHz range from trunked mobile operation to point-to-multipoint operation as the demand for trunked mobile service decreases.

(a) The licensees in each market shall measure channel usage at least once every 3 months. These measurements shall be reported to the FCC within 30 days. Measurements shall be taken during the busiest 12-hour periods on 3 days (within a 7-day period) having normal usage. The information must be reported separately for each of the 3 days selected, must be reported by dates, and must disclose the following:

(1) The number of mobile units in service during each of the days specified;

(2) The number of calls completed each hour;

(3) The total number of minutes during each hour that the channels were

utilized for communications by the mobile units;

(4) The average channel usage for the busiest hour for the 3 days measured; and

(5) Any additional information that more accurately reflects channel usage.

(b) If the measured probability of blocking decreases below 25%, the FCC will redesignate channels not needed to maintain blocking at 25% or less. The number of channels needed to maintain blocking below 25% will be determined from the channel usage reports and the Erlang C tables.

(c) Although two or more channels are necessary to provide trunked service, the FCC may, pursuant to this section, reduce to one the number of channels assigned. In such cases, the licensee may provide non-trunked two-way public mobile service on the one remaining channel.

§ 22.657 Transmitter locations.

The purpose of the rules in paragraphs (a) and (b) of this section is to define the areas in which the 470–512 MHz channels are allocated for public mobile use. The purpose of the rules in paragraphs (c) through (f) of this section is to reduce the likelihood that interference to television reception from public mobile operations on these channels will occur. The protected TV station locations specified in paragraphs (d), (e)(1) and (f) of this section are the locations of record as of September 1974, and these do not change even though the TV stations may have been subsequently relocated.

(a) *Base transmitter locations*. Base transmitter locations must be within 80 kilometers (50 miles) of the designated locations in this paragraph. Mobile transmitters must not be operated at locations more than 129 kilometers (80 miles) from the designated locations in this paragraph. Note: All coordinates are referenced to North American Datum 1983 (NAD83).

Urban area	N. latitude	W. longitude
Houston, TX	29°45′26.8″	95°21′37.8″
New York, NY–NE NJ	40°45′06.4″	73°59′37.5″

(b) *Mobile area of operation*. Mobile transmitters must not be operated at locations more than 48 kilometers (30 miles) from all associated base stations.

(c) *Protection from intermodulation interference*. Base transmitter locations must be at least 1.6 kilometers (1 mile) from the current main transmitter locations of all TV stations transmitting on TV channels separated by 2, 3, 4, 5, 7, or 8 TV channels from the TV channel containing the frequencies on which the base station will transmit. This requirement is intended to reduce the likelihood of intermodulation interference.

(d) Adjacent channel protection from mobile transmitters. Base transmitter locations must be at least 145 kilometers (90 miles) from the applicable protected TV station locations specified in this paragraph. This requirement is intended to provide a 0 dB minimum desired to undesired signal strength ratio at the Grade B contour of an adjacent channel TV station. Note: All coordinates are referenced to North American Datum 1983 (NAD83).

Control transmitter frequency range	Protected TV station location	TV channel
470–476 MHz.	Lancaster, PA, 40°15′45.3″ N. Lat. 76°27′47.9″ W. Long..	(15)
476–482 MHz.	Scranton, PA, 41°10′58.3″ N. Lat. 75°52′19.7″ W. Long..	(16)

(e) *Co-channel protection from mobile transmitters*. Base transmitter locations must be at least the distance specified in paragraph (e)(2) of this section from the applicable protected TV station locations specified in paragraph (e)(1) of this section. This requirement is intended to provide a 40 dB minimum desired to undesired signal strength ratio at the Grade B contour of a co-channel TV station.

(1) The protected TV station locations are as follows (all coordinates are referenced to North American Datum 1983 (NAD83)):

Control transmitter frequency range	Protected TV station location
470–476 MHz.	Washington, DC, 38°57′17.4″ N. Lat. 77°00′15.9″ W. Long.
476–482 MHz.	Lancaster, PA, 40°15′45.3″ N. Lat. 76°27′47.9″ W. Long.

(2) The required minimum distance depends upon the effective radiated power (ERP) of the most powerful mobile transmitter(s) in the system:

Mobile unit ERP (watts)	Minimum distance	
	Kilometers	Miles
60	193	(120)
50	185	(115)
25	177	(110)
10	169	(105)
5	161	(100)

(f) *Co-channel protection from base transmitters with high antennas.* This paragraph applies only to base transmitter locations in the New York-Northeastern New Jersey urban area that utilize an antenna height of more than 152 meters (500 feet) above average terrain. The distance between the location of such a base transmitter and the applicable protected TV station location specified in this paragraph must equal or exceed the sum of the distance from the base transmitter location to the radio horizon in the direction of the specified location and 89 kilometers (55 miles—representing the distance from the main transmitter location of the TV station to its Grade B contour in the direction of the base transmitter). The distance to the radio horizon is calculated as follows:

$$d = \sqrt{17 \times h}$$

Where d is the distance to the radio horizon in kilometers h is the height of the antenna center of radiation above ground level in meters

NOTE: All coordinates are referenced to North American Datum 1983 (NAD83)):

Control transmitter frequency range	Protected TV station location
470–476 MHz	Washington, DC, 38°57′17.4″ N. Lat. 77°00′15.9″ W. Long.
476–482 MHz	Lancaster, PA, 40°15′45.3″ N. Lat. 76°27′47.9″ W. Long.

(g) The FCC may waive specific distance separation requirements of paragraphs (d) through (f) of this section if the applicant submits an engineering analysis which demonstrates that terrain effects and/or operation with less effective radiated power would satisfy the applicable minimum desired to undesired signal strength ratios at the Grade B contours of the protected TV stations. For this purpose, the Grade B contour of a TV station is deemed to be a circle with a 89 kilometer (55 mile) radius, centered on the protected TV station location, and along which the median TV signal field strength is 64 dBμV/m. In any showing intended to demonstrate compliance with the minimum desired to undesired signal ratio requirements of this section, all predicted field strengths must have been determined using the UHF TV propagation curves contained in part 73 of this chapter.

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68947, Dec. 14, 1998]

§ 22.659 Effective radiated power limits.

The purpose of the rules in this section, which limit effective radiated power (ERP), is to reduce the likelihood that interference to television reception from public mobile operations on these channels will occur. The protected TV station locations specified in this section are the locations of record as of September 1974, and these do not change even though the TV stations may have been subsequently relocated.

(a) *Maximum ERP.* The ERP of base transmitters must not exceed 100 Watts under any circumstances. The ERP of mobile transmitters must not exceed 60 Watts under any circumstances.

(b) *Co-channel protection from base transmitters.* The ERP of base transmitters in the New York-Northeastern New Jersey urban area must not exceed the limits in the tables referenced in paragraphs (b)(2) and (b)(3) of this section. The limits depend upon the height above average terrain of the base transmitter antenna and the distance between the base transmitter and the nearest protected TV station

location in paragraph (b)(1) of this section.

(1) The protected TV station locations are as follows (all coordinates are referenced to North American Datum 1983 (NAD83)):

Control transmitter frequency range	Protected TV station location
470–476 MHz.	Washington, DC, 38°57′17.4″ N. Lat. 77°00′15.9″ W. Long.
476–482 MHz.	Lancaster, PA, 40°15′45.3″ N. Lat. 76°27′47.9″ W. Long.

(2) Tables E–8 and E–9 of this section apply to base transmitters in the New York-Northeastern New Jersey urban area that transmit on channels in the 476–482 MHz range.

(3) Tables E–10 and E–11 of this section apply to base transmitters in the New York-Northeastern New Jersey urban area that transmit on channels in the 470–476 MHz range.

(c) *Adjacent channel protection from base transmitters.* The ERP of base transmitters must not exceed the limits in Table E–12 of this section. The limits depend upon the height above average terrain of the base transmitter antenna and the distance between the base transmitter and the nearest protected TV station location specified in paragraph (c)(1) of this section.

(1) The protected TV station locations are as follows (all coordinates are referenced to North American Datum 1983 (NAD83)):

Control transmitter frequency range	Protected TV station location	TV channel
470–476 MHz	Hanover, NH, 43°42′30.3″ N. Lat. 72°09′14.3″ W. Long	(15)
476–482 MHz	Lancaster, PA, 40°15′45.3″ N. Lat. 76°27′47.9″ W. Long	(15)
482–488 MHz	Scranton, PA, 41°10′58.3″ N. Lat. 75°52′19.7″ W. Long	(16)
	Hanover, NH, 43°42′30.3″ N. Lat. 72°09′14.3″ W. Long	(15)

Note: Coordinates are referenced to North American Datum 1983 (NAD83).

(2) Table E–12 of this section applies to base transmitters in the New York-Northeastern New Jersey urban area.

TABLE E–8.—MAXIMUM ERP (WATTS) FOR BASE TRANSMITTERS (HAAT 152 METERS OR LESS)

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)									
	15 (50)	30 (100)	46 (150)	61 (200)	76 (250)	91 (300)	107 (350)	122 (400)	137 (450)	152 (500)
209 (130)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
201 (125)	1000	1000	1000	1000	1000	1000	1000	850	750	725
193 (120)	1000	1000	1000	1000	900	750	675	600	550	500
185 (115)	1000	1000	800	725	600	525	475	425	375	350
177 (110)	850	700	600	500	425	375	325	300	275	225
169 (105)	600	475	400	325	275	250	225	200	175	150
161 (100)	400	325	275	225	175	150	140	125	110	100
153 (95)	275	225	175	125	110	95	80	70	60	50
145 (90)	175	125	100	75	50	.....	.....	.....	.....	.....

See § 22.659(b)(2). This table is for antenna heights of 152 meters (500 feet) or less above average terrain. For antenna heights between those in the table, use the next higher antenna height. For distances between those in the table, use the next lower distance.

TABLE E–9.—MAXIMUM ERP (WATTS) FOR BASE TRANSMITTERS (HAAT MORE THAN 152 METERS)

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)					
	152 (500)	305 (1000)	457 (1500)	610 (2000)	762 (2500)	914 (3000)
209 (130)	1000	447	219	117	71	46
193 (120)	500	209	95	50	30	19
177 (110)	225	91	35	19	11	8
161 (100)	100	30	10	5	3	2

TABLE E–9.—MAXIMUM ERP (WATTS) FOR BASE TRANSMITTERS (HAAT MORE THAN 152 METERS)—Continued

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)					
	152 (500)	305 (1000)	457 (1500)	610 (2000)	762 (2500)	914 (3000)
153 (95)	50	13	5	3	2	1

See § 22.659(b)(2). This table is for antenna heights of more than 152 meters (500 feet) above average terrain. For intermediate values of height and/or distance, use linear interpolation to obtain the maximum permitted ERP.

TABLE E–10.—MAXIMUM ERP (WATTS) FOR BASE TRANSMITTERS (HAAT 152 METERS OR LESS)

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)									
	15 (50)	30 (100)	46 (150)	61 (200)	76 (250)	91 (300)	107 (350)	122 (400)	137 (450)	152 (500)
261 (162)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
257 (160)	1000	1000	1000	1000	1000	1000	1000	1000	1000	800
249 (155)	1000	1000	1000	1000	1000	875	775	700	625	575
241 (150)	1000	1000	950	775	725	625	550	500	450	400
233 (145)	850	750	650	575	500	440	400	350	320	300
225 (140)	600	575	465	400	350	300	275	250	230	225
217 (135)	450	400	335	300	255	240	200	185	165	150
209 (130)	350	300	245	200	185	160	145	125	120	100
201 (125)	225	200	170	150	125	110	100	90	80	75
193 (120)	175	150	125	105	90	80	70	60	55	50

See § 22.659(b)(3). This table applies for antenna heights of 152 meters (500 feet) or less above average terrain. For antenna heights between those in the table, use the next higher antenna height. For distances between those in the table, use the next lower distance.

TABLE E–11.—MAXIMUM ERP (WATTS) FOR BASE TRANSMITTERS (HAAT MORE THAN 152 METERS)

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)					
	152 (500)	305 (1000)	457 (1500)	610 (2000)	762 (2500)	914 (3000)
261 (162)	1000	501	282	170	110	71
241 (150)	400	209	110	60	36	23
225 (140)	225	102	50	28	16	10
209 (130)	100	48	21	11	7	5
193 (120)	50	19	9	5	3	2

See § 22.659(b)(3). This table is for antenna heights of more than 152 meters (500 feet) above average terrain. For intermediate values of height and/or distance, use linear interpolation to obtain the maximum permitted ERP.

TABLE E–12.—MAXIMUM ERP (WATTS) FOR BASE TRANSMITTERS

Distance to protected TV station in kilometers (miles)	Antenna height above average terrain in meters (feet)								
	30 (100)	46 (150)	61 (200)	76 (250)	91 (300)	107 (350)	122 (400)	137 (450)	152 (500)
108 (67)	1000	1000	1000	1000	1000	1000	1000	1000	1000
106 (66)	1000	1000	1000	1000	1000	1000	1000	1000	750
105 (65)	1000	1000	1000	1000	1000	1000	825	650	600
103 (64)	1000	1000	1000	1000	1000	775	625	500	400
101 (63)	1000	1000	1000	1000	440	400	350	320	300
100 (62)	1000	1000	1000	525	375	250	200	150	125
98 (61)	1000	700	450	250	200	125	100	75	50
97 (60)	1000	425	225	125	100	75	50	.....	.....

See § 22.659(c)(2). This table applies to base transmitters in the New York-Northeastern New Jersey urban areas. This table is for antenna heights of 152 meters (500 feet) or less above average terrain. For antenna heights between those in the table, use the next higher antenna height. For distances between those in the table, use the next lower distance.

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68947, Dec. 14, 1998]

Subpart F—Rural Radiotelephone Service

§ 22.701 Scope.

The rules in this subpart govern the licensing and operation of stations and systems in the Rural Radiotelephone Service. The licensing and operation of these stations and systems is also subject to rules elsewhere in this part that apply generally to the Public Mobile Services. In case of conflict, however, the rules in this subpart govern.

§ 22.702 Eligibility.

Existing and proposed communications common carriers are eligible to hold authorizations to operate conventional central office, interoffice and rural stations in the Rural Radiotelephone Service. Only local exchange carriers that have been state certified to provide basic exchange telephone service (or others having state approval to provide such service) in the pertinent area are eligible to hold authorizations for Basic Exchange Telephone Radio Systems (BETRS). Subscribers are also eligible to hold authorizations to operate rural subscriber stations in the Rural Radiotelephone Service.

§ 22.703 Separate rural subscriber station authorization not required.

A separate authorization is not required for rural subscriber stations for which the effective radiated power does not exceed 60 Watts and for which FAA notification of construction or alteration of the antenna structure is not required (see criteria in § 17.7 of this chapter). Authority to operate such rural subscriber stations is conferred by the authorization of the central office or base station from which they receive service.

§ 22.705 Rural radiotelephone system configuration.

Stations in the Rural Radiotelephone Service are authorized to communicate as follows:

(a) Rural subscriber stations are authorized to communicate with and through the central office station(s) with which they are associated. However, where the establishment of a central office station in this service is not feasible, rural subscriber stations may be authorized to communicate with and through a base station in the Paging and Radiotelephone Service.

(b) Central office stations may communicate only with rural subscriber stations.

(c) Interoffice stations may communicate only with other interoffice stations.

§ 22.709 Rural radiotelephone service application requirements.

In addition to information required by Subparts B and D of this part, FCC Form 601 applications for authorization to operate a station in the Rural Radiotelephone Service must contain the applicable supplementary information described in this section.

(a) *Interoffice stations.* Applications for authority to operate a new interoffice station or to add transmitters or points of communications to an existing interoffice station must contain an exhibit demonstrating that the requested facilities would be used only for interconnecting central office stations and explaining why the use of alternative existing radio or wire facilities is not feasible.

(b) *Technical information required.* For each transmitter in the Rural Radiotelephone Service, the following information is required by FCC Form 601:

(1) Location description: city; county; state; geographic coordinates correct to ±1 second, the datum used (NAD83), site elevation above mean sea level, proximity to adjacent market boundaries and international borders;

(2) Antenna height to tip above ground level, the height of the center of radiation of the antenna above the average terrain, the height of the antenna center of radiation above the average elevation of the terrain along each of the 8 cardinal radials, antenna gain in the maximum lobe, the beamwidth of the maximum lobe of the antenna, a polar plot of the horizontal gain pattern of the antenna, the electric field polarization of the wave emitted by the antenna when installed as proposed;

(c) *No landline facilities*. Each application for a central office station must contain an exhibit showing that it is impracticable to provide the required communication service by means of landline facilities.

(d) *Interference exhibit*. Applications for central office, interoffice and relay stations must include an exhibit identifying co-channel facilities and demonstrating, in accordance with § 22.715 that the proposed station, if authorized, would not cause interference to the service of those co-channel facilities. This exhibit must:

(1) For UHF channels, identify each protected transmitter located within 108 kilometers (67 miles) of the proposed transmitter in directions in which the distance to the interfering contour is 76.4 kilometers (47.5 miles) or less, and within 178 kilometers (111 miles) of the proposed transmitter in directions in which the distance to the interfering contour exceeds 76.4 kilometers (47.5 miles); and identify each protected Basic Exchange Telephone Radio System central office transmitter in the rural Radiotelephone Service within 231 kilometers (144 miles).

(2) For VHF channels, identify each protected transmitter located within 135 kilometers (84 miles) of the proposed transmitter in directions in which the distance to the interfering contour is 93.3 kilometers (58 miles) or less, and within 178 kilometers (111 miles) of the proposed transmitter in directions in which the distance to the interfering contour exceeds 93.3 kilometers (58 miles).

(3) For each protected transmitter identified, show the results of distance calculations indicating that there would be no overlap of service and interfering contours, or alternatively, indicate that the licensee of or applicant for the protected transmitter and/or the applicant, as required, have agreed in writing to accept any interference resulting from operation of the proposed transmitter.

(e) *Blocking probability*. Applications for authority to operate basic exchange telephone radio systems (BETRS) that request more than two channel pairs must include an exhibit containing calculations showing that the number of channels requested is the minimum necessary to achieve the required grade of service (in terms of blocking probability), and that there will be adequate spectrum available in the area to meet realistic estimates of current and future demand for paging, two-way mobile and rural radiotelephone services (see § 22.719(c)). Applications for authority to operate new conventional rural radiotelephone systems that request more than two channel pairs must include a statement explaining why BETRS technology is not being proposed.

(f) *Antenna Information*. Upon request by an applicant, licensee, or the Commission, a part 22 applicant or licensee of whom the request is made shall furnish the antenna type, model, and the name of the antenna manufacturer to the requesting party within ten (10) days of receiving written notification.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 63 FR 68948, Dec. 14, 1998; 64 FR 53240, Oct. 1, 1999]

EFFECTIVE DATE NOTES: 1. At 63 FR 68948, Dec. 14, 1998, § 22.709 was amended in part by revising paragraph (b)(2). This section contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

2. At 64 FR 53240, Oct. 1, 1999, § 22.709 was amended by adding paragraph (f). This paragraph contain information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 22.711 Provision of information to applicants.

Licensees in the Rural Radio Service must, upon request by a *bona-fide* prospective applicant, provide to such applicant the information required by § 22.709 regarding the portion of the licensee's operations that potentially could affect, or be affected by, the prospective applicant's proposed station, if such information is not already on file with the FCC. This information must be provided to the *bona-fide* prospective applicant no later than 30 days after receipt of the information request.

[59 FR 59954, Nov. 21, 1994]

§ 22.713 Construction period for rural radiotelephone stations.

The construction period for stations in the Rural Radiotelephone Service is 12 months.

§ 22.715 Technical channel assignment criteria for rural radiotelephone stations.

Channels are assigned in the Rural Radiotelephone Service using the procedures in § 22.567.

§ 22.717 Procedure for mutually exclusive applications in the Rural Radiotelephone Service.

Mutually exclusive applications in the Rural Radiotelephone Service, including those that are mutually exclusive with applications in the Paging and Radiotelephone Service, are processed in accordance with § 22.131 and with this section.

(a) Applications in the Rural Radiotelephone Service may be mutually exclusive with applications in the Paging and Radiotelephone Service if they seek authorization to operate facilities on the same channel in the same area, or the technical proposals are otherwise in conflict. See § 22.567.

(b) A modification application in either service filed on the earliest filing date may cause all later-filed mutually exclusive applications of any type in either service to be ''cut off'' (excluded from a same-day filing group) and dismissed, pursuant to § 22.131(c)(3)(ii) and § 22.131(c)(4).

[59 FR 59956, Nov. 21, 1994, as amended at 62 FR 11636, Mar. 12, 1997]

§ 22.719 Additional channel policy for rural radiotelephone stations.

The rules in this section govern the processing of applications for central office stations that request a rural radiotelephone channel pair when the applicant has applied for or been granted an authorization for other rural radiotelephone channel pairs in the same area. The general policy of the FCC is to promote effective use of the spectrum by encouraging the use of spectrum-efficient technologies (i.e. BETRS) and by assigning the minimum number of channels necessary to provide service.

(a) *Transmitters in same area.* Any central office station transmitter on any channel pair listed in § 22.725 is considered to be in the same area as another central office station transmitter on any other channel pair listed in § 22.725 if the transmitting antennas are located within 10 kilometers (6.2 miles) of each other.

(b) *Initial channel pairs.* The FCC does not assign more than two channel pairs for new central office stations, unless there are more than eight rural subscriber stations to be served. Stations are considered to be new if there are no authorized transmitters on any channel listed in § 22.725 controlled by the applicant in the same geographic area.

(c) *Additional channel pairs.* Applications for central office station transmitters to be located in the same area as an authorized central office station controlled by the applicant, but to operate on a different channel pair(s) are considered as requests for additional channel pair(s) for the authorized central office station. The FCC may grant applications for additional channel pairs provided that the need for each additional channel pair (after the first two) is established and fully justified in terms of achieving the required grade of service (blocking probability), and the applicant demonstrates that there will still be adequate spectrum available in the area to meet realistic estimates of current and future demand for paging, two-way mobile and rural radiotelephone services. In the case of conventional rural radiotelephone central office stations, an explanation must be provided as to why BETRS technology is not being used instead of additional channel pairs.

CONVENTIONAL RURAL RADIOTELEPHONE STATIONS

§ 22.721 Geographic area authorizations.

Eligible persons may apply for a paging geographic area authorization in the Rural Radiotelephone Service, on the channel pairs listed in § 22.725, by following the procedures and requirements set forth in § 22.503 for paging geographic area authorizations.

[62 FR 11636, Mar. 12, 1997]

§ 22.723 Secondary site-by-site authorizations.

Authorizations for new facilities (including new sites and additional channel pairs for existing sites) in the Rural Radiotelephone Service (including BETRS facilities) may be granted after May 12, 1997 only on the condition that such authorizations shall be secondary to any existing or future co-channel paging geographic area authorization in the Paging and Radiotelephone Service or the Rural Radiotelephone Service. If the paging geographic area licensee notifies the Rural Radiotelephone Service licensee that operation of a co-channel secondary facility must be discontinued because it may cause interference to existing or planned facilities, the Rural Radiotelephone Service licensee must discontinue operation of that facility on the particular channel pair involved no later than six months after such notice.

[62 FR 11636, Mar. 12, 1997]

§ 22.725 Channels for conventional rural radiotelephone stations.

The following channels are allocated for paired assignment to transmitters that provide conventional rural radiotelephone service. These channels may be assigned for use by central office or rural subscriber stations as indicated, and interoffice stations. These channels may be assigned also for use by relay stations in systems where it would be impractical to provide rural radiotelephone service without the use of relay stations. All channels have a bandwidth of 20 kHz and are designated by their center frequencies in Mega-Hertz.

Central office	Rural subscriber	Central office	Rural subscriber
VHF Channels			
152.03	158.49	152.57	157.83
152.06	158.52	152.60	157.86
152.09	158.55	152.63	157.89
152.12	158.58	152.66	157.92
152.15	158.61	152.69	157.95
152.18	158.64	152.72	157.98
152.21	158.67	152.75	158.01
152.51	157.77	152.78	158.04
152.54	157.80	152.81	158.07
UHF Channels			
454.025	459.025	454.350	459.350
454.050	459.050	454.375	459.375
454.075	459.075	454.400	459.400
454.100	459.100	454.425	459.425
454.125	459.125	454.450	459.450
454.150	459.150	454.475	459.475
454.175	459.175	454.500	459.500
454.200	459.200	454.525	459.525
454.225	459.225	454.550	459.550
454.250	459.250	454.575	459.575
454.275	459.275	454.600	459.600
454.300	459.300	454.625	459.625
454.325	459.325	454.650	459.650

(a) The channels listed in this section are also allocated for assignment in the Paging and Radiotelephone Service.

(b) In Puerto Rico and the Virgin Islands, channels in the 154.04–154.46 MHz and 161.40–161.85 MHz frequency ranges may be assigned to transmitters providing rural radiotelephone service; channels in these ranges are also allocated for assignment in the International Fixed Public and Aeronautical Fixed radio services.

(c) In Alaska, channels 42.40, 44.10, 44.20 and 45.90 MHz are allocated for assignment to transmitters providing rural radiotelephone service using meteor burst propagation modes, subject to the provisions of § 22.729.

[59 FR 59507, Nov. 17, 1994; 60 FR 9891, Feb. 22, 1995]

§ 22.727 Power limits for conventional rural radiotelephone transmitters.

The transmitting power of transmitters operating on the channels listed in § 22.725 must not exceed the limits in this section.

(a) *Maximum ERP*. The effective radiated power (ERP) of central office and rural subscriber station transmitters must not exceed the applicable limits in this paragraph under any circumstances.

Frequency range (MHz)	Maximum ERP (watts)
152–153	1400
157–159	150
454–455	3500
459–460	150

(b) *Basic power limit*. Except as provided in paragraph (d) of this section,

the ERP of central office station transmitters must not exceed 500 Watts.

(c) *Height-power limits.* Except as provided in paragraph (d) of this section, the ERP of central office station transmitters must not exceed the amount that would result in an average distance to the ''service contour'' of 41.6 kilometers (26 miles) for VHF channels or 30.7 kilometers (19 miles) for UHF channels. The average distance to the ''service contour'' is calculated by taking the arithmetic mean of the distances determined using the procedures specified in § 22.567 for the eight cardinal radial directions, excluding cardinal radial directions for which 90% or more of the distance so calculated is over water.

(d) *Encompassed interfering contour areas.* Central office station transmitters are exempt from the basic power and height-power limits of this section if the area within their interfering contours is totally encompassed by the interfering contours of operating co-channel central office station transmitters controlled by the same licensee. For the purpose of this paragraph, operating transmitters are authorized transmitters that are providing service to subscribers.

(e) *Adjacent channel protection.* The ERP of central office station transmitters must not exceed 500 Watts if they transmit on channel 454.025 MHz and are located less than 7 kilometers (4.3 miles) from any Private Radio Services station receiving on adjacent channel 454.000 MHz.

(f) *Meteor burst stations.* The transmitter output power for stations using meteor burst propagation modes must not exceed 2000 Watts for central office stations and 500 Watts for rural subscriber stations.

§ 22.729 Meteor burst propagation modes.

The rules in this section govern stations in this service that use meteor burst propagation modes to provide rural radiotelephone service in Alaska.

(a) *Channel assignments.* The channels 42.40 and 44.10 MHz may be assigned to central office stations and rural subscriber stations, respectively, on a primary basis. The channels 44.20 and 45.90 MHz may be assigned to central office and rural subscriber stations, respectively, on a secondary basis to Private Radio services stations using meteor burst propagation modes.

(b) *Transmitting power.* The transmitter output power must not exceed 2000 Watts for central office stations and 500 Watts for rural subscriber stations.

(c) *Station locations.* Co-channel central office stations of different licensees must be at least 241 kilometers (150 miles) apart. A rural subscriber station and a central office station of different licensees must be at least 241 kilometers (150 miles) apart if the rural subscriber stations of the different licensees operate on the same channel. The FCC may waive the requirements of this paragraph if the affected users agree to a cooperative sharing arrangement.

(d) *Emission type.* Only type F1D emission is authorized.

(e) *Bandwidth.* The authorized bandwidth is 20 kHz.

(f) *Station identification.* Station identification is required only for the central office station.

(g) *Interference.* Stations authorized under the provisions of this section must not cause harmful interference to the service of stations in other radio services.

(h) *Developmental authorization.* Meteor burst communications systems may be authorized under developmental authorizations pursuant to § 22.419.

§ 22.731 Emission limitations.

Upon application for multichannel operation, the FCC may authorize emission bandwidths wider than those specified in § 22.357, provided that spectrum utilization is equal to or better than that achieved by single channel operation.

§ 22.733 Priority of service.

Within the Rural Radiotelephone Service, the channels listed in § 22.725 are intended primarily for use in rendition of public message service between rural subscriber and central office stations and to provide radio trunking facilities between central offices. The channels may also be used, however, for the rendition of private

leased-line communication service provided that such usage would not reduce or impair the extent or quality of communication service that would be available, in the absence of private leased-line service, to the general public receiving or subsequently requesting public message service from a central office.

§ 22.737 Temporary fixed stations.

The FCC may, upon proper application therefor, authorize the construction and operation of temporary fixed stations. Temporary fixed stations are to be used as rural subscriber, interoffice, or central office stations when those stations are unavailable or when service from those stations is disrupted by storms or emergencies.

(a) *Six month limitation.* If it is necessary for a temporary fixed station to remain at the same location for more than six months, the licensee of that station must apply for authorization to operate the station at the specific location at least 30 days before the end of the six month period.

(b) *International communications.* Communications between the United States and Canada or Mexico must not be carried using a temporary fixed station without prior authorization from the FCC. Licensees desiring to carry such communications should apply sufficiently in advance to allow for the time necessary to coordinate with Canada or Mexico.

Basic Exchange Telephone Radio Systems

§ 22.757 Channels for basic exchange telephone radio systems.

The channels listed in § 22.725 are also allocated for paired assignment to transmitters in basic exchange telephone radio systems. In addition, the following channels are allocated for paired assignment to transmitters in basic exchange telephone radio systems. All channels have a bandwidth of 20 kHz and are designed by their center frequencies in MegaHertz.

UHF Channels—Shared With Private Radio Services

Rural subscriber	Central office	Rural subscriber	Central office
816.2375	861.2375	816.1125	861.1125
817.2375	862.2375	817.1125	862.1125
818.2375	863.2375	818.1125	863.1125
819.2375	864.2375	819.1125	864.1125
820.2375	865.2375	820.1125	865.1125
816.2125	861.2125	816.0875	861.0875
817.2125	862.2125	817.0875	862.0875
818.2125	863.2125	818.0875	863.0875
819.2125	864.2125	819.0875	864.0875
820.2125	865.2125	820.0875	865.0875
816.1875	861.1875	816.0625	861.0625
817.1875	862.1875	817.0625	862.0625
818.1875	863.1875	818.0625	863.0625
819.1875	864.1875	819.0625	864.0625
820.1875	865.1875	820.0625	865.0625
816.1625	861.1625	816.0375	861.0375
817.1625	862.1625	817.0375	862.0375
818.1625	863.1625	818.0375	863.0375
819.1625	864.1625	819.0375	864.0375
820.1625	865.1625	820.0375	865.0375
816.1375	861.1375	816.0125	861.0125
817.1375	862.1375	817.0125	862.0125
818.1375	863.1375	818.0125	863.0125
819.1375	864.1375	819.0125	864.0125
820.1375	865.1375	820.0125	865.0125

(a) Channels are assigned in groups, as listed in this section.

(b) Channel groups in the 816–865 Mhz frequency range are not assigned to Rural Radio Service stations located:

(1) Within 161 kilometers (100 miles) of the borders of the largest 54 MSAs (see § 22.909).

(2) North of Line A or East of Line C; or,

(3) Within 110 kilometers (68 miles) of the Mexican border.

(c) Channel groups in the 816–865 MHz frequency range are not assigned to central office stations located within 113 kilometers (70 miles) of another station authorized to operate on the same channels or on channels with center frequencies offset by 12.5 kHz.

(d) Technical parameters governing the use of these channels are contained in subpart S of part 90 of this chapter.

(e) The Common Carrier Bureau coordinates the availability of channels in the 816–865 MHz frequency range with the Private Radio Bureau.

[59 FR 59507, Nov. 17, 1994; 60 FR 9891, Feb. 22, 1995]

§ 22.759 Power limit for BETRS.

The effective radiated power of central office and rural subscriber station transmitters used in basic exchange telephone radio systems must not exceed the limits in this section.

(a) *Maximum ERP*. The effective radiated power (ERP) of central office and rural subscriber station transmitters in BETRS must not exceed the applicable limits in this paragraph under any circumstances.

Frequency range (MHz)	Maximum ERP (watts)
152–153	1400
157–159	150
454–455	3500
459–460	150

(b) *Height-power limit*. The ERP of central office stations in BETRS must not exceed the amount calculated as follows:

$ERP_w = 557{,}418 \div h_m 2$

where ERP_w is the effective radiated power in Watts

h_m is the average (eight cardinal radial) antenna height above average terrain in meters

Subpart G—Air-Ground Radiotelephone Service

§ 22.801 Scope.

The rules in this subpart govern the licensing and operation of public air-ground radiotelephone stations and systems. The licensing and operation of these stations and systems is also subject to rules elsewhere in this part that apply generally to the Public Mobile services. In case of conflict, however, the rules in this subpart govern.

§ 22.803 Air-ground application requirements.

In addition to information required by Subparts B and D of this part, FCC Form 601 applications for authorization to operate an air-ground station or system in the Air-ground Radiotelephone Service must contain the applicable supplementary information described in this section.

(a) *Administrative information*. The following information is required by FCC Form 601.

(1) The number of transmitter sites for which authorization is requested.

(2) The call sign(s) of other facilities in the same area that are ultimately controlled by the real party in interest to the application.

(b) *Technical information required*. For each transmitter in the Rural Radiotelephone Service, the following information is required by FCC Form 601:

(1) Location description: city; county; state; geographic coordinates correct to ±1 second, the datum used (NAD83), site elevation above mean sea level, proximity to adjacent market boundaries and international borders;

(2) Antenna height to tip above ground level, the height of the center of radiation of the antenna above the average terrain, the height of the antenna center of radiation above the average elevation of the terrain along each of the 8 cardinal radials, antenna gain in the maximum lobe, the beamwidth of the maximum lobe of the antenna, a polar plot of the horizontal gain pattern of the antenna, the electric field polarization of the wave emitted by the antenna when installed as proposed;

(3) The center frequency of each channel requested, the maximum effective radiated power, any non-standard emission types to be used, including bandwidth and modulation type and the transmitter classification (e.g. ground or signaling).

(c) Upon request by an applicant, licensee, or the Commission, a part 22 applicant or licensee of whom the request is made shall furnish the antenna type, model, and the name of the antenna manufacturer to the requesting party within ten (10) days of receiving written notification.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 63 FR 68948, Dec. 14, 1998; 64 FR 53240, Oct. 1, 1999]

EFFECTIVE DATE NOTES: 1. At 63 FR 68948, Dec. 14, 1998, § 22.803 was amended in part by revising paragraph (b)(2). This paragraph contains information collection requirements and will not become effective until approval has been given by the Office of Management and Budget.

2. At 64 FR 53240, Oct. 1, 1999, § 22.803 was amended by adding paragraph (c). This paragraph contains information collection requirements and will not become effective

until approval has been given by the Office of Management and Budget.

GENERAL AVIATION AIR-GROUND STATIONS

§ 22.805 Channels for general aviation air-ground service.

The following channels are allocated for the provision of radiotelephone service to airborne mobile subscribers in general aviation aircraft. These channels have a bandwidth of 20 kHz and are designated by their center frequencies in MegaHertz.

SIGNALLING CHANNEL PAIR

Ground	Airborne mobile
454.675	459.675

COMMUNICATION CHANNEL PAIRS

Ground	Airborne mobile
454.700	459.700
454.725	459.725
454.750	459.750
454.775	459.775
454.800	459.800
454.825	459.825
454.850	459.850
454.875	459.875
454.900	459.900
454.925	459.925
454.950	459.950
454.975	459.975

(a) Channel 454.675 MHz is assigned to each and every ground station, to be used only for automatically alerting airborne mobile stations of incoming calls.

(b) All airborne mobile channels are assigned for use by each and every airborne mobile station.

§ 22.809 Transmitting power limits.

The transmitting power of ground and airborne mobile transmitters operating on the channels listed in § 22.805 must not exceed the limits in this section.

(a) *Ground station transmitters*. The effective radiated power of ground stations must not exceed 100 Watts and must not be less than 50 Watts, except as provided in § 22.811.

(b) *Airborne mobile transmitters*. The transmitter power output of airborne mobile transmitters must not exceed 25 Watts and must not be less than 4 Watts.

§ 22.811 Idle tone.

Whenever a ground station transmitter authorized to transmit on any of the communications channels listed in § 22.805 is available for service but is not providing service, a modulated signal must be continuously transmitted on the communication channel assigned to that transmitter. While this modulated signal is transmitted, the transmitter power must be between 10 and 20 dB lower than the normal transmitting power.

§ 22.813 Technical channel pair assignment criteria.

The rules in this section establish technical assignment criteria for the channel pairs listed in § 22.805. These criteria are intended to provide substantial service volumes over areas that have significant local and regional general aviation activity, while maintaining the continuous nationwide inroute coverage of the original geographical layout.

(a) *Distance separation for co-channel ground stations*. The FCC may grant an application requesting assignment of a communication channel pair to a proposed ground transmitter only if the proposed antenna location is at least 800 kilometers (497 miles) from the antenna location of the nearest co-channel ground transmitter in the United States, its territories and possessions; and 1000 kilometers (621 miles) from the antenna location of the nearest co-channel ground transmitter in Canada.

(b) *Dispersion*. The FCC may grant an application requesting assignment of a communication channel pair to a proposed ground transmitter only if there are no more than five different communication channel pairs already assigned to ground transmitters with antenna locations within a 320 kilometer (199 mile) radius of the proposed antenna location.

§ 22.815 Construction period for general aviation ground stations.

The construction period (see § 22.142) for general aviation ground stations is 12 months.

§ 22.817 Additional channel policies.

The rules in this section govern the processing of applications for authority

to operate a ground station transmitter on any ground station communication channel listed in § 22.805 when the applicant has applied or been granted an authorization for other ground station communication channels in the same area. The general policy of the FCC is to assign one ground station communication channel in an area to a carrier per application cycle, up to a maximum of six ground station communication channels per area. That is, a carrier must apply for one ground station communication channel, receive the authorization, construct the station, and notify the FCC of commencement of service before applying for an additional ground station communication channel in that area.

(a) *Air-ground transmitters in same area.* Any transmitter on any of the ground station channels listed in § 22.805 is considered to be in the same area as another transmitter on any ground station channel listed in § 22.805 if it is located less than 350 kilometers (217 miles) from that transmitter.

(b) *Initial channel.* The FCC will not assign more than one ground station communication channel for new ground stations. Ground stations are considered to be new if there are no authorized ground station transmitters on any channel listed in § 22.805 controlled by the applicant in the same area.

(c) *Additional channel.* Applications for ground transmitters to be located in the same area as an authorized ground station controlled by the applicant, but to operate on a different ground station communication channel, are considered as requesting an additional channel for the authorized station.

(d) *Amendment of pending application.* If the FCC receives and accepts for filing an application for a ground station transmitter to be located in the same area as a ground station transmitter proposed in a pending application previously filed by the applicant, but on a different ground station communication channel, the subsequent application is treated as a major amendment to change the technical proposal of the prior application. The filing date of any application so amended is the date the FCC received the subsequent application.

(e) *Dismissal of premature applications for additional channel.* If the FCC receives an application requesting an additional ground station communication channel for an authorized ground station prior to receiving notification that the station is providing service to subscribers on the authorized channel(s), the FCC may dismiss that application without prejudice.

(f) *Dismissal of applications for seventh channel.* If the FCC receives an application requesting an additional ground station communication channel for an authorized ground station which would, if granted, result in that station being assigned more than six ground station communication channels in the same area, the FCC may dismiss that application without prejudice.

§ 22.819 AGRAS compatibility requirement.

Except as provided in paragraph (a) of this section, stations transmitting on the channels listed in § 22.805 must operate in compliance with the technical and operational requirements contained in the document, ''Technical Reference, Air-ground Radiotelephone Automated Service (AGRAS), System Operation and Equipment Characteristics'', dated April 12, 1985.

(a) Until January 1, 1996, stations may continue to operate in compliance with the previous standard adopted in Docket 16073.

(b) Copies of the document referenced in this section may be obtained from the FCC's copying contractor.

COMMERCIAL AVIATION AIR-GROUND SYSTEMS

§ 22.857 Channel plan for commercial aviation air-ground systems.

The 849–851 and 894–896 MHz frequency ranges are allocated for block assignment to nationwide air-ground systems providing radiotelephone service to passengers aboard commercial aircraft. These frequency ranges may also be used to provide service to persons in general aviation or other aircraft. Ground stations transmit on channels in the 849–851 MHz range. Airborne mobile stations transmit on

channels in the 894–896 MHz range. Systems using these channels must conform to the channel plan described in this section.

(a) *Channel blocks.* The spectrum allocated for commercial aviation air-ground systems is divided into ten channel blocks, numbered 1 through 10. All ground stations in each geographical area must use the same channel block for communication with airborne mobile stations in flight, in accordance with § 22.859.

(1) Each channel block is subdivided into 6 control channels labeled P–1 through P–6, and 29 communications channels labeled C–1 through C–29.

(2) The authorized channel bandwidths are as follows:

(i) Each control channel has a bandwidth of 3.2 kHz.

(ii) Each communications channel has a bandwidth of 6 kHz.

(b) The center frequencies (in MegaHertz) of the communications and control channels are listed in Tables G–1 and G–2 of this section.

TABLE G–1.—GROUND STATION CHANNELS

	Channel block									
	10	9	8	7	6	5	4	3	2	1
C–1	849.0055	849.2055	849.4055	849.6055	849.8055	850.0055	850.2055	850.4055	850.6055	850.8055
C–2	849.0115	849.2115	849.4115	849.6115	849.8115	850.0115	850.2115	850.4115	850.6115	850.8115
C–3	849.0175	849.2175	849.4175	849.6175	849.8175	850.0175	850.2175	850.4175	850.6175	850.8175
C–4	849.0235	849.2235	849.4235	849.6235	849.8235	850.0235	850.2235	850.4235	850.6235	850.8235
C–5	849.0295	849.2295	849.4295	849.6295	849.8295	850.0295	850.2295	850.4295	850.6295	850.8295
C–6	849.0355	849.2355	849.4355	849.6355	849.8355	850.0355	850.2355	850.4355	850.6355	850.8355
C–7	849.0415	849.2415	849.4415	849.6415	849.8415	850.0415	850.2415	850.4415	850.6415	850.8415
C–8	849.0475	849.2475	849.4475	849.6475	849.8475	850.0475	850.2475	850.4475	850.6475	850.8475
C–9	849.0535	849.2535	849.4535	849.6535	849.8535	850.0535	850.2535	850.4535	850.6535	850.8535
C–10	849.0595	849.2595	849.4595	849.6595	849.8595	850.0595	850.2595	850.4595	850.6595	850.8595
C–11	849.0655	849.2655	849.4655	849.6655	849.8655	850.0655	850.2655	850.4655	850.6655	855.8655
C–12	849.0715	849.2715	849.4715	849.6715	849.8715	850.0715	850.2715	850.4715	850.6715	850.8715
C–13	849.0775	849.2775	849.4775	849.6775	849.8775	850.0775	850.2775	850.4775	850.6775	850.8775
C–14	849.0835	849.2835	849.4835	849.6835	849.8835	850.0835	850.2835	850.4835	850.6835	850.8835
C–15	849.0895	849.2895	849.4895	849.6895	849.8895	850.0895	850.2895	850.4895	850.6895	850.8895
C–16	849.0955	849.2955	849.4955	849.6955	849.8955	850.0955	850.2955	850.4955	850.6955	850.8955
C–17	849.1015	849.3015	849.5015	849.7015	849.9015	850.1015	850.3015	850.5015	850.7015	850.9015
C–18	849.1075	849.3075	849.5075	849.7075	849.9075	850.1075	850.3075	850.5075	850.7075	850.9075
C–19	849.1135	849.3135	849.5135	849.7135	849.9135	850.1135	850.3135	850.5135	850.7135	850.9135
C–20	849.1195	849.3195	849.5195	849.7195	849.9195	850.1195	850.3195	850.5195	850.7195	850.9195
C–21	849.1255	849.3255	849.5255	849.7255	849.9255	850.1255	850.3255	850.5255	850.7255	850.9255
C–22	849.1315	849.3315	849.5315	849.7315	849.9315	850.1315	850.3315	850.5315	850.7315	850.9315
C–23	849.1375	849.3375	849.5375	849.7375	849.9375	850.1375	850.3375	850.5375	850.7375	850.9375
C–24	849.1435	849.3435	849.5435	849.7435	849.9435	850.1435	850.3435	850.5435	850.7435	850.9435
C–25	849.1495	849.3495	849.5495	849.7495	849.9495	850.1495	850.3495	850.5495	850.7495	850.9495
C–26	849.1555	849.3555	849.5555	849.7555	849.9555	850.1555	850.3555	850.5555	850.7555	850.9555
C–27	849.1615	849.3615	849.5615	849.7615	849.9615	850.1615	850.3615	850.5615	850.7615	850.9615
C–28	849.1675	849.3675	849.5675	849.7675	849.9675	850.1675	850.3675	850.5675	850.7675	850.9675
C–29	849.1735	849.3735	849.5735	849.7735	849.9735	850.1735	850.3735	850.5735	850.7735	850.9735
P–6	849.1813	849.3813	849.5813	849.7813	849.9813	850.1813	850.3813	850.5813	850.7813	850.9813
P–5	849.1845	849.3845	849.5845	849.7845	849.9845	850.1845	850.3845	850.5845	850.7845	850.9845
P–4	849.1877	849.3877	849.5877	849.7877	849.9877	850.1877	850.3877	850.5877	850.7877	850.9877

TABLE G–1.—GROUND STATION CHANNELS—Continued

	Channel block									
	10	9	8	7	6	5	4	3	2	1
P–3	849.1909	849.3909	849.5909	849.7909	849.9909	850.1909	850.3909	850.5909	850.7909	850.9909
P–2	849.1941	849.3941	849.5941	849.7941	849.9941	850.1941	850.3941	850.5941	850.7941	850.9941
P–1	849.1973	849.3973	849.5973	849.7973	849.9973	850.1973	850.3973	850.5973	850.7973	850.9973

TABLE G–2.—AIRBORNE MOBILE STATION CHANNELS

	Channel block									
	10	9	8	7	6	5	4	3	2	1
C–1	894.0055	894.2055	894.4055	894.6055	894.8055	895.0055	895.2055	895.4055	895.6055	895.8055
C–2	894.0115	894.2115	894.4115	894.6115	894.8115	895.0115	895.2115	895.4115	895.6115	895.8115
C–3	894.0175	894.2175	894.4175	894.6175	894.8175	895.0175	895.2175	895.4175	895.6175	895.8175
C–4	894.0235	894.2235	894.4235	894.6235	894.8235	895.0235	895.2235	895.4235	895.6235	895.8235
C–5	894.0295	894.2295	894.4295	894.6295	894.8295	895.0295	895.2295	895.4295	895.6295	895.8295
C–6	894.0355	894.2355	894.4355	894.6355	894.8355	895.0355	895.2355	895.4355	895.6355	895.8355
C–7	894.0415	894.2415	894.4415	894.6415	894.8415	895.0415	895.2415	895.4415	895.6415	895.8415
C–8	894.0475	894.2475	894.4475	894.6475	894.8475	895.0475	895.2475	895.4475	895.6475	895.8475
C–9	894.0535	894.2535	894.4535	894.6535	894.8535	895.0535	895.2535	895.4535	895.6535	895.8535
C–10	894.0595	894.2595	894.4595	894.6595	894.8595	895.0595	895.2595	895.4595	895.6595	895.8595
C–11	894.0655	894.2655	894.4655	894.6655	894.8655	895.0655	895.2655	895.4655	895.6655	895.8655
C–12	894.0715	894.2715	894.4715	894.6715	894.8715	895.0715	895.2715	895.4715	895.6715	895.8715
C–13	894.0775	894.2775	894.4775	894.6775	894.8775	895.0775	895.2775	895.4775	895.6775	895.8775
C–14	894.0835	894.2835	894.4835	894.6835	894.8835	895.0835	895.2835	895.4835	895.6835	895.8835
C–15	894.0895	894.2895	894.4895	894.6895	894.8895	895.0895	895.2895	895.4895	895.6895	895.8895
C–16	894.0955	894.2955	894.4955	894.6955	894.8955	895.0955	895.2955	895.4955	895.6955	895.8955
C–17	894.1015	894.3015	894.5015	894.7015	894.9015	895.1015	895.3015	895.5015	895.7015	895.9015
C–18	894.1075	894.3075	894.5075	894.7075	894.9075	895.1075	895.3075	895.5075	895.7075	895.9075
C–19	894.1135	894.3135	894.5135	894.7135	894.9135	895.1135	895.3135	895.5135	895.7135	895.9135
C–20	894.1195	894.3195	894.5195	894.7195	894.9195	895.1195	895.3195	895.5195	895.7195	895.9195
C–21	894.1255	894.3255	894.5255	894.7255	894.9255	895.1255	895.3255	895.5255	895.7255	895.9255
C–22	894.1315	894.3315	894.5315	894.7315	894.9315	895.1315	895.3315	895.5315	895.7315	895.9315
C–23	894.1375	894.3375	894.5375	894.7375	894.9375	895.1375	895.3375	895.5375	895.7375	895.9375
C–24	894.1435	894.3435	894.5435	894.7435	894.9435	895.1435	895.3435	895.5435	895.7435	895.9435
C–25	894.1495	894.3495	894.5495	894.7495	894.9495	895.1495	895.3495	895.5495	895.7495	895.9495
C–26	894.1555	894.3555	894.5555	894.7555	894.9555	895.1555	895.3555	895.5555	895.7555	895.9555
C–27	894.1615	894.3615	894.5615	894.7615	894.9615	895.1615	895.3615	895.5615	895.7615	895.9615
C–28	894.1675	894.3675	894.5675	894.7675	894.9675	895.1675	895.3675	895.5675	895.7675	895.9675
C–29	894.1735	894.3735	894.5735	894.7735	894.9735	895.1735	895.3735	895.5735	895.7735	895.9735
P–6	894.1813	894.3813	894.5813	894.7813	894.9813	895.1813	895.3813	895.5813	895.7813	895.9813
P–5	894.1845	894.3845	894.5845	894.7845	894.9845	895.1845	895.3845	895.5845	895.7845	895.9845
P–4	894.1877	894.3877	894.5877	894.7877	894.9877	895.1877	895.3877	895.5877	895.7877	895.9877
P–3	894.1909	894.3909	894.5909	894.7909	894.9909	895.1909	895.3909	895.5909	895.7909	895.9909
P–2	894.1941	894.3941	894.5941	894.7941	894.9941	895.1941	895.3941	895.5941	895.7941	895.9941
P–1	894.1973	894.3973	894.5973	894.7973	894.9973	895.1973	895.3973	895.5973	895.7973	895.9973

§ 22.859 Geographical channel block layout.

Except as provided in paragraphs (a) and (b) of this section, each ground station location must be within 1.6 kilometers (one mile) of one of the locations listed in this paragraph. The channel block allotted for each location must be used to provide service to airborne mobile stations in flight and may be used to provide service to airborne mobile stations on the ground.

NOTE: All geographic coordinates are referenced to North American Datum 1983 (NAD83).

Location	N. latitude	W. longitude	Channel block
ALASKA:			
Anchorage	61°11′04″	149°54′50″	8
Cordova	60°29′38″	145°28′17″	5
Ketchikan	55°21′10″	131°42′20″	5
Juneau	58°21′17″	134°34′36″	4
Sitka	57°03′03″	135°20′23″	7
Yakutat	59°32′22″	139°44′10″	2
ALABAMA:			
Birmingham	33°23′24″	86°39′59″	2
ARIZONA:			
Phoenix	33°35′39″	112°05′15″	4
Winslow	35°01′17″	110°43′04″	6
ARKANSAS:			
Pine Bluff	34°10′56″	91°56′18″	8
CALIFORNIA:			
Burbank	34°11′44″	118°21′31″	4
Blythe	33°36′39″	114°42′27″	10
Los Angeles	33°56′45″	118°23′06″	3
Oakland	37°51′54″	122°13′15″	1
Red Bluff	40°04′34″	122°10′38″	8
San Francisco	37°41′15″	122°26′05″	6
San Jose	37°20′56″	121°54′01″	5
Visalia	36°19′36″	119°23′25″	7
COLORADO:			
Colorado Springs	38°44′39″	104°51′48″	8
Bennet	39°51′24″	104°35′53″	1
Hayden	40°29′04″	107°13′10″	6
FLORIDA:			
Miami	25°48′28″	80°16′29″	4
Orlando	28°26′54″	81°21′59″	2
Tallahassee	30°24′03″	84°21′18″	7
GEORGIA:			
Atlanta	33°39′05″	84°25′54″	5
St Simons Island	31°09′23″	81°23′13″	6
HAWAII:			
Mauna Kapu	21°24′13″	158°05′52″	5
IDAHO:			
Blackfoot	43°11′34″	112°21′00″	8
Caldwell	43°38′45″	116°38′47″	10
ILLINOIS:			
Chicago	41°46′49″	87°45′20″	3
Kewanee	41°12′05″	89°57′33″	5
Schiller Park	41°57′18″	87°52′57″	2
INDIANA:			
Fort Wayne	40°59′16″	85°11′31″	7
IOWA:			
Des Moines	41°31′58″	93°38′55″	1
KANSAS:			
Garden City	37°59′35″	100°54′06″	3
Wichita	37°37′24″	97°27′16″	7
KENTUCKY:			
Fairdale	38°04′48″	85°47′33″	6
LOUISIANA:			
Kenner	30°00′28″	90°13′49″	3
Shreveport	32°27′10″	93°49′39″	5
MASSACHUSETTS:			
Boston	42°23′15″	71°01′01″	7
MICHIGAN:			
Bellville	42°12′17″	83°29′09″	8
Flint	42°58′21″	83°44′22″	9
Sault Saint Marie	46°28′45″	84°21′31″	6
MINNESOTA:			
Bloomington	44°51′30″	93°13′20″	9
MISSISSIPPI:			
Meridian	32°19′11″	88°41′33″	9
MISSOURI:			
Kansas City	39°18′13″	94°41′05″	6
St. Louis	38°42′45″	90°19′19″	4
Springfield	37°14′28″	93°22′55″	9
MONTANA:			
Lewistown	47°02′56″	109°27′30″	5
Miles City	46°25′30″	105°52′32″	8
Missoula	47°01′05″	114°00′44″	3
NEBRASKA:			
Grand Island	40°58′00″	98°19′12″	2
Ogallala	41°07′11″	101°45′39″	4
NEVADA:			
Las Vegas	36°05′35″	115°10′28″	1
Reno	39°35′13″	119°55′56″	4
Tonopah	38°03′43″	117°13′27″	9
Winnemucca	41°00′39″	117°46′01″	3
NEW MEXICO:			
Alamogordo	32°54′46″	105°56′43″	8
Albuquerque	35°03′05″	106°37′15″	10
Aztec	36°48′42″	107°53′50″	9
Clayton	36°27′29″	103°11′18″	5
NEW JERSEY:			
Woodbury	39°50′01″	75°09′20″	3
NEW YORK:			
E. Elmhurst	40°46′21″	73°52′40″	1
Schuyler	43°09′09″	75°07′49″	2
Staten Island	40°36′05″	74°06′34″	9
NORTH CAROLINA:			
Greensboro	36°05′54″	79°56′41″	9
Wilmington	34°16′11″	77°54′23″	3
NORTH DAKOTA:			
Dickinson	46°51′05″	102°47′37″	7
OHIO:			
Pataskala	40°04′05″	82°42′00″	1
OKLAHOMA:			
Warner	35°29′31″	95°18′26″	4
Woodward	36°24′42″	99°28′51″	9
OREGON:			
Albany	44°38′23″	123°03′40″	5
Klamath Falls	42°06′30″	121°38′04″	2
Pendleton	45°35′44″	118°31′06″	7
PENNSYLVANIA:			
Coraopolis	40°30′33″	80°13′26″	4
New Cumberland	40°11′30″	76°52′01″	8
SOUTH CAROLINA:			
Charleston	32°54′11″	80°01′19″	4
SOUTH DAKOTA:			
Aberdeen	45°27′21″	98°25′27″	6
Rapid City	44°02′36″	103°03′38″	5
TENNESSEE:			

Location	N. latitude	W. longitude	Channel block
Elizabethton	36°26′04″	82°08′05″	7
Memphis	35°01′44″	89°56′15″	10
Nashville	36°08′07″	86°41′39″	3
TEXAS:			
Bedford	32°′45″	97°07′20″	1
Houston	29°54′38″	95°24′40″	2
Lubbock	33°37′06″	101°52′16″	7
Monahans	31°34′58″	102°54′20″	6
UTAH:			
Abajo Peak	37°50′21″	109°27′44″	7
Delta	39°23″15′	112°30′47″	2
Escalante	37°45′19″	111°52′30″	5
Green River	38°57′54″	110°13′43″	3
Salt Lake City	40°39′11″	112°12′09″	1
VIRGINIA:			
Arlington	38°52′55″	77°06′17″	6
WASHINGTON:			
Seattle	47°26′07″	122°17′39″	4
Cheney	47°33′14″	117°43′39″	1
WEST VIRGINIA:			
Charleston	38°19′47″	81°39′35″	2
WISCONSIN:			
Stevens Point	44°33′06″	89°25′27″	8
WYOMING:			
Riverton	43°03′37″	108°27′25″	9

(a) Carriers authorized to construct and operate air-ground radiotelephone systems on the channels listed in § 22.857 may also construct and operate low power ground stations designed to provide service to airborne mobile stations on the ground, provided that no interference is caused to service provided by ground stations located in accordance with the geographical channel block layout or with paragraph (b) of this section. The antenna location of each such low power ground station may be anywhere that is at least 483 kilometers (300 miles) from all antenna locations of ground stations using the same channel block(s) in accordance with the geographical channel block layout or with paragraph (b) of this section.

(b) Ground station locations may be more than 1.61 kilometers (one mile) from all of the locations listed in this section, provided that they are at least 885 kilometers (550 miles) from all antenna locations of ground stations using the same channel block(s) in accordance with the geographical channel block layout or with this paragraph.

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68948, Dec. 14, 1998; 65 FR 49203, Aug. 11, 2000]

§ 22.861 Emission limitations.

Any appropriate emission type may be used to provide air-ground radiotelephone service on the channels listed in § 22.857, provided that the emission limitations of this section are met.

(a) *Emission mask.* The emission mask described in this paragraph applies instead of those in § 22.359. The power of any emission in each of the adjacent channels must be at least 30 dB below the power of the total emission. The power of any emission in any of the channels other than the one being used and the adjacent channels must be at least 50 dB below the power of the total emission.

(b) *Airborne mobile transmitters.* The power of any emission in each of the adjacent channels must not exceed –130 dBm at any ground station receiver, assuming a 0 dBi receive antenna. The power of any emission in any of the channels other than the one being used and the adjacent channels must not exceed –148 dBm at any ground station receiver, assuming a 0 dBi receive antenna.

(c) *Ground station transmitters.* The effective radiated power (ERP) of any emission outside of the frequency ranges set forth in § 22.857 must not exceed –10 dBm. The ERP of any emission in each of the adjacent channels must not exceed +10 dBm. The ERP of any emission in any of the channels other than the one being used and the adjacent channels must not exceed –5 dBm.

(d) If an emission on any frequency outside of the authorized bandwidth causes harmful interference, the FCC may require greater attenuation of that emission than required in paragraph (a) of this section.

§ 22.863 Transmitter frequency tolerance.

Ground station transmitter frequencies must be maintained within 0.1 parts per million (ppm) of the channel reference or center frequencies. Doppler shift correction must be used to ensure that the frequencies of the signals of airborne mobile stations received at ground stations remain within 0.2 ppm of the channel reference or center frequencies.

§ 22.865 Automatic channel selection procedures.

Operation of stations using the channels listed in § 22.857 must be in accordance with the procedures in this section.

(a) A communications channel is not available for use by a ground station if it is already in use by another ground station at the same location. Ground station equipment must automatically determine whether channels are in use by other ground stations at the same location, and may employ radio frequency signal monitoring to do so. For example, a communications channel may be determined to be in use if the received signal power on that channel at the ground station exceeds –115 dBm, which, assuming a 0 dB gain 895 MHz receive antenna, corresponds to a field strength of approximately 19 dBμV/m. Ground stations may employ an alternative method of determining whether a communications channel is in use provided that such procedure is at least as reliable as radio frequency signal monitoring.

(b) Data indicating which communications channels are available for use are transmitted by ground stations on the assigned control channels.

(c) A call is originated when an airborne mobile station selects a communications channel based on the received data from ground stations and other factors, and transmits an identification code (which identifies the specific ground station from which service is requested) on the selected communications channel. The ground station from which service has been requested may then obtain any necessary billing information and complete the call.

(d) A ground station may not transmit on a communications channel unless it has received the proper identification code. After a ground station has begun to transmit on a communications channel, that channel is not available to ground stations other than the one from which service has been requested until the call is terminated.

(e) A call is terminated by the ground station when either a hang-up signal is transmitted by the airborne mobile station, or the signal from the airborne mobile station on the communications channel is lost for a period of 15 continuous seconds. The hang-up signal is the on-off keying (50% duty cycle) of an unmodulated carrier over a period of one second with pulse duration of 5 milliseconds. However, if all carriers authorized to operate air-ground systems using the channels listed in § 22.857 agree that an alternative hang-up signal and/or procedure would be more efficient or beneficial, such alternative hang-up signal and/or procedure may be used. The carriers must jointly give prior notification to the FCC if an alternative hang-up signal and/or procedure is used.

§ 22.867 Effective radiated power limits.

The effective radiated power (ERP) of ground and airborne stations operating on the channels listed in § 22.857 must not exceed the limits in this section.

(a) The ERP of airborne mobile station transmitters must not exceed 30 Watts.

(b) The ERP of ground station transmitters must not exceed 100 Watts.

(c) The ERP of low power ground station transmitters operating pursuant to paragraph (a) of § 22.859 must not exceed 1 Watt.

§ 22.869 Assignment of control channels.

The FCC selects and assigns exclusively one control channel to each commercial aviation air-ground licensee.

§ 22.871 Control channel transition period.

The rules in this section provide for a period of transition during which the experimental air-ground system operating on the channels listed in § 22.857 will be discontinued and replaced by a system operating in full compliance with the rules in this subpart. The experimental system may continue to exclusively use a 3.2 kHz control channel contained within the bandwidth of communications channel C–2 of each channel block until September 9, 1996. After that date communications channel C–2 will be available for use by all carriers authorized to operate an air-ground system on the channels listed in § 22.857.

§ 22.873 Construction period for commercial aviation air-ground systems.

Construction of a new commercial aviation air-ground system is considered to be completed for the purpose of this section and § 22.142 when the number of ground stations specified in this section are constructed and operational.

(a) *Stage I.* At least 25 ground stations must be constructed and operational within 3 years. Licensees must notify the Commission by using FCC Form 601 as soon as this requirement is met.

(b) *Stage II.* At least 50 ground stations must be constructed and operational within 5 years. Nationwide service to subscribers must commence within 5 years. Licensees must notify the Commission by using FCC Form 601 as soon as this requirement is met.

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68950, Dec. 14, 1998]

§ 22.875 Commercial aviation air-ground system application requirements.

Existing and prospective common carriers may file applications for authority to construct and operate a new nationwide air-ground system on the channels listed in § 22.857 only during window filing periods that may be announced by the FCC in Public Notices. In addition to the requirements elsewhere in this part, such applications must contain the following exhibits:

(a) *Written agreement.* A signed agreement between the applicant and at least one airline or airline organization, authorizing the applicant to provide air-ground service on its aircraft.

(b) *Financial qualifications.* At the time of filing its application an applicant must demonstrate that it has either a firm financial commitment or available financial resources necessary to construct 50 ground stations and operate for one year after initiation of nationwide air-ground service its proposed air-ground system.

(1) The demonstration of commitment must include and be sufficient to cover the realistic and prudent estimated costs of construction of 50 ground stations, operation and other initial expenses for one year after initiation of nationwide air-ground service. The estimated costs, operation costs and other initial expenses must be itemized. The estimated costs must include the anticipated costs of construction of each ground station.

(2) The firm financial commitment required above must be obtained from a state or federally chartered bank or savings and loan association, or the financial affiliate or subsidiary of an equipment supplier, and must contain a statement that the lender:

(i) Has examined the financial condition of the applicant including audited financial statements, and has determined that the applicant is credit worthy;

(ii) That the lender is committed to providing a sum certain to the particular applicant;

(iii) That the lender's willingness to enter into the commitment is based solely on its relationship with the applicant; and

(iv) That the commitment is not in any way guaranteed by any entity other than the applicant.

(3) Applicants intending to rely on personal or internal resources must submit:

(i) Audited financial statements certified within one year of the date of the application, indicating the availability of sufficient net liquid assets to construct and operate the proposed air-ground system for one year.

(A) The auditors must be certified public accountants.

(B) Net liquid assets is considered to be the excess of current assets (readily converted to cash) over current liabilities. In order to demonstrate ready convertibility into cash, the identity, liquidity and value of listed assets must be demonstrated. Non-liquid assets can be relied on if the marketability of those assets is documented.

(ii) An audited balance sheet, current within 60 days of filing, which clearly shows the continued availability of sufficient net liquid assets to construct and operate the proposed air-ground system for one year after nationwide service begins.

(c) *Service Plan.* A service plan containing:

(1) A map or other description of the planned geographic coverage area, including air space over the continental United States, Alaska, Hawaii and other United States territories.

(2) A schedule for construction of 50 ground stations and provision of nationwide service to subscribers within 5 years from the grant of the initial authorization.

(3) A description of how the system will interconnect with the landline telephone network and be integrated with other air-ground systems, including a statement as to whether the system will be interconnected with international air-ground systems.

(d) *Technical Exhibit.* A technical description of the proposed system demonstrating compliance with all applicable technical requirements and describing how the proposed system would operate, if authorized. This exhibit must provide the following information:

(1) The number of ground stations to be used, their locations, and the type and quantity of equipment proposed for the system;

(2) A complete description of the procedures and data protocols to be used on the control channel;

(3) The modulation types to be used and their spectral characteristics;

(4) The effective radiated power and transmitter peak envelope power for all transmitters at each ground station location, and the effective radiated power of the airborne mobile stations;

(5) Antenna information as follows:

(i) For airborne mobile stations, the antenna type(s) to be used;

(ii) For ground stations, vertical and horizontal radiation patterns, antenna heights above ground level, antenna support structure heights above ground level, ground elevation above mean sea level and any relevant information (e.g. FAA approval) that may be helpful in determining whether ground station antennas require marking and lighting;

(6) Analytical data, including calculations, of potential interference within and without the spectrum for the air-ground system;

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68951, Dec. 14, 1998]

EFFECTIVE DATE NOTE: At 63 FR 68904, Dec. 14, 1998, § 22.875 was amended by removing paragraph (d)(5). This paragraph contains modified information collection requirements and will not become effective until approved by the Office of Management and Budget.

Subpart H—Cellular Radiotelephone Service

§ 22.900 Scope.

The rules in this subpart govern the licensing and operation of cellular radiotelephone systems. Licensing and operation of these systems are also subject to rules elsewhere in this part that apply generally to the Public Mobile Services. In case of conflict, however, the rules in this subpart govern.

§ 22.901 Cellular service requirements and limitations.

Cellular system licensees must provide cellular mobile radiotelephone service upon request to subscribers in good standing, including roamers, as provided in § 20.12 of this chapter. A cellular system licensee may refuse or terminate service, however, subject to any applicable state or local requirements for timely notification, to any subscriber who operates a cellular telephone in an airborne aircraft in violation of § 22.925 or otherwise fails to cooperate with the licensee in exercising operational control over mobile stations pursuant to § 22.927.

(a) *Service area information.* Licensees must inform prospective subscribers of the area in which reliable service can be expected.

(b) *Lack of capacity.* If a licensee refuses a request for cellular service because of a lack of system capacity, it must report that fact to the FCC in writing, explaining how it plans to increase capacity.

(c) *Dispatch service.* Cellular systems may provide dispatch service.

(d) *Alternative technologies and co-primary services.* Licensees of cellular systems may use alternative cellular technologies and/or provide fixed services on a co-primary basis with their mobile offerings, including personal communications services (as defined in part 24 of this chapter) on the spectrum within their assigned channel block. Cellular carriers that provide mobile services must make such service available to

subscribers whose mobile equipment conforms to the cellular system compatibility specification (see § 22.933).

(1) Licensees must perform or obtain an engineering analysis to ensure that interference to the service of other cellular systems will not result from the implementation of co-primary fixed services or alternative cellular technologies.

(2) Alternative technology and co-primary fixed services are exempt from requirements for incidental communications services of § 22.323, the channeling requirements of § 22.905, the modulation requirements of § 22.915, the wave polarization requirements of § 22.367, the compatibility specification in § 22.933 and the emission limitations of §§ 22.357 and 22.917, except for emission limitations that apply to emissions outside the assigned channel block.

[59 FR 59507, Nov. 17, 1994; 59 FR 64856, Dec. 16, 1994, as amended at 60 FR 15495, Mar. 24, 1995; 61 FR 38403, July 24, 1996; 61 FR 45356, Aug. 29, 1996; 65 FR 49202, Aug. 11, 2000]

§ 22.905 Channels for cellular service.

The following channels are allocated for block assignment in the Cellular Radiotelephone Service. All channels have a bandwidth of 40 kHz and are designed by their center frequencies in MegaHertz.

Base	Mobile	Base	Mobile
CHANNEL BLOCK A			
416 communication channel pairs			
869.040	824.040	890.010	845.010
869.070	824.070	890.040	845.040
|	|	|	|
|	|	|	|
879.990	834.990	891.480	846.480
21 control channel pairs			
	834.390	879.390	
	834.420	879.420	
	|	|	
	|	|	
	834.990	879.990	
CHANNEL BLOCK B			
416 communication channel pairs			
880.020	835.020	891.510	846.510
880.050	835.050	981.540	846.540
|	|	|	|
|	|	|	|
889.980	844.980	893.970	848.970
21 control channel pairs			
	835.020	880.020	
	835.050	880.050	
	|	|	
	|	|	
	835.920	880.620	

(a) Each channel block is assigned exclusively to one licensee for use in that licensee's cellular geographic service area (see § 22.911).

(b) Licensees may use any channel pair from the assigned channel block at any of their transmitter locations, subject to the prior coordination requirements of § 22.907.

[59 FR 59507, Nov. 17, 1994; 60 FR 9891, Feb. 22, 1995]

§ 22.907 Coordination of channel usage.

Licensees in the Cellular Radiotelephone Service must coordinate, with the appropriate parties, channel usage at each transmitter location within 121 kilometers (75 miles) of any transmitter locations authorized to other licensees or proposed by tentative selectees or other applicants, except those with mutually exclusive applications.

(a) Licensees must cooperate and make reasonable efforts to resolve technical problems that may inhibit effective and efficient use of the cellular radio spectrum; however, licensees are not obligated to suggest extensive changes to or redesign other licensees' cellular systems. Licensees must make reasonable efforts to avoid blocking the growth of other cellular systems that are likely to need additional capacity in the future.

(b) If technical problems are addressed by an agreement or operating agreement between the licensees that would result in a reduction of quality or capacity of either system, the licensees must notify the Commission by updating FCC Form 601.

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68951, Dec. 14, 1998]

§ 22.909 Cellular markets.

Cellular markets are standard geographic areas used by the FCC for administrative convenience in the licensing of cellular systems. Cellular markets comprise Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs). All cellular markets and the counties they comprise are listed in Public Notice Report No. CL–92–40

''Common Carrier Public Mobile Services Information, Cellular MSA/RSA Markets and Counties'', dated January 24, 1992, DA 92–109, 7 FCC Rcd 742 (1992).

(a) *MSAs*. Metropolitan Statistical Areas are 306 areas, including New England County Metropolitan Areas and the Gulf of Mexico Service Area (water area of the Gulf of Mexico, border is the coastline), defined by the Office of Management and Budget, as modified by the FCC.

(b) *RSAs*. Rural Service Areas are 428 areas, other than MSAs, established by the FCC.

§ 22.911 Cellular geographic service area.

The Cellular Geographic Service Area (CGSA) of a cellular system is the geographic area considered by the FCC to be served by the cellular system. The CGSA is the area within which cellular systems are entitled to protection and within which adverse effects for the purpose of determining whether a petitioner has standing are recognized.

(a) *CGSA determination*. The CGSA is the composite of the service areas of all of the cells in the system, excluding any area outside the cellular market boundary, except as provided in paragraph (c) of this section, and excluding any area within the CGSA of another cellular system. The service area of a cell is the area within its service area boundary (SAB). The distance to the SAB is calculated as a function of effective radiated power (ERP) and antenna center of radiation height above average terrain (HAAT), height above sea level (HASL) or height above mean sea level (HAMSL).

(1) Except as provided in paragraphs (a)(2) and (b) of this section, the distance from a cell transmitting antenna to its SAB along each cardinal radial is calculated as follows:

$d=2.531\times h^{0.34}\ xp^{0.17}$

where:

d is the radial distance in kilometers
h is the radial antenna HAAT in meters
p is the radial ERP in Watts

(2) For the cellular systems authorized to serve the Gulf of Mexico MSA, the distance from a cell transmitting antenna to its SAB along each cardinal radial is calculated as follows:

$d=6.895\times h^{0.30}\ xp^{0.15}$

where:

d is the radial distance in kilometers
h is the radial antenna HAAT in meters
p is the radial ERP in Watts

(3) The value used for h in the formula in paragraph (a)(2) of this section must not be less than 8 meters (26 feet) HASL (or HAMSL, as appropriate for the support structure). The value used for h in the formula in paragraph (a)(1) of this section must not be less than 30 meters (98 feet) HAAT, except that for unserved area applications proposing a cell with an ERP not exceeding 10 Watts, the value for h used in the formula in paragraph (a)(1) of this section to determine the service area boundary for that cell may be less than 30 meters (98 feet) HAAT, but not less than 3 meters (10 feet) HAAT.

(4) The value used for p in the formulas in paragraphs (a)(1) and (a)(2) of this section must not be less than 0.1 Watt or 27 dB less than (1/500 of) the maximum ERP in any direction, whichever is more.

(5) Whenever use of the formula in paragraph (a)(1) of this section pursuant to the exception contained in paragraph (a)(3) of this section results in a calculated distance that is less than 5.4 kilometers (3.4 miles), the radial distance to the service area boundary is deemed to be 5.4 kilometers (3.4 miles).

(6) The distance from a cell transmitting antenna to the SAB along any radial other than the eight cardinal radials is calculated by linear interpolation of distance as a function of angle.

NOTE TO PARAGRAPH (a) OF § 22.911: On May 13, 1994, the United States Court of Appeals for the District of Columbia Circuit instructed the FCC to vacate the provisions of old § 22.903(a), now § 22.911(a), insofar as they apply to cellular systems licensed to serve the Gulf of Mexico MSA (GMSA), pending reconsideration of an issue remanded to the FCC in that decision. See *Petroleum Communications, Inc.* v. *Federal Communications Commission*, No. 92–1670 and *RVC Services, Inc., D/B/A Coastel Communications Company* v. *Federal Communications Commission*, No. 93–1016, ____ F.2d ____, ____ (D.C. Cir. 1994). Accordingly, notwithstanding the provisions of

§ 22.911(a), until further notice, the authorized CGSAs of the cellular systems licensed to serve the GMSA are those which were authorized prior to January 11, 1993.

(b) *Alternative CGSA determination.* If a carrier believes that the method described in paragraph (a) of this section produces a CGSA that departs significantly (±20% in the service area of any cell) from the geographic area where reliable cellular service is actually provided, the carrier may submit, as an exhibit to an application for modification of the CGSA using FCC Form 601, a depiction of what the carrier believes the CGSA should be. Such submissions must be accompanied by one or more supporting propagation studies using methods appropriate for the 800–900 MHz frequency range, including all supporting data and calculations, and/or by extensive field strength measurement data. For the purpose of such submissions, cellular service is considered to be provided in all areas, including ''dead spots'', between the transmitter location and the locus of points where the predicted or measured median field strength finally drops to 32 dBμV/m (i.e. does not exceed 32 dBμV/m further out). If, after consideration of such submissions, the FCC finds that adjustment to a CGSA is warranted, the FCC may grant the application.

(1) The alternative CGSA determination must define the CGSA in terms of distances from cell sites to cell SABs along the eight cardinal radials, with other points along the SAB determined in accordance with paragraph (a)(6) of this section. The distances used for the cardinal radials must be representative of the coverage within the 45° sectors, as depicted by the alternative CGSA determination.

(2) If an uncalibrated predictive model is used to depict the CGSA, the alternative CGSA determination must identify factors (e.g. terrain roughness or features) that could plausibly account for the difference between actual coverage and that defined by the formula in paragraph (a)(1) of this section. If actual measurements or a measurement-calibrated predictive model are used to depict the CGSA, and this fact is disclosed in the alternative CGSA determination, it is not necessary to offer an explanation of the difference between actual coverage and that defined by the formula in paragraph (a)(1) of this section. If the formula in paragraph (a)(1) of this section is clearly inapplicable for the cell(s) in question (e.g. for microcells), this should be disclosed in the alternative CGSA determination.

(3) The provision for alternative CGSA determinations was made in recognition that the formula in paragraph (a)(1) of this section is a general model that provides a reasonable approximation of coverage in most land areas, but may substantially under-predict or over-predict coverage in specific areas with unusual terrain roughness or features, and may be inapplicable for certain purposes, e.g. cells with a radial distance to the SAB less than 8 kilometers (5 miles). In such cases, alternative methods that utilize more specific models are appropriate. Accordingly, the FCC does not consider use of the formula in paragraph (a)(1) of this section with parameters outside of the limits in paragraphs (a)(3), (a)(4) and (a)(5) of this section or with data for radials other than the cardinal radials to be a valid alternative method for determining the CGSA of a cellular system.

(c) *CGSA extension areas.* SAB extensions (areas outside of the cellular market boundary, but within the service area as calculated using the methods of paragraph (a) of this section) are part of the CGSA only under the following circumstances:

(1) During the five year build-out period of the system in the cellular market containing the extension, the licensees of systems on the same channel block in adjacent cellular markets may agree that the portion of the service area of one system that extends into unserved areas in the other system's cellular market is part of the CGSA of the former system.

(2) At the end of the five year build-out period of the system in the cellular market containing the extension, the portion of the service area that extends into unserved areas in another cellular market becomes part of the CGSA, provided that the licensee of the system so extended files a system information update in accordance with § 22.947(c).

(3) For original systems in MSAs, extensions of the CGSA authorized by the FCC are part of the CGSA to the extent authorized.

(d) *Protection afforded.* Within the CGSA determined in accordance with this section, cellular systems are entitled to protection from co-channel and first-adjacent channel interference and from capture of subscriber traffic by adjacent systems on the same channel block.

(1) Licensees must cooperate in resolving co-channel and first-adjacent channel interference by changing channels used at specific cells or by other technical means.

(2) Protection from capture of subscriber traffic is applied and limited in accordance with the following:

(i) Subscriber traffic is captured if an SAB of one cellular system overlaps the CGSA of another operating cellular system. Therefore, cellular licensees must not begin to operate any facility that would cause an SAB to overlap the existing CGSA of another cellular system on the same channel block, without first obtaining the written consent of the licensee of that system. However, cellular licensees may continue to operate existing facilities that produce an SAB overlapping a subsequently-authorized portion of the CGSA of another cellular system on the same channel block until the licensee of that system requests that the SAB be removed from its CGSA. Such request may be made directly to the licensee of the overlapping system or to the FCC. In the event such request is made, the licensee of the overlapping system must reduce the transmitting power or antenna height (or both) at the pertinent cell site as necessary to remove the SAB from the CGSA of the other system, unless a written consent from the licensee of the other system allowing the SAB to remain is obtained. Cellular licensees may enter into contracts with the licensees of other cellular systems on the same channel block to allow SABs to overlap CGSAs.

(ii) Cellular licensees are at most entitled to have a CGSA free of SABs from other cellular systems on the same channel block.

(e) *Unserved areas.* Unserved areas are areas outside of all existing CGSAs (on either of the channel blocks), to which the Communications Act of 1934, as amended, is applicable.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 63 FR 68951, Dec. 14, 1998]

§ 22.912 Service area boundary extensions.

This section contains rules governing service area boundary (SAB) extensions. SAB extensions are areas outside of the cellular market boundary, but within the service area as calculated using the methods of § 22.911(a). Cellular systems must be designed to comply with the rules in this section. Applications proposing systems that would not comply with the rules in this section are defective. Service within SAB extensions is not protected from interference or capture under § 22.911(d) unless and until the area within the SAB extension becomes a part of the cellular geographic service area (CGSA) in accordance with § 22.911(c).

(a) *De minimis extensions.* Except as restricted in paragraph (d) of this section, SABs may extend into adjacent cellular markets if such extensions are *de minimis*, are demonstrably unavoidable for technical reasons of sound engineering design, and do not extend into the CGSA of any other licensee's cellular system on the same channel block (unless the licensee of such other system consents to the extension) or into any adjacent cellular market on a channel block for which the five year build-out period has expired.

(b) *Contract extensions.* Except as restricted in paragraph (d) of this section, licensees of cellular systems on the same channel block in adjacent cellular markets may, at any time, enter into contracts with applicants or other licensees to allow SAB extensions into their CGSA only (not into unserved areas). Except as restricted in paragraph (d) of this section, licensees of the first authorized cellular systems on the same channel block in adjacent cellular markets may agree to allow SAB extensions into their CGSA and/or

unserved areas in their cellular markets during the five year build-out period of the market into which the SAB extends.

(c) *Same applicant/licensee.* Except as restricted in paragraph (d) of this section, licensees of cellular systems that are also an applicant or licensee on the same channel block in adjacent cellular markets may, at any time, allow or propose SAB extensions from their adjacent market system into their CGSH only (not into unserved areas). Except as restricted in paragraph (d) of this section, licensees of the first authorized cellular systems that are also an applicant or licensee on the same channel block in adjacent cellular markets may allow or propose SAB extensions from their adjacent market system into their CGSA and/or unserved areas in their cellular markets during the five year build-out period of the market into which the SAB extends.

(d) *Unserved area systems.* Phase I initial cellular applications must not propose SAB extensions. Phase I sole major modification applications and Phase II applications may propose SAB extensions, subject to the conditions in this section.

§ 22.913 Effective radiated power limits.

The effective radiated power (ERP) of transmitters in the Cellular Radiotelephone Service must not exceed the limits in this section.

(a) *Maximum ERP.* The effective radiated power (ERP) of base transmitters and cellular repeaters must not exceed 500 Watts. The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

(b) *Height-power limit.* The ERP of base transmitters must not exceed the amount that would result in an average distance to the service area boundary of 79.1 kilometers (49 miles) for cellular systems authorized to serve the Gulf of Mexico MSA and 40.2 kilometers (25 miles) for all other cellular systems. The average distance to the service area boundary is calculated by taking the arithmetic mean of the distances determined using the procedures specified in § 22.911 for the eight cardinal radial directions.

(c) *Coordination exemption.* Licensees need not comply with the height-power limit in paragraph (b) of this section if the proposed operation is coordinated with the licensees of all affected cellular systems on the same channel block within 121 kilometers (75 miles) and concurrence is obtained.

§ 22.915 Modulation requirements.

Cellular systems must be capable of providing service using the types of modulation described in the cellular system compatibility specification.

(a) *Non-voice modulating signals.* Modulating signals other than voice signals, such as data signals, may be transmitted, provided the resulting modulated emission exhibits spectral characteristics not exceeding those resulting from voice modulation.

(b) *Modulation levels.* The levels of the modulating signals must be set to the values specified in this paragraph, and must be maintained within ±10% of those values.

(1) The instantaneous frequency deviation resulting from the main modulating signal must be ±12 kHz.

(2) The instantaneous frequency deviation resulting from the supervisory audio tones must be ±2 kHz.

(3) The instantaneous frequency deviation resulting from the signaling tone must be ±8 kHz.

(4) The instantaneous frequency deviation resulting from wideband data signals must be ±8 kHz.

(c) *Deviation limitation circuitry.* Cellular transmitters must be equipped with circuitry that automatically prevents modulation levels for voice transmissions from exceeding the limits specified in this section.

(d) *Audio filter characteristics.* Except as provided in § 22.917, radiotelephony signals applied to the modulator from the modulation limiter must be attenuated as a function of frequency as specified in this paragraph.

(1) For mobile stations, these signals must be attenuated, relative to the level at 1 kHz, as follows:

(i) In the frequency ranges of 3.0 to 5.9 kHz and 6.1 to 15.0 kHz, signals must be attenuated by at least 40 log (f÷3) dB, where f is the frequency of the signal in kHz.

(ii) In the frequency range of 5.9 to 6.1 kHz, signals must be attenuated at least 35 dB.

(iii) In the frequency range above 15 kHz, signals must be attenuated at least 28 dB.

(2) For base stations, these signals shall be attenuated, relative to the level at 1 kHz, as follows:

(i) In the frequency range of 3 to 15 kHz, signals must be attenuated by at least 40 log (f÷3) dB, where f is the frequency of the signal in kHz.

(ii) In the frequency range above 15 kHz, signals must be attenuated by at least 28 dB.

(3) Filtering is not required for the supervisory audio tones, signaling tones or wideband data signals.

§ 22.917 Emission limitations for cellular.

The rules in this section govern the spectral characteristics of emissions in the Cellular Radiotelephone Service.

(a) *Analog radiotelephony emissions.* F3E emissions must be used only on the communication channels.

(b) *F3E/F3D emission mask for use with audio filter.* For F3E and F3D emissions, except as provided in paragraph (c) of this section, the mean power of emissions must be attenuated below the mean power of the unmodulated carrier wave (P) as follows:

(1) On any frequency removed from the carrier frequency by more than 20 kHz but not more than 45 kHz:

at least 26 dB;

(2) On any frequency removed from the carrier frequency by more than 45 kHz, up to the first multiple of the carrier frequency:

at least 60 dB or 43 + 10 log P dB, whichever is the lesser attenuation.

(c) *Alternative F3E/F3D emission mask.* For F3E and F3D emissions, transmitters may comply with the emission limitations in this paragraph in lieu of compliance with paragraph (b) of this section and the audio filter requirement of § 22.915.

(1) The mean power of any emission removed from the carrier frequency by a displacement frequency (f_d in kHz) must be attenuated below the mean power of the unmodulated carrier (P) as follows:

(i) On any frequency removed from the carrier frequency by more than 12 kHz but not more than 20 kHz:

at least 117 log (f_d÷12) dB;

(ii) On any frequency removed from the carrier frequency by more than 20 kHz, up to the first multiple of the carrier frequency:

at least 100 log (f_d÷11) dB or 60 dB or 43 + 10 log P dB, whichever is the lesser attenuation;

(2) For mobile stations, modulating signals other than the supervisory audio tone in the frequency range of 5.9 to 6.1 kHz must be attenuated, relative to the level at 1 kHz, at least 35 dB.

(d) *F1D emission mask.* For F1D emissions, the mean power of emissions must be attenuated below the mean power of the unmodulated carrier (P) as follows:

(1) On any frequency removed from the carrier frequency by more than 20 kHz but not more than 45 kHz:

at least 26 dB;

(2) On any frequency removed from the carrier frequency by more than 45 kHz but not more than 90 kHz:

at least 45 dB;

(3) On any frequency removed from the carrier frequency by more than 90 kHz, up to the first multiple of the carrier frequency:

at least 60 dB or 43+10 log P dB, whichever is the lesser attenuation.

(e) *Out of band emissions.* The mean power of emissions must be attenuated below the mean power of the unmodulated carrier (P) on any frequency twice or more than twice the fundamental frequency by:

at least 43+10 log P dB.

(f) *Mobile emissions in base frequency range.* The mean power of any emissions appearing in the base station frequency range from cellular mobile transmitters operated must be attenuated to a level not to exceed −80 dBm at the transmit antenna connector.

(g) *Interference from spurious emissions.* If any emission from a transmitter operating in this service results in interference to users of another radio service, the FCC may require a greater attenuation of that emission than specified in this section.

(h) *Measurement procedure.* The following spectrum analyzer bandwidth settings should be used for measurement of spurious emissions:

(1) When operating in the radiotelephony mode or the supervisory audio tone mode:

(i) For any emission not more than 45 kHz removed from the carrier frequency: 300 Hz;

(ii) For any emission more than 45 kHz removed from the carrier frequency: 30 kHz.

(2) When operating in the wideband data mode or the signaling tone mode:

(i) For any emission not more than 60 kHz removed from the carrier frequency: 300 Hz;

(ii) For any emission more than 60 kHz removed from the carrier frequency: 30 kHz.

§ 22.919 Electronic serial numbers.

The Electronic Serial Number (ESN) is a 32 bit binary number that uniquely identifies a cellular mobile transmitter to any cellular system.

(a) Each mobile transmitter in service must have a unique ESN.

(b) The ESN host component must be permanently attached to a main circuit board of the mobile transmitter and the integrity of the unit's operating software must not be alterable. The ESN must be isolated from fraudulent contact and tampering. If the ESN host component does not contain other information, that component must not be removable, and its electrical connections must not be accessible. If the ESN host component contains other information, the ESN must be encoded using one or more of the following techniques:

(1) Multiplication or division by a polynomial;

(2) Cyclic coding;

(3) The spreading of ESN bits over various non-sequential memory locations.

(c) The ESN must be factory set and must not be alterable, transferable, removable or otherwise able to be manipulated. Cellular mobile equipment must be designed such that any attempt to remove, tamper with, or change the ESN chip, its logic system, or firmware originally programmed by the manufacturer will render the mobile transmitter inoperative.

§ 22.921 911 Call Processing Procedures; 911-Only Calling Mode.

All mobile phones manufactured after February 13, 2000, and capable of operating in an analog mode, i.e., in compliance with ''Cellular System Mobile Station—Land Station Compatibility Specification'' (April 1981 Ed.) Office of Engineering and Technology Bulletin No. 53, referenced in § 22.933 must incorporate a special procedure for processing ''9–1–1'' calls. Such procedure must recognize when a ''9–1–1'' call is made and, at such time, must override any programming in the mobile unit that determines the handling of a non-911 call and permit the call to be handled by other analog carriers. This special procedure must incorporate any one or more of the 9–1–1 call system selection processes endorsed or approved by the Commission.

[64 FR 34568, June 28, 1999]

§ 22.923 Cellular system configuration.

Mobile stations communicate with and through base transmitters only. Base transmitters communicate with mobile stations directly or through cellular repeaters. Auxiliary test stations may communicate with base or mobile stations for the purpose of testing equipment.

§ 22.925 Prohibition on airborne operation of cellular telephones.

Cellular telephones installed in or carried aboard airplanes, balloons or any other type of aircraft must not be operated while such aircraft are airborne (not touching the ground). When any aircraft leaves the ground, all cellular telephones on board that aircraft must be turned off. The following notice must be posted on or near each cellular telephone installed in any aircraft:

''The use of cellular telephones while this aircraft is airborne is prohibited by FCC rules, and the violation of this rule could result in suspension of service and/or a fine. The use of cellular telephones while this aircraft is on the ground is subject to FAA regulations.''

§ 22.927 Responsibility for mobile stations.

Mobile stations that are subscribers in good standing to a cellular system, when receiving service from that cellular system, are considered to be operating under the authorization of that cellular system. Cellular system licensees are responsible for exercising effective operational control over mobile stations receiving service through their cellular systems. Mobile stations that are subscribers in good standing to a cellular system, while receiving service from a different cellular system, are considered to be operating under the authorization of such different system. The licensee of such different system is responsible, during such temporary period, for exercising effective operational control over such mobile stations as if they were subscribers to it.

§ 22.929 Application requirements for the Cellular Radiotelephone Service.

In addition to information required by subparts B and D of this part, applications for authorization in the Cellular Radiotelephone Service contain required information as described in the instructions to the form. Site coordinates must be referenced to NAD83 and be correct to ±1 second.

(a) *Administrative information*. The following information is required either by FCC Form 601, or as an exhibit:

(1) Location description; city; county; state; geographical coordinates correct to ± 1 second, the datum used (NAD 83), site elevation above mean sea level, proximity to adjacent market boundaries and international borders;

(2) Antenna height to tip above ground level, the height of the center of radiation of the antenna above the average terrain, the height of the antenna center of radiation above the average elevation of the terrain along each of the 8 cardinal radials, antenna gain in the maximum lobe, the beamwidth of the maximum lobe of the antenna, a polar plot of the horizontal gain pattern of the antenna, the electric field polarization of the wave emitted by the antenna when installed as proposed:

(3) The channel block requested, the maximum effective radiated power, the effective radiated power in each of the cardinal radial directions.

(b) If the application involves a service area boundary (SAB) extension (§ 22.912 of this chapter), the licensee must provide a statement as described in § 22.953.

(c) *Maps*. If the application proposes a change in the CGSA, it must include full size and reduced maps, and supporting engineering, as described in § 22.953 (a)(1) through (a)(3).

(d) *Antenna Information*. Upon request by an applicant, licensee, or the Commission, a cellular applicant or licensee of whom the request is made shall furnish the antenna type, model, and the name of the antenna manufacturer to the requesting party within ten (10) days of receiving written notification.

[63 FR 68951, Dec. 14, 1998, as amended at 64 FR 53241, Oct. 1, 1999]

EFFECTIVE DATE NOTES: 1. At 63 FR 68951, Dec. 14, 1998, § 22.929 was revised. This section contains information collection requirements and will not become effective until approval has been given by the Office of Management and Budget.

2. At 64 FR 53241, Oct. 1, 1999, § 22.929 was amended by adding paragraph (d). This paragraph contains information collection requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 22.933 Cellular system compatibility specification.

Except as provided in § 22.901(d), equipment used in the Cellular Radiotelephone Service must be designed in compliance with the technical specifications for compatibility of mobile and base stations in the Cellular Radiotelephone Service contained in ''Cellular System Mobile Station-Land Station Compatibility Specification'' (April 1981 Ed.), Office of Engineering and Technology Bulletin No. 53. This bulletin is contained in Appendix D to the *Report and Order* in CC Docket No. 79–318, and was published in the FEDERAL REGISTER of May 21, 1981. Copies may be obtained from the FCC's copying contractor. Special operational features that have been developed by joint industry consensus through the Telecommunications Industry Association

(TIA) and established as a TIA standard may be activated at the option of the cellular licensee, provided that the compatibility of equipment within the Cellular Radiotelephone Service as specified in OET Bulletin No. 53 is not adversely affected.

§ 22.935 Procedures for comparative renewal proceedings.

The procedures in this section apply to comparative renewal proceedings in the Cellular Radiotelephone Service.

(a) If one or more of the applications competing with an application for renewal of a cellular authorization are filed, the renewal applicant must file with the Commission its original renewal expectancy showing electronically via the ULS. This filing must be submitted no later than 60 days after the date of the Public Notice listing as acceptable for filing the renewal application and the competing applications.

(b) Interested parties may file petitions to deny any of the mutually exclusive applications. Any such petitions to deny must be filed no later than 30 days after the date that the renewal applicant submitted its renewal expectancy showing. Applicants may file replies to any petitions to deny applications that are filed. Any such replies must be filed no later than 15 days after the date that the petition(s) to deny was filed. No further pleadings will be accepted.

(c) In most instances, the renewal application and any competing applications will be designated for a two-step procedure. An Administrative Law Judge (Presiding Judge) will conduct a threshold hearing (step one), in which both the licensee and the competing applicants will be parties, to determine whether the renewal applicant deserves a renewal expectancy. If the order designating the applications for hearing specifies any basic qualifying issues against the licensee, those issues will be tried in this threshold hearing. If the Presiding Judge determines that the renewal applicant is basically qualified and due a renewal expectancy, the competing applicants will be found ineligible for further consideration and their applications will be denied. If the Presiding Judge determines that the renewal applicant does not merit a renewal expectancy but is otherwise qualified, then all of the applications will be considered in a comparative hearing (step two).

(d) Any competing applicant may request a waiver of the threshold hearing (step one), if such applicant demonstrates that its proposal so far exceeds the service already being provided that there would be no purpose in making a threshold determination as to whether the renewal applicant deserved a renewal expectancy vis-a-vis such a competing applicant. Any such waiver request must be filed at the time the requestor's application is filed. Petitions opposing such waiver requests may be filed. Any such petitions must be filed no later than 30 days after the date that the renewal applicant submitted its renewal expectancy showing. Replies to any petitions opposing such waiver requests may be filed. Any such replies must be filed no later than 15 days after the date that the petition(s) were filed. No further pleadings will be accepted. Any waiver request submitted pursuant to this paragraph will be acted upon prior to designating the applications for hearing. If a request to waive the threshold hearing (step one) is granted, the renewal expectancy issue will be designated as part of the comparative hearing (step two), and will remain the most important comparative factor in deciding the case, as provided in § 22.940(a).

(e) If the Presiding Judge issues a ruling in the threshold (step one) that denies the licensee a renewal expectancy, all of the applicants involved in the proceeding will be allowed to file direct cases no later than 90 days after the release date of the Presiding Judge's ruling. Rebuttal cases must be filed no later than 30 days after the date that the direct cases were filed.

(f) The Presiding Judge shall use the expedited hearing procedures delineated in this paragraph in both threshold (step one) and comparative (step two) hearings conducted in comparative cellular renewal proceedings.

(1) The Presiding Judge will schedule a first hearing session as soon as practicable after the date for filing rebuttal evidence. This first session will be an evidentiary admission session at which

each applicant will identify and offer its previously circulated direct and rebuttal exhibits, and each party will have an opportunity to lodge objections.

(2) After accepting the exhibits into evidence, the Presiding Judge will entertain motions to cross-examine and rule whether any sponsoring witness needs to be produced for cross-examination.

Determination of what, if any, cross-examination is necessary is within the sound judicial discretion of the Presiding Judge, the prevailing standard being whether the person requesting cross-examination has persuasively demonstrated that written evidence is ineffectual to develop proof. If cross-examination is necessary, the Presiding Judge will specify a date for the appearance of all witnesses. In addition, if the designation order points out an area where additional underlying data is needed, the Presiding Judge will have the authority to permit the limited use of discovery procedures. Finally, the Presiding Judge may find that certain additional testimony or cross-examination is needed to provide a complete record for the FCC. If so, the Presiding Judge may schedule a further session.

(3) After the hearing record is closed, the Presiding Judge may request Proposed Findings of Fact and Conclusions of Law to be filed no later than 30 days after the final hearing session. Replies are not permitted except in unusual cases and then only with respect to the specific issues named by the Presiding Judge.

(4) The Presiding Judge will then issue an Initial Decision, preferably within 60 days of receipt of the last pleadings. If mutually exclusive applications are before the Presiding Judge, the Presiding Judge will determine which applicant is best qualified. The Presiding Judge may also rank the applicants in order of merit if there are more than two.

(5) Parties will have 30 days in which to file exceptions to the Initial Decision.

[59 FR 59507, Nov. 17, 1994, as amended at 62 FR 4172, Jan. 29, 1997; 63 FR 68951, Dec. 14, 1998]

§ 22.936 Dismissal of applications in cellular renewal proceedings.

Any applicant that has filed an application in the Cellular Radiotelephone Service that is mutually exclusive with an application for renewal of a cellular authorization (competing application), and seeks to resolve the mutual exclusivity by requesting dismissal of its application, must obtain the approval of the FCC.

(a) If a competing applicant seeks to dismiss its application prior to the Initial Decision stage of the hearing on its application, it must submit to the Commission a request for approval of the dismissal of its application. This request for approval of the dismissal of its application must be submitted and must also include a copy of any agreement related to the withdrawal or dismissal, and an affidavit setting forth:

(1) A certification that neither the petitioner nor its principals has received or will receive any money or other consideration in excess of legitimate and prudent expenses in exchange for the withdrawal or dismissal of the application, except that this provision does not apply to dismissal or withdrawal of applications pursuant to *bona fide* merger agreements;

(2) The exact nature and amount of any consideration received or promised;

(3) An itemized accounting of the expenses for which it seeks reimbursement; and

(4) The terms of any oral agreement related to the withdrawal or dismissal of the application.

(b) In addition, within 5 days of the filing date of the applicant or petitioner's request for approval, each remaining party to any written or oral agreement must submit an affidavit setting forth:

(1) A certification that neither the applicant nor its principals has paid or will pay money or other consideration in excess of the legitimate and prudent expenses of the petitioner in exchange for withdrawing or dismissing the application; and

(2) The terms of any oral agreement relating to the withdrawal or dismissal of the application.

(c) For the purposes of this section:

(1) Affidavits filed pursuant to this section must be executed by the filing party, if an individual, a partner having personal knowledge of the facts, if a partnership, or an officer having personal knowledge of the facts, if a corporation or association.

(2) Applications are deemed to be pending before the FCC from the time the application is filed with the FCC until such time as an order of the FCC granting, denying or dismissing the application is no longer subject to reconsideration by the FCC or to review by any court.

(3) ''Legitimate and prudent expenses'' are those expenses reasonably incurred by a party in preparing to file, filing, prosecuting and/or settling its application for which reimbursement is sought.

(4) ''Other consideration'' consists of financial concessions, including, but not limited to, the transfer of assets or the provision of tangible pecuniary benefit, as well as non-financial concessions that confer any type of benefit on the recipient.

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68951, Dec. 14, 1998]

§ 22.937 Demonstration of financial qualifications.

Except as provided in paragraphs (g) and (h) of this section, each applicant for a new cellular system must demonstrate that it has, at the time the application is filed, either a separate market-specific firm financial commitment or available financial resources sufficient to construct and operate for one year the proposed cellular system. Each application of reassignment of license or consent to transfer of control must demonstrate the financial ability of the proposed assignee or transferee to acquire and operate the facilities.

(a) *Estimated costs.* The demonstration required by this section must include a realistic and prudent estimate of the costs of construction, operating and other initial expenses for one year.

(b) *Source of financing.* The firm financial commitment must be obtained from a state or federally chartered bank or savings and loan association, another recognized financial institution, or the financial arm of a capital equipment supplier. The firm financial commitment may be contingent upon the applicant's obtaining an authorization.

(c) *Lender's statement.* The firm financial commitment must contain a statement that:

(1) The lender has examined the financial condition of the applicant, including audited financial statements if applicable, and has determined that the applicant is creditworthy;

(2) The lender has examined the financial viability of each proposal for which the applicant intends to use the commitment;

(3) The lender is committed to providing a sum certain to the particular applicant;

(4) The lender's willingness to enter into the commitment is based solely on its relationship with the applicant; and,

(5) The commitment is not in any way guaranteed by any entity other than the applicant.

(d) *Showings of financial resources.* Applicants relying upon personal or internal financial resources must submit the following:

(1) Audited financial statements, certified within one year of the date of the cellular application, that show the availability of sufficient net current assets to construct and operate for one year the proposed cellular system;

(2) A balance sheet current within 60 days of the date of filing that shows the continued availability of sufficient net current assets to construct and operate for one year the proposed cellular system; and,

(3) A certification by the applicant or an officer of the applicant organization attesting to the validity of the unaudited balance sheet.

(e) *Parent corporation financing.* Applicants relying upon financing obtained from parent corporations must submit the showings listed in paragraph (d) of this section as the information pertains to the parent corporation.

(f) *Notice upon default.* In addition to the disclosures required by paragraph (c) of this section, any loan or other credit arrangement providing for a chattel mortgage or secured interest in any proposed cellular system must include a provision for a minimum of ten

(10) days prior written notification to the licensee, and to the FCC, before any such equipment may be repossessed under default provision of the agreement.

(g) *Competing applications in cellular renewal proceedings.* Initial cellular applications that are competing against a cellular renewal application are subject to the rules in this paragraph instead of the rules in paragraphs (a) through (f) of this section.

(1) Any applicant filing a competing application against a cellular renewal application must demonstrate, at the time it files its application, that it has either:

(i) A firm financial commitment, an irrevocable letter of credit or performance bond in the amount of its realistic and prudent estimated costs of construction and any other expenses to be incurred during the first year of operating its proposed system (the irrevocable letter of credit or performance bond must be from the type of financial institution described in paragraph (g)(3) of this section); or,

(ii) Available resources, as defined in paragraph (g)(4) of this section, necessary to construct and operate its proposed cellular system for one year.

(2) The firm financial commitment may be contingent on the applicant obtaining an authorization. The applicant must also list all of its realistic and prudent estimated costs of construction and any other expenses to be incurred during the first year of operating its proposed system.

(3) The firm financial commitment required above shall be obtained from a state or federally chartered bank or savings and loan association, another recognized financial institution, or the financial arm of a capital equipment supplier; shall specify the terms of the loan or other form of credit arrangement, including the amount to be borrowed, the interest to be paid, the amount of the commitment fee and the fact that it has been paid, the terms of repayment and any collateral required; and shall contain a statement:

(i) That the lender has examined the financial conditions of the applicant, including audited financial statements where applicable, and has determined that the applicant is creditworthy;

(ii) That the lender has examined the financial viability of the proposal for which the applicant intends to use the commitment;

(iii) That the lender is committed to providing a sum certain to the particular applicant;

(iv) That the lender's willingness to enter into the commitment is based solely on its relationship with the applicant; and,

(v) That the commitment is not in any way guaranteed by an entity other than the applicant.

(4) Applicants intended to rely on personal or internal resources must submit:

(i) Audited financial statements certified within one year of the date of the cellular application, indicating the availability of sufficient net current assets to construct and operate the proposed cellular system for one year;

(ii) A balance sheet current within 60 days of the date of filing its application that clearly shows the continued availability of sufficient net current assets to construct and operate the proposed cellular system for one year; and,

(iii) A certification by the applicant or an officer of the applicant organization attesting to the validity of the unaudited balance sheet.

(5) Applicant intending to rely upon financing obtained through a parent corporation must submit the information required by paragraph (g)(4) of this section, as the information pertains to the parent corporation.

(6) As an alternative to relying upon a firm financial commitment, an irrevocable letter of credit, or a performance bond from a financial institution as described in paragraph (g)(3) of this section, an applicant may state that it has placed in an escrow account sufficient cash to meet its construction and first-year operating expenses. Such a statement must specify the amount of cash, the escrow account number and the financial institution where the escrow account is located.

(7) Any competing application filed against the renewal application of an incumbent cellular licensee that does not demonstrate, at the time it is initially filed, that the competing applicant has sufficient funds to construct

and operate for one year its proposed cellular system will be dismissed.

(h) *Exemptions.* Any licensee applying for an unserved area adjacent to its existing cellular system, to integrate such area into the existing system, is exempt from the financial demonstration requirements of this section. In addition, modification applications and *pro forma* assignment and transfer of control applications are exempt from the financial demonstration requirements of this section.

§ 22.939 Site availability requirements for applications competing with cellular renewal applications.

In addition to the other requirements set forth in this part for initial cellular applications, any application competing against a cellular renewal application must contain, when initially filed, appropriate documentation demonstrating that its proposed antenna site(s) will be available. Competing applications that do not include such documentation will be dismissed. If the competing applicant does not own a particular site, it must, at a minimum demonstrate that the site is available to it by providing a letter from the owner of the proposed antenna site expressing the owner's intent to sell or lease the proposed site to the applicant. If any proposed antenna site is under U.S. Government control, the applicant must submit written confirmation of the site's availability from the appropriate Government agency. Applicants which file competing applications against incumbent cellular licensees may not rely on the assumption that an incumbent licensee's antenna sites are available for their use.

§ 22.940 Criteria for comparative cellular renewal proceedings.

This section sets forth criteria to be used in comparative cellular renewal proceedings. The ultimate issue in comparative renewal proceedings will be to determine, in light of the evidence adduced in the proceeding, what disposition of the applications would best serve the public interest, convenience and necessity.

(a) *Renewal expectancies.* The most important comparative factor to be considered in a comparative cellular renewal proceeding is a major preference, commonly referred to as a ''renewal expectancy.''

(1) The cellular renewal applicant involved in a comparative renewal proceeding will receive a renewal expectancy, if its past record for the relevant license period demonstrates that:

(i) The renewal applicant has provided ''substantial'' service during its past license term. ''Substantial'' service is defined as service which is sound, favorable, and substantially above a level of mediocre service which just might minimally warrant renewal; and

(ii) The renewal applicant has substantially compiled with applicable FCC rules, policies and the Communications Act of 1934, as amended.

(2) In order to establish its right to a renewal expectancy, a cellular renewal applicant involved in a comparative renewal proceeding must submit a showing explaining why it should receive a renewal expectancy. At a minimum, this showing must include.

(i) A description of its current service in terms of geographic coverage and population served, as well as the system's ability to accommodate the needs of roamers;

(ii) An explanation of its record of expansion, including a timetable of the construction of new cell sites to meet changes in demand for cellular service;

(iii) A description of its investments in its cellular system; and

(iv) Copies of all FCC orders finding the licensee to have violated the Communications Act or any FCC rule or policy; and a list of any pending proceedings that relate to any matter described in this paragraph.

(3) In making its showing of entitlement to a renewal expectancy, a renewal applicant may claim credit for any system modification applications that were pending on the date it filed its renewal application. Such credit will not be allowed if the modification application is dismissed or denied.

(b) *Additional comparative issues.* The following additional comparative issues will be included in comparative cellular renewal proceedings, if a full comparative hearing is conducted pursuant to § 22.935(c).

(1) To determine on a comparative basis the geographic areas and population that each applicant proposes to serve; to determine and compare the relative demand for the services proposed in said areas; and to determine and compare the ability of each applicant's cellular system to accommodate the anticipated demand for both local and roamer service;

(2) To determine on a comparative basis each applicant's proposal for expanding its system capacity in a coordinated manner in order to meet anticipated increasing demand for *both* local and roamer service;

(3) To determine on a comparative basis the nature and extent of the service proposed by each applicant, including each applicant's proposed rates, charges, maintenance, personnel, practices, classifications, regulations and facilities (including switching capabilities); and

(4) To determine on a comparative basis each applicant's past performance in the cellular industry or another business of comparable type and size.

(c) *Additional showings for competing applications.* With respect to evidence introduced pursuant to paragraph (b)(3) of this section, any applicant filing a competing application against a cellular renewal application (competing applicant) who claims a preference for offering any service not currently offered by the incumbent licensee must demonstrate that there is demand for that new service and also present a business plan showing that the competing applicant can operate the system economically. Any competing applicant who proposes to replace analog technology with digital technology will receive no credit for its proposal unless it submits a business plan showing how it will operate its system economically and how it will provide more comprehensive service than does the incumbent licensee with existing and implemented cellular technology.

§ 22.941 System identification numbers.

System identification numbers (SIDs) are 15 bit binary numbers assigned to cellular systems. SIDs are transmitted by the cellular systems so that cellular mobile stations can determine whether the system through which they are communicating is a system to which they subscribe, or whether they are considered by the system to be roamers.

(a) The FCC assigns one SID to each cellular system on its initial authorization. Cellular systems may transmit only their assigned SID(s) and/or the SIDs assigned to other cellular systems. A cellular system may transmit the SID assigned to another cellular system only if the licensee of that system concurs with such use of its assigned SID.

(b) Licensees must notify the Commission using FCC Form 601, if their cellular systems transmit SIDs assigned to other cellular systems. The notification must indicate the concurrence of the licensee(s) of such other systems with this use of their assigned SID(s). The notification must be mailed or delivered to the filing place (see § 22.106) no later than 15 days after the system begins transmitting the SID(s).

(c) Licensees may request that an additional (previously unassigned) SID be assigned to their system by filing an application for minor modification of station on FCC Form 601.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 63 FR 68951, Dec. 14, 1998]

§ 22.942 Limitations on interests in licensees for both channel blocks in an area.

(a) *Controlling interests.* A licensee, an individual or entity that owns a controlling or otherwise attributable interest in a licensee, or an individual or entity that actually controls a licensee for one channel block in a CGSA may have an direct or indirect ownership interest of 5 percent or less in the licensee, an individual or entity that owns a controlling or otherwise attributable interest in a licensee, or an individual or entity that actually controls a licensee for the other channel block in an overlapping CGSA.

(b) *Non-controlling interests.* A direct or indirect non-attributable interest in both systems is excluded from the general rule prohibiting multiple ownership interests.

(c) *Divestiture*. Divestiture of interests as a result of a transfer of control or assignment of authorization must occur prior to consummating the transfer or assignment.

(d) *Ownership attribution*. For purposes of paragraphs (a) and (b) of this section, ownership and other interests cellular licensees will be attributed to their holders pursuant to the following criteria:

(1) Controlling interest shall be attributable. Controlling interest means majority voting equity ownership, any general partnership interest, or any means of actual working control (including negative control) over the operation of the licensee, in whatever manner exercised.

(2) Partnership and other ownership interests and any stock interest amounting to 20 percent or more of the equity, or outstanding stock, or outstanding voting stock of a cellular licensee shall be attributed.

(3) Non-voting stock shall be attributed as an interest in the issuing entity if in excess of the amounts set forth in paragraph (d)(2) of this section.

(4) Debt and instruments such as warrants, convertible debentures, options, or other interests (except non-voting stock) with rights of conversion to voting interests shall not be attributed unless and until converted.

(5) Limited partnership interests shall be attributed to limited partners and shall be calculated according to both the percentage of equity paid in and the percentage of distribution of profits and losses.

(6) Officers and directors of a cellular licensee shall be considered to have an attributable interest in the entity with which they are so associated. The officers and directors of an entity that controls a cellular licensee shall be considered to have an attributable interest in the cellular licensee.

(7) Ownership interests that are held indirectly by any party through one or more intervening corporations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that if the ownership percentage for an interest in any link in the chain exceeds 50 percent or represents actual control, it shall be treated as if it were a 100 percent interest. (For example, if A owns 20% of B, and B owns 40% of licensee C, then A's interest in licensee C would be 8%. If A owns 20% of B, and B owns 51% of licensee C, then A's interest in licensee C would be 20% because B's ownership of C exceeds 50%.)

(8) Any person who manages the operations of a cellular licensee pursuant to a management agreement shall be considered to have an attributable interest in such licensee if such person, or its affiliate, has authority to make decisions or otherwise engage in practices or activities that determine, or significantly influence,

(i) The nature or types of services offered by such licensee;

(ii) The terms upon which such services are offered; or

(iii) The prices charged for such services.

(9) Any licensee or its affiliate who enters into a joint marketing arrangements with a cellular, licensee, or its affiliate shall be considered to have an attributable interest, if such licensee, or its affiliate, has authority to make decisions or otherwise engage in practices or activities that determine, or significantly influence,

(i) The nature or types of services offered by such licensee;

(ii) The terms upon which such services are offered; or

(iii) The prices charged for such services.

[64 FR 54576, Oct. 7, 1999]

§ 22.943 Limitations on assignments and transfers of cellular authorizations.

The following limitations apply to applications for consent to transfer of control or assignment of authorizations in the Cellular Radiotelephone Service.

(a) *Trafficking*. Applications for consent to transfer of control or assignment of authorization in the Cellular Radiotelephone Service are subject to the provisions of § 22.139, except for:

(1) Applications reflecting the trading of an ownership interest in an authorized but unconstructed cellular

system in one market for a commensurate interest in a cellular system in another market; and,

(2) Applications for consent to transfer of control or assignment of a cellular authorization obtained by random selection, after commencement of service.

(b) *Unserved area systems.* Except as otherwise provided in paragraph (b)(2) of this section, the FCC does not accept applications for consent to transfer of control or assignment of the authorization of a cellular system licensed to serve an unserved area until the system has provided service to subscribers for at least one year.

(1) Licensees must not enter into any agreement (e.g. option agreement or management contract) to transfer control of the licensee of the system until the system has provided service to subscribers for one year.

(2) The FCC may accept that grant applications for consent to transfer of control or for assignment of authorization if the transfer or assignment is *pro forma* and does not involve a change in ownership.

(3) An applicant seeking approval for a transfer of control or assignment (otherwise permitted under the Commission's Rules, 47 CFR chapter I) of a license within three years of receiving a new license through a competitive bidding procedure must, together with its application for transfer of control or assignment, file with the Commission a statement indicating that its license was obtained through competitive bidding. Such applicant must also file with the Commission the other documents and information set forth in §1.2111 of this chapter.

(c) *Systems authorized as result of comparative renewal proceeding.* Except as otherwise provided in paragraphs (c)(1), (c)(2) and (c)(3) of this section, the FCC does not accept applications for consent to transfer of control or for assignment of the authorization of a cellular system that has been acquired by the current licensee for the first time as a result of a comparative renewal proceeding until the system has provided service to subscribers for at least three years.

(1) The FCC may accept and grant applications for consent to transfer of control or for assignment of the authorization of a cellular system that is to be transferred as a part of a *bona fide* sale of an on-going business to which the cellular operation is incidental.

(2) The FCC may accept and grant applications for consent to transfer of control or for assignment of the authorization of a cellular system that is to be transferred as a result of the death of the licensee.

(3) The FCC may accept and grant applications for consent to transfer of control or for assignment of authorization if the transfer or assignment is *pro forma* and does not involve a change in ownership.

[59 FR 59507, Nov. 17, 1994, as amended at 61 FR 58339, Nov. 14, 1996]

§22.945 Interests in multiple applications.

This section governs interests in applicants with mutually exclusive applications for a new cellular system. For the purposes of this section, ''interest in an application'' means interest in the applicant.

(a) *General.* Except as otherwise provided in this section, parties must not have any interest, direct or indirect, in more than one application for authority to operate a new cellular system in the same cellular market.

(b) *Abutting CGSAs.* Licensees of existing systems whose cellular geographic service area (CGSA) abuts a proposed CGSA may each file one application that is mutually exclusive with the applications of other such licensees, even though they share common owners, provided that such licensees do not thereby acquire a simultaneous interest in applications for both channel blocks in any geographical area.

(c) *Publicly traded corporate applicants.* Parties must not have any interest, direct or indirect, in more than one mutually exclusive initial application for which the applicant is a publicly traded corporation, except that ownership interests of less than 5% are not considered. Ownership and other interests in applicants are attributed to their holder and deemed cognizable as set forth below.

(1) *Passive investors*. Investment companies, as defined in 15 U.S.C. 80a–3, insurance companies and banks holding stock through their trust departments in trust accounts are deemed to have a cognizable interest in a publicly traded cellular applicant only if they hold 10% or more of the stock of the applicant. This provision applies only if an applicant in which such parties hold an interest certifies in its application that no such party has exerted or attempted to exert any influence or control over the officers of the applicant.

(2) *Multiplier*. Attribution of ownership interests in a publicly traded cellular applicant that are held indirectly by any party through one or more intervening corporations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that wherever the ownership percentage for any link in the chain exceeds 50 percent, it is not included in the multiplication.

§ 22.946 Service commencement and construction periods for cellular systems.

(a) *Commencement of service*. New cellular systems must be at least partially constructed and begin providing cellular service to subscribers within the service commencement periods specified in Table H–1 of this section. Service commencement periods begin on the date of grant of the initial authorization, and are not extended by the grant of subsequent authorizations for the cellular system (such as for major modifications). The licensee must notify the FCC (FCC Form 601) after the requirements of this section are met (*see* § 1.946 of this chapter).

(b) To satisfy the requirement of paragraph (a) of this section, a cellular system must be interconnected with the public switched telephone network (PSTN) and must be providing service to mobile stations operated by its subscribers and roamers. A cellular system is not considered to be providing service to subscribers if mobile stations can not make telephone calls to landline telephones and receive telephone calls from landline telephones through the PSTN, or if the system intentionally serves only roamer stations.

(1) [Reserved]

(2) The licensee must notify the FCC (FCC Form 489) no later than 15 days after the requirements of paragraph (a) of this section are met.

(b) *Construction period for specific facilities*. The construction period applicable to specific new or modified cellular facilities for which an authorization has been granted is one year from the date the authorization is granted. Failure to comply with this requirement results in termination of the authorization for the specific new or modified facility, pursuant to § 22.144(b).

[59 FR 59507, Nov. 17, 1994, as amended at 63 FR 68951, Dec. 14, 1998; 64 FR 53241, Oct. 1, 1999]

§ 22.947 Five year build-out period.

The licensee of the first cellular system authorized on each channel block in each cellular market is afforded a five year period, beginning on the date the initial authorization for the system is granted, during which it may expand the system within that market.

(a) *Exclusive right to expand within market*. Except as provided in paragraph (b) of this section, the FCC does not accept applications for authority to operate a new cellular system in any unserved area in a market on a channel block during the five year build-out period.

(b) *Partitioned markets*. During the five-year build-out period, the licensee of the first cellular system on each channel block in each market may enter into contracts with eligible parties, allowing such parties to apply by using FCC Form 601 for a new cellular system in that channel block within the market. The FCC may grant such applications if they are in compliance with the rules in this part. Markets with two or more authorized cellular systems on the same channel block during the five year build-out period are referred to (with respect to the affected channel block) as ''partitioned markets''.

(1) Partitioning contracts must define the CGSA of the subsequent cellular system in accordance with

§ 22.911, including any expansion rights ceded. If not exercised, any such expansion rights terminate at the end of the five year build-out period.

(2) The five year build-out period begins on the date the initial authorization for the first cellular system is granted, and is not extended or affected in any way by the initial authorization of any subsequent cellular systems pursuant to paragraph (b) of this section.

(c) *System information update.* Sixty days before the end of the five year build-out period, the licensee of each cellular system authorized on each channel block in each cellular market must file, in triplicate, a system information update (SIU), comprising a full size map, a reduced map, and an exhibit showing technical data relevant to determination of the system's CGSA. Separate maps must be submitted for each market into which the CGSA extends, showing the extension area in the adjacent market. Maps showing extension areas must be labeled (i.e. marked with the market number and channel block) for the market into which the CGSA extends. SIUs must accurately depict the relevant cell locations and coverage of the system at the end of the five year build-out period. SIUs must be filed at the Mobile Services Division, Common Carrier Bureau, Federal Communications Commission, Washington, DC 20554. If any changes to the system occur after the filing of the SIU, but before the end of the five year build-out period, the licensee must file, in triplicate, additional maps and/or data as necessary to insure that the cell locations and coverage of the system as of the end of the five year build-out period are accurately depicted.

(1) The scale of the full-size map must be 1:500,000, regardless of whether any different scale is used for the reduced map. The map must have a legend, a distance scale and correctly labeled latitude and longitude lines. The map must be clear and legible. The map must accurately show the cell sites (transmitting antenna locations) which determine the CGSA, the entire CGSA, any extension of the composite service are boundary beyond the CGSA (see § 22.911) and the relevant portions of the cellular market boundary. The date on which the map depictions are accurate must appear on the map.

(2) The reduced map must be a proportional reduction, to 8½×11 inches, of the full-size map required in paragraph (c)(1) of this section, unless it proves to be impractical to depict the entire market by reducing the full-size map. In such instance, an 8½×11 inch map of a different scale may be substituted, provided that the required features of the full-size map are clearly depicted and labeled.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 63 FR 68951, Dec. 14, 1998]

§ 22.948 Partitioning and Disaggregation.

(a) *Eligibility.* (1) *Generally.* Parties seeking approval for partitioning and disaggregation shall request an authorization for partial assignment of a license pursuant to § 1.948 of this chapter. Cellular licensees may partition or disaggregate their spectrum to other qualified entities.

(2) *Partitioning.* During the five year build-out period, as defined in § 22.947, cellular licensees may partition any portion of their cellular market to other qualified entities. After the five year build-out period, cellular licensees and unserved area licensees may partition any portion of their Cellular Geographic Service Area (CGSA), as defined by § 22.911, to other qualified entities but may not partition unserved portions of their cellular market.

(3) *Disaggregation.* After the five year build-out period, as defined in § 22.947, parties obtaining disaggregated spectrum may only use such spectrum in that portion of the cellular market encompassed by the original licensee's CGSA and may not use such spectrum to provide service to unserved portions of the cellular market.

(b) *Disaggregation.* Cellular licensees and unserved area licensees may disaggregate spectrum in any amount.

(c) *Combined partitioning and disaggregation.* The Commission will consider requests for partial assignment of cellular licenses that propose combinations of partitioning and disaggregation.

(d) *License Term.* The license term for the partitioned license area and for

disaggregated spectrum shall be the remainder of the original cellular licensee's or the unserved area licensee's license term provided for in § 22.144(a).

[65 FR 37057, June 13, 2000]

§ 22.949 Unserved area licensing process.

This section sets forth the process for licensing unserved areas in cellular markets on channel blocks for which the five year build-out period has expired. This process has two phases: Phase I and Phase II.

(a) *Phase I.* Phase I is a one-time process that provides an opportunity for eligible parties to file competing applications for authority to operate a new cellular system in or to expand an existing cellular system into unserved areas (Phase I initial applications) as soon as these areas become available. In addition, each licensee whose Phase I initial application is granted is afforded one opportunity during the Phase I process to file an application proposing major modifications to the cellular system authorized by that grant (a Phase I major modification application), without being subject to competing applications.

(1) Phase I initial applications must be filed on the 31st day after the expiration of the five year build-out period of the authorized system(s) on the channel block requested in the market containing the unserved area.

(i) Each Phase I application must request authorization for one and only one cellular geographic service area (CGSA) in one and only one cellular market.

(ii) Applicants must not file more than one Phase I initial application for any cellular market.

(iii) Phase I initial applications must not propose any *de minimis* or contract service area boundary (SAB) extensions.

(2) Only one Phase I initial application is granted on each channel block in each market. Consequently, whenever two or more acceptable Phase I initial applications are timely filed in the same market on the same channel block, such Phase I initial applications are mutually exclusive, regardless of any other considerations such as the technical proposals. In order to determine which of such mutually exclusive Phase I initial applications to grant, the Commission administers competitive bidding procedures in accordance with subpart Q of part 1 of this chapter. After such procedures, the application of the winning bidder may be granted and the applications excluded by that grant may be dismissed without prejudice.

NOTE: Notwithstanding the provisions of § 22.949(a)(2), mutually exclusive Phase I initial applications that were filed between March 10, 1993 and July 25, 1993, inclusive, are to be included in a random selection process, following which the selected application may be granted and the applications excluded by that grant may be dismissed without prejudice.

(3) Phase I major modification applications (applications filed during Phase I that propose major modifications to cellular systems authorized by the grant of Phase I initial applications) must be filed no later than 90 days after the grant of the Phase I initial application. Each Phase I licensee may file only one Phase I major modification application. The FCC will not accept any competing applications in response to a Phase I major modification application. Phase I licensees may not sell to a third party any rights to apply for unserved area.

(i) Phase I major modification applications may propose *de minimis* or contract SAB extensions; provided that a contract SAB extension into an adjacent market may be proposed only if, at the time the Phase I major modification application is filed, the licensee in the adjacent market (on the requested channel block) has the right to enter into such a contract (see § 22.912(c)).

(ii) Phase I major modification application may propose a CGSA that is not contiguous with the authorized or proposed CGSA, provided that the noncontiguous CGSA meets the minimum coverage requirement of § 22.951.

(4) Phase I licensees may also file applications for or notifications of minor modifications to its system. However, such minor modifications may not reduce the size of the CGSA below the minimum coverage requirement of § 22.951.

(b) *Phase II*. Phase II is an on-going filing process that allows eligible parties to apply for any unserved areas that may remain in a market after the Phase I process is complete.

(1) If a Phase I initial application is granted for a market and channel block, Phase II applications (applications for authority to operate a cellular system in any remaining unserved area) for that market and channel block may be filed on or after the 121st day after the Phase I application was granted. If no Phase I initial applications are granted for a market and channel block, Phase II applications for that market and channel block may be filed on or after the 31st day after the FCC dismissed the last pending Phase I application. If no Phase I initial applications are received for a market and channel block, Phase II applications for that market and channel block may be filed on or after the 32nd day after the expiration of the relevant five-year build-out period.

(2) There is no limit to the number of Phase II applications that may be granted on each channel block in each market. Consequently, Phase II applications are mutually exclusive only if the proposed CGSAs would overlap. Mutually exclusive applications are processed using the general procedures in § 22.131.

(3) Phase II applications may propose a CGSA covering more than one cellular market. Each Phase II application must request authorization for one and only one CGSA. Phase II applications may propose *de minimis* and contract SAB extensions.

(c) Settlements among some, but not all, applicants with mutually exclusive applications for unserved areas (partial settlements) are prohibited. Settlements among all applicants with mutually exclusive applications (full settlements) are allowed and must be filed no later than the date that the FCC Form 175 (short-form) is filed.

(d) *Limitations on amendments*. Notwithstanding the provisions of § 22.122, Phase I applications are subject to the following additional limitations in regard to the filing of amendments.

(1) The Commission will not accept amendments (of any type) to mutually exclusive Phase I applications prior to the conclusion of the competitive bidding process.

(2) The FCC will not accept major amendments to Phase I applications.

(3) Minor amendments required by § 1.65 of this chapter must be filed no later than thirty (30) days after public notice announcing the results of the competitive bidding process.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59956, Nov. 21, 1994; 61 FR 58339, Nov. 14, 1996]

§ 22.951 Minimum coverage requirement.

Applications for authority to operate a new cellular system in an unserved area, other than those filed by the licensee of an existing system that abuts the unserved area, must propose a contiguous cellular geographical service area (CGSA) of at least 130 square kilometers (50 square miles). Area within contract SAB extensions counts toward the minimum coverage requirement. However, area within *de minimis* SAB extensions does not count toward the minimum coverage requirement. Applications for authority to operate a new cellular system in an unserved area, other than those filed by the licensee of an existing system that abuts the unserved area, must not propose coverage of water areas only (or water areas and uninhabited islands or reefs only), except for unserved areas in the Gulf of Mexico MSA.

§ 22.953 Content and form of applications.

Applications for authority to operate a cellular system in an unserved area must comply with the specifications in this section.

(a) Applications for authority to operate a cellular system in an unserved area must include the following information in addition to the requirements specified in §§ 1.919, 1.923 and 1.924. The following exhibits must be set off by tabs and numbered as follows:

(1) *Exhibit I—full-size map*. The scale of the full-size map must be 1:500,000, regardless of whether any different scale is used for the reduced map required in Exhibit II. The map must have a legend, a distance scale and correctly labeled latitude and longitude

lines. The map must be clear and legible. The map must accurately show the cell sites (transmitting antenna locations), the entire CGSA, any extension of the composite service area boundary beyond the CGSA (*see* § 22.911) and the relevant portions of the cellular market boundary.

(2) *Exhibit II—reduced map*. This map must be a proportional reduction, to 8½ × 11 inches, of the full-size map required for Exhibit I, unless it proves to be impractical to depict the entire cellular market by reducing the full-size map. In such instance, an 8½ x 11 inch map of a different scale may be substituted, provided that the required features of the full-size map are clearly depicted and labeled.

(3) *Exhibit III—engineering*. This exhibit must contain the data and methodology used to calculate the CGSA and service area boundary.

(4) *Exhibit IV—channel plan*. This exhibit must show which specific channels (or groups) are to be used at each cell site. Any necessary table for converting channel numbers to center frequencies must be provided.

(5) [Reserved]

(6) *Exhibit VI—service proposal*. This exhibit must describe the services proposed for subscribers and roamers, including the proposed method for handling complaints.

(7) *Exhibit VII—cellular design*. This exhibit must show that the proposed system design complies with cellular system design concepts, and must describe the method proposed to expand the system in a coordinated fashion as necessary to address changing demand for cellular service.

(8) *Exhibit VIII—blocking level*. This exhibit must disclose the blocking probability or other criteria to be used to determine whether it is necessary to take measures to increase system capacity to maintain service quality.

(9) *Exhibit IX—start-up expenses*. This exhibit must disclose in detail the projected cost of construction and other initial expenses of the proposed system, and how the applicant intends to meet these expenses and the costs of operation for the first year.

(10) *Exhibit X—interconnection arrangements*. This exhibit is required for applicants that provide public landline message telephone service in any portion of the proposed CGSA. This exhibit must describe exactly how the proposed system would interconnect with the landline network. The description must be of sufficient detail to enable a competitor to connect with the landline system in exactly the same manner, if the competitor so chooses.

(b) *Existing systems—major modifications*. Licensees making major modifications pursuant to § 1.929(h) must file FCC Form 601 and need only contain the exhibits required by paragraphs (a)(1) through (a)(3) of this section.

(c) *Existing systems—minor modifications*. Licensees making minor modifications pursuant to § 1.929(h)—in which the modification causes a change in the CGSA boundary (including the removal of a transmitter or transmitters)—must notify the FCC (using FCC Form 601) and include full-sized maps, reduced maps, and supporting engineering exhibits as described in paragraphs (a)(1)–(3) of this section. If the modification involves a contract SAB extension, it must include a statement as to whether the five-year build-out for the system on the relevant channel block in the market into which the SAB extends has elapsed, and as to whether the SAB extends into any unserved area in that market.

[59 FR 59507, Nov. 17, 1994, as amended at 59 FR 59954, Nov. 21, 1994; 63 FR 68951, Dec. 14, 1998; 64 FR 53241, Oct. 1, 1999]

§ 22.955 Canadian condition.

Pursuant to an agreement between the FCC and the Department of Communications in Canada, authorizations for cellular systems within 72 kilometers (45 miles) of the U.S.-Canadian border must have the following condition attached:

This authorization is subject to the condition that, in the event that cellular systems using the same channel block as granted herein are authorized in adjacent territory in Canada, coordination of any of your transmitter installations which are within 72 kilometers (45 miles) of the U.S.-Canadian border shall be required to eliminate any harmful interference that might otherwise exist and to insure continuance of equal access to the channel block by both countries.

§ 22.957 Mexican condition.

Pursuant to an agreement between the United States and Mexico, FCC authorizations for cellular systems within 72 kilometers (45 miles) of the United States-Mexican border must have the following condition attached:

This authorization is subject to the condition that, in the event cellular systems using the same frequencies granted herein are authorized in adjacent territory in Mexico, coordination of your transmitter installations which are within 72 kilometers (45 miles) of the United States-Mexico border shall be required to eliminate any harmful interference that might otherwise exist and to ensure continuance of equal access to the frequencies by both countries. The operator of this system shall not contract with customers in Mexico, and further, users of the system must be advised that operation of a mobile unit in Mexico is not permitted at this time without the express permission of the Mexican government. The above conditions are subject to modification pending further notice from the FCC.

§ 22.959 Rules governing processing of applications for initial systems.

Pending applications for authority to operate the first cellular system on a channel block in an MSA or RSA market continue to be processed under the rules governing the processing of such applications that were in effect when those applications were filed, unless the Commission determines otherwise in a particular case.

§ 22.960 Cellular unserved area radiotelephone licenses subject to competitive bidding.

Mutually exclusive initial applications for cellular unserved area Phase I and Phase II licenses filed after July 26, 1993, are subject to competitive bidding procedures. The general competitive bidding procedures found in part 1, subpart Q, of this chapter will apply unless otherwise provided in this part.

[61 FR 58339, Nov. 14, 1996]

§ 22.961 Competitive bidding design for cellular unserved area radiotelephone licensing.

The Commission will employ a simultaneous multiple round auction design when choosing from among mutually exclusive initial applications to provide cellular unserved area radiotelephone service, unless otherwise specified by the Wireless Telecommunications Bureau before the auction.

[61 FR 58339, Nov. 14, 1996]

§ 22.962 Competitive bidding mechanisms.

(a) *Grouping*. All cellular unserved area Phase I and Phase II licenses will be auctioned simultaneously, unless the Wireless Telecommunications Bureau announces, by Public Notice prior to the auction, an alternative auction scheme.

(b) *Minimum bid increments*. The Wireless Telecommunications Bureau will, by announcement before or during an auction, require minimum bid increments in dollar or percentage terms.

(c) *Stopping rules*. The Wireless Telecommunications Bureau will establish stopping rules before or during multiple round auctions in order to terminate an auction within a reasonable time.

(d) *Activity rules*. The Wireless Telecommunications Bureau will establish activity rules which require a minimum amount of bidding activity. In the event that the Wireless Telecommunications Bureau establishes an activity rule in connection with a simultaneous multiple round auction, each bidder will be entitled to request and will be automatically granted a certain number of waivers of such rule during the auction.

[61 FR 58339, Nov. 14, 1996]

§ 22.963 Withdrawal, default and disqualification payments.

(a) During the course of an auction conducted pursuant to § 22.961, the Commission will impose payments on bidders who withdraw high bids during the course of an auction, who default on payments due after an auction closes, or who are disqualified.

(b) *Bid withdrawal prior to close of auction*. A bidder who withdraws a high bid during the course of an auction will be subject to a payment equal to the difference between the amount bid and the amount of the winning bid the next time the license is offered by the Commission. No withdrawal payment would be assessed if the subsequent winning bid exceeds the withdrawn bid. This

payment amount will be deducted from any upfront payments or down payments that the withdrawing bidder has deposited with the Commission.

(c) *Default or disqualification after close of auction*. If a high bidder defaults or is disqualified after the close of such an auction, the defaulting bidder will be subject to the payment in paragraph (a) of this section plus an additional penalty equal to three (3) percent of the subsequent winning bid. If the subsequent winning bid exceeds the defaulting bidder's bid amount, the 3 percent payment will be calculated based on the defaulting bidder's bid amount. These amounts will be deducted from any upfront payments or down payments that the defaulting or disqualified bidder has deposited with the Commission.

[61 FR 58339, Nov. 14, 1996]

§ 22.964 Bidding application (FCC Form 175).

All applicants who wish to participate in competitive bidding for cellular unserved area radiotelephone licenses must submit applications on FCC Form 175 pursuant to § 1.2105 of this chapter. The Wireless Telecommunications Bureau will issue a Public Notice announcing the availability of cellular unserved area Phase I and Phase II licenses and, in the event that mutually exclusive applications are filed, the date of the auction for those licenses. This Public Notice will specify the date on or before which applicants intending to participate in a cellular unserved area radiotelephone service auction must file their applications in order to be eligible for that auction, and it will contain information necessary for completion of the application as well as other important information such as the materials which must accompany the short form, any upfront payment that will need to be submitted, and the location where the application must be filed.

[61 FR 58339, Nov. 14, 1996]

§ 22.965 Submission of upfront payments and down payments.

(a) Each bidder in the cellular unserved radiotelephone service auction(s) will be required to pay the Commission, immediately prior to the auction, by cashier's check or by wire, at least $5,000 in order to get a bidder identification number. The upfront money will later be counted toward the full payment of the license.

(b) Each winning bidder in the cellular unserved radiotelephone service auction(s) will be required to make a down payment to the Commission's lock-box bank in an amount sufficient to bring its total deposits up to 20 percent of its winning bid within five business days after the close of the auction, or by a date specified by Public Notice. The remainder of the full payment for the license shall be paid within 5 days following the release of a Public Notice that will indicate that the Commission is prepared to award the license(s). The Commission will grant the license generally within ten (10) business days after receiving full payment.

[61 FR 58339, Nov. 14, 1996]

§ 22.967 License grant, denial, default, and disqualification.

(a) Each winning bidder will be required to pay the balance of its winning bid in a lump sum payment within five (5) business days following Public Notice that the Commission is prepared to award the license. The Commission will grant the license generally within ten (10) business days after receipt of full and timely payment of the winning bid amount.

(b) A bidder who withdraws its bid subsequent to the close of bidding, defaults on a payment due, or is disqualified, will be subject to the payments specified in § 22.963 or §§ 1.2104(g) and 1.2109 of this chapter, as applicable.

[61 FR 58340, Nov. 14, 1996]

Subpart I—Offshore Radiotelephone Service

§ 22.1001 Scope.

The rules in this subpart govern the licensing and operation of offshore radiotelephone stations. The licensing and operation of these stations and systems is also subject to rules elsewhere in this part that apply generally to the public mobile services. However, in case of conflict, the rules in this subpart govern.

§ 22.1003 Eligibility.

Offshore central station licenses may be licensed to communications common carriers. Offshore subscriber stations may be licensed to common carriers or users of the service.

§ 22.1005 Priority of service.

Facilities in the Offshore Radiotelephone Service are intended primarily for rendition of public message service between offshore subscriber and central stations. However, they may also be used to render private leased line communication service, provided that such usage does not reduce or impair the extent or quality of communication service which would be available, in the absence of private leased line service, to the general public receiving or subsequently requesting public message service from an offshore central station.

§ 22.1007 Channels for offshore radiotelephone systems.

The channels listed in this section are allocated for paired assignment to transmitters located in the specified geographical zones that provide offshore radiotelephone service. All channels have a bandwidth of 20 kHz and are designated by their center frequencies in MegaHertz.

(a) *Zone A—Southern Louisiana*. The geographical area in Zone A is bounded as follows:

From longitude W.87°45′ on the East to longitude W.94°00′ on the West and from the 4.8 kilometer (3 mile) limit along the Gulf of Mexico shoreline on the North to the limit of the Outer Continental Shelf on the South.

(1) These channels may be assigned for use by offshore central (base/fixed) or subscriber stations (fixed, temporary fixed, surface and/or airborne mobile) as indicated, for voice-grade general communications:

Central	Subscriber	Central	Subscriber
488.025	491.025	488.225	491.225
488.050	491.050	488.250	491.250
488.075	491.075	488.275	491.275
488.100	491.100	488.300	491.300
488.125	491.125	488.325	491.325
488.150	491.150	488.350	491.350
488.175	491.175	488.375	491.375
488.200	491.200	488.400	491.400

(2) These channels may be assigned for use by offshore central (base/fixed) or subscriber stations (fixed, temporary fixed, surface and/or airborne mobile) as indicated, for voice-grade general communications and private line service:

Central	Subscriber	Central	Subscriber
488.425	491.425	488.575	491.575
488.450	491.450	488.600	491.600
488.475	491.475	488.625	491.625
488.500	491.500	488.650	491.650
488.525	491.525	488.675	491.675
488.550	491.550	488.700	491.700

(3) These channels may be assigned for use by relay stations in systems where it would be impractical to provide offshore radiotelephone service without the use of relay stations.

Central	Subscriber	Central	Subscriber
488.725	491.725	488.775	491.775
488.750	491.750	488.800	491.800

(4) These channels may be assigned for use by offshore central (base/fixed) or subscriber stations (fixed, temporary fixed, surface and/or airborne mobile) as indicated, for emergency communications involving protection of life and property.

Central	Subscriber	Central	Subscriber
488.825	491.825	488.875	491.875
488.850	491.850	488.900	491.900

(5) These channels may be assigned for use by offshore central (base/fixed) or subscriber stations (fixed, temporary fixed, surface and/or airborne mobile) as indicated, for emergency auto alarm and voice transmission pertaining to emergency conditions only.

Central	Subscriber
488.950	491.950

(6) These channels may be assigned for use by offshore central (base/fixed) or subscriber stations (fixed, temporary fixed, surface and/or airborne mobile) as indicated, for emergency shut-off remote control telemetry, environmental data acquisition and disseminations, or facsimile transmissions.

Central	Subscriber	Central	Subscriber
489.000	492.000	489.200	492.200
489.025	492.025	489.225	492.225
489.050	492.050	489.250	492.250
489.075	492.075	489.275	492.275
489.100	492.100	489.300	492.300
489.125	492.125	489.325	492.325
489.150	492.150	489.350	492.350
489.175	492.175	489.375	492.375

(7) These channels may be assigned for use by offshore central (base/fixed) or subscriber stations (fixed, temporary fixed, surface and/or airborne mobile) as indicated, for private line service:

Central	Subscriber	Central	Subscriber
489.400	492.400	489.725	492.725
489.425	492.425	489.750	492.750
489.450	492.450	489.775	492.775
489.475	492.475	489.800	492.800
489.500	492.500	489.825	492.825
489.525	492.525	489.850	492.850
489.550	492.550	489.875	492.875
489.575	492.575	489.900	492.900
489.600	492.600	489.925	492.925
489.625	492.625	489.950	492.950
489.650	492.650	489.975	492.975
489.675	492.675	490.000	493.000
489.700	492.700		

(8) *Interstitial channels.* Interstitial channels are those with center frequencies offset by ±12.5 kHz from the listed center frequencies. The FCC may assign interstitial channels to offshore stations in Zone A subject to the following conditions:

(i) Offshore stations transmitting on interstitial channels must be located east of W.92° longitude.

(ii) Operations on interstitial channels are considered to be secondary to operations on channels with the listed center frequencies.

(iii) Offshore stations operating on interstitial channels must be used only for voice grade general communications or to provide for private line service.

NOTE TO PARAGRAPH (a) OF § 22.1007: These channels are contained in UHF TV Channel 17.

(b) *Zone B—Southern Louisiana—Texas.* (1) The geographical area in Zone B is bounded as follows:

From longitude W.87°45′ on the East to longitude W.95°00′ on the West and from the 4.8 kilometer (3 mile) limit along the Gulf of Mexico shoreline on the North to the limit of the Outer Continental Shelf on the South.

(2) These channels may be assigned for use by offshore central (base/fixed) or subscriber stations (fixed, temporary fixed, surface and/or airborne mobile) as indicated, for voice-grade general communications and private line service:

Central	Subscriber	Central	Subscriber
485.025	482.025	486.025	483.025
485.050	482.050	486.050	483.050
485.075	482.075	486.075	483.075
485.100	482.100	486.100	483.100
485.125	482.125	486.125	483.125
485.150	482.150	485.150	483.150
485.175	482.175	486.175	483.175
485.200	482.200	486.200	483.200
485.225	482.225	486.225	483.225
485.250	482.250	486.250	483.250
485.275	482.275	486.275	483.275
485.300	482.300	486.300	483.300
485.325	482.325	486.325	483.325
485.350	482.350	486.350	483.350
485.375	482.375	486.375	483.375
485.400	482.400	486.400	483.400
485.425	482.425	486.425	483.425
485.450	482.450	486.450	483.450
485.475	482.475	486.475	483.475
485.500	482.500	486.500	483.500
485.525	482.525	486.525	483.525
485.550	482.550	484.550	483.550
485.575	482.575	486.575	483.575
485.600	482.600	486.600	483.600
485.625	482.625	486.625	483.625
485.650	482.650	486.650	483.650
485.675	482.675	486.675	483.675
485.700	482.700	486.700	483.700
485.725	482.725	486.725	483.725
485.750	482.750	486.750	483.750
485.775	482.775	486.775	483.775
485.800	482.800	486.800	483.800
485.825	482.825	486.825	483.825
485.850	482.850	486.850	483.850
485.875	482.875	486.875	483.875
485.900	482.900	486.900	483.900
485.925	482.925	486.925	483.925
485.950	482.950	486.950	483.950
485.975	482.975	486.975	483.975
486.000	483.000	487.050	480.050

NOTE to paragraph (b) of § 22.1007: These channels are contained in UHF TV Channel 16.

(c) *Zone C—Southern Texas.* The geographical area in Zone C is bounded as follows:

Longitude W.94°00′ on the East, the 4.8 kilometer (3 mile) limit on the North and West, a 282 kilometer (175 mile) radius from the reference point at Linares, N.L., Mexico on the Southwest, latitude N.26°00′ on the South, and the limits of the outer continental shelf on the Southeast.

(1) These channels may be assigned for use by offshore central (base/fixed) or subscriber stations (fixed, temporary fixed, surface and/or airborne

mobile) as indicated, for emergency auto alarm and voice transmission pertaining to emergency conditions only.

Central	Subscriber
476.950	479.950

(2) These channels may be assigned for use by offshore central (base/fixed) or subscriber stations (fixed, temporary fixed, surface and/or airborne mobile) as indicated, for voice-grade general communications and private line service:

476.025	479.025
476.050	479.050
476.075	479.075
476.100	479.100
476.125	479.125
476.150	479.150
476.175	479.175
476.200	479.200
476.225	479.225
476.250	479.250
476.275	479.275
476.300	479.300
476.325	479.325
476.350	479.350
476.375	479.375
476.400	479.400
476.425	479.425
476.450	479.450
476.475	479.475
476.500	479.500
476.525	479.525
476.550	479.550
476.575	479.575
476.600	479.600
476.625	479.625
476.650	479.650
476.675	479.675
476.700	479.700
476.725	479.725
476.750	479.750
476.775	479.775
476.800	479.800
476.825	479.825
476.850	479.850
476.875	479.875
476.900	479.900
477.000	480.000
477.025	480.025
477.075	480.075
477.100	480.100
477.125	480.125
477.150	480.150
477.175	480.175
477.200	480.200
477.225	480.225
477.250	480.250
477.275	480.275
477.300	480.300
477.325	480.325
477.350	480.350
477.375	480.375
477.400	480.400
477.425	480.425
477.450	480.450
477.475	480.475
477.500	480.500
477.525	480.525
477.550	480.550
477.575	480.575
477.600	480.600
477.625	480.625
477.650	480.650
477.675	480.675
477.700	480.700
477.725	480.725
477.750	480.750
477.775	480.775
477.800	480.800
477.825	480.825
477.850	480.850
477.875	480.875
477.900	480.900
477.925	480.925
477.950	480.950
477.975	480.975

[59 FR 59507, Nov. 17, 1994; 60 FR 9891, Feb. 22, 1995]

§ 22.1009 Transmitter locations.

The rules in this section establish limitations on the locations from which stations in the Offshore Radiotelephone Service may transmit.

(a) *All stations.* Offshore stations must not transmit from locations outside the boundaries of the appropriate zones specified in § 22.1007. Offshore stations must not transmit from locations within 241 kilometers (150 miles) of any full-service television station that transmits on the TV channel containing the channel on which the offshore station transmits.

(b) *Airborne subscriber stations.* Airborne subscriber stations must not transmit from altitudes exceeding 305 meters (1000 feet) above mean sea level. Airborne mobile stations in Zone A must not transmit from locations within 129 kilometers (80 miles) of Lake Charles, Louisiana. Airborne mobile stations in Zone B must not transmit from locations within 129 kilometers

(80 miles) of Lafayette, Louisiana. Airborne mobile stations in Zone C must not transmit from locations within 129 kilometers (80 miles) of Corpus Christi or locations within 129 kilometers (80 miles) of Houston, Texas.

§ 22.1011 Antenna height limitations.

The antenna height of offshore stations must not exceed 61 meters (200 feet) above mean sea level. The antenna height of offshore surface mobile stations must not exceed 10 meters (30 feet) above the waterline.

§ 22.1013 Effective radiated power limitations.

The effective radiated power (ERP) of transmitters in the Offshore Radiotelephone Service must not exceed the limits in this section.

(a) *Maximum power*. The ERP of transmitters in this service must not exceed 1000 Watts under any circumstances.

(b) *Mobile transmitters*. The ERP of mobile transmitters must not exceed 100 Watts. The ERP of mobile transmitters, when located within 32 kilometers (20 miles) of the 4.8 kilometer (3 mile) limit, must not exceed 25 Watts. The ERP of airborne mobile stations must not exceed 1 Watt.

(c) *Protection for TV Reception*. The ERP limitations in this paragraph are intended to reduce the likelihood that interference to television reception from offshore radiotelephone operations will occur.

(1) *Co-channel protection*. The ERP of offshore stations must not exceed the limits in Table I–1 of this section. The limits depend upon the height above mean sea level of the offshore transmitting antenna and the distance between the antenna location of the offshore transmitter and the antenna location of the main transmitter of the nearest full-service television station that transmits on the TV channel containing the channel on which the offshore station transmits.

(2) *Adjacent channel protection*. The ERP of offshore stations located within 128.8 kilometers (80 miles) of the main transmitter antenna of a full service TV station that transmits on a TV channel adjacent to the TV channel which contains the channel on which the offshore station transmits must not exceed the limits in the Table I–2 of § 22.1015. The limits depend upon the height above mean sea level of the offshore transmitting antenna and the distance between the location of the offshore transmitter and the 4.8 kilometer (3 mile) limit.

TABLE I–1.—MAXIMUM ERP (WATTS)

Distance	30 meters (100 feet)	45 meters (150 feet)	61 meters (200 feet)
338 km (210 mi)	1000	1000	1000
330 km (205 mi)	1000	900	800
2 km (200 mi)	800	710	630
314 km (195 mi)	590	520	450
306 km (190 mi)	450	400	330
298 km (185 mi)	320	280	240
290 km (180 mi)	250	210	175
282 km (175 mi)	180	150	130
274 km (170 mi)	175	110	100
266 km (165 mi)	95	80	70
258 km (160 mi)	65	55	50
249 km (155 mi)	50	40	35
241 km (150 mi)	35	30	25

§ 22.1015 Repeater operation.

Offshore central stations may be used as repeater stations provided that the licensee is able to maintain control of the station, and in particular, to turn the transmitter off, regardless of whether associated subscriber stations are transmitting at the time.

TABLE I–2.—MAXIMUM ERP (WATTS)

Distance from the 4.8 km (3 mi) limit	30 meters (100 feet)	61 meters (200 feet)
6.4 km (4 mi)	25	6
8.0 km (5 mi)	40	10
9.7 km (6 mi)	65	15
11.3 km (7 mi)	100	25
12.9 km (8 mi)	150	35
14.5 km (9 mi)	215	50
16.1 km (10 mi)	295	70
17.7 km (11 mi)	400	100
19.3 km (12 mi)	530	130
20.9 km (13 mi)	685	170
22.5 km (14 mi)	870	215
24.1 km (15 mi)	1000	270
25.7 km (16 mi)	1000	415
27.4 km (17 mi)	1000	505
29.0 km (18 mi)	1000	610
30.6 km (19 mi)	1000	730
32.2 km (20 mi)	1000	865
33.8 km (21 mi)	1000	1000

§ 22.1025 Permissible communications.

Offshore central stations must communicate only with subscriber stations

(fixed, temporary-fixed, mobile and airborne). Offshore subscriber stations must normally communicate only with and through offshore central stations. Stations in the Offshore Radiotelephone Service may communicate through relay stations authorized in this service.

§ 22.1031 Temporary fixed stations.

The FCC may, upon proper application therefor, authorize the construction and operation of temporary fixed stations in the Offshore Radiotelephone service to be used only when the service of permanent fixed stations is disrupted by storms or emergencies or is otherwise unavailable.

(a) *Six month limitation.* If it is necessary for a temporary fixed station to remain at the same location for more than six months, the licensee of that station must apply for authorization to operate the station at the specific location at least 30 days before the end of the six month period.

(b) *International communications.* Communications between the United States and Mexico must not be carried using a temporary fixed station without prior authorization from the FCC. Licensees desiring to carry such communications should apply sufficiently in advance to allow for the time necessary to coordinate with Canada or Mexico.

§ 22.1035 Construction period.

The construction period (see § 22.142) for offshore stations is 18 months.

§ 22.1037 Application requirements for offshore stations.

Applications for new Offshore Radiotelephone Service stations must contain an exhibit showing that:

(a) The applicant has notified all licensees of offshore stations located within 321.8 kilometers (200 miles) of the proposed offshore station, by providing the following data, at least 30 days before filing the application:

(1) The name, business address, channel coordinator, and telephone number of the applicant;

(2) The location and geographical coordinates of the proposed station;

(3) The channel and type of emission;

(4) The height and type of antenna;

(5) The bearing of the main lobe of the antenna; and,

(6) The effective radiated power.

(b) The proposed station will not interfere with the primary ORS channels by compliance with the following separations:

(1) Co-channel to a distance of 241.4 kilometers (150 miles).

(2) If interstitial channels are used, adjacent channels (±12.5 kHz) to a distance of 80.5 kilometers (50 miles).

(3) Third order intermodulation channels (±12.5 kHz) to a distance of 32.2 kilometers (20 miles).

(4) If the proposed transmitting antenna site is located west of longitude W.93°40′, and within 32.2 kilometers (20 miles) of the shoreline, and proposed use of the channels listed in § 22.1007(b), no third-order intermodulation interference would be caused to any base or mobile station using the channels between 488 and 494 MHz.

Subpart J—Required New Capabilities Pursuant to the Communications Assistance for Law Enforcement Act (CALEA)

SOURCE: 64 FR 51717, Sept. 24, 1999, unless otherwise noted.

§ 22.1100 Purpose.

Pursuant to the Communications Assistance for Law Enforcement Act (CALEA), Public Law 103–414, 108 Stat. 4279 (1994) (codified as amended in sections of 18 U.S.C. and 47 U.S.C.), this subpart contains rules that require a cellular telecommunications carrier to implement certain capabilities to ensure law enforcement access to authorized communications or call-identifying information.

§ 22.1101 Scope.

The definitions included in this subpart shall be used solely for the purpose of implementing CALEA requirements.

§ 22.1102 Definitions.

Call identifying information. Call identifying information means dialing or signaling information that identifies the origin, direction, destination, or termination of each communication

generated or received by a subscriber by means of any equipment, facility, or service of a telecommunications carrier. Call identifying information is ''reasonably available'' to a carrier if it is present at an intercept access point and can be made available without the carrier being unduly burdened with network modifications.

Collection function. The location where lawfully authorized intercepted communications and call-identifying information is collected by a law enforcement agency (LEA).

Content of subject-initiated conference calls. Capability that permits a LEA to monitor the content of conversations by all parties connected via a conference call when the facilities under surveillance maintain a circuit connection to the call.

Dialed digit extraction. Capability that permits a LEA to receive on the call data channel digits dialed by a subject when a call is connected to another carrier's service for processing and routing.

In-band and out-of-band signaling. Capability that permits a LEA to be informed when a network message that provides call identifying information (*e.g.*, ringing, busy, call waiting signal, message light) is generated or sent by the IAP switch to a subject using the facilities under surveillance. Excludes signals generated by customer premises equipment when no network signal is generated.

Intercept Access Point (IAP). Intercept access point is a point within a carrier's system where some of the communications or call-identifying information of an intercept subject's equipment, facilities, and services are accessed.

J–STD–025. The interim standard developed by the Telecommunications Industry Association and the Alliance for Telecommunications Industry Solutions for wireline, cellular, and broadband PCS carriers. This standard defines services and features to support lawfully authorized electronic surveillance, and specifies interfaces necessary to deliver intercepted communications and call-identifying information to a LEA.

LEA. Law enforcement agency; *e.g.*, the Federal Bureau of Investigation or a local police department.

Party hold, join, drop on conference calls. Capability that permits a LEA to identify the parties to a conference call conversation at all times.

Subject-initiated dialing and signaling information. Capability that permits a LEA to be informed when a subject using the facilities under surveillance uses services that provide call identifying information, such as call forwarding, call waiting, call hold, and three-way calling. Excludes signals generated by customer premises equipment when no network signal is generated.

Timing information. Capability that permits a LEA to associate call-identifying information with the content of a call. A call-identifying message must be sent from the carrier's IAP to the LEA's Collection Function within eight seconds of receipt of that message by the IAP at least 95% of the time, and with the call event timestamped to an accuracy of at least 200 milliseconds.

§ 22.1103 Capabilities that must be provided by a cellular telecommunications carrier.

(a) Except as provided under paragraph (b) of this section, as of June 30, 2000, a cellular telecommunications carrier shall provide to a LEA the assistance capability requirements of CALEA, *see* 47 U.S.C. 1002. A carrier may satisfy these requirements by complying with publicly available technical requirements or standards adopted by an industry association or standard-setting organization, such as J–STD–025.

(b) As of September 30, 2001, a cellular telecommunications carrier shall provide to a LEA communications and call-identifying information transported by packet-mode communications and the following capabilities:

(1) Content of subject-initiated conference calls;

(2) Party hold, join, drop on conference calls;

(3) Subject-initiated dialing and signaling information ;

(4) In-band and out-of-band signaling;

(5) Timing information;

(6) Dialed digit extraction.

PART 23—INTERNATIONAL FIXED PUBLIC RADIOCOMMUNICATION SERVICES

FIXED PUBLIC SERVICES

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AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082 as amended; 47 U.S.C. 154, 303. Interpret or apply sec. 301, 48 Stat. 1081; 47 U.S.C. 301.

SOURCE: 28 FR 13032, Dec. 5, 1963, as amended at 36 FR 2562, Feb. 6, 1971, unless otherwise noted.

FIXED PUBLIC SERVICES

§ 23.1 Definitions.

Assigned frequency. The frequency coinciding with the center of an authorized bandwidth of emission.

Authorized bandwidth. The maximum bandwidth authorized to be used by a station as specified in the station license. This shall be occupied bandwidth or necessary bandwidth, whichever is greater.

Authorized reference frequency. A frequency having a fixed and specific position with respect to the assigned frequency.

Authorized service. The term ''authorized service'' of a point-to-point radiotelegraph or radiotelephone station means the transmission of public correspondence to a point of communication as defined herein subject to such special provisions as may be contained in the license of the station or in accordance with § 23.53.

Fixed public service. The term ''fixed public service'' means a radiocommunication service carried on between fixed stations open to public correspondence.

Fixed public press service. The term ''fixed public press service'' means a limited radio communication service carried on between point-to-point telegraph stations, consisting of transmissions by fixed stations open to limited public correspondence, of news items, or other material related to or intended for publication by press agencies, newspapers, or for public dissemination. In addition, these transmissions may be directed to one or more fixed points specifically named in a station license, or to unnamed points in accordance with the provisions of § 23.53.

NOTE: This section is not intended as a definition of any press classification. Correspondence admissible under any press classification is determined by the tariffs of the various common carriers on file with the Commission.

Fixed station. The term ''fixed station'' in the fixed public or fixed public press service includes all apparatus used in rendering the authorized service at a particular location under a single instrument of authorization.

Frequency tolerance. The maximum permissible departure by the center frequency of the frequency band occupied by an emission from the assigned frequency or by the carrier, or suppressed carrier, from the reference frequency.

International fixed public radiocommunication service. A fixed service, the stations of which are open to public correspondence and which, in general, is intended to provide radiocommunication between any one of the contiguous 48 states (including the District of Columbia) and the State of Alaska, or the State of Hawaii, or any U.S. possession or any foreign point; or between any U.S. possession and any other point; or between the State of Alaska and any other point; or between the State of Hawaii and any other point. In addition, radiocommunications within the contiguous 48 states (including the District of Columbia) in connection with the relaying of international traffic between stations which provide the above service, are also deemed to be the international fixed public radiocommunications service; provided, however, that communications solely between Alaska, or any one of the contiguous 48 states (including the District of Columbia), and either Canada or Mexico are not deemed to be in the international fixed public radiocommunication service when such radiocommunications are transmitted on frequencies above 72 MHz.

International fixed public control service. A fixed service carried on for the purpose of communicating between transmitting stations, receiving stations, message centers or control points in the international fixed public radiocommunication service.

Occupied bandwidth. The frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Point-to-point telegraph station. The term ''point-to-point telegraph station'' means a fixed station authorized for radiotelegraph communication.

Point-to-point telephone station. The term ''point-to-point telephone station'' means a fixed station authorized for radiotelephone communication.

Point of communication. The term ''point of communication'' means a specific location designated in the license to which a station is authorized to communicate for the transmission of public correspondence.

Radiotelegraph. The term ''radiotelegraph'' as used in this part shall be construed to include types N0N, A1A, A2A, A3C, F1B, F2B, and F3C emission.

Radiotelephone. The term ''radiotelephone'' as used in this part, with respect to operation on frequencies below 30 MHz, means a system of radiocommunication for the transmission of speech or, in some cases, other sounds by means of amplitude modulation including double sideband (A3E), single sideband (R3E, H3E, J3E) or independent sideband (B3E) transmission.

[38 FR 22478, Aug. 21, 1973, as amended at 49 FR 48701, Dec. 14, 1984]

§ 23.11 Use of radiotelephone emissions by radiotelegraph stations.

The licensee of a radiotelegraph station, using frequencies below 30 MHz, may be authorized to use radiotelephone emissions as defined in § 23.1 for the following purposes:

(a) Transmission of addressed program material as set forth in § 23.51.

(b) Controlling the transmission or reception of addressed program material

(c) Controlling the transmission or reception of facsimile material.

[28 FR 13032, Dec. 5, 1963, as amended at 36 FR 2562, Feb. 6, 1971; 38 FR 22479, Aug. 21, 1973]

§ 23.12 Use of radiotelegraph emissions by radiotelephone stations.

The licensee of a point-to-point radiotelephone station may be authorized to use type N0N, A1A, A2A, F1B, or F2B emission for identification, for test

purposes or for the exchange of service messages.

[49 FR 48701, Dec. 14, 1984]

§ 23.13 Types of emission.

Stations in the international fixed public radiocommunication services may be authorized to use any of the types of emission or combinations thereof, described in part 2 of this chapter, as well as new types which may be developed: *Provided*, That harmful interference to adjacent operations is not caused thereby, *And provided further*, That the intelligence to be transmitted will use the bandwidth requested to a degree of efficiency compatible with the current state of the art. A determination of the possibilities of interference will be made as outlined in § 23.20. In certain cases frequencies or emissions may be authorized on a temporary basis to determine if interference will occur. During normal operations, emissions shall be centered about an assigned frequency. Non-centered emissions may be employed for short periods of time as needed to avoid interfering signals or meet fluctuating traffic loading: *Provided*, That the occupied bandwidth of these emissions be contained within the authorized bandwidth, *And provided further*, That prior to any such use, the Commission be notified of the reference frequency or frequencies proposed to be used in lieu of the assigned frequency.

[38 FR 22479, Aug. 21, 1973]

§ 23.14 Emission, bandwidth, modulation and transmission characteristics.

In the services under this part emissions are designated by their classification and their necessary bandwidth in accordance with the following procedures:

(a) *Designation of emissions in applications*. In applying for new frequency assignments for emissions not presently authorized, the emissions proposed to be used shall be described and their bandwidths specified as outlined in part 2 of this chapter.

(b) *Designation of emissions in authorizations*. The emission designations used in authorizations will indicate only the maximum value of the necessary bandwidth for each type of modulation authorized.

(c) *New types of emissions*. If application is made for a type of emission not covered by part 2 of this chapter, a full description of the emission must be provided and, if possible, measurements of its occupied bandwidth.

[38 FR 22479, Aug. 21, 1973, as amended at 49 FR 48701, Dec. 14, 1984]

§ 23.15 Emission limitations.

(a) For all transmitters placed into operation after September 19, 1973, and for all transmitters after September 19, 1975, which operate on frequencies below 30 MHz:

(1) The occupied bandwidth of emission shall be confined within the least possible spectrum space consistent with the state of the art and the required quality of transmission, and in no event shall be more than the authorized bandwidth.

(2) Spurious emissions of transmitters of mean power of 50 kilowatts or less shall be attenuated at least 40 decibels below the mean power of the fundamental without exceeding the power of 50 milliwatts.

(3) Spurious emissions of transmitters of mean power exceeding 50 kilowatts shall be attenuated at least 60 decibels below the mean power of the fundamental and every effort should be made to keep the level of spurious emissions below the power of 50 milliwatts.

(b) For all transmitters placed into operation after September 19, 1973, and for all transmitters after September 19, 1975, which operate on frequencies above 30 MHz, the mean powers of emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:

(1) On any frequency removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: At least 25 decibels;

(2) On any frequency removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: at least 35 decibels;

(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: at least 43 plus 10 log (mean output power in watts) decibels, or 80 decibels, whichever is the lesser attenuation.

(c) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than that specified in this section.

[38 FR 22479, Aug. 21, 1973; 38 FR 24901, Sept. 11, 1973]

§ 23.16 Frequency tolerances.

(a) The frequency tolerance for stations in the International Fixed Public Radiocommunications Services shall be maintained as prescribed in the following table:

Frequency range	Tolerances applicable to new transmitters installed after September 19, 1973, and to all transmitters after September 19, 1975	
	Percent	Parts per million
10 to 50 kHz	.1	1000
50 to 535 kHz	.02	200
1605 to 30,000 kHz	.0015	15
30 to 50 MHz	.002	20
50 to 000 MHz	.0005	5
1000 to 1850 MHz	.001	10
1850 to 1990 MHz	.02	200
1990 to 2500 MHz	.001	10
2500 to 10,500 MHz	.03	300
10,500 to 40,000 MHz	.05	500

(b) Until September 19, 1975, the frequency tolerance of transmitters installed at stations in these services before September 19, 1973, and operating within the frequency bands set forth below, shall be maintained within the following limits:

Frequency range	Tolerance (percent)
10 to 50 kHz	0.1
50 to 535 kHz	0.02
1605 to 30000 kHz	0.003
Above 30 MHz	(1)

[1] As set forth in the radio station license.

[38 FR 27386, Oct. 3, 1973]

§ 23.17 Frequency measurement.

Each station shall provide for the measurement of all frequencies assigned thereto, and establish a procedure for checking them regularly. These measurements shall be made by means independent of the frequency control of the transmitter and shall be of accuracy sufficient to detect deviation from the assigned frequency within one-half of the allowed tolerance. A record shall be kept of the results and dates of all frequency measurements.

[38 FR 22480, Aug. 21, 1973]

§ 23.18 Authorization of power.

(a) *Authorized power*. Power, when designated in the respective station license for a particular transmitter or transmitters, is peak envelope power for transmitters having full, unkeyed carrier, single sideband or independent sideband emissions, and mean power for transmitters having other emissions, unless specifically expressed otherwise. Designation of effective radiated power may appear in the station license in addition to designation of power for a transmitter or transmitters, when deemed necessary by the Commission.

(b) *Use of minimum power*. In the interest of avoiding interference to other operations, all stations shall radiate only as much power as is necessary to ensure a satisfactory service.

[38 FR 22480, Aug. 21, 1973]

§ 23.19 Use of directional antennas.

Insofar as is practicable, directional antennas, of type consistent with the current state of art, shall be used on all circuits for both transmitting and receiving.

[38 FR 22480, Aug. 21, 1973]

§ 23.20 Assignment of frequencies.

(a) Only those frequencies which are in accordance with § 2.106 of this chapter may be authorized for use by stations in the Fixed Public and Fixed Public Press Services. Selection of specific frequencies within such bands shall be made by the applicants therefor. After an application has been filed with the Commission for a particular frequency, its availability for assignment as requested will be determined by a study of the probabilities of interference to and from existing services

assigned on the same or adjacent frequencies and, if necessary, by coordination with other agencies utilizing frequencies in these ranges. The applicant will be notified of the results of such study and coordination. All new assignments of frequencies may be made subject to certain conditions as may be required to minimize the possibility of harmful interference to existing services.

(b) In order to minimize possible harmful interference at the National Radio Astronomy Observatory site located at Green Bank, Pocahontas County, West Virginia, and at the Naval Radio Research Observatory site at Sugar Grove, Pendleton County, West Virginia, any applicant for a station authorization other than mobile, temporary base, temporary fixed, Personal Radio, Civil Air Patrol, or Amateur seeking a station license for a new station, a construction permit to construct a new station or to modify an existing station license in a manner which would change either the frequency, power, antenna height or directivity, or location of such a station within the area bounded by 39°15′ N. on the north, 78°30′ W. on the east, 37°30′ N. on the south and 80°30′ W. on the west shall, at the time of filing such application with the Commission, simultaneously notify the Director, National Radio Astronomy Observatory, P. O. Box No. 2, Green Bank, West Virginia, 24944, in writing, of the technical particulars of the proposed station. Such notification shall include the geographical coordinates of the antenna, antenna height, antenna directivity if any, proposed frequency, type of emission, and power. In addition, the applicant shall indicate in his application to the Commission the date notification was made to the Observatory. After receipt of such applications, the Commission will allow a period of twenty (20) days for comments or objections in response to the notifications indicated. If an objection to the proposed operation is received during the twenty day period from the National Radio Astronomy Observatory for itself or on behalf of the Naval Radio Research Observatory, the Commission will consider all aspects of the problem and take whatever action is deemed appropriate.

(c) [Reserved]

(d) Protection for Table Mountain Radio Receiving Zone, Boulder County, Colorado: Applicants for a station authorization to operate in the vicinity of Boulder County, Colorado under this part are advised to give due consideration, prior to filing applications, to the need to protect the Table Mountain Radio Receiving Zone from harmful interference. These are the research laboratories of the Department of Commerce, Boulder County, Colorado. To prevent degradation of the present ambient radio signal level at the site, the Department of Commerce seeks to ensure that the field strengths of any radiated signals (excluding reflected signals) received on this 728 hectare site (in the vicinity of coordinates 40°07′50″ N Latitude, 105°14′40″ W Longitude) resulting from new assignments (other than mobile stations) or from the modification or relocation of existing facilities do not exceed the following values:

Frequency range	Field strength (mV/m) in authorized bandwidth of service	Power flux density[1] (dBW/m^2) in authorized bandwidth of service
Below 540 kHz	10	65.8
540 to 1600 Khz	20	59.8
1.6 to 470 MHz	10	[2] 65.8
470 to 890 MHz	30	[2] 56.2
Above 890 MHz	1	[2] 85.8

[1] Equivalent values of power flux density are calculated assuming free space characteristic impedance of 376.7=120π ohms.

[2] Space stations shall conform to the power flux density limits at the earth's surface specified in appropriate parts of the FCC rules, but in no case should exceed the above levels in any 4 kHz band for all angles of arrival.

(1) Advance consultation is recommended particularly for those applicants who have no reliable data which indicates whether the field strength or power flux density figures in the above table would be exceeded by their proposed radio facilities (except mobile stations). In such instances, the following is a suggested guide for determining whether coordination is recommended:

(i) All stations within 2.4 kilometers;

(ii) Stations within 4.8 kilometers with 50 watts or more effective radiated power (ERP) in the primary plane of polarization in the azimuthal direction of the Table Mountain Radio Receiving Zone;

(iii) Stations within 16.1 kilometers with 1 kW or more ERP in the primary plane of polarization in the azimuthal direction of Table Mountain Receiving Zone;

(iv) Stations within 80.5 kilometers with 25 kW or more ERP in the primary plane or polarization in the azimuthal direction of Table Mountain Receiving Zone.

(2) Applicants concerned are urged to communicate with the Radio Frequency Management Coordinator, Department of Commerce, Research Support Services, NOAA R/E5X2, Boulder Laboratories, Boulder, CO 80303; telephone (303) 497–6548, in advance of filing their applications with the Commission.

(3) The Commission will not screen applications to determine whether advance consultation has taken place. However, applicants are advised that such consultation can avoid objections from the Department of Commerce or proceedings to modify any authorization which may be granted which, in fact, delivers a signal at the site in excess of the field strength specified herein.

(e) Protection for Federal Communications Commission monitoring stations:

(1) Applicants in the vicinity of an FCC monitoring station for a radio station authorization to operate new transmitting facilities or changed transmitting facilities which would increase the field strength produced over the monitoring station over that previously authorized are advised to give consideration, prior to filing applications, to the possible need to protect the FCC stations from harmful interference. Geographical coordinates of the facilities which require protection are listed in §0.121(c) of the Commission's Rules. Applications for stations (except mobile stations) which will produce on any frequency a direct wave fundamental field strength of *greater than 10 mV/m* in the authorized bandwidth of service (-65.8 dBW/m^2 power flux density assuming a free space characteristic impedance of 120 ohms) at the referenced coordinates, may be examined to determine extent of possible interference. Depending on the theoretical field strength value and existing root-sum-square or other ambient radio field signal levels at the indicated coordinates, a clause protecting the monitoring station may be added to the station authorization.

(2) In the event that calculated value of expected field exceeds 10 mV/m (-65.8 dBW/m^2) at the reference coordinates, or if there is any question whether field strength levels might exceed the threshold value, advance consultation with the FCC to discuss any protection necessary should be considered. Prospective applicants may communicate with: Chief, Compliance and Information Bureau, Federal Communications Commission, Washington, DC 20554, Telephone (202) 632–6980.

(3) Advance consultation is suggested particularly for those applicants who have no reliable data which indicates whether the field strength or power flux density figure indicated would be exceeded by their proposed radio facilities (except mobile stations). In such instances, the following is a suggested guide for determining whether an applicant should coordinate:

(i) All stations within 2.4 kilometers (1.5 statute miles);

(ii) Stations within 4.8 kilometers (3 statute miles) with 50 watts or more average effective radiated power (ERP) in the primary plane of polarization in the azimuthal direction of the Monitoring Stations.

(iii) Stations within 16 kilometers (10 statute miles) with 1 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station;

(iv) Stations within 80 kilometers (50 statute miles) with 25 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station;

(4) Advance coordination for stations operating above 1000 MHz is recommended only where the proposed station is in the vicinity of a monitoring station designated as a satellite monitoring facility in §0.121(c) of the Commission's Rules and also meets the criteria outlined in paragraphs (e)(2) and (3) of this section.

(5) The Commission will not screen applications to determine whether advance consultation has taken place. However, applicants are advised that

such consultation can avoid objections from the Federal Communications Commission or modification of any authorization which will cause harmful interference.

(f) Any applicant for a new permanent base or fixed station to be located on the islands of Puerto Rico, Desecheo, Mona, Vieques, and Culebra, or for a modification of an existing authorization which would change the frequency, power, antenna height, directivity, or location of a station on these islands and would increase the likelihood of the authorized facility causing interference, shall notify the Interference Office, Arecibo Observatory, Post Office Box 995, Arecibo, Puerto Rico 00613, in writing or electronically, of the technical parameters of the proposal. Applicants may wish to consult interference guidelines, which will be provided by Cornell University. Applicants who choose to transmit information electronically should e-mail to: prcz@naic.edu

(1) The notification to the Interference Office, Arecibo Observatory shall be made prior to, or simultaneously with, the filing of the application with the Commission. The notification shall state the geographical coordinates of the antenna (NAD–83 datum), antenna height above ground, ground elevation at the antenna, antenna directivity and gain, proposed frequency and FCC Rule Part, type of emission, effective radiated power, and whether the proposed use is itinerant. Generally, submission of the information in the technical portion of the FCC license application is adequate notification. In addition, the applicant shall indicate in its application to the Commission the date notification was made to the Arecibo Observatory.

(2) After receipt of such applications, the Commission will allow the Arecibo Observatory a period of 20 days for comments or objections in response to the notification indicated. The applicant will be required to make reasonable efforts in order to resolve or mitigate any potential interference problem with the Arecibo Observatory and to file either an amendment to the application or a modification application, as appropriate. If the Commission determines that an applicant has satisfied its responsibility to make reasonable efforts to protect the Observatory from interference, its application may be granted.

(3) The provisions of this paragraph do not apply to operations that transmit on frequencies above 15 GHz.

[28 FR 13032, Dec. 5, 1963, as amended at 42 FR 8329, Feb. 9, 1977; 42 FR 27894, June 1, 1977; 44 FR 77167, Dec. 31, 1979; 50 FR 39002, Sept. 26, 1985; 58 FR 44904, Aug. 25, 1993; 61 FR 8477, Mar. 5, 1996; 62 FR 55530, Oct. 27, 1997]

§ 23.21 Communications by international control stations.

Stations in the international fixed public control service are authorized to communicate between transmitting stations, receiving stations, message centers or control points operating in the international fixed public radiocommunication services for the purpose of handling service messages or international traffic between these points: *Provided*, That only traffic originating in or destined to points outside the contiguous states may be handled. Frequencies in bands designated for international control stations in Part 2 of this chapter may be assigned to these stations.

[38 FR 22480, Aug. 21, 1973]

§ 23.23 Use of frequencies for radiotelegraph communication within the continental United States.

Licensees of point-to-point radiotelegraph stations may use any frequency authorized in a station license for communication between designated points within the 48 contiguous states and the District of Columbia upon the express condition that the use of any frequency above 5000 kHz shall be subject to the limitation that no interference shall be caused to the international service, or to service with Alaska or Hawaii; and in the event such interference is caused the licensee shall immediately discontinue the use of the frequency or frequencies producing such interference and operation thereon may be conducted only at times when such interference will not be caused.

§ 23.24 Correspondents and points of communication.

Each instrument of authorization issued for fixed public or fixed public press service shall authorize communication to the points of communication and to the organizations, agencies, or persons specified therein only, except as provided by § 23.53: *Provided, however,* That in the event of a change in an organization, agency, or person specified or a change in the effective control of such organization, agency, or person, the licensee shall immediately notify the Commission of such change and shall file an application for modification of the instrument of authorization: *And provided further,* That where such change is occasioned by reason of circumstances beyond the control of the licensee, communication under the then outstanding instrument of authorization shall be permitted to continue pending consideration of and action upon the application for modification of the instrument of authorization.

§ 23.25 Points of communication, limitations.

No point of communication will be regularly authorized in any instrument of authorization for fixed public or fixed public press service in absence of an adequate showing that public correspondence may be transmitted and received from such points, except as provided in § 23.53.

§ 23.26 Use of transmitters.

The licensee of a point-to-point radiotelegraph or radiotelephone station may use any transmitter of the station for transmission upon any frequency assigned to the station for communication with any point of communication authorized by the station license: *Provided, however,* That the maximum power authorized for the specific frequency as shown in the license is not exceeded.

§ 23.27 Experimental research.

The licensee of a station may be authorized to use a transmitter which is licensed for fixed public or fixed public press service for experimental research in accordance with the rules and regulations governing the experimental service upon the condition that no interference will be caused to the public service. Experimental (Research) and Experimental (Developmental) Stations authorized to operate as point-to-point telegraph or telephone stations shall comply with the rules governing fixed public radio services in addition to the rules and regulations governing experimental radio services.

§ 23.28 Special temporary authorization.

(a) Requests for special temporary authority must be accompanied by a showing that interference will not be caused to the fixed public or fixed public press service for which the station is primarily licensed; and, in addition, such requests must be accompanied by the following:

(1) A statement of the call signs, location, and frequencies of the transmitting station; The call signs, location, and frequencies of the received station; and the type or types of emission to be employed by both stations.

(2) A statement as to whether the frequencies are to be used for contact control purposes only.

(3) A statement of the period for which the temporary authority is desired.

(4) A statement describing the service which is to be rendered.

(b) Temporary authorizations of operation not to exceed 180 days may be granted under the standards of section 309(f) of the Communications Act where extraordinary circumstances so require. Extensions of the temporary authorizations for a period of 180 days may also be granted, but the renewal applicant bears a heavy burden to show that extraordinary circumstances warrant such an extension.

(c) Each application proposing construction of one or more new antenna structures or alteration of the overall height of one or more existing antenna structures, where FAA notification prior to such construction or alteration is required by part 17 of this chapter, must include the FCC Antenna Structure Registration Number(s) for the affected structure(s). If no such number has been assigned at the time the application(s) is filed, the applicant must state in the application

whether the owner has notified the FAA of the proposed construction or alteration and applied to the FCC for an Antenna Structure Registration Number in accordance with part 17 of this chapter. Applications proposing construction of one or more new antenna structures or alteration of the overall height of one or more existing antenna structures, where FAA notification prior to such construction or alteration is *not* required by part 17 of this chapter, must indicate such and, unless the structure is 6.10-meters or less above ground level (AGL), must contain a statement explaining why FAA notification is not required.

[48 FR 27253, June 14, 1983, as amended at 61 FR 4365, Feb. 6, 1996]

§ 23.29 License period and expiration time.

(a) Licenses for stations operating in the fixed public radiocommunications services will be issued for a period of 10 years unless otherwise stated in the instrument of authorization. The date of expiration of such licenses shall be the 1st day of December, and each station license will be issued so as to expire at the hour 3 a.m., eastern standard time. Unless otherwise ordered, when an application for a new station license is granted within three months of the expiration date for licenses of the particular class of station involved, the license shall be issued for the unexpired period of the current license term and for the full succeeding term. If granted more than three months from the normal expiration date, the license shall be issued for the unexpired period of the current license term only.

(b) The Commission reserves the right to grant or renew station licenses in these services for a shorter period of time than that generally prescribed for such stations if, in its judgment, the public interest, convenience or necessity would be served by such action.

[28 FR 13032, Dec. 5, 1963, as amended at 36 FR 2562, Feb. 6, 1971; 38 FR 22480, Aug. 21, 1973; 48 FR 27253, June 14, 1983]

§ 23.31 Period of construction.

Each construction permit for a radio station in the fixed public service will specify the date of grant as the earliest date of commencement of construction and a maximum of eight months thereafter as the time within which construction shall be completed and the station ready for operation, unless otherwise determined by the Commission upon proper showing in any particular case.

§ 23.32 Equipment and service tests.

(a) Upon completion of construction of a radio station in exact accordance with the terms of the construction permit, the technical provisions of the application therefor and the other applicable provisions of this part and prior to filing of application for license, the permittee is authorized to test the equipment for a period not to exceed 10 days: *Provided,* That:

(1) The engineer in charge of the district in which the station is located is notified 2 days in advance of the beginning of tests.

(2) The Commission may notify the permittee to conduct no tests or may cancel, suspend, or change the date of beginning for the period of such tests as and when such action may appear to be in the public interest, convenience, and necessity.

(b) When construction and equipment tests are completed in exact accordance with the terms of the construction permit, the technical provisions of the application therefor, and the other applicable provisions of this part, and after an application for station license has been filed with the Commission showing the transmitter to be in satisfactory operating condition, the permittee is authorized to conduct service tests in exact accordance with the terms of the construction permit for a period not to exceed 30 days: *Provided,* That:

(1) The engineer in charge of the district in which the station is located is notified 2 days in advance of the beginning of the tests.

(2) The Commission reserves the right to cancel such tests or suspend, or change the date of beginning for the period of such tests as and when such action may appear to be in the public interest, convenience, and necessity by notifying the permittee.

(3) Service tests will not be authorized after the expiration date of the construction permit.

(c) The authorization for tests embodied in paragraphs (a) and (b) of this section shall not be construed as constituting a license to operate but as a necessary part of the construction.

§ 23.35 Compliance with tariff requirements.

No licensee authorized to perform common carrier service by means of radio communication shall engage in such service without compliance with all statutory provisions and regulations of the Commission relative to the filing of tariffs; and nothing contained in this part shall be deemed as a waiver or modification of any such statutory provision or regulation.

§ 23.36 Posting of license.

The license of a station shall be posted in a conspicuous place in the main transmitter building of the station or kept in such building where it is readily available for inspection purposes.

§ 23.37 Station identification.

(a) *General.* Every radiotelegraph or radiotelephone station in the International Fixed Public or Fixed Public Press Service shall transmit, as provided below, the identifying call sign or other approved identification signal on each of its assigned frequencies below 30 MHz on which energy is being radiated.

(b) *When required.* (1) The call sign assigned to each frequency shall be transmitted on that frequency at the beginning and end of each period of use of the frequency.

(2) During regular operation on any freuency, the call sign or other approved identification signal shall be transmitted at least at hourly intervals within the period from 10 minutes before to 10 minutes after each hour. If identification during this period would require an interruption in the transmission of a radio-photo, a telephone conversation, an addressed program or a multiple addressed press message, or a break in the continuity of a ''conference'' or ''leased line'' type of service, the identifying signal shall be transmitted at the first break in, at the conclusion of, or simultaneously with, the particular transmission as described below.

(c) *Methods of transmission.* (1) All identifying signals shall be transmitted in such a manner as to permit identification without special equipment other than communication type receivers, except as provided in paragraph (e) of this section. When emissions are being used which are not capable of identification without special equipment, the identifying signal shall be transmitted by one of the following methods:

(i) By interrupting the transmission and transmitting the call sign in a manner which can be identified without special equipment.

(ii) By superimposing the call sign or other approved identification signal on the emission being transmitted without interrupting the transmission as provided for by paragraphs (e) and (f) of this section.

(d) *Emissions to be used.* (1) Except as otherwise provided, the following emissions shall be used for identification:

(i) *Radiotelegraph stations.* The identifying call sign shall be transmitted by International Morse code at a speed not to exceed 25 words per minute and shall consist of the signal ''QRA de'' followed by the call sign. This transmission shall be made at least three times.

(ii) *Radiotelegraph stations using telephone type emissions.* When telephone type emissions are being used in accordance with § 23.11, identification may be made by voice and shall consist of announcing three times in English the call sign of the frequency being used

(iii) *Radiotelephone stations.* The identifying transmission may be made utilizing either telegraph or telephone type emissions. When telegraph emission is used, the transmission shall be made in International Morse Code at a speed not to exceed 25 words per minute and shall consist of the signal ''QRA de'' followed by the call sign. This transmission shall be made at least three times. When telephone emission is used, the identification shall consist of announcing three times in English the call sign of the frequency being used, provided that all privacy or secrecy devices shall be removed from the circuit during such transmissions.

(e) *Superimposed identification*. Radiotelegraph or radiotelephone stations identifying simultaneously with transmission of traffic: call signs or the general identification signal described in paragraph (f) of this section may be superimposed on the emission being transmitted by any method which will make identification possible with communication type receivers provided that approval of any such method shall first have been obtained from the Federal Communications Commission. (Approval by the Federal Communications Commission of any means of identification of complex emissions by superimposing identification of regular transmissions will be given upon satisfactory completion of coordinated tests thereof by the applicant and the Commission's Field Engineering Bureau.) Commission approval may be withdrawn if at any subsequent time harmful interference to adjacent frequencies is caused by the superimposed identification. When superimposed identification by call sign is used, the identifying signal shall consist of ''QTT de (call sign)'' transmitted at least three times in International Morse Code at a speed not to exceed 25 words per minute.

(f) *General identification signal*. When an approved method of superimposed identification is used, the identification signal shall consist of ''QTT de (abbreviated name of company recorded with the Commission) (abbreviated name of station recorded with the Commission).'' (It is suggested that ''abbreviated company name'' consist of two to five letters such as the initials of the company name and that ''abbreviated name of station'' consist of two or three letters indicating the name of the city where the licensee's message center is located. Both of these abbreviations shall be notified to the Commission before being used for identification.) This general identification signal shall be transmitted in International Morse Code at a speed not to exceed 25 words per minute and may be transmitted continuously or intermittently as desired provided that it shall be transmitted for at least five minutes total time during the period from 10 minutes before to 10 minutes after each hour that energy is being radiated on the frequency. The same signal may be superimposed on all transmissions being made at a particular station: *Provided, however*, That licensed call signs shall be transmitted on the frequencies to which they are assigned as often as is practicable and reasonable or at least at the beginning and end of each period of use of each frequency.

(g) *Identification by printer*. Notwithstanding the other provisions of this section with respect to methods of transmission, when single channel start-stop 5 unit code printer equipment is being used, the identifying call sign may be transmitted by means of printer signals. When identification is made by printer signals, it shall consist of the call sign for the particular frequency being used and shall be made at least three times at a speed of approximately 60 words per minute.

§ 23.38 Experimental points of communication, limitations.

Experimental (Research) or Experimental (Developmental) stations licensed to operate as point-to-point telegraph or telephone stations in the fixed public service may communicate only with other experimental stations located within the continental limits of the United States (except Alaska): *Provided, however*, That upon application the Commission may authorize such a station to communicate with one or more specific points in Alaska, Hawaii, possessions of the United States, or with a specific foreign point. In each such case, the Commission will determine the nature of the experimental transmissions which may be made to such point of communication.

§ 23.39 Antenna structures.

(a) *FAA notification*. Before the construction of new antenna structures or alteration in the height of existing antenna structures is authorized by the FCC, a Federal Aviation Administration (FAA) determination of ''no hazard'' may be required. To apply for this determination, the FAA must be notified of the planned construction. Criteria used to determine whether FAA notification is required for a particular antenna structure are contained in part 17 of this chapter. Applications

proposing construction of one or more new antenna structures or alteration of the overall height of one or more existing antenna structures, where FAA notification prior to such construction or alteration is *not* required by part 17 of this chapter, must indicate such and, unless the reason is obvious (e.g. structure height is less than 6.10 meters AGL) must contain a statement explaining why FAA notification is not required.

(b) *Painting and lighting*. The owner of each antenna structure required to be painted and/or illuminated under the provisions of Section 303(q) of the Communications Act of 1934, as amended, shall operate and maintain the antenna structure painting and lighting in accordance with part 17 of this chapter. In the event of default by the owner, each licensee or permittee shall be individually responsible for conforming to the requirements pertaining to antenna structure painting and lighting.

(c) *Antenna Structure Registration Number*. Applications proposing construction of one or more new antenna structures or alteration of the overall height of one or more existing structures, where FAA notification prior to such construction or alteration is required by part 17 of this chapter, must include the FCC Antenna Structure Registration Number(s) for the affected structure(s). If no such number has been assigned at the time the application is filed, the applicant must state in the application whether or not the antenna structure owner has notified the FAA of the proposed construction or alteration and applied to the FCC for an Antenna Structure Registration Number in accordance with part 17 of this chapter for the antenna structure in question.

[61 FR 4366, Feb. 6, 1996]

§ 23.40 [Reserved]

§ 23.41 Quarterly report of frequency usage.

(a) *Transmitted frequencies*. Each licensee in the international fixed radiocommunication services shall submit a report of frequency usage for all authorized frequencies below 30 MHz for each station. If more than one station is operated from a common control point, reports for the stations may be combined into one. This report shall be due 40 days after the close of each calendar quarter and shall contain the following information: Each frequency assigned to the station or stations and the number of hours it was used during the quarter to each point of communication for each class of service rendered (such as telegraph, telephone, program, or radiophoto), the types of emission normally used to each point of communication, and the total hours each frequency was used.

(b) *Received frequency report*. Upon specific request by the Commission, licensees in the international fixed public radiocommunication services shall furnish promptly the following information regarding frequencies received from all points of communication: All frequencies received, including call signs, location of transmitting station, type and bandwidth of emission normally employed, point of reception, and a symbol from the following table indicating the amount of usage of the particular received frequency.

Symbol	Usage
D	Daily regular use during business days.
O	Occasional use; not used daily, but offered frequently when required by propagation or operational conditions.
S	Seldom received; where records indicate light use during the past year.
L	Limited use; limited by solar activity to a part of the solar cycle or to a part of each year.

The following criteria shall be used to determine whether or not a frequency shall be reported as received:

(1) Report all frequencies regularly used during the period under consideration.

(2) Report frequencies received consistently during a substantial part of any cyclical change in frequency usefulness even though they may be unused for considerable periods of time during another part of the cycle.

(3) Do not report any frequency, the use of which is known to have been discontinued or transferred to another operation by a foreign correspondent.

(4) Do not report any frequency which has been inactive for a period of 6 months or longer, except as indicated in paragraph (b)(2) of this section.

[38 FR 22480, Aug. 21, 1973]

§ 23.42 License, simultaneous modification and renewal.

When an application is granted by the Commission necessitating the issuance of a modified license less than 60 days prior to the expiration date of the license sought to be modified, and an application for renewal of said license is granted subsequent or prior thereto (but within 30 days of expiration of the present license) the modified license as well as the renewal license shall be issued to conform to the combined action of the Commission.

§ 23.43 Maintenance tests of licensed stations.

Station licensees are authorized to carry on such routine tests as may be required for the proper maintenance of the stations: *Provided*, That the tests shall be so conducted as not to cause interference with the service of other stations.

§ 23.44 Station inspection.

The licensee of any radio station shall make the station available for inspection by representatives of the Commission at any reasonable hour.

§ 23.45 Operator license, posting of.

The original license of each station operator shall be posted at the place where he is on duty.

§ 23.46 Operators, class required and general duties.

(a) The operation and control of all transmitting apparatus licensed at a station in the international fixed public radiocommunication services shall be carried on only by a person holding a valid operator license issued by the Commission, except as provided in other paragraphs of this section.

(b) Classes of operator licenses required are as follows:

(1) Radiotelegraph stations: Radiotelegraph or Radiotelephone first- or second-class license: *Provided, however:*

(i) If manual morse code keying is used for transmitting public correspondence, the person manipulating the telegraph key shall be the holder of a radio-telegraph first- or second-class license except as provided by paragraph (b)(1)(iv) of this section;

(ii) If manual morse code keying is used only for the purposes of identification or for sending service messages, the person manipulating the telegraph key shall be the holder of a radiotelegraph third-class permit or higher class of radiotelegraph license except as provided by paragraph (b)(1)(iv) of this section;

(iii) If automatic keying equipment is used, the operator of such equipment may send short service signals (requests for repeats, etc.) by manual morse code without being the holder of a radio operator license.

(iv) Unlicensed telegraph operators of appropriate skill as determined by the radio station licensee may manipulate the telegraph key of radiotelegraph stations provided that properly licensed radiotelegraph operators are on duty at the transmitting station or authorized remote control point and that such licensed operators are fully responsible for the proper operation of the transmitting equipment.

(2) Radiotelephone stations: Radiotelephone first- or second-class license: *Provided, however,* that, if manual morse code keying is employed in accordance with § 23.12, the person manipulating the telegraph key shall be the holder of a valid radiotelegraph third-class permit or higher class of radiotelegraph license.

(3) Radiotelegraph-Radiotelephone stations: Provisions under paragraph (b)(1) of this section are applicable.

(4) International control stations: Radiotelegraph or radiotelephone first- or second-class license.

(c) One or more licensed operators of the grade specified in paragraph (b) of this section shall be on duty at the place where the transmitting apparatus is located and in actual charge thereof when it is being operated: *Provided, however*, That:

(1) In case of stations in these services operating on frequencies above 30 MHz, the Commission may authorize unattended operation upon application therefor and showing that the equipment is so designed and constructed as to make such operation feasible. When such unattended operation is authorized, properly licensed operators shall be on duty at a terminal of the system

of which the unattended station or stations are a part or shall be available on call to perform necessary maintenance duties.

(2) In the case of a station where remote control is used, the Commission may grant authority to employ an operator or operators at the control point in lieu of the place where the transmitting apparatus is located, provided that the following conditions are complied with:

(i) The transmitter shall be so installed and protected that it is not accessible to other than duly authorized persons.

(ii) A device shall be provided at the remote control point which gives a continuous visual indication whenever the control circuits have been placed in a condition to activate the radio transmitting apparatus.

(iii) Provision shall be made to monitor aurally all transmissions originating under control of the responsible operator at the remote point.

(iv) The radiation of the transmitter shall be suspended immediately when there is a deviation from the terms of the station license or applicable provisions of this chapter.

(v) When remote control of a transmitter is performed from a separate location such as a message center or telephone exchange and manual morse code keying is not used, the operator(s) at that point need not be licensed by the Commission provided that licensed operator(s) are on duty at the transmitter location or authorized remote control point at all times that the station is in operation, and they are fully responsible for the proper operation of the transmitting equipment. If manual morse code keying is used at a remote control point, the provisions of paragraph (b)(1) of this section shall apply.

(3) When a radio station is radiating, all adjustments or tests during or coincident with the installation and servicing or maintenance of the transmitter and its associated equipment which may affect the quality of transmission or possibly cause the station radiation to exceed the limits specified in its instrument of authorization or in the rules pertaining to such station shall be made by or under the immediate supervision and responsibility of a person holding the proper license, who shall be responsible for the proper functioning of the radio facilities. A radiotelephone station must be under the supervision of a person holding a radiotelephone or radiotelegraph first- or second-class license, and a radiotelegraph station must be under the supervision of a person holding a radiotelegraph first- or second-class license.

(4) When a radio station is not radiating, persons of appropriate technical skill, who are not licensed radio operators, may perform the functions described in paragraph (c)(3) of this section without direct supervision after having been authorized to do so by the responsible licensed operator under whose immediate supervision the facilities shall thereafter initially be placed in operation and be determined to be operating properly.

[38 FR 22480, Aug. 21, 1973]

§ 23.47 Station records.

(a) Station records shall be kept in an orderly manner, and in such detail that the data required is readily available. Key letters, abbreviations, or symbols may be used if proper meaning or explanation is set forth in the record.

(b) Each entry in the records of a station shall be made by a person qualified to do so and having actual knowledge of the facts to be recorded, and each entry shall clearly identify the person making the entry. Each entry or group of entries shall be certified by the signature of the person or persons responsible: *Provided*, That each physical page contain such certification: *And provided further*, That any such group of entries contain entries made only during a single daily period of duty.

(c) No record or portions thereof shall be erased, obliterated, or willfully destroyed within the required retention period. Any necessary correction may be made only by the person originating the entry, who shall strike out the erroneous portion, initial the corrections made, and indicate the date of correction.

(d) The records required by this part shall be retained for a period of at least 1 year: *Provided, that:*

(1) Records involving communications incident to a disaster or which include communications incident to, or involved in, an investigation by the Commission and concerning which the licensee has knowledge shall be retained by the licensee until specifically authorized in writing by the Commission to destroy them.

(2) Records incident to or involved in any claim or complaint of which the licensee has knowledge shall be retained by the licensee until such claim or complaint has been fully satisfied or until the same has been barred by statute limiting the time for the filing of suit upon such claim.

[38 FR 22481, Aug. 21, 1973]

§ 23.48 Content of station records.

(a) For each station in the services under this part, except stations in the international fixed public control service, the licensee shall maintain a technical log of the station operating showing:

(1) Signature of each licensed operator responsible for the operation of the transmitting equipment and an indication of his hours of duty.

(2) Hours of use of each frequency assignment and type of emission indicating time of beginning and end of each period of operation and points of communication to which each frequency is used (or area if service is pursuant to § 23.53).

(3) Hours of use of each transmitter indicating time of beginning and end of each period of operation.

(4) Power input to the final stage of each transmitter.

(5) Dates and results of each frequency measurement.

(b) For stations in the international fixed public control service, the licensee shall maintain a technical log of the station operating showing:

(1) Normal hours of operation and dates and times of interruptions to service.

(2) Dates and results of each frequency measurement.

(3) When service or maintenance duties are performed, the responsible operator shall sign and date the station record giving pertinent details of all duties performed by him or under his supervision; his name and the class, serial number, and date of expiration of his license.

(c) For each station having an antenna structure which is required to be obstruction-lighted, appropriate entries shall be made in the station's technical log as required by § 23.39.

[38 FR 22481, Aug. 21, 1973]

§ 23.49 Discontinuance of operation.

The licensee of each fixed radio station except stations operating in Alaska, shall notify the Engineer in Charge of the district where such station is located of any of the following changes in the status of such station at least two days before such change: (a) Temporary discontinuance of operation for a period of ten days or more; (b) the date of resumption of operation after temporary discontinuance of operation for a period of ten days or more; (c) permanent discontinuance of operation: *Provided, however,* Where any such discontinuance of operation is not voluntary and results from causes beyond the control of the licensee, notice thereof shall be given not later than two days after such discontinuance of operation. In all cases of permanent discontinuance of operation the licensee shall, in addition to notifying the engineer of intention to discontinue operation, immediately forward the station license to the Washington, D.C., office of the Commission for cancellation.

[28 FR 13002, Dec. 5, 1963, as amended at 30 FR 7176, May 28, 1965; 35 FR 10447, June 26, 1970. Redesignated at 38 FR 22481, Aug. 21, 1973]

§ 23.50 Place of filing application; fees and number of copies.

(a) Standard numbered forms applicable to the international fixed public radiocommunication services discussed within the subpart are as follows:

Form No.	Description
403	Application for radio station license or modification thereof.
405	Application for renewal of radio station license in specified services.
407	Application for radio station construction permit.
408	Application for temporary authorization in addition to authority contained in license.
701	Application for additional time to construct radio station.

Form No.	Description
702	Application for consent to assignment of radio station construction permit or license (for stations in services other than broadcast).
704	Application for consent to transfer of control of corporation holding common carrier radio station construction permit or license.
714	Supplement to application for new or modified radio station authorization (concerning antenna structure notification to FAA).

These forms may be obtained from the Secretary, Federal Communications Commission, Washington, DC 20554, or from any of the Commission's engineering field offices, the addresses of which are listed in § 0.121(a) of this chapter.

(b) Every application for a radio station authorization and all correspondence relating thereto shall be submitted to the Commission's office at Washington, DC 20554. Applications requiring fees as set forth at part 1, subpart G of this chapter must be filed in accordance with § 0.401(b) of the rules.

(c) Unless otherwise specified in a particular case, or for a particular form, each application, including exhibits and attachments thereto, shall be filed in duplicate.

(d) Each application shall be accompanied by a fee prescribed in subpart G of part 1 of this chapter.

[38 FR 22481, Aug. 21, 1973, as amended at 52 FR 5294, Feb. 20, 1987; 52 FR 10230, Mar. 31, 1987]

§ 23.51 Addressed program material.

(a) Stations operating in the fixed public service and in the fixed public press service may be authorized to transmit addressed program material to a fixed point, or points, outside the 48 contiguous States and the District of Columbia, specifically named in the instrument of authorization granted to the licensee, intended for broadcast only by a broadcast station. Any such authorization shall be subject to the condition that no interference is caused to the authorized regular service of the station as defined by § 23.8.

(b) Such stations may also, upon proper application therefor, be authorized to transmit addressed program material to any such fixed point in South or Central America for simultaneous interception and broadcast by a broadcast station at one or more additional points in the same general area upon a showing that public message service to such fixed point of communication will not be unduly impaired. Application for such authority shall be submitted not less than 10 days prior to the proposed date of the the first interception. Such application shall show, in addition to the proposed intercept and broadcast points, the South or Central American station or stations over which the program will be broadcast, a full description of the arrangements made for such intercept and broadcast, and the period for which such authority is requested. Authorizations will be limited to the period for which arrangements for broadcasting by South or Central American stations have been made and in no event will extend beyond the term of the point-to-point station license.

§ 23.52 Mobile stations, transmission simultaneously to.

A point-to-point telegraph station, in addition to the fixed points of communication specified in an instrument of authorization, may be authorized to communicate simultaneously with mobile stations for the transmission of press material destined primarily to fixed points.

§ 23.53 Addressed press and meteorological services.

(a) The licensee of a station in the fixed public or fixed public press service may be authorized to transmit, without coordinated reception, addressed press messages (including press facsimile and photographs) and weather maps, charts and photographs for reception at overseas or foreign points by meteorological organizations by facsimile and radio phototelegraphy, to one or more persons at one or more fixed points not specifically named in its license: *Provided, however,* That the licensee, upon institution of addressed press service to any point, shall promptly notify the Commission of the following:

(1) The name and location of the person subscribing to such service.

(2) The date of institution of such service, and

(3) The location of the licensee's station from which such service is transmitted.

Any authority, granted under this paragraph, to transmit addressed press messages to any person or to any point may be terminated by the Commission upon notice to the licensee within 30 days after notification of institution of service to such person or point is filed by the licensee.

(b) In the event of the deletion of service to any point or to any person or any change with respect to the facts reported under paragraph (a) (1) or (3) of this section, the licensee shall promptly notify the Commission of such deletion or change and the date thereof.

(c) On or before the first day of February and the first day of August of each year, the licensee shall submit, for each of its stations authorized to render addressed press service in accordance with provisions of this section, a recapitulative list, as of the first day of January and the first day of July respectively of that year, containing the following:

(1) The name and location of each person subscribing to such service, and

(2) The date of institution of such service to each person at each point.

[28 FR 13032, Dec. 5, 1963, as amended at 36 FR 2562, Feb. 6, 1971]

§ 23.54 Use of double sideband radiotelephone.

Use of double sideband radiotelephone transmissions, on frequencies below 30 MHz, shall be held to a minimum with a view towards discontinuance of such operations as soon as possible. Except in cases where the foreign correspondent is unable to receive single sideband transmissions, double sideband radiotelephone shall not be transmitted after January 1, 1965.

§ 23.55 Equal employment opportunities.

(a) *General policy.* Equal opportunity in employment shall be afforded by all common carrier licensees or permittees to all qualified persons, and no personnel shall be discriminated against in employment because of sex, race, color, religion, or national origin.

(b) *Equal employment opportunity program.* Each licensee or permittee shall establish, maintain, and carry out, a positive continuing program of specific practices designed to assure equal opportunity in every aspect of employment policy and practice. Under the terms of its program, a licensee or permittee shall:

(1) Define the responsibility of each level of management to insure a positive application and vigorous enforcement of the policy of equal opportunity, and establish a procedure to review and control managerial and supervisory performance.

(2) Inform its employees and recognized employee organizations of the positive equal employment opportunity policy and program and enlist their cooperation.

(3) Communicate its equal employment opportunity policy and program and its employment needs to sources of qualified applicants without regard to sex, race, color, religion, or national origin, and solicit their recruitment assistance on a continuing basis.

(4) Conduct a continuing campaign to exclude every form of prejudice or discrimination based upon sex, race, color, religion, or national origin, from the licensees' or permittees' personnel policies and practices and working conditions.

(5) Conduct a continuing review of job structure and employment practices and adopt positive recruitment, training, job design and other measures needed in order to insure genuine equality of opportunity to participate fully in all organizational units, occupations and levels of responsibility.

(c) *Additional information to be furnished to the Commission.* (1) Equal Employment Programs to be filed by common carrier licensees or permittees.

(i) All licensees or permittees will file a statement of their equal employment opportunity program not later than December 17, 1970, indicating specific practices to be followed in order to assure equal employment opportunity on the basis of sex, race, color, religion, or national origin in such aspects of employment practices as regards recruitment, selection, training, placement, promotion, pay, working

conditions, demotion, layoff, and termination.

(*a*) Any changes or amendments to existing programs should be filed with the Commission on April 1 of each year thereafter.

(*b*) If a licensee or permittee has fewer than 16 full-time employees, no such statement need be filed.

(2) The program should reasonably address itself to such specific areas as set forth below, to the extent that they are appropriate in terms of licensee size, location, etc.

(i) *To assure nondiscrimination in recruiting.* (*a*) Posting notices in the licensee's or permittee's offices informing applicants for employment of their equal employment rights and their right to notify the Equal Employment Opportunity Commission, the Federal Communications Commission, or other appropriate agency. Where a substantial number of applicants are Spanish-surnamed Americans such notice should be posted in Spanish and English.

(*b*) Placing a notice in bold type on the employment application informing prospective employees that discrimination because of sex, race, color, religion, or national origin is prohibited and that they may notify the Equal Employment Opportunity Commission, the Federal Communications Commission or other appropriate agency if they believe they have been discriminated against.

(*c*) Placing employment advertisements in media which have significant circulation among minority-group people in the recruiting area.

(*d*) Recruiting through schools and colleges with significant minority-group enrollments.

(*e*) Maintaining systematic contacts with minority and human relations organizations, leaders, and spokesmen to encourage referral of qualified minority or female applicants.

(*f*) Encouraging present employees to refer minority or female applicants.

(*g*) Making known to the appropriate recruitment sources in the employer's immediate area that qualified minority members are being sought for consideration whenever the licensee hires.

(ii) *To assure nondiscrimination in selection and hiring.* (*a*) Instructing personally those on the staff of the licensee or permittee who make hiring decisions that all applicants for all jobs are to be considered without discrimination.

(*b*) Where union agreements exist, cooperating with the union or unions in the development of programs to assure qualified minority persons or females of equal opportunity for employment, and including an effective nondiscrimination clause in new or renegotiated union agreements.

(*c*) Avoiding use of selection techniques or tests which have the effect of discriminating against minority groups or females.

(iii) *To assure nondiscriminatory placement and promotion.* (*a*) Instructing personally those of the licensee's or permittee's staff who make decisions on placement and promotion that minority employees and females are to be considered without discrimination, and that job areas in which there is little or no minority or female representation should be reviewed to determine whether this results from discrimination.

(*b*) Giving minority groups and female employees equal opportunity for positions which lead to higher positions. Inquiring as to the interest and skills of all lower-paid employees with respect to any of the higher-paid positions, followed by assistance, counseling, and effective measures to enable employees with interest and potential to qualify themselves for such positions.

(*c*) Reviewing seniority practices to insure that such practices are nondiscriminatory and do not have a discriminatory effect.

(*d*) Avoiding use of selection techniques or tests, which have the effect of discriminating against minority groups or females.

(iv) *To assure nondiscrimination in other areas of employment practices.* (*a*) Examining rates of pay and fringe benefits for present employees with equivalent duties, and adjusting any inequities found.

(*b*) Proving opportunity to perform overtime work on a basis that does not discriminate against qualified minority group or female employees.

(d) *Report of complaints filed against licensees and permittees.* (1) All licensees or permittees shall submit an annual report to the FCC no later than May 31 of each year indicating whether any complaints regarding violations by the licensee or permittee of equal employment provisions of Federal, State, Territorial, or local law have been filed before any body having competent jurisdiction.

(i) The report should state the parties involved the date filing, the courts or agencies before which the matters have been heard, the appropriate file number (if any), and the respective disposition or current status of any such complaints.

(ii) Any licensee or permittee who has filed such information with the EEOC need not do so with the Commission, if such previous filing is indicated.

(e) *Complaints of violations of Equal Employment Programs.* (1) Complaints alleging employment discrimination against a common carrier licensee will be considered by the Commission in the following manner:

(i) If a complaint raising an issue of discrimination is received against a licensee or permittee who is within the jurisdiction of the EEOC, it will be submitted to that agency. The Commission will maintain a liaison with that agency which will keep the Commission informed of the disposition of complaints filed against any of the common carrier licensees.

(ii) Complaints alleging employment discrimination against a common carrier licensee of permittee who does not fall under the jurisdiction of the EEOC but is covered by appropriate enforceable State law, to which penalties apply, may be submitted by the Commission to the respective State agency.

(iii) Complaints alleging employment discrimination against a common carrier licensee or permittee who does not fall under the jurisdiction of the EEOC or an appropriate State law, will be accorded appropriate treatment by the FCC.

(iv) The Commission will consult with the EEOC on all matters relating to the evaluation and determination of compliance by the common carrier licensees or permittees with the principles of equal employment as set forth herein.

(2) Complaints indicating a general pattern of disregard of equal employment practices which are received against a licensee or permittee who is required to file an employment report to the Commission under § 1.815(a) of this chapter will be investigated by the Commission.

(f) *Records available to public*—(1) *Commission records.* A copy of every annual employment report, equal employment opportunity program, and reports on complaints regarding violation of equal employment provisions of Federal, State, Territorial, or local law, and copies of all exhibits, letters, and other documents filed as part thereof, all amendments thereto, all correspondence between the permittee or licensee and the Commission pertaining to the reports after they have been filed and all documents incorporated therein by reference, are open for public inspection at the offices of the Commission.

(2) *Records to be maintained locally for public inspection by licensees or permittees*—(i) *Records to be maintained.* Each licensee or permittee required to file annual employment reports, equal employment opportunity programs, and annual reports on complaints regarding violations of equal employment provisions of Federal, State, Territorial, or local law shall maintain for public inspection, in the same manner and in the same locations as required for the keeping and posting of tariffs as set forth in § 61.72 of this chapter, a file containing a copy of each such report and copies of all exhibits, letters, and other documents filed as part thereto, all correspondence between the permittee or licensee and the Commission pertaining to the reports after they have been filed and all documents incorporated therein by reference.

(ii) *Period of retention.* The documents specified in paragraph (f)(2)(i) of this section shall be maintained for a period of 2 years.

[35 FR 12894, Aug. 14, 1970, as amended at 36 FR 3119, Feb. 18, 1971. Redesignated at 38 FR 22481, Aug. 21, 1973]

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24.901 Scope.
24.902 Definitions.
24.903 Capabilities that must be provided by a broadband PCS telecommunications carrier.

AUTHORITY: 47 U.S.C. 154, 301, 302, 303, 309 and 332.

SOURCE: 58 FR 59183, Nov. 8, 1993, unless otherwise noted. Redesignated at 59 FR 18499, Apr. 19, 1994.

Subpart A—General Information

§ 24.1 Basis and purpose.

This section contains the statutory basis for this part of the rules and provides the purpose for which this part is issued.

(a) *Basis*. The rules for the personal communications services (PCS) in this part are promulgated under the provisions of the Communications Act of 1934, as amended, that vests authority in the Federal Communications Commission to regulate radio transmission and to issue licenses for radio stations.

(b) *Purpose*. This part states the conditions under which portions of the radio spectrum are made available and licensed for PCS.

(c) *Scope*. The rules in this part apply only to stations authorized under this part. Rules in subparts D and E apply only to stations authorized under those subparts.

[58 FR 59183, Nov. 8, 1993. Redesignated at 59 FR 18499, Apr. 19, 1994, and amended at 59 FR 32854, June 24, 1994]

§ 24.2 Other applicable rule parts.

Other FCC rule parts applicable to licensees in the personal communications services include the following:

(a) *Part 0*. This part describes the Commission's organization and delegations of authority. Part 0 of this chapter also lists available Commission publications, standards and procedures for access to Commission records, and location of Commission Field Offices.

(b) *Part 1*. This part includes rules of practice and procedure for license applications, adjudicatory proceedings, procedures for reconsideration and review of the Commission's actions; provisions concerning violation notices and forfeiture proceedings; and the environmental requirements that, if applicable, must be complied with prior to the initiation of construction. Subpart F includes the rules for the Wireless Telecommunications Services and the procedures for filing electronically via the ULS.

(c) *Part 2*. This part contains the Table of Frequency Allocations and special requirements in international regulations, recommendations, agreements, and treaties. This part also contains standards and procedures concerning the marketing and importation of radio frequency devices, and for obtaining equipment authorization.

(d) *Part 5*. This part contains rules prescribing the manner in which parts of the radio frequency spectrum may be made available for experimentation.

(e) *Part 15*. This part contains rules setting out the regulations under which an intentional, unintentional, or incidental radiator may be operated without an individual license. It also contains the technical specifications, administrative requirements and other conditions relating to the marketing of part 15 devices. Unlicensed PCS devices operate under subpart D of part 15.

(f) *Part 17*. This part contains requirements for construction, marking and lighting of antenna towers.

(g) Part 20 of this chapter governs commercial mobile radio services.

(h) *Part 21*. This part contains rules concerning multipoint distribution service and multichannel multipoint distribution service.

(i) *Part 68*. This part contains technical standards for connection of terminal equipment to the telephone network.

(j) *Part 101*. This part contains rules concerning common carrier and private services relating to fixed point-to-point and point-to-multipoint microwave systems.

[58 FR 59183, Nov. 8, 1993. Redesignated and amended at 59 FR 18499, Apr. 19, 1994, as amended at 63 FR 68952, Dec. 14, 1998; 65 FR 38325, June 20, 2000]

§ 24.3 Permissible communications.

PCS licensees may provide any mobile communications service on their assigned spectrum. Fixed services may be provided on a co-primary basis with mobile operations. Broadcasting as defined in the Communications Act is prohibited.

[61 FR 45356, Aug. 29, 1996]

§ 24.5 Terms and definitions.

Assigned Frequency. The center of the frequency band assigned to a station.

Authorized Bandwidth. The maximum width of the band of frequencies permitted to be used by a station. This is normally considered to be the necessary or occupied bandwidth, whichever is greater.

Average Terrain. The average elevation of terrain between 3 and 16 kilometers from the antenna site.

Base Station. A land station in the land mobile service.

Broadband PCS. PCS services operating in the 1850–1890 MHz, 1930–1970 MHz, 2130–2150 MHz, and 2180–2200 MHz bands.

Effective Radiated Power (e.r.p.) (*in a given direction*). The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

Equivalent Isotropically Radiated Power (e.i.r.p.). The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

Fixed Service. A radiocommunication service between specified fixed points.

Fixed Station. A station in the fixed service.

Land Mobile Service. A mobile service between base stations and land mobile stations, or between land mobile stations.

Land Mobile Station. A mobile station in the land mobile service capable of surface movement within the geographic limits of a country or continent.

Land Station. A station in the mobile service not intended to be used while in motion.

Mobile Service. A radiocommunication service between mobile and land stations, or between mobile stations.

Mobile Station. A station in the mobile service intended to be used while in motion or during halts at unspecified points.

Narrowband PCS. PCS services operating in the 901–902 MHz, 930–931 MHz, and 940–941 MHz bands.

National Geodetic Reference System (NGRS): The name given to all geodetic control data contained in the National Geodetic Survey (NGS) data base. (Source: National Geodetic Survey, U.S. Department of Commerce)

PCS Relocator. A PCS entity that pays to relocate a fixed microwave link from its existing 2 GHz facility to other media or other fixed channels.

Personal Communications Services (PCS). Radio communications that encompass mobile and ancillary fixed communication that provide services to individuals and businesses and can be integrated with a variety of competing networks.

Universal Licensing System. The Universal Licensing System (ULS) is the consolidated database, application filing system, and processing system for all Wireless Radio Services. ULS supports electronic filing of all applications and related documents by applicants and licensees in the Wireless Radio Services, and provides public access to licensing information.

UTAM. The Unlicensed PCS Ad Hoc Committee for 2 GHz Microwave Transition and Management, which coordinates relocation in the 1910–1930 MHz band.

Voluntarily Relocating Microwave Incumbent A microwave incumbent that

voluntarily relocates its licensed facilities to other media or fixed channels.

[58 FR 59183, Nov. 8, 1993. Redesignated at 59 FR 18499, Apr. 19, 1994, and amended at 61 FR 29691, June 12, 1996; 62 FR 12757, Mar. 18, 1997; 63 FR 68952, Dec. 14, 1998]

Subpart B—Applications and Licenses

GENERAL FILING REQUIREMENTS

§ 24.10 Scope.

This subpart contains some of the procedures and requirements for filing applications for licenses in the personal communications services. One also should consult subparts F and G of this part. Other Commission rule parts of importance that may be referred to with respect to licensing and operation of radio services governed under this part include 47 CFR parts 0, 1, 2, 5, 15, 17 and 20.

[59 FR 32854, June 24, 1994]

§ 24.11 Initial authorization.

(a) An applicant must file a single application for an initial authorization for all markets won and frequency blocks desired.

(b) Blanket licenses are granted for each market and frequency block. Applications for individual sites are not required and will not be accepted.

[59 FR 32854, June 24, 1994, as amended at 63 FR 68952, Dec. 14, 1998]

§ 24.12 Eligibility.

Any entity, other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. 310, or §§ 99.202(c) or 99.204, is eligible to hold a license under this part.

[58 FR 59183, Nov. 8, 1993; 59 FR 15269, Mar. 31, 1994]

§ 24.15 License period.

Licenses for service areas will be granted for ten year terms from the date of original issuance or renewal.

§ 24.16 Criteria for comparative renewal proceedings.

A renewal applicant involved in a comparative renewal proceeding shall receive a preference, commonly referred to as a renewal expectancy, which is the most important comparative factor to be considered in the proceeding, if its past record for the relevant license period demonstrates that the renewal applicant:

(a) Has provided ''substantial'' service during its past license term. ''Substantial'' service is defined as service which is sound, favorable, and substantially above a level of mediocre service which might just minimally warrant renewal; and

(b) Has substantially complied with applicable Commission rules, policies and the Communications Act.

Subpart C—Technical Standards

§ 24.50 Scope.

This subpart sets forth the technical requirements for use of the spectrum and equipment in the personal communications services.

§ 24.51 Equipment authorization.

(a) Each transmitter utilized for operation under this part and each transmitter marketed, as set forth in § 2.803 of this chapter, must be of a type that has been authorized by the Commission under its certification procedure for use under this part.

(b) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter.

(c) Applicants for certification of transmitters that operate in these services must determine that the equipment complies with IEEE C95.1–1991, ''IEEE Standards for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz'' as measured using methods specified in IEEE C95.3–1991, ''Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields—RF and Microwave.'' The applicant for certification is required to submit a statement affirming that the equipment

complies with these standards as measured by an approved method and to maintain a record showing the basis for the statement of compliance with IEEE C.95.1–1991.

[58 FR 59183, Nov. 8, 1993. Redesignated at 59 FR 18499, Apr. 19, 1994, as amended at 63 FR 36604, July 7, 1998]

§ 24.52 RF hazards.

Licensees and manufacturers are subject to the radiofrequency radiation exposure requirements specified in § 1.1307(b), § 2.1091 and § 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

[61 FR 41018, Aug. 7, 1996]

§ 24.53 Calculation of height above average terrain (HAAT).

(a) HAAT is determined by subtracting average terrain elevation from antenna height above mean sea level.

(b) Average terrain elevation shall be calculated using elevation data from a 30 arc second or better Digital Elevation Models (DEMs). DEM data is available from United States Geological Survey (USGS). The data file shall be identified. If 30 arc second data is used, the elevation data must be processed for intermediate points using interpolation techniques; otherwise, the nearest point may be used. If DEM data is not available, elevation data from the Defense Mapping Agency's Digital Chart of the World (DCW) may be used.

(c) Radial average terrain elevation is calculated as the average of the elevation along a straight line path from 3 to 16 kilometers extending radially from the antenna site. At least 50 evenly spaced data points for each radial shall be used in the computation.

(d) Average terrain elevation is the average of the eight radial average terrain elevations (for the eight cardinal radials).

(e) The position location of the antenna site shall be determined to an accuracy of no less than ±5 meters in both the horizontal (latitude and longitude) and vertical (ground elevation) dimensions with respect to the National Geodetic Reference System.

[58 FR 59183, Nov. 8, 1993; 59 FR 15269, Mar. 31, 1994]

§ 24.55 Antenna structures; air navigation safety.

Licensees that own their antenna structures must not allow these antenna structures to become a hazard to air navigation. In general, antenna structure owners are responsible for registering antenna structures with the FCC if required by part 17 of this chapter, and for installing and maintaining any required marking and lighting. However, in the event of default of this responsibility by an antenna structure owner, each FCC permittee or licensee authorized to use an affected antenna structure will be held responsible by the FCC for ensuring that the antenna structure continues to meet the requirements of part 17 of this chapter. *See* § 17.6 of this chapter.

(a) *Marking and lighting.* Antenna structures must be marked, lighted and maintained in accordance with part 17 of this chapter and all applicable rules and requirements of the Federal Aviation Administration.

(b) *Maintenance contracts.* Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) may enter into contracts with other entities to monitor and carry out necessary maintenance of antenna structures. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) that make such contractual arrangements continue to be responsible for the maintenance of antenna structures in regard to air navigation safety.

[61 FR 4366, Feb. 6, 1996]

Subpart D—Narrowband PCS

§ 24.100 Scope.

This subpart sets out the regulations governing the licensing and operations of personal communications services authorized in the 901–902, 930–931, and 940–941 MHz bands (900 MHz band).

§ 24.101 [Reserved]

§ 24.102 Service areas.

Narrowband PCS service areas are nationwide, regional, and Major Trading Areas (MTAs), as defined in this section. MTAs are based on the Rand McNally 1992 Commercial Atlas & Marketing Guide, 123rd Edition, at pages 38–39 (MTA Map). Rand McNally organizes the 50 States and the District of Columbia into 47 MTAs. The MTA Map is available for public inspection in the FCC's Library, Room TW–B505, 445 12th Street SW, Washington, D.C.

(a) The nationwide service area consists of the fifty states, the District of Columbia, American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and United States Virgin Islands.

(b) The regional service areas are defined as follows:

(1) Region 1 (Northeast): The Northeast Region consists of the following MTAs: Boston-Providence, Buffalo-Rochester, New York, Philadelphia, and Pittsburgh.

(2) Region 2 (South): The South Region consists of the following MTAs: Atlanta, Charlotte-Greensboro-Greenville-Raleigh, Jacksonville, Knoxville, Louisville-Lexington-Evansville, Nashville, Miami-Fort Lauderdale, Richmond-Norfolk, Tampa-St. Petersburg-Orlando, and Washington-Baltimore; and, Puerto Rico and United States Virgin Islands.

(3) Region 3 (Midwest): The Midwest Region consists of the following MTAs: Chicago, Cincinnati-Dayton, Cleveland, Columbus, Des Moines-Quad Cities, Detroit, Indianapolis, Milwaukee, Minneapolis-St. Paul, and Omaha.

(4) Region 4 (Central): The Central Region consists of the following MTAs: Birmingham, Dallas-Fort Worth, Denver, El Paso-Albuquerque, Houston, Kansas City, Little Rock, Memphis-Jackson, New Orleans-Baton Rouge, Oklahoma City, San Antonio, St. Louis, Tulsa, and Wichita.

(5) Region 5 (West): The West Region consists of the following MTAs: Honolulu, Los Angeles-San Diego, Phoenix, Portland, Salt Lake City, San Francisco-Oakland-San Jose, Seattle (including Alaska), and Spokane-Billings; and, American Samoa, Guam, and the Northern Mariana Islands.

(c) The MTA service areas are based on the Rand McNally *1992 Commercial Atlas & Marketing Guide*, 123rd Edition, at pages 38–39, with the following exceptions and additions:

(1) Alaska is separated from the Seattle MTA and is licensed separately.

(2) Guam and the Northern Mariana Islands are licensed as a single MTA-like area.

(3) Puerto Rico and the United States Virgin Islands are licensed as a single MTA-like area.

(4) American Samoa is licensed as a single MTA-like area.

[59 FR 14118, Mar. 25, 1994, as amended at 59 FR 46199, Sept. 7, 1994; 65 FR 35852, June 6, 2000]

§ 24.103 Construction requirements.

(a) Nationwide narrowband PCS licensees shall construct base stations that provide coverage to a composite area of 750,000 square kilometers or serve 37.5 percent of the U.S. population within five years of initial license grant date; and, shall construct base stations that provide coverage to a composite area of 1,500,000 square kilometers or serve 75 percent of the U.S. population within ten years of initial license grant date. Licensees may, in the alternative, provide substantial service to the licensed area as provided in paragraph (d) of this section.

(b) Regional narrowband PCS licensees shall construct base stations that provide coverage to a composite area of 150,000 square kilometers or serve 37.5 percent of the population of the service area within five years of initial license grant date; and, shall construct base stations that provide coverage to a composite area of 300,000 square kilometers or serve 75 percent of the service area population within ten years of initial license grant date. Licensees may, in the alternative, provide substantial service to the licensed area as provided in paragraph (d) of this section.

(c) MTA narrowband PCS licensees shall construct base stations that provide coverage to a composite area of 75,000 square kilometers or 25 percent of the geographic area, or serve 37.5 percent of the population of the service area within five years of initial license grant date; and, shall construct base

stations that provide coverage to a composite area of 150,000 square kilometers or 50 percent of the geographic area, or serve 75 percent of the population of the service area within ten years of initial license grant date. Licensees may, in the alternative, provide substantial service to the licensed area as provided in paragraph (d) of this section.

(d) As an alternative to the requirements of paragraphs (a), (b), and (c) of this section, narrowband PCS licensees may demonstrate that, no later than ten years after the initial grant of their license, they provide substantial service to their licensed area. Licensees choosing this option must notify the FCC by filing FCC Form 601, no later than 15 days after the end of the five year period following the initial grant of their license, that they plan to satisfy the alternative requirement to provide substantial service. ''Substantial service'' is defined as service that is sound, favorable, and substantially above a level of mediocre service that would barely warrant renewal.

(e) In demonstrating compliance with the construction requirements set forth in this section, licensees must base their calculations on signal field strengths that ensure reliable service for the technology utilized. Licensees may determine the population of geographic areas included within their service contours using either the 1990 census or the 2000 census, but not both.

(1) For the purpose of this section, the service radius of a base station may be calculated using the following formula:

$$d_{km} = 2.53 \times h_m 0.34 \times p^{0.17}$$

where d_{km} is the radial distance in kilometers,

h_m is the antenna HAAT of the base station in meters, and

p is the e.r.p. of the base station in watts.

(2) Alternatively, licensees may use any service radius contour formula developed or generally used by industry, provided that such formula is based on the technical characteristics of their system.

(f) Upon meeting the five and ten year benchmarks in paragraphs (a), (b), and (c) of this section, or upon meeting the substantial service alternative in paragraph (d), licensees shall notify the Commission by filing FCC Form 601 and including a map and other supporting documentation that demonstrate the required geographic area coverage, population coverage, or substantial service to the licensed area. The notification must be filed with the Commission within 15 days of the expiration of the relevant period.

(g) If the sale of a license is approved, the new licensee is held to the original build-out requirement.

(h) Failure by a licensee to meet the above construction requirements shall result in forfeiture of the license and ineligibility to regain it.

[59 FR 14118, Mar. 25, 1994, as amended at 65 FR 35852, June 6, 2000]

§ 24.104 Partitioning and disaggregation.

Nationwide, regional, and MTA licensees may apply to partition their authorized geographic service area or disaggregate their authorized spectrum at any time following grant of their geographic area authorizations.

(a) *Application required.* Parties seeking approval for partitioning and/or disaggregation shall apply for partial assignment of a license pursuant to § 1.948 of this chapter.

(b) *Partitioning.* In the case of partitioning, applicants and licensees must file FCC Form 603 pursuant to § 1.948 of this chapter and describe the partitioned service area on a schedule to the application. The partitioned service area shall be defined by up to 120 sets of geographic coordinates at points at every 3 degrees azimuth from a point within the partitioned service area along the partitioned service area boundary unless either an FCC-recognized service area is used (*e.g.*, MEA or EA) or county lines are followed. The geographical coordinates must be specified in degrees, minutes, and seconds to the nearest second latitude and longitude, and must be based upon the 1983 North American Datum (NAD83). In the case where FCC-recognized service areas or county lines are used, applicants need only list the specific area(s) through use of FCC designations or county names that constitute the partitioned area.

(c) *Disaggregation*. Spectrum may be disaggregated in any amount.

(d) *Combined partitioning and disaggregation*. Licensees may apply for partial assignment of authorizations that propose combinations of partitioning and disaggregation.

(e) *License term*. The license term for a partitioned license area and for disaggregated spectrum shall be the remainder of the original licensee's license term as provided for in § 1.955 of this chapter.

(f) *Coverage requirements for partitioning*. (1) Parties to a partitioning agreement must satisfy at least one of the following requirements:

(i) The partitionee must satisfy the applicable coverage requirements set forth in § 24.103 for the partitioned license area; or

(ii) The original licensee must meet the coverage requirements set forth in § 24.103 for the entire geographic area. In this case, the partitionee must meet only the requirements for renewal of its authorization for the partitioned license area.

(2) Parties seeking authority to partition must submit with their partial assignment application a certification signed by both parties stating which of the options they select.

(3) Partitionees must submit supporting documents showing compliance with their coverage requirements as set forth in § 24.103.

(4) Failure by any partitionee to meet its coverage requirements will result in automatic cancellation of the partitioned authorization without further Commission action.

(g) *Coverage requirements for disaggregation*. (1) Parties to a disaggregation agreement must satisfy at least one of the following requirements:

(i) Either the disaggregator or disaggregatee must satisfy the coverage requirements set forth in § 24.103 for the entire license area; or

(ii) Parties must agree to share responsibility for meeting the coverage requirements set forth in § 24.103 for the entire license area.

(2) Parties seeking authority to disaggregate must submit with their partial assignment application a certification signed by both parties stating which of the requirements they select.

(3) Disaggregatees must submit supporting documents showing compliance with their coverage requirements as set forth in § 24.103.

(4) Parties that accept responsibility for meeting the coverage requirements and later fail to do so will be subject to automatic license cancellation without further Commission action.

[65 FR 35853, June 6, 2000]

EFFECTIVE DATE NOTE: At 65 FR 35853, June 6, 2000, § 24.104 was added. This section contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 24.129 Frequencies.

The following frequencies are available for narrowband PCS:

(a) Eighteen frequencies are available for assignment on a nationwide basis as follows:

(1) Seven 50 kHz channels paired with 50 kHz channels:

Channel 1: 940.00–940.05 and 901.00–901.05 MHz;
Channel 2: 940.05–940.10 and 901.05–901.10 MHz;
Channel 3: 940.10–940.15 and 901.10–901.15 MHz;
Channel 4: 940.15–940.20 and 901.15–901.20 MHz;
Channel 5: 940.20–940.25 and 901.20–901.25 MHz;
Channel 19: 930.50–930.55 and 901.30–901.35 MHz; and
Channel 20: 930.75–930.80 and 901.90–901.95 MHz.

(2) Three 50 kHz channels paired with 12.5 kHz channels:

Channel 6: 930.40–930.45 and 901.7500–901.7625 MHz;
Channel 7: 930.45–930.50 and 901.7625–901.7750 MHz; and
Channel 8: 940.75–940.80 and 901.7750–901.7875 MHz;

(3) Two 50 kHz unpaired channels:

Channel 9: RESERVED;
Channel 10: 940.80–940.85 MHz; and
Channel 11: 940.85–940.90 MHz.

(4) One 100 kHz unpaired channel:

Channel 18: 940.65–940.75 MHz.

(5) Two 150 kHz channels paired with 50 kHz channels:

Channel 21: 930.00–930.15 and 901.50–901.55 MHz; and
Channel 22: 930.15–930.30 and 901.60–901.65 MHz.

(6) Three 100 kHz channels paired with 50 kHz channels:

Channel 23: 940.55–940.65 and 901.45–901.50 MHz;
Channel 24: 940.30–940.40 and 901.55–901.60 MHz; and
Channel 25: 940.45–940.55 and 901.85–901.90 MHz.

(b) Five frequencies are available for assignment on a regional basis as follows:

(1) One 50 kHz channel paired with 50 kHz channel:

Channel 12: 940.25–940.30 and 901.25–901.30 MHz.
Channel 13: RESERVED.

(2) Four 50 kHz channels paired with 12.5 kHz channels:

Channel 14: 930.55–930.60 and 901.7875–901.8000 MHz;
Channel 15: 930.60–930.65 and 901.8000–901.8125 MHz;
Channel 16: 930.65–930.70 and 901.8125–901.8250 MHz; and
Channel 17: 930.70–930.75 and 901.8250–901.8375 MHz.

(c) Seven frequencies are available for assignment on an MTA basis as follows:

(1) Three 50 kHz unpaired channels:

Channel 26: 901.35–901.40 MHz;
Channel 27: 901.40–901.45 MHz; and
Channel 28: 940.40–940.45 MHz.

(2) One 50 kHz channel paired with 50 kHz channel:

Channel 29: 930.80–930.85 and 901.95–902.00 MHz.

(3) One 100 kHz channel paired with 50 kHz channel:

Channel 30: 930.30–930.40 and 901.65–901.70 MHz.

(4) One 150 kHz channel paired with 50 kHz channel:

Channel 31: 930.85–931.00 and 901.7–901.75 MHz.

(5) One 100 kHz channel paired with 12.5 kHz channel:

Channel 32: 940.90–941 and 901.8375–901.85 MHz.

NOTE TO § 24.129: Operations in markets or portions of markets which border other countries, such as Canada and Mexico, will be subject to on-going coordination arrangements with neighboring countries.

[66 FR 29920, June 4, 2001]

§ 24.130 [Reserved]

§ 24.131 Authorized bandwidth.

The authorized bandwidth of narrowband PCS channels will be 10 kHz for 12.5 kHz channels and 45 kHz for 50 kHz channels. For aggregated adjacent channels, a maximum authorized bandwidth of 5 kHz less than the total aggregated channel width is permitted.

§ 24.132 Power and antenna height limits.

(a) Stations transmitting in the 901–902 MHz band are limited to 7 watts e.r.p.

(b) Mobile stations transmitting in the 930–931 MHz and 940–941 MHz bands are limited to 7 watts e.r.p.

(c) Base stations transmitting in the 930–931 MHz and 940–941 MHz bands are limited to 3500 watts e.r.p. per authorized channel and are unlimited in antenna height except as provided in paragraph (d) of this section.

(d)(1) MTA and regional base stations located between 200 kilometers (124 miles) and 80 kilometers (50 miles) from their licensed service area border are limited to the power levels in the following table:

Antenna HAAT in meters (feet) (see § 24.53 for HAAT HAAT calculation method)	Effective radiated power (e.r.p.) (watts)
183 (600) and below	3500
183 (600) to 208 (682)	3500 to 2584
208 (682) to 236 (775)	2584 to 1883
236 (775) to 268 (880)	1883 to 1372
268 (880) to 305 (1000)	1372 to 1000
305 (1000) to 346 (1137)	1000 to 729
346 (1137) to 394 (1292)	729 to 531
394 (1292) to 447 (1468)	531 to 387
447 (1468) to 508 (1668)	387 to 282
508 (1668) to 578 (1895)	282 to 206
578 (1895) to 656 (2154)	206 to 150
656 (2154) to 746 (2447)	150 to 109
746 (2447) to 848 (2781)	109 to 80
848 (2781) to 963 (3160)	80 to 58
963 (3160) to 1094 (3590)	58 to 42
1094 (3590) to 1244 (4080)	42 to 31
1244 (4080) to 1413 (4636)	31 to 22
Above 1413 (4636)	16

(2) For heights between the values listed in the table, linear interpolation shall be used to determine maximum e.r.p.

(e) MTA and regional base stations located less than 80 kilometers (50 miles) from the licensed service area

border must limit their effective radiated power in accordance with the following formula:

PW = 0.0175 x dkm* * 6.6666 x hm* * −3.1997
PW is effective radiated power in watts
dkm is distance in kilometers
hm is antenna HAAT in meters; see § 24.53 for HAAT calculation method

(f) All power levels specified in this section are expressed in terms of the maximum power, averaged over a 100 millisecond interval, when measured with instrumentation calibrated in terms of an rms-equivalent voltage with a resolution bandwidth equal to or greater than the authorized bandwidth.

(g) Additionally, PCS stations will be subject to any power limits imposed by international agreements.

[58 FR 59183, Nov. 8, 1993; 59 FR 15269, Mar. 31, 1994, as amended at 62 FR 27511, May 20, 1997; 65 FR 35853, June 6, 2000]

§ 24.133 Emission limits.

(a) The power of any emission shall be attenuated below the transmitter power (P), as measured in accordance with § 24.132(f), in accordance with the following schedule:

(1) For transmitters authorized a bandwidth greater than 10 kHz:

(i) On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency (f_d in kHz) of up to and including 40 kHz: at least 116 Log_{10} ((f_d+10)/6.1) decibels or 50 plus 10 Log_{10} (P) decibels or 70 decibels, whichever is the lesser attenuation;

(ii) On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 40 kHz: at least 43+10 Log_{10} (P) decibels or 80 decibels, whichever is the lesser attenuation.

(2) For transmitters authorized a bandwidth of 10 kHz:

(i) On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency (f_d in kHz) of up to and including 20 kHz: at least 116 × Log_{10} ((f_d+5)/3.05) decibels or 50+10×Log_{10} (P) decibels or 70 decibels, whichever is the lesser attenuation;

(ii) On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 20 kHz: at least 43+10 Log $_{10}$ (P) decibels or 80 decibels, whichever is the lesser attenuation.

(b) The measurements of emission power can be expressed in peak or average values provided they are expressed in the same parameters as the transmitter power.

(c) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

(d) The following minimum spectrum analyzer resolution bandwidth settings will be used: 300 Hz when showing compliance with paragraphs (a)(1)(i) and (a)(2)(i) of this section; and 30 kHz when showing compliance with paragraphs (a)(1)(ii) and (a)(2)(ii) of this section.

[58 FR 59183, Nov. 8, 1993. Redesignated at 59 FR 18499, April 19, 1994, as amended at 59 FR 14119, Mar. 25, 1994; 66 FR 10968, Feb. 21, 2001]

§ 24.134 Co-channel separation criteria.

The minimum co-channel separation distance between base stations in different service areas is 113 kilometers (70 miles). A co-channel separation distance is not required for the base stations of the same licensee or when the affected parties have agreed to other co-channel separation distances.

§ 24.135 Frequency stability.

(a) The frequency stability of the transmitter shall be maintained within ± 0.0001 percent (± 1 ppm) of the center frequency over a temperature variation of −30° Celsius to +50° Celsius at normal supply voltage, and over a variation in the primary supply voltage of 85 percent to 115 percent of the rated supply voltage at a temperature of 20° Celsius.

(b) For battery operated equipment, the equipment tests shall be performed using a new battery without any further requirement to vary supply voltage.

(c) It is acceptable for a transmitter to meet this frequency stability requirement over a narrower temperature range provided the transmitter

ceases to function before it exceeds these frequency stability limits.

Subpart E—Broadband PCS

SOURCE: 59 FR 32854, June 24, 1994, unless otherwise noted.

§ 24.200 Scope.

This subpart sets out the regulations governing the licensing and operations of personal communications services authorized in the 1850–1910 and 1930–1990 MHz bands.

§ 24.202 Service areas.

Broadband PCS service areas are Major Trading Areas (MTAs) and Basic Trading Areas (BTAs) as defined in this section. MTAs and BTAs are based on the Rand McNally 1992 Commercial Atlas & Marketing Guide, 123rd Edition, at pages 38–39 (''BTA/MTA Map''). Rand McNally organizes the 50 states and the District of Columbia into 47 MTAs and 487 BTAs. The BTA/MTA Map is available for public inspection at the Office of Engineering and Technology's Technical Information Center, 445 12th Street, SW, Washington, DC 20554.

(a) The MTA service areas are based on the Rand McNally *1992 Commercial Atlas & Marketing Guide*, 123rd Edition, at pages 38–39, with the following exceptions and additions:

(1) Alaska is separated from the Seattle MTA and is licensed separately.

(2) Guam and the Northern Mariana Islands are licensed as a single MTA-like area.

(3) Puerto Rico and the United States Virgin Islands are licensed as a single MTA-like area.

(4) American Samoa is licensed as a single MTA-like area.

(b) The BTA service areas are based on the Rand McNally *1992 Commercial Atlas & Marketing Guide*, 123rd Edition, at pages 38–39, with the following additions licensed separately as BTA-like areas: American Samoa; Guam; Northern Mariana Islands; Mayagüez/Aguadilla-Ponce, Puerto Rico; San Juan, Puerto Rico; and the United States Virgin Islands. The Mayagüez/Aguadilla-Ponce BTA-like service area consists of the following municipios: Adjuntas, Aguada, Aguadilla, Añasco, Arroyo, Cabo Rojo, Coamo, Guánica, Guayama, Guayanilla, Hormigueros, Isabela, Jayuya, Juana Díaz, Lajas, Las Marías, Mayagüez, Maricao, Maunabo, Moca, Patillas, Peñuelas, Ponce, Quebradillas, Rincón, Sabana Grande, Salinas, San Germán, Santa Isabel, Villalba, and Yauco. The San Juan BTA-like service area consists of all other municipios in Puerto Rico.

[59 FR 32854, June 24, 1994; 59 FR 40835, Aug. 10, 1994; 63 FR 68952, Dec. 14, 1998; 65 FR 53636, Sept. 5, 2000]

§ 24.203 Construction requirements.

(a) Licensees of 30 MHz blocks must serve with a signal level sufficient to provide adequate service to at least one-third of the population in their licensed area within five years of being licensed and two-thirds of the population in their licensed area within 10 years of being licensed. Licensees may choose to define population using the 1990 census or the 2000 census. Failure by any licensee to meet these requirements will result in forfeiture or nonrenewal of the license and the licensee will be ineligible to regain it.

(b) Licensees of 10 MHz blocks, including 10 MHz C block licenses reconfigured pursuant to Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees, WT Docket No. 97–82, *Sixth Report and Order*, FCC 00–313, and 15 MHz blocks resulting from the disaggregation option as provided in the Commission's Rules Regarding Installment payment Financing for Personal Communications Services (PCS) Licensees, Second Report and Order and Further Notice of Proposed Rule Making, WT Docket 97–82, 12 FCC Rcd 16436 (1997), as modified by Order on Reconsideration of the Second Report and Order, WT Docket 97–82, 13 FCC Rcd 8345 (1998), must serve with a signal level sufficient to provide adequate service to at least one-quarter of the population in their licensed area within five years of being licensed, or make a showing of substantial service in their licensed area within five years of being licensed. Population is defined as the 1990 population census. Licensees may elect to use the 2000 population

census to determine the five-year construction requirement. Failure by any licensee to meet these requirements will result in forfeiture of the license and the licensee will be ineligible to regain it.

(c) Licensees must file maps and other supporting documents showing compliance with the respective construction requirements within the appropriate five- and ten-year benchmarks of the date of their initial licenses.

[58 FR 59183, Nov. 8, 1993, as amended at 64 FR 26890, May 18, 1999; 65 FR 53636, Sept. 5, 2000]

§ 24.229 Frequencies.

The frequencies available in the Broadband PCS service are listed in this section in accordance with the frequency allocations table of § 2.106 of this chapter.

(a) The following frequency blocks are available for assignment on an MTA basis:

Block A: 1850–1865 MHz paired with 1930–1945 MHz; and

Block B: 1870–1885 MHz paired with 1950–1965 MHz.

(b) The following frequency blocks are available for assignment on a BTA basis:

Block C: 1895–1910 MHz paired with 1975–1990 MHz;

Pursuant to Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees, WT Docket No. 97–82, *Sixth Report and Order*, FCC 00–313, all 30 MHz Block C licenses available for auction in Auction No. 35 or any subsequent auction will be reconfigured into three 10 MHz C block licenses as follows: 1895–1900 MHz paired with 1975–1980 MHz, 1900–1905 MHz paired with 1980–1985 MHz, 1905–1910 MHz paired with 1985–1990 MHz;

Block D: 1865–1870 MHz paired with 1945–1950 MHz;

Block E: 1885–1890 MHz paired with 1965–1970 MHz;

Block F: 1890–1895 MHz paired with 1970–1975 MHz;

[59 FR 32854, June 24, 1994, as amended at 60 FR 13917, Mar. 15, 1995; 60 FR 26375, May 17, 1995; 61 FR 33868, July 1, 1996; 62 FR 660, Jan. 6, 1997; 65 FR 53637, Sept. 5, 2000]

§ 24.232 Power and antenna height limits.

(a) Base stations are limited to 1640 watts peak equivalent isotropically radiated power (e.i.r.p.) with an antenna height up to 300 meters HAAT. See § 24.53 for HAAT calculation method. Base station antenna heights may exceed 300 meters with a corresponding reduction in power; see Table 1 of this section. In no case may the peak output power of a base station transmitter exceed 100 watts. The service area boundary limit and microwave protection criteria specified in § 24.236 and § 24.237 apply.

TABLE 1.—REDUCED POWER FOR BASE STATION ANTENNA HEIGHTS OVER 300 METERS

HAAT in meters	Maximum e.i.r.p. (watts)
≤300	1,640
≤500	1,070
≤1,000	490
≤1,500	270
≤2,000	160

(b) Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

(c) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, *etc.*, so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

§ 24.235 Frequency stability.

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

§ 24.236 Field strength limits.

The predicted or measured median field strength at any location on the border of the PCS service area shall not exceed 47 dBuV/m unless the parties agree to a higher field strength.

§ 24.237 Interference protection.

(a) All licensees are required to coordinate their frequency usage with the co-channel or adjacent channel incumbent fixed microwave licensees in the 1850–1990 MHz band. Coordination must occur before initiating operations from any base station. Problems that arise during the coordination process are to be resolved by the parties to the coordination. Licensees are required to coordinate with all users possibly affected, as determined by Appendix I to this subpart E (Appendix E of the Memorandum Opinion and Order, GEN Docket No. 90–314, FCC 94–144; TIA Telecommunications Systems Bulletin 10–F, ''Interference Criteria for Microwave Systems,'' May 1994, (TSB10–F)); or an alternative method agreed to by the parties.

(b) The results of the coordination process need to be reported to the Commission only if the parties fail to agree. Because broadband PCS licensees are required to protect fixed microwave licensees in the 1850–1990 MHz band, the Commission will be involved in the coordination process only upon complaint of interference from a fixed microwave licensee. In such a case, the Commission will resolve the issues.

(c) In all other respects, coordination procedures are to follow the requirements of § 101.103(d) of this chapter to the extent that these requirements are not inconsistent with those specified in this part.

(d) The licensee must perform an engineering analysis to assure that the proposed facilities will not cause interference to existing OFS stations within the coordination distance specified in Table 2 of a magnitude greater than that specified in the criteria set forth in paragraph (e) and (f) of this section, unless there is prior agreement with the affected OFS licensee. Interference calculations shall be based on the sum of the power received at the terminals of each microwave receiver from all of the applicant's current and proposed PCS operations.

TABLE 2.—COORDINATION DISTANCES IN KILOMETERS

[PCS Base Station Antenna HAAT in Meters]

e.i.r.p. (W)	5	10	20	50	100	150	200	250	300	500	1000	1500	2000
0.1	90	93	99	110	122	131	139	146	152	173	210	239	263
0.5	96	100	105	116	128	137	145	152	158	179	216	245	269
1	99	103	108	119	131	140	148	155	161	182	219	248	272
2	120	122	126	133	142	148	154	159	164	184	222	250	274
5	154	157	161	168	177	183	189	194	198	213	241	263	282
10	180	183	187	194	203	210	215	220	225	240	268	291	310
20	206	209	213	221	229	236	242	247	251	267	296	318	337
50	241	244	248	255	264	271	277	282	287	302	331	354	374
100	267	270	274	282	291	297	303	308	313	329	358	382	401
200	293	296	300	308	317	324	330	335	340	356	386	409	.....
500	328	331	335	343	352	359	365	370	375	391	421	.....	.....
1000	354	357	361	369	378	385	391	397	402	418	.....	.....	.....
1200	361	364	368	376	385	392	398	404	409	.....	.....	.....	.....
1640	372	375	379	338	397	404	410	416	421	.....	.....	.....	.....

Note: If actual value does not match table values, round to the closest higher value on this table. See Section 24.53 for HAAT calculation method.

(e) For microwave paths of 25 kilometers or less, interference determinations shall be based on the C/I criteria set forth in TIA Telecommunications Systems Bulletin 10–F, ''Interference Criteria for Microwave Systems,'' May 1994 (TSB10–F).

(f) For microwave paths longer than 25 kilometers, the interference protection criterion shall be such that the

interfering signal will not produce more than 1.0 dB degradation of the practical threshold of the microwave receiver for analog system, or such that the interfering signal will not cause an increase in the bit error rate (BER) from 10E–6 to 10E–5 for digital systems.

(g) The development of the C/I ratios and interference criteria specified in paragraphs (e) and (f) of this section and the methods employed to compute the interfering power at the microwave receivers shall follow generally acceptable good engineering practices. The procedures described for computing interfering signal levels in (Appendix I to this subpart E Appendix E of the Memorandum Opinion and Order, GEN Docket No. 90–314, FCC 94–144) shall be applied. Alternatively, procedures for determining interfering signal levels and other criteria as may be developed by the Electronics Industries Association (EIA), the Institute of Electrical and Electronics Engineers, Inc. (IEEE), the American National Standards Institute (ANSI) or any other recognized authority will be acceptable to the Commission.

[59 FR 32854, June 24, 1994, as amended at 61 FR 29691, June 21, 1996]

§ 24.238 Emission limits.

(a) On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB.

(b) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

(d) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

(e) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

POLICIES GOVERNING MICROWAVE RELOCATION FROM THE 1850–1990 MHZ BAND

§ 24.239 Cost-sharing requirements for broadband PCS.

Frequencies in the 1850–1990 MHz band listed in § 101.147(c) of this chapter have been allocated for use by PCS. In accordance with procedures specified in §§ 101.69 through 101.81 of this chapter, PCS entities (both licensed and unlicensed) are required to relocate the existing Fixed Microwave Services (FMS) licensees in these bands if interference to the existing FMS operations would occur. All PCS entities who benefit from spectrum clearance by other PCS entities or a voluntarily relocating microwave incumbent, must contribute to such relocation costs. PCS entities may satisfy this requirement by entering into private cost-sharing agreements or agreeing to terms other than those specified in § 24.243. However, PCS entities are required to reimburse other PCS entities or voluntarily relocating microwave incumbents that incur relocation costs and are not parties to the alternative agreement. In addition, parties to a private cost-sharing agreement may seek reimbursement through the clearinghouse (as discussed in § 24.241) from PCS entities that are not parties to the agreement. The cost-sharing plan is in effect during all phases of microwave relocation specified in § 101.69 of this chapter.

[62 FR 12757, Mar. 18, 1997]

§ 24.241 Administration of the Cost-Sharing Plan.

The Wireless Telecommunications Bureau, under delegated authority, will select an entity to operate as a neutral, not-for-profit clearinghouse. This clearinghouse will administer the cost-

sharing plan by, *inter alia*, maintaining all of the cost and payment records related to the relocation of each link and determining the cost-sharing obligation of subsequent PCS entities. The cost-sharing rules will not take effect until an administrator is selected.

[61 FR 29691, June 12, 1996]

§ 24.243 The cost-sharing formula.

A PCS relocator who relocates an interfering microwave link, *i.e.* one that is in all or part of its market area and in all or part of its frequency band or a voluntarily relocating microwave incumbent, is entitled to *pro rata* reimbursement based on the following formula:

$$R_N = \frac{C}{N} \times \frac{\left[120 - \left(T_m\right)\right]}{120}$$

(a) *RN* equals the amount of reimbursement.

(b) *C* equals the actual cost of relocating the link. Actual relocation costs include, but are not limited to, such items as: Radio terminal equipment (TX and/or RX—antenna, necessary feed lines, MUX/Modems); towers and/or modifications; back-up power equipment; monitoring or control equipment; engineering costs (design/path survey); installation; systems testing; FCC filing costs; site acquisition and civil works; zoning costs; training; disposal of old equipment; test equipment (vendor required); spare equipment; project management; prior coordination notification under § 101.103(d) of this chapter; site lease renegotiation; required antenna upgrades for interference control; power plant upgrade (if required); electrical grounding systems; Heating Ventilation and Air Conditioning (HVAC) (if required); alternate transport equipment; and leased facilities. C also includes voluntarily relocating microwave incumbent's independent third party appraisal of its compensable relocation costs and incumbent transaction expenses that are directly attributable to the relocation, subject to a cap of two percent of the ''hard'' costs involved. C may not exceed $250,000 per link, with an additional $150,000 permitted if a new or modified tower is required.

(c) *N* equals the number of PCS entities that would have interfered with the link. For the PCS relocator, N=1. For the next PCS entity that would have interfered with the link, N=2, and so on. In the case of a voluntarily relocating microwave incumbent, N=1 for the first PCS entity that would have interfered with the link. For the next PCS entity that would have interfered with the link, N=2, and so on.

(d) *Tm* equals the number of months that have elapsed between the month the PCS relocator or voluntarily relocating microwave incumbent obtains reimbursement rights for the link and the month that the clearinghouse notifies a later-entrant of its reimbursement obligation for the link. A PCS relocator obtains reimbursement rights for the link on the date that it signs a relocation agreement with a microwave incumbent. A voluntarily relocating microwave incumbent obtains reimbursement rights for the link on the date that the incumbent notifies the Commission that it intends to discontinue, or has discontinued, the use of the link, pursuant to § 101.305 of the Commission's rules.

[62 FR 12757, Mar. 18, 1997, as amended at 65 FR 46113, July 27, 2000]

§ 24.245 Reimbursement under the Cost-Sharing Plan.

(a) *Registration of reimbursement rights.* (1) To obtain reimbursement, a PCS relocator must submit documentation of the relocation agreement to the clearinghouse within ten business days of the date a relocation agreement is signed with an incumbent.

(2) To obtain reimbursement, a voluntarily relocating microwave incumbent must submit documentation of the relocation of the link to the clearinghouse within ten business days of the date that the incumbent notifies the Commission that it intends to discontinue, or has discontinued, the use of the link, pursuant to § 101.305 of the Commission's rules.

(b) *Documentation of expenses.* Once relocation occurs, the PCS relocator or the voluntarily relocating microwave incumbent, must submit documentation itemizing the amount spent for

items listed in § 24.243(b). The voluntarily relocating microwave incumbent, must also submit an independent third party appraisal of its compensable relocation costs. The appraisal should be based on the actual cost of replacing the incumbent's system with comparable facilities and should exclude the cost of any equipment upgrades or items outside the scope of § 24.243(b). The PCS relocator or the voluntarily relocating microwave incumbent, must identify the particular link associated with appropriate expenses (*i.e.*, costs may not be averaged over numerous links). If a PCS relocator pays a microwave incumbent a monetary sum to relocate its own facilities, the PCS relocator must estimate the costs associated with relocating the incumbent by itemizing the anticipated cost for items listed in § 24.243(b). If the sum paid to the incumbent cannot be accounted for, the remaining amount is not eligible for reimbursement. A PCS relocator may submit receipts or other documentation to the clearinghouse for all relocation expenses incurred since April 5, 1995.

(c) *Full Reimbursement*. A PCS relocator who relocates a microwave link that is either fully outside its market area or its licensed frequency band may seek full reimbursement through the clearinghouse of compensable costs, up to the reimbursement cap as defined in § 24.243(b). Such reimbursement will not be subject to depreciation under the cost-sharing formula.

[61 FR 29692, June 12, 1996, as amended at 62 FR 12757, Mar. 18, 1997; 65 FR 46113, July 27, 2000]

§ 24.247 Triggering a reimbursement obligation.

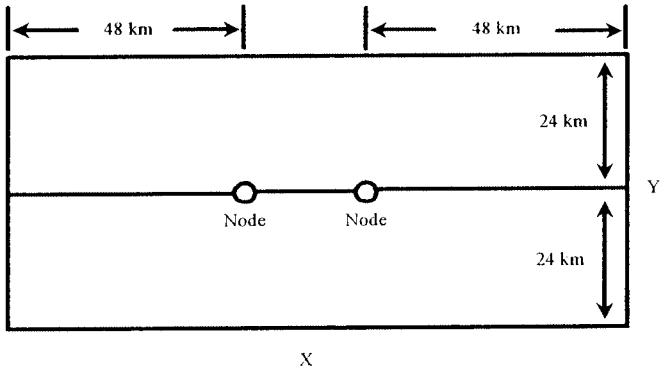
(a) *Licensed PCS*. The clearinghouse will apply the following test to determine if a PCS entity preparing to initiate operations must pay a PCS relocator or a voluntarily relocating microwave incumbent in accordance with the formula detailed in § 24.243:

(1) All or part of the relocated microwave link was initially co-channel with the licensed PCS band(s) of the subsequent PCS entity;

(2) A PCS relocator has paid the relocation costs of the microwave incumbent; and

(3) The subsequent PCS entity is preparing to turn on a fixed base station at commercial power and the fixed base station is located within a rectangle (Proximity Threshold) described as follows:

(i) The length of the rectangle shall be x where x is a line extending through both nodes of the microwave link to a distance of 48 kilometers (30 miles) beyond each node. The width of the rectangle shall be y where y is a line perpendicular to x and extending for a distance of 24 kilometers (15 miles) on both sides of x. Thus, the rectangle is represented as follows:



(ii) If the application of the Proximity Threshold test indicates that a reimbursement obligation exists, the clearinghouse will calculate the reimbursement amount in accordance with the cost-sharing formula and notify the subsequent PCS entity of the total amount of its reimbursement obligation.

(b) *Unlicensed PCS.* UTAM's reimbursement obligation is triggered either:

(1) When a county is cleared of microwave links in the unlicensed allocation, and UTAM invokes a Zone 1 power cap as a result of third party relocation activities; or

(2) A county is cleared of microwave links in the unlicensed allocation and UTAM reclassifies a Zone 2 county to Zone 1 status.

[61 FR 29692, June 12, 1996, as amended at 62 FR 12757, Mar. 18, 1997]

§ 24.249 Payment issues.

(a) *Timing.* On the day that a PCS entity files its prior coordination notice (PCN) in accordance with § 101.103(d) of this chapter, it must file a copy of the PCN with the clearinghouse. The clearinghouse will determine if any reimbursement obligation exists and notify the PCS entity in writing of its repayment obligation, if any. When the PCS entity receives a written copy of such obligation, it must pay directly to the PCS relocator or the voluntarily relocating microwave incumbent the amount owed within thirty days, with the exception of those businesses that qualify for installment payments. A business that qualifies for an installment payment plan must make its first installment payment within thirty days of notice from the clearinghouse. UTAM's first payment will be due thirty days after its reimbursement obligation is triggered, as described in § 24.247(b).

(b) *Eligibility for Installment Payments.* PCS licensees that are allowed to pay for their licenses in installments under our designated entity rules will have identical payment options available to them with respect to payments under the cost-sharing plan. The specific terms of the installment payment mechanism, including the treatment of principal and interest, are the same as those applicable to the licensee's installment auction payments. If, for any reason, the entity eligible for installment payments is no longer eligible for such installment payments on its license, that entity is no longer eligible for installment payments under the cost-sharing plan. UTAM may make quarterly payments over a five-year period with an interest rate of prime plus 2.5 percent. UTAM may also negotiate separate repayment arrangements with other parties.

[61 FR 29693, June 12, 1996, as amended at 62 FR 12757, Mar. 18, 1997]

§ 24.251 Dispute resolution under the Cost-Sharing Plan.

Disputes arising out of the cost-sharing plan, such as disputes over the amount of reimbursement required, must be brought, in the first instance, to the clearinghouse for resolution. To the extent that disputes cannot be resolved by the clearinghouse, parties are encouraged to use expedited ADR procedures, such as binding arbitration, mediation, or other ADR techniques.

[61 FR 29693, June 12, 1996]

§ 24.253 Termination of cost-sharing obligations.

The cost-sharing plan will sunset for all PCS entities on April 4, 2005, which is ten years after the date that voluntary negotiations commenced for A and B block PCS entities. Those PCS entities that are paying their portion of relocation costs on an installment basis must continue the payments until the obligation is satisfied.

[61 FR 29693, June 12, 1996]

APPENDIX I TO SUBPART E—A PROCEDURE FOR CALCULATING PCS SIGNAL LEVELS AT MICROWAVE RECEIVERS (APPENDIX E OF THE MEMORANDUM OPINION AND ORDER)

The new Rules adopted in Part 24 stipulate that estimates of interference to fixed microwave operations from a PCS operation will be based on the sum of signals received at a microwave receiver from the PCS operation. This appendix describes a procedure for computing this PCS level.

In general, the procedure involves four steps:

1. Determine the geographical coordinates of all microwave receivers operating on co-

channel and adjacent frequencies within the coordination distance of each base station and the characteristics of each receiver, *i.e.*, adjacent channel susceptibility, antenna gain, pattern and height, and line and other losses.

2. Determine an equivalent isotropically radiated power (e.i.r.p.) for each base station and equivalent e.i.r.p. values for the mobiles and portables associated with each base station. Determine the values of pertinent correction and weighting factors based on building heights and density and distribution of portables. Close-in situations, prominent hills, and extra tall buildings require special treatment.

3. Based on PCS e.i.r.p. values, correction and weighting factors, and microwave receiving system characteristics determined above, calculate the total interference power at the input of each microwave receiver, using the Longley-Rice propagation model.

4. Based on the interference power level computed in step 3, determine interference to each microwave receiver using criteria described in Part 24 and EIA/TIA Bulletin 10–F.

The interference from each base station and the mobiles and portables associated with it is calculated as follows:

$P_{rbi}=10\text{Log}\ (p_{tbi})-L_{bi}-UC_i+G_{mwi}-C_i-BP_i$

$P_{rmi}=10\text{Log}\ (n_{mi}\times p_{tmi})-L_{mi}-UC_i+G_{mwi}-C_i$

$P_{rpsi}=10\text{Log}\ (n_{psi}\times p_{tpsi})-L_{psi}-UC_i+G_{mwi}-C_i$

$P_{rpbi}=10\text{Log}\ (n_{pbi}\times p_{tpbi})-L_{pbi}-UC_i-(BP_i-BH_i)+G_{mwi}-C_i$

$P_{rpri}=10\text{Log}\ (n_{pri}\times p_{tpri})-L_{pri}-(UC_i-BH_i)+G_{mwi}-C_i$

where:

P refers to Power in dBm

p refers to power in milliwatts

P_{rbi}=Power at MW receiver from ith base station in dBm

p_{tbi}=e.i.r.p. transmitted from ith base station in milliwatts, which equals average power per channel x number of channels x antenna gain with respect to an isotropic antenna—line loss

L_{bi}=Path loss between MW and base station site in dB

UC_i=Urban correction factor in dB

G_{mwi}=Gain of MW antenna in pertinent direction (dBi)

C_i=Channel discrimination of MW system in dB

P_{rmi}=Power at MW receiver from mobiles associated with ith base station

p_{tmi}=e.i.r.p. transmitted from mobiles associated with ith base station

n_{mi}=Number of mobiles associated with ith base station

L_{mi}=Path loss between MW and mobile transmitters in dB

P_{rpsi}=Power at MW receiver from outdoor portables (s for sidewalk)

p_{tpsi}=e.i.r.p. transmitted from outdoor portables associated with ith base station

n_{psi}=Number of outdoor portables associated with ith base station

L_{psi}=Path loss between MW and outdoor portables in dB

P_{rpbi}=Power at MW receiver from indoor portables (b for building)

p_{tpbi}=e.i.r.p. transmitted from indoor portables associated with ith base station

n_{pbi}=number of indoor portables associated with ith base station

L_{pbi}=Path loss in dB between MW and base station site (using average building height divided by 2 as effective antenna height)

P_{rpri}=Power at MW receiver from rooftop portables (r for rooftop)

p_{tpri}=e.i.r.p. transmitted from rooftop portables associated with ith base station

n_{pri}=Number of rooftop portables associated with ith base station

L_{pri}=Path loss in dB between MW and base station site (using average building height as effective antenna height)

BP_i=Building penetration loss at street level in dB

BH_i=Height gain for portables in buildings dB=2.5×(nf–1), where nf is number of floors

NOTE: where C_i varies from channel-to-channel, which often is the case, the summation process is more complex, requiring summation at a channel level first.

Finally, the total PCS interference power at a given microwave receiver from all the base stations in a given frequency band is found by summing the contributions from the individual stations. Likewise, the total interference power at a given microwave receiver from all mobiles and portables operating in a given frequency band is found by summing the contributions from the mobiles and portables associated with each cell.

$$p_{rb} = \sum_i p_{rbi} \text{ milliwatts}$$

$$p_{rm} = \sum_i \left(p_{rmi} + p_{rpsi} + p_{rpbi} + p_{rpri}\right) \text{ milliwatts}$$

$$P = 10 \text{ Log}(p) \text{ dBm}$$

Base Stations. Interference from each base station to each microwave should normally be considered independently. A group of base stations having more or less (within ± 50 percent) the same height above average terrain, the same e.i.r.p., basically the same path to a microwave receiving site, and subtending an angle to that receiving site of less than 5 degrees, may be treated as a group, using the total power of the group and the average antenna height of the group to calculate path loss, L.

Mobile Stations. The e.i.r.p. from mobile transmitters is weighted according to the number of base station channels expected to be devoted to mobile operation at any given time. The antenna height of mobiles used in calculating path loss, L, is assumed to be 2 meters.

Portable Stations. The e.i.r.p. from the portable units associated with each base station is weighted according to the estimated portion of portables associated with that cell expected to be operated inside buildings at any given time and the portion which could be expected to be operating from elevated locations, such as balconies or building rooftops. For example, in the case of service intended for business use in an urban area, one might expect that perhaps 85 percent of the portables in use at any given time would be operating from within buildings and perhaps 5 percent might be operating from rooftops or balconies. The remaining 10 percent would be outside at street level.

Calculation of an equivalent e.i.r.p. for cells in suburban areas will involve different weighting criteria.

Urban Correction Factor. The urban correction factor (UC) depends on the height and density of buildings surrounding a base station. For the core area of large cities, it is assumed to be 35 dB. For medium size cities and fringe areas of large cities (4- to 6-story buildings with scattered taller buildings and lower buildings and open spaces) it is assumed to be 25 dB; for small cities and towns, 15 dB, and for suburban residential areas (one- and two-story, single family houses with scattered multiple-story apartment buildings, shopping centers and open areas), 10 dB.

The unadjusted urban correction factor, UC, should not be applied to base station antenna heights that are greater than 50 percent of the average building height for a cell.

Building Height and Building Penetration Factors. The building height correction, BH, is a function of the average building height within the nominal coverage area of the base station. It is used in conjunction with the building penetration loss, BP, to adjust the expected interference contribution from that portion of the portables transmitting from within buildings. The adjustment is given by:

BP=20 dB in urban areas
BP=10 dB in suburban areas
BH=2.5×(nf–1) dB

where nf is the average height (number of floors) of the buildings in the area.

(Note that this formula implies a net gain when the average building height is greater than 8 floors). All buildings more than twice the average height should be considered individually. The contribution to BH from that portion of portables in the building above the average building height should be increased by a factor of 20Log(h) dB, where h is the height of the portables above the average building height in meters.

Channel Discrimination Factor. A factor based on the interference selectivity of the microwave receiver.

Propagation Model. The PCS to microwave path loss, L, is calculated using the Longley-Rice propagation model, Version 1.2.2., in the point-to-point mode. The Longley-Rice [1] model was derived from NBS Technical Note 101 [2], and updated in 1982 by Hufford [3]. Version 1.2.2 incorporated modifications described in a letter by Hufford [4] in 1985. Terrain elevations used as input to the model should be from the U.S. Geological Survey 3-second digitized terrain database.

Special Situations. If a cell size is large compared to the distance between the cell and a microwave receiving site so that it subtends an angle greater than 5 degrees, the cell should be subdivided and calculations should be based on the expected distribution of mobiles and portables within each subdivision.

If terrain elevations within a cell differ by more than a factor of two-to-one, the cell should be subdivided and microwave interference calculations should be based on the average terrain elevation for each subdivision.

If a co-channel PCS base station lies within the main beam of a microwave antenna (±5 degrees), there is no intervening terrain obstructions, and the power at the microwave receiver from that base station, assuming free space propagation, would be 3 dB or less below the interference threshold, interference will be assumed to exist unless the PCS licensee can demonstrate otherwise by specific path loss calculations based on terrain and building losses.

If any part of a cell or cell subdivision lies within the main beam of a co-channel microwave antenna, there is no intervening terrain obstructions, and the accumulative power of 5 percent or less of the mobiles, assuming free space propagation would be 3 dB or less below the interference threshold, interference will be assumed to exist unless the PCS licensee can demonstrate otherwise by specific path loss calculations based on terrain and building losses.

If a building within a cell or cell subdivision lies within the main beam of a co-channel microwave antenna, there is no intervening terrain obstructions, and the cumulative power of 5 percent or fewer of the portables, assuming free space propagation, would be 3 dB or less below the interference threshold, interference will be assumed to exist unless the PCS licensee can demonstrate otherwise by specific path loss calculations based on terrain and building losses.

REFERENCES:

1. Longley, A.G. and Rice, P.L., ''Prediction of Tropospheric Radio Transmission Loss Over Irregular Terrain, A Computer Method-1968'', ESSA Technical Report ERL 79–ITS 67, Institute for Telecommunications Sciences, July 1968.

2. Rice, P.L. Longley, A.G., Norton, K.A., Barsis, A.P., ''Transmission Loss Predictions for Tropospheric Communications Circuits,'' NBS Technical Note 101 (Revised), Volumes I and II, U.S. Department of Commerce, 1967.

3. Hufford, G.A., Longley, A.G. and Kissick, W.A., ''A Guide to the use of the ITS Irregular Terrain Model in the Area Prediction Mode'', NTIA Report 82–100, U.S. Department of Commerce, April 1982. Also, Circular letter, dated January 30, 1985, from G.A. Hufford, identifying modifications to the computer program.

4. Hufford, G.A., Memorandum to Users of the ITS Irregular Terrain Model, Institute for Telecommunications Sciences, U.S. Department of Commerce, January 30, 1985.

Subpart F—Competitive Bidding Procedures for Narrowband PCS

SOURCE: 59 FR 26747, May 24, 1994, unless otherwise noted.

§ 24.301 Narrowband PCS subject to competitive bidding.

Mutually exclusive initial applications to provide narrowband PCS service are subject to competitive bidding procedures. The general competitive bidding procedures found in 47 CFR part 1, subpart Q, will apply unless otherwise provided in this part.

§ 24.302–24.309 [Reserved]

§ 24.320 [Reserved]

§ 24.321 Designated entities.

(a) *Eligibility for small business provisions.* (1) A small business is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding $40 million for the preceding three years.

(2) A very small business is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding $15 million for the preceding three years.

(3) For purposes of determining whether an entity meets either of the definitions set forth in paragraphs (a)(1) and (a)(2) of this section, the gross revenues of the entity, its controlling interests and affiliates shall be considered on a cumulative basis and aggregated. An applicant seeking status as a small business or very small business under this section must disclose on its short- and long-form applications, separately and in the aggregate, the gross revenues of the applicant (or licensee), its controlling interests and affiliates for each of the previous three years.

(4) Persons or entities that hold interests in an applicant (or licensee) that are affiliates of each other or have an identity of interests identified in § 1.2110(b)(4)(iii) of this chapter will be treated as though they were one person or entity and their ownership interests aggregated for purposes of determining an applicant's (or licensee's) compliance with the requirements of this section.

(5) Where an applicant (or licensee) cannot identify controlling interests under the standards set forth in this section, the gross revenues of all interest holders in the applicant, and their affiliates, will be attributable.

(6) A consortium of small businesses (or a consortium of very small businesses) is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(1) of this section (or each of which individually satisfies the definition in paragraph (a)(2) of this section). Where an applicant or licensee is a consortium of small businesses (or very small businesses), the gross revenues of each small business (or very small business) shall not be aggregated.

(7) Designated entities must describe on their long-form applications how they satisfy the requirements for eligibility for designated entity status, and must list and summarize on their long-form applications all agreements that affect designated entity status such as partnership agreements, shareholder agreements, management agreements and other agreements, including oral agreements, establishing, as applicable, *de facto* or *de jure* control of the entity. Such information must be maintained at the licensee's facilities or by its designated agent for the term of the license in order to enable the Commission to audit designated entity eligibility on an ongoing basis.

(b) *Controlling interest.* (1) For purposes of this section, a controlling interest includes individuals or entities with either *de jure* or *de facto* control of the applicant. *De jure* control is evidenced by holdings of greater than 50 percent of the voting stock of a corporation, or in the case of a partnership, general partnership interests. *De facto* control is determined on a case-by-case basis. An entity must disclose its equity interest and demonstrate at least the following indicia of control to establish that it retains *de facto* control of the applicant:

(i) The entity constitutes or appoints more than 50 percent of the board of directors or management committee;

(ii) The entity has authority to appoint, promote, demote, and fire senior executives that control the day-to-day activities of the licensee; and

(iii) The entity plays an integral role in management decisions.

(2) The following rules apply for the calculation of certain interests.

(i) Ownership interests shall be calculated on a fully diluted basis; all agreements such as warrants, stock options, and convertible debentures will generally be treated as if the rights thereunder already have been fully exercised.

(ii) Partnership and other ownership interests and any stock interest equity, or outstanding stock, or outstanding voting stock shall be attributed as specified in this paragraph (b).

(iii) Stock interests held in trust shall be attributed to any person who holds or shares the power to vote such stock, to any person who has the sole power to sell such stock, and to any person who has the right to revoke the trust at will or to replace the trustee at will. If the trustee has a familial, personal, or extra-trust business relationship to the grantor or the beneficiary, the stock interests held in trust will be attributed to the grantor or beneficiary, as appropriate.

(iv) Non-voting stock shall be attributed as an interest in the issuing entity.

(v) Limited partnership interests shall be attributed to limited partners and shall be calculated according to both the percentage of equity paid in and the percentage of distribution of profits and losses.

(vi) Officers and directors of an entity shall be considered to have a controlling interest in the entity. The officers and directors of an entity that controls a licensee or applicant shall be considered to have a controlling interest in the licensee or applicant.

(vii) Ownership interests that are held indirectly by any party through one or more intervening corporations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that if the ownership percentage for an interest in any link in the chain exceeds 50 percent or represents actual control, it shall be treated as if it were a 100 percent interest.

(viii) Any person who manages the operations of an applicant or licensee pursuant to a management agreement

shall be considered to have a controlling interest in such applicant or licensee if such person, or its affiliate, has authority to make decisions or otherwise engage in practices or activities that determine, or significantly influence:

(A) The nature or types of services offered by such an applicant or licensee;

(B) The terms upon which such services are offered; or

(C) The prices charged for such services.

(ix) Any licensee or its affiliate who enters into a joint marketing arrangement with an applicant or licensee, or its affiliate, shall be considered to have a controlling interest, if such applicant or licensee, or its affiliate, has authority to make decisions or otherwise engage in practices or activities that determine, or significantly influence:

(A) The nature or types of services offered by such an applicant or licensee;

(B) The terms upon which such services are offered; or

(C) The prices charged for such services.

(c) *Bidding credits.* (1) After August 7, 2000, a winning bidder that qualifies as a small business or a consortium of small businesses as defined in this section may use the bidding credit specified in §1.2110(e)(2)(iii) of this chapter. A winning bidder that qualifies as a very small business or a consortium of very small businesses as defined in this section may use the bidding credit specified in §1.2110(e)(2)(ii) of this chapter.

(2)(i) Businesses owned by members of minority groups and women, including small businesses owned by members of minority groups and women, that are winning bidders on nationwide licenses on Channel 5, Channel 8, and Channel 11 prior to [effective date of rules] will be eligible for a twenty-five (25) percent bidding credit.

(ii) Businesses owned by members of minority groups and women, including small businesses owned by members of minority groups and women, that are winning bidders on regional licenses on Channel 13 and Channel 17 prior to August 7, 2000 will be eligible for a forty (40) percent bidding credit.

(d) Installment payments. Small businesses, including small businesses owned by members of minority groups and women, that are winning bidders on any regional license prior to August 7, 2000 will be eligible to pay the full amount of their winning bids in installments over the term of the license pursuant to the terms set forth in §1.2110(f) of this chapter.

[65 FR 35854, June 6, 2000]

Subpart G—Interim Application, Licensing and Processing Rules for Narrowband PCS

SOURCE: 59 FR 26749, May 24, 1994, unless otherwise noted.

§24.403 Authorization required.

No person shall use or operate any device for the transmission of energy or communications by radio in the services authorized by this part except as provided in this part.

§24.404 Eligibility.

(a) *General.* Authorizations will be granted upon proper application if:

(1) The applicant is qualified under the applicable laws and the regulations, policies and decisions issued under the laws, including §24.12;

(2) There are frequencies available to provide satisfactory service; and

(3) The public interest, convenience or necessity would be served by a grant.

(b) *Alien ownership.* A narrowband PCS authorization to provide Commercial Mobile Radio Service may not be granted to or held by:

(1) Any alien or the representative of any alien.

(2) Any corporation organized under the laws of any foreign government.

(3) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or any corporation organized under the laws of a foreign country.

(4) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned or voted by aliens, their representatives, or by a

foreign government or representative thereof, or by any corporation organized under the laws of a foreign country, if the Commission finds that the public interest will be served by the refusal or revocation of such license. A Narrowband PCS authorization to provide Private Mobile Radio Service may not be granted to or held by a foreign government or a representative thereof.

[59 FR 26749, May 24, 1994, as amended at 61 FR 55581, Oct. 28, 1996; 65 FR 35855, June 6, 2000]

§§ 24.405–24.414 [Reserved]

§ 24.415 Technical content of applications; maintenance of list of station locations.

(a) All applications required by this part shall contain all technical information required by the application forms or associated public notice(s). Applications other than initial applications for a narrowband PCS license must also comply with all technical requirements of the rules governing the narrowband PCS (see subparts C and D as appropriate). The following paragraphs describe a number of general technical requirements.

(b) Each application (except applications for initial licenses filed on Form 175) for a radio station authorization for narrowband PCS must comply with the provisions of §§ 24.129 through 24.135.

(c)—(i) [Reserved]

(j) The location of the transmitting antenna shall be considered to be the station location. Narrowband PCS licensees must maintain a current list of all station locations, which must describe the transmitting antenna site by its geographical coordinates and also by conventional reference to street number, landmark, or the equivalent. All such coordinates shall be specified in terms of degrees, minutes, and seconds to the nearest second of latitude and longitude.

[59 FR 26749, May 24, 1994; 59 FR 43898, Aug. 25, 1994]

§§ 24.416–24.429 [Reserved]

§ 24.430 Opposition to applications.

(a) Petitions to deny (including petitions for other forms of relief) and responsive pleadings for Commission consideration must comply with § 1.2108 of this chapter and must:

(1) Identify the application or applications (including applicant's name, station location, Commission file numbers and radio service involved) with which it is concerned;

(2) Be filed in accordance with the pleading limitations, filing periods, and other applicable provisions of §§ 1.41 through 1.52 of this chapter except where otherwise provided in § 1.2108 of this chapter;

(3) Contain specific allegations of fact which, except for facts of which official notice may be taken, shall be supported by affidavit of a person or persons with personal knowledge thereof, and which shall be sufficient to demonstrate that the petitioner (or respondent) is a party in interest and that a grant of, or other Commission action regarding, the application would be prima facie inconsistent with the public interest; and

(4) Contain a certificate of service showing that it has been mailed to the applicant no later than the date of filing thereof with the Commission.

(b) A petition to deny a major amendment to a previously filed application may only raise matters directly related to the amendment which could not have been raised in connection with the underlying, previously filed application. This does not apply to petitioners who gain standing because of the major amendment.

(c) Parties who file frivolous petitions to deny may be subject to sanctions including monetary forfeitures, license revocation, if they are FCC licensees, and may be prohibited from participating in future auctions.

[59 FR 44072, Aug. 26, 1994, as amended at 65 FR 35855, June 6, 2000]

§ 24.431 Mutually exclusive applications.

(a) The Commission will consider applications to be mutually exclusive if

their conflicts are such that the grant of one application would effectively preclude by reason of harmful electrical interference, or other practical reason, the grant of one or more of the other applications. The Commission will presume ''harmful electrical interference'' to mean interference which would result in a material impairment to service rendered to the public despite full cooperation in good faith by all applicants or parties to achieve reasonable technical adjustments which would avoid electrical conflict.

(b) Mutually exclusive applications filed on Form 175 for the initial provision of narrowband PCS service are subject to competitive bidding in accordance with the procedures in subpart F of this part and in 47 CFR part 1, subpart Q.

(c) An application will be entitled to comparative consideration with one or more conflicting applications only if the Commission determines that such comparative consideration will serve the public interest.

§§ 24.432–24.444 [Reserved]

Subpart H—Competitive Bidding Procedures for Broadband PCS

SOURCE: 59 FR 37604, July 22, 1994, unless otherwise noted.

§ 24.701 Broadband PCS subject to competitive bidding.

Mutually exclusive initial applications to provide broadband PCS service are subject to competitive bidding procedures. The general competitive bidding procedures found in 47 CFR part 1, subpart Q will apply unless otherwise provided in this part.

§ 24.702 Competitive bidding design for Broadband PCS licensing.

(a) The Commission will employ the following competitive bidding designs when choosing from among mutually exclusive initial applications to provide broadband PCS service:

(1) Simultaneous multiple round auctions.

(2) Sequential auctions.

(b) The Commission may design and test alternative procedures. The Commission will announce by Public Notice before each auction the competitive bidding design to be employed in a particular auction.

(c) The Commission may use combinatorial bidding, which would allow bidders to submit all or nothing bids on combinations of licenses, in addition to bids on individual licenses. The Commission may require that to be declared the high bid, a combinatorial bid must exceed the sum of the individual bids by a specified amount or percentage. Combinatorial bidding may be used with any type of auction design.

(d) The Commission may use single combined auctions, which combine bidding for two or more substitutable licenses and award licenses to the highest bidders until the available licenses are exhausted. This technique may be used in conjunction with any type of auction.

§ 24.703 [Reserved]

§ 24.704 Withdrawal, default and disqualification penalties.

See § 1.2104 of this chapter.

[63 FR 50799, Sept. 23, 1998]

§ 24.705 [Reserved]

§ 24.706 Submission of upfront payments and down payments.

(a) All auction participants are required to submit an upfront payment in accordance with § 1.2106 of this chapter. Any C block applicant that has previously been in default on any Commission licenses or has previously been delinquent on any non-tax debt owed to any Federal agency must submit an upfront payment equal to 50 percent more than that set for each particular license.

(b) Winning bidders in an auction must submit a down payment to the Commission in accordance with § 1.2107(b) of this chapter and §§ 24.711(a)(2) and 24.716(a)(2).

(c) Each eligible bidder for licenses on frequency Blocks D and E subject to auction shall pay an upfront payment of $0.06 per MHz per pop for the maximum number of licenses (in terms of MHz-pops) on which it intends to bid

pursuant to § 1.2106 of this chapter and procedures specified by Public Notice.

[61 FR 33868, July 1, 1996, as amended at 63 FR 50799, Sept. 23, 1998]

§ 24.707 [Reserved]

§ 24.708 License grant, denial, default, and disqualification.

(a) Except with respect to entities eligible for installment payments (*see* § 24.711), each winning bidder will be required to pay the balance of its winning bid in a lump sum payment within five (5) business days following the award of the license. Grant of the license will be conditioned upon full and timely payment of the winning bid amount.

(b) A bidder who withdraws its bid subsequent to the close of bidding, defaults on a payment due or is disqualified will be subject to the penalties specified in § 1.2109 of this chapter.

§ 24.709 Eligibility for licenses for frequency Blocks C and F.

(a) *General Rule for licenses offered for closed bidding.* (1) No application is acceptable for filing and no license shall be granted to a winning bidder in closed bidding for frequency block C or frequency block F, unless the applicant, together with its affiliates and persons or entities that hold interests in the applicant and their affiliates, have had gross revenues of less than $125 million in each of the last two years and total assets of less than $500 million at the time the applicant's short-form application (Form 175) is filed.

(2) The *gross revenues* and *total assets* of the applicant (or licensee), and its *affiliates*, and (except as provided in paragraph (b) of this section) of persons or entities that hold interests in the applicant (or licensee), and their *affiliates*, shall be attributed to the applicant and considered on a cumulative basis and aggregated for purposes of determining whether the applicant (or licensee) is eligible for a license for frequency block C or frequency block F under this section.

(3) Any licensee awarded a license won in closed bidding pursuant to the eligibility requirements of this section (or pursuant to § 24.839(a)(2)) shall maintain its eligibility until at least five years from the date of initial license grant, except that a licensee's (or other attributable entity's) increased gross revenues or increased total assets due to nonattributable equity investments (i.e., from sources whose gross revenues and total assets are not considered under paragraph (b) of this section), debt financing, revenue from operations or other investments, business development, or expanded service shall not be considered.

(4) In order to be eligible for participation in a C block auction, an applicant must certify that it is not in default on any Commission licenses and that it is not delinquent on any non-tax debt owed to any Federal agency. *See* § 24.706 of this part.

(5) An applicant for participation in a C block auction must state under penalty of perjury whether or not it has ever been in default on any Commission licenses or has ever been delinquent on any non-tax debt owed to any Federal agency. See § 24.706 of this part.

(b) *Exceptions to General Rule.* (1) *Small Business Consortia.* Where an applicant (or licensee) is a *consortium of small businesses*, the *gross revenues* and *total assets* of each small business shall not be aggregated.

(2) *Publicly-Traded Corporations.* Where an applicant (or licensee) is a *publicly traded corporation with widely dispersed voting power*, the *gross revenues* and *total assets* of a person or entity that holds an interest in the applicant (or licensee), and its *affiliates*, shall not be considered.

(3) *25 Percent Equity Exception.* The *gross revenues* and *total assets* of a person or entity that holds an interest in the applicant (or licensee), and its *affiliates*, shall not be considered so long as:

(i) Such person or entity, together with its *affiliates*, holds only *nonattributable equity* equaling no more than 25 percent of the applicant's (or licensee's) total equity;

(ii) Except as provided in paragraph (b)(5) of this section, such person or entity is not a member of the applicant's (or licensee's) *control group;* and

(iii) The applicant (or licensee) has a *control group* that complies with the

minimum equity requirements of paragraph (b)(5) of this section, and, if the applicant (or licensee) is a corporation, owns at least 50.1 percent of the applicant's (or licensee's) voting interests, and, if the applicant (or licensee) is a partnership, holds all of its general partnership interests.

(4) *49.9 Percent Equity Exception.* The *gross revenues* and *total assets* of a person or entity that holds an interest in the applicant (or licensee), and its *affiliates,* shall not be considered so long as:

(i) Such person or entity, together with its *affiliates,* holds only *nonattributable equity* equaling no more than 49.9 percent of the applicant's (or licensee's) total equity;

(ii) Except as provided in paragraph (b)(6) of this section, such person or entity is not a member of the applicant's (or licensee's) *control group;* and

(iii) The applicant (or licensee) has a *control group* that complies with the minimum equity requirements of paragraph (b)(6) of this section and, if the applicant (or licensee) is a corporation, owns at least 50.1 percent of the applicant's (or licensee's) voting interests, and, if the applicant (or licensee) is a partnership, holds all of its general partnership interests.

(5) *Control Group Minimum 25 Percent Equity Requirement.* In order to be eligible to exclude *gross revenues* and *total assets* of persons or entities identified in paragraph (b)(3) of this section, and applicant (or licensee) must comply with the following requirements:

(i) Except for an applicant (or licensee) whose sole control group member is a *preexisting entity,* as provided in paragraph (b)(5)(ii) of this section, at the time the applicant's short-form application (Form 175) is filed and until at least three years following the date of initial license grant, the applicant's (or licensee's) *control group* must own at least 25 percent of the applicant's (or licensee's) total equity as follows:

(A) At least 15 percent of the applicant's (or licensee's) total equity must be held by *qualifying investors,* either unconditionally or in the form of options exercisable, at the option of the holder, at any time and at any exercise price equal to or less than the market value at the time the applicant files its short-form application (Form 175);

(B) Such *qualifying investors* must hold 50.1 percent of the voting stock and all general partnership interests within the control group, and must have *de facto* control of the control group and of the applicant;

(C) The remaining 10 percent of the applicant's (or licensee's) total equity may be owned, either unconditionally or in the form of stock options, by any of the following entities, which may not comply with § 24.720(n)(1):

(*1*) *Institutional Investors;*

(*2*) Noncontrolling *existing investors* in any *preexisting entity* that is a member of the *control group;*

(*3*) Individuals that are members of the applicant's (or licensee's) management; or

(*4*) *Qualifying investors,* as specified in § 24.720(n)(4).

(D) Following termination of the three-year period specified in paragraph (b)(5)(i) of this section, qualifying investors must continue to own at least 10 percent of the applicant's (or licensee's) total equity unconditionally or in the form of stock options subject to the restrictions in paragraph (b)(5)(i)(A) of this section. The restrictions specified in paragraph (b)(5)(i)(C)(1) through (b)(5)(i)(C)(4) of this section no longer apply to the remaining equity after termination of such three-year period.

(ii) At the election of an applicant (or licensee) whose control group's sole member is a preexisting entity, the 25 percent minimum equity requirements set forth in paragraph (b)(5)(i) of this section shall apply, except that only 10 percent of the applicant's (or licensee's) total equity must be held in qualifying investors, and that the remaining 15 percent of the applicant's (or licensee's) total equity may be held by qualifying investors, or noncontrolling existing investors in such control group member or individuals that are members of the applicant's (or licensee's) management. These restrictions on the identity of the holder(s) of the remaining 15 percent of the licensee's total equity no longer apply after termination of the three-year period specified in paragraph (b)(5)(i) of this section.

(6) *Control Group Minimum 50.1 Percent Equity Requirement*. In order to be eligible to exclude *gross revenues* and *total assets* of persons or entities identified in paragraph (b)(4) of this section, an applicant (or licensee) must comply with the following requirements:

(i) Except for an applicant (or licensee) whose sole control group member is a *preexisting entity*, as provided in paragraph (b)(6)(ii) of this section, at the time the applicant's short-form application (Form 175) is filed and until at least three years following the date of initial license grant, the applicant's (or licensee's) *control group* must own at least 50.1 percent of the applicant's (or licensee's) total equity as follows:

(A) At least 30 percent of the applicant's (or licensee's)total equity must be held by *qualifying investors*, either unconditionally or in the form of options, exercisable at the option of the holder, at any time and at any exercise price equal to or less than the market value at the time the applicant files its short-form application (Form 175);

(B) Such *qualifying investors* must hold 50.1 percent of the voting stock and all general partnership interests within the control group and must have *de facto* control of the control group and of the applicant;

(C) The remaining 20.1 percent of the applicant's (or licensee's) total equity may be owned by *qualifying investors*, either unconditionally or in the form of stock options not subject to the restrictions of paragraph (b)(6)(i)(A) of this section, or by any of the following entities which may not comply with § 24.720(n)(1):

(*1*) *Institutional investors*, either unconditionally or in the form of stock options;

(*2*) Noncontrolling *existing investors* in any *preexisting entity* that is a member of the *control group*, either unconditionally or in the form of stock options;

(*3*) Individuals that are members of the applicant's (or licensee's) management, either unconditionally or in the form of stock options; or

(*4*) *Qualifying investors*, as specified in 24.720(n)(4).

(D) Following termination of the three-year period specified in paragraph (b)(6)(i) of this section, *qualifying investors* must continue to own at least 20 percent of the applicant's (or licensee's) total equity unconditionally or in the form of stock options subject to the restrictions in paragraph (b)(6)(i)(A) of this section. The restrictions specified in paragraph (b)(6)(i)(C)(*1*) through (*4*) of this section no longer apply to the remaining equity after termination of such three-year period.

(ii) At the election of an applicant (or licensee) whose *control group's* sole member is a *preexisting entity*, the 50.1 percent minimum equity requirements set forth in paragraph (b)(6)(i) of this section shall apply, except that only 20 percent of the applicant's (or licensee's) total equity must be held by *qualifying investors*, and that the remaining 30.1 percent of the applicant's (or licensee's) total equity may be held by *qualifying investors*, or noncontrolling *existing investors* in such *control group* member or individuals that are members of the applicant's (or licensee's) management. These restrictions on the identity of the holder(s) of the remaining 30.1 percent of the licensee's total equity no longer apply after termination of the three-year period specified in paragraph (b)(6)(i) of this section.

(7) *Calculation of Certain Interests*. Except as provided in paragraphs (b)(5) and (b)(6) of this section, ownership interests shall be calculated on a fully diluted basis; all agreements such as warrants, stock options and convertible debentures will generally be treated as if the rights thereunder already have been fully exercised, except that such agreements may not be used to appear to terminate or divest ownership interests before they actually do so, in order to comply with the *nonattributable equity* requirements in paragraphs (b)(3)(i) and (b)(4)(i) of this section.

(8) *Aggregation of Affiliate Interests*. Persons or entities that hold interest in an applicant (or licensee) that are *affiliates* of each other or have an identify of interests identified in § 24.720(1)(3) will be treated as though they were one person or entity and their ownership interests aggregated for purposes of determining an applicant's (or licensee's) compliance with the *nonattributable equity* requirements

in paragraphs (b)(3)(i) and (b)(4)(i) of this section.

Example 1 for paragraph (b)(8). ABC Corp. is owned by individuals, A, B, and C, each having an equal one-third voting interest in ABC Corp. A and B together, with two-thirds of the stock have the power to control ABC Corp. and have an identity of interest. If A & B invest in DE Corp., a broadband PCS applicant for block C, A and B's separate interests in DE Corp. must be aggregated because A and B are to be treated as one person.

Example 2 for paragraph (b)(8). ABC Corp. has subsidiary BC Corp., of which it holds a controlling 51 percent of the stock. If ABC Corp. and BC Corp., both invest in DE Corp., their separate interests in DE Corp. must be aggregated because ABC Corp. and BC Corp. are affiliates of each other.

(9) *Special rule for licensees disaggregating or returning certain spectrum in frequency block C.*

(i) In addition to entities qualifying for closed bidding under paragraph (a)(1) of this section, any entity that was eligible for and participated in the auction for frequency block C, which began on December 18, 1995, or the reauction for frequency block C, which began on July 3, 1996, will be eligible to bid for C block licenses offered in closed bidding in any reauction of frequency block C spectrum that begins within two years of March 23, 1999.

(ii) In cases of merger, acquisition, or other business combination of entities, where each of the entities is eligible to bid for C block licenses offered in closed bidding in any reauction of C block spectrum on the basis of the eligibility exception set forth in paragraph (b)(9)(i) of this section, the resulting entity will also be eligible for the exception specified in paragraph (b)(9)(i).

(iii) In cases of merger, acquisition, or other business combination of entities, where one or more of the entities are ineligible for the exception set forth in paragraph (b)(9)(i) of this section, the resulting entity will not be eligible pursuant to paragraph (b)(9)(i) unless an eligible entity possesses *de jure* and *de facto* control over the resulting entity.

(iv) The following restrictions will apply for any reauction of frequency block C spectrum conducted after March 24, 1998:

(A) Applicants that elected to disaggregate and surrender to the Commission 15 MHz of spectrum from any or all of their frequency block C licenses, as provided in Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees, Second Report and Order and Further Notice of Proposed Rule Making, WT Docket No. 97–82, 12 FCC Rcd 16,436 (1997), as modified by the Order on Reconsideration of the Second Report and Order, WT Docket No. 97–82, FCC 98–46 (rel. Mar. 24, 1998), will not be eligible to apply for such disaggregated spectrum until 2 years from the start of the reauction of that spectrum.

(B) Applicants that surrendered to the Commission any of their frequency block C licenses, as provided in Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees, Second Report and Order and Further Notice of Proposed Rule Making, WT Docket No. 97–82, 12 FCC Rcd 16,436 (1997), as modified by the Order on Reconsideration of the Second Report and Order, WT Docket No. 97–82, FCC 98–46 (rel. Mar. 24, 1998), will not be eligible to apply for the licenses that they surrendered to the Commission until 2 years from the start of the reauction of those licenses if they elected to apply a credit of 70% of the down payment they made on those licenses toward the prepayment of licenses they did not surrender.

(c) *Short-Form and Long-Form Applications: Certifications and Disclosure.* (1) *Short-form Application.* In addition to certifications and disclosures required by Part 1, subpart Q of this chapter and § 24.813, each applicant for a license for frequency block C or frequency block F shall certify on its short-form application (Form 175) that it is eligible to bid on and obtain such license(s), and (if applicable) that it is eligible for designated entity status pursuant to this section and § 24.720, and shall append the following information as an exhibit to its Form 175:

(i) For an applicant that is a *publicly traded corporation with widely disbursed voting power:*

(A) A certified statement that such applicant complies with the requirements of the definition of *publicly traded corporation with widely disbursed voting power* set forth in § 24.720(m);

(B) The identify of each *affiliate* of the applicant if not disclosed pursuant to § 24.813; and

(C) The applicant's *gross revenues* and *total assets*, computed in accordance with paragraphs (a) and (b) of this section.

(ii) For all other applicants:

(A) The identity of each member of the applicant's *control group*, regardless of the size of each member's total interest in the applicant, and the percentage and type of interest held;

(B) The citizenship and the gender or minority group classification for each member of the applicant's *control group* if the applicant is claiming status as a *business owned by members of minority groups and/or women;*

(C) The status of each *control group* member that is *an institutional investor*, an *existing investor*, and/or a member of the applicant's management;

(D) The identify of each *affiliate* of the applicant and each *affiliate* of individuals or entities identified pursuant to paragraphs (c)(1)(ii)(A) and (c)(1)(ii)(C) of this section if not disclosed pursuant to § 24.813;

(E) A certification that the applicant's sole *control group* member is a *preexisting entity*, if the applicant makes the election in either paragraph (b)(5)(ii) or (b)(6)(ii) of this section; and

(F) The applicant's *gross revenues* and *total assets*, computed in accordance with paragraphs (a) and (b) of this section.

(iii) For each applicant claiming status as a *small business consortium*, the information specified in paragraph (c)(1)(ii) of this section, for each member of such consortium.

(2) *Long-form Application*. In addition to the requirements in subpart I of this part and other applicable rules (e.g., §§ 20.6(e) and 20.9(b) of this chapter), each applicant submitting a long-form application for a license(s) for frequency block C or frequency block F shall, in an exhibit to its long-form application:

(i) Disclose separately and in the aggregate the *gross revenues* and *total assets*, computed in accordance with paragraphs (a) and (b) of this section, for each of the following: the applicant; the applicant's *affiliates*, the applicant's *control group* members; the applicant's attributable investors; and *affiliates* of its attributable investors;

(ii) List and summarize all agreements or other instruments (with appropriate references to specific provisions in the text of such agreements and instruments) that support the applicant's eligibility for a license(s) for frequency block C or frequency block F and its eligibility under §§ 24.711, 24.712, 24.714 and 24.720, including the establishment of *de facto* and *de jure* control; such agreements and instruments include articles of incorporation and bylaws, shareholder agreements, voting or other trust agreements, partnership agreements, management agreements, joint marketing agreements, franchise agreements, and any other relevant agreements (including letters of intent), oral or written; and

(iii) List and summarize any investor protection agreements and identify specifically any such provisions in those agreements identified pursuant to paragraph (c)(2)(ii) of this section, including rights of first refusal, supermajority clauses, options, veto rights, and rights to hire and fire employees and to appoint members to boards of directors or management committees.

(3) *Records Maintenance*. All applicants, including those that are winning bidders, shall maintain at their principal place of business an updated file of ownership, revenue and asset information, including those documents referenced in paragraphs (c)(2)(ii) and (c)(2)(iii) of this section and any other documents necessary to establish eligibility under this section or under the definitions of *small business and/or business owned by members of minority groups and/or women*. Licensees (and their successors in interest) shall maintain such files for the term of the license. Applicants that do not obtain the license(s) for which they applied shall maintain such files until the grant of such license(s) is final, or one year from the date of the filing of their short-form application (Form 175), whichever is earlier.

(d) *Audits*. (1) Applicants and licensees claiming eligibility for closed bidding under this section or for other provisions under §§ 24.711 through 24.720 shall be subject to audits by the Commission, using in-house and contract resources. Selection for audit may be random, on information, or on the basis of other factors.

(2) Consent to such audits is part of the certification included in the short-form application (Form 175). Such consent shall include consent to the audit of the applicant's or licensee's books, documents and other material (including accounting procedures and practices) regardless of form or type, sufficient to confirm that such applicant's or licensee's representations are, and remain, accurate. Such consent shall include inspection at all reasonable times of the facilities, or parts thereof, engaged in providing and transacting business, or keeping records regarding licensed broadband PCS service and shall also include consent to the interview of principals, employees, customers and suppliers of the applicant or licensee.

(e) *Tiers*. (1) For purposes of determining spectrum to which the eligibility requirements of this section are applicable, the BTA service areas (see § 24.202(b)) are divided into two tiers according to their population as follows:

(i) Tier 1: BTA service areas with population equal to or greater than 2.5 million;

(ii) Tier 2: BTA service areas with population less than 2.5 million.

(2) For Auction No. 35, the population of individual BTA service areas will be based on the 1990 census. For auctions beginning after the start of Auction No. 35, the population of individual BTA service areas will be based on the most recent available decennial census.

(f) *Application of eligibility requirements*. (1) The following categories of licenses will be subject to closed bidding pursuant to the eligibility requirements of this section in auctions that begin after the effective date of this paragraph.

(i) For Tier 1 BTAs, one of the 10 MHz C block licenses (1895–1900 MHz paired with 1975–1980 MHz);

(ii) For Tier 2 BTAs, two of the 10 MHz C block licenses (1895–1900 MHz paired with 1975–1980 MHz; 1900–1905 MHz paired with 1980–1985 MHz) and all 15 MHz C block licenses.

(2) Notwithstanding the provisions of paragraph (f)(1) of this section, any C block license for operation on spectrum that has been offered, but not won by a bidder, in closed bidding in any auction beginning on or after March 23, 1999, will not be subject in a subsequent auction to closed bidding pursuant to the eligibility requirements of this section.

(g) *Definitions*. The terms *affiliate*, *business owned by members of minority groups and/or women*, and *gross revenues* used in this section are defined in § 1.2110 of this chapter. The terms *consortium of small businesses*, *control group*, *existing investor*, *institutional investor*, *nonattributable equity*, *preexisting entity*, *publicly traded corporation with widely dispersed voting power*, *qualifying investor*, *small business*, and *total assets* used in this section are defined in § 24.720 of this chapter.

[59 FR 63232, Dec. 7, 1994; 60 FR 5335, Jan. 27, 1995, as amended at 60 FR 37795, July 21, 1995; 61 FR 33868, July 1, 1996; 63 FR 17122, Apr. 8, 1998; 63 FR 50799, Sept. 23, 1998; 65 FR 53637, Sept. 5, 2000; 65 FR 68931, Nov. 15, 2000]

§ 24.710 [Reserved]

§ 24.711 Upfront payments, down payments and installment payments for licenses for frequency Block C.

(a) *Upfront Payments and Down Payments*. (1) Each eligible bidder for licenses subject to auction on frequency Block C shall pay an upfront payment as set forth in a Public Notice pursuant to the procedures in § 1.2106 of this chapter.

(2) Each winning bidder shall make a down payment and pay the balance of its winning bids pursuant to § 1.2107 and § 1.2109 of this chapter.

(b) *Installment payments*. Each eligible licensee of frequency Block C or F may pay the remaining 90 percent of the net auction price for the license in installment payments pursuant to § 1.2110(g) of this chapter and under the following terms:

(1) For an eligible licensee with *gross revenues* exceeding $75 million (calculated in accordance with § 24.709(a)(2) and (b)) in each of the two preceding years (calculated in accordance with

§ 24.720(f)), interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted, plus 3.5 percent; payments shall include both principal and interest amortized over the term of the license.

(2) For an eligible licensee with *gross revenues* not exceeding $75 million (calculated in accordance with § 24.709(a)(2) and (b)) in each of the two preceding years, interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted, plus 2.5 percent; payments shall include interest only for the first year and payments of interest and principal amortized over the remaining nine years of the license term.

(3) For an eligible licensee that qualifies as a Small business or as a consortium of small businesses, interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted, plus 2.5 percent; payments shall include interest only for the first two years and payments of interest and principal amortized over the remaining eight years of the license term.

(4) For an eligible licensee that qualifies as a business owned by members of minority groups and/or women, interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted; payments shall include interest only for the first three years and payments of interest and principal amortized over the remaining seven years of the license term.

(5) For an eligible licensee that qualifies as a small business owned by members of minority groups and/or women or as a consortium of small business owned by members of minority groups and/or women, interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted; payments shall include interest only for the first six years and payments of interest and principal amortized over the remaining four years of the license term.

(c) *Unjust enrichment*. *See* § 1.2111 of this chapter.

[59 FR 63235, Dec. 7, 1994; 60 FR 5335, Jan. 27, 1995, as amended at 60 FR 37796, July 21, 1995; 63 FR 2349, Jan. 15, 1998; 63 FR 50799, Sept. 23, 1998]

§ 24.712 Bidding credits for licenses for frequency Block C.

(a) Except with respect to licenses won in closed bidding in auctions that begin after March 23, 1999, a winning bidder that qualifies as a small business or a consortium of small businesses as defined in § 24.720(b)(1) or § 24.720(b)(4) may use a bidding credit of fifteen percent, as specified in § 1.2110(e)(2)(iii) of this chapter, to lower the cost of its winning bid.

(b) Except with respect to licenses won in closed bidding in auctions that begin after March 23, 1999, a winning bidder that qualifies as a very small business or a consortium of very small businesses as defined in § 24.720(b)(2) or § 24.720(b)(5) may use a bidding credit of twenty-five percent as specified in § 1.2110(e)(2)(ii) of this chapter, to lower the cost of its winning bid.

(c) *Unjust enrichment*. See § 1.2111 of this chapter. The unjust enrichment provisions of § 1.2111(d) and (e)(2) shall not apply with respect to licenses acquired in either the auction for frequency block C that began on December 18, 1995, or the reauction of block C spectrum that began on July 3, 1996.

[65 FR 53637, Sept. 5, 2000]

§ 24.713 [Reserved]

§ 24.714 Partitioned licenses and disaggregated spectrum.

(a) *Eligibility*. (1) Parties seeking approval for partitioning and disaggregation shall request an authorization for partial assignment of a license pursuant to § 24.839.

(2) Broadband PCS licensees in spectrum blocks A, B, D, and E and broadband PCS C and F block licenses not subject to the eligibility requirements of § 24.709 may apply to partition their licensed geographic service area or disaggregate their licensed spectrum at any time following the grant of their licenses.

(3) Broadband PCS licensees that acquired C or F block licenses in closed

bidding subject to the eligibility requirements of § 24.709 may partition their licensed geographic service area or disaggregate their licensed spectrum at any time to an entity that meets the eligibility criteria set forth in § 24.709 at the time the request for partial assignment of license is filed or to an entity that holds license(s) for frequency blocks C and F that met the eligibility criteria set forth in § 24.709 at the time of receipt of such license(s). Partial assignment applications seeking partitioning or disaggregation of broadband PCS licenses in spectrum blocks C and F must include an attachment demonstrating compliance with this section.

(b) *Technical standards*—(1) *Partitioning*. In the case of partitioning, applicants and licensees must file FCC Form 603 pursuant to § 1.948 of this chapter and list the partitioned service area on a schedule to the application. The geographic coordinates must be specified in degrees, minutes, and seconds to the nearest second of latitude and longitude and must be based upon the 1983 North American Datum (NAD83).

(2) *Disaggregation*. Spectrum may be disaggregated in any amount.

(3) *Combined partitioning and disaggregation*. The Commission will consider requests for partial assignment of licenses that propose combinations of partitioning and disaggregation.

(c) *Unjust enrichment*—(1) *Installment payments*. Licensees in frequency Blocks C and F making installment payments that partition their licenses or disaggregate their spectrum to entities not meeting the eligibility standards for installment payments, will be subject to the provisions concerning unjust enrichment as set forth in §§ 1.2111 of this chapter and 24.716(d).

(2) *Bidding credits*. Licensees in frequency Blocks C and F that received a bidding credit and partition their licenses or disaggregate their spectrum to entities not meeting the eligibility standards for such a bidding credit, will be subject to the provisions concerning unjust enrichment as set forth in §§ 1.2110(f) of this chapter and 24.717(c).

(3) *Apportioning unjust enrichment payments*. Unjust enrichment payments for partitioned license areas shall be calculated based upon the ratio of the population of the partitioned license area to the overall population of the license area and by utilizing the most recent census data. Unjust enrichment payments for disaggregated spectrum shall be calculated based upon the ratio of the amount of spectrum disaggregated to the amount of spectrum held by the licensee.

(d) *Installment payments*—(1) *Apportioning the balance on installment payment plans*. When a winning bidder elects to pay for its license through an installment payment plan pursuant to §§ 1.2110(e) of this chapter or 24.716, and partitions its licensed area or disaggregates spectrum to another party, the outstanding balance owed by the licensee on its installment payment plan (including accrued and unpaid interest) shall be apportioned between the licensee and partitionee or disaggregatee. Both parties will be responsible for paying their proportionate share of the outstanding balance to the U.S. Treasury. In the case of partitioning, the balance shall be apportioned based upon the ratio of the population of the partitioned area to the population of the entire original license area calculated based upon the most recent census data. In the case of disaggregation, the balance shall be apportioned based upon the ratio of the amount of spectrum disaggregated to the amount of spectrum allocated to the licensed area.

(2) *Parties not qualified for installment payment plans*. (i) When a winning bidder elects to pay for its license through an installment payment plan, and partitions its license or disaggregates spectrum to another party that would not qualify for an installment payment plan or elects not to pay for its share of the license through installment payments, the outstanding balance owed by the licensee (including accrued and unpaid interest) shall be apportioned according to § 24.714(d)(1).

(ii) The partitionee or disaggregatee shall, as a condition of the approval of the partial assignment application, pay its entire pro rata amount within 30 days of Public Notice conditionally

granting the partial assignment application. Failure to meet this condition will result in a rescission of the grant of the partial assignment application.

(iii) The licensee shall be permitted to continue to pay its pro rata share of the outstanding balance and shall receive new financing documents (promissory note, security agreement) with a revised payment obligation, based on the remaining amount of time on the original installment payment schedule. These financing documents will replace the licensee's existing financing documents which shall be marked ''superseded'' and returned to the licensee upon receipt of the new financing documents. The original interest rate, established pursuant to § 1.2110(e)(3)(i) of this chapter at the time of the grant of the initial license in the market, shall continue to be applied to the licensee's portion of the remaining government obligation. We will require, as a further condition to approval of the partial assignment application, that the licensee execute and return to the U.S. Treasury the new financing documents within 30 days of the Public Notice conditionally granting the partial assignment application. Failure to meet this condition will result in the automatic cancellation of the grant of the partial assignment application.

(iv) A default on the licensee's payment obligation will only affect the licensee's portion of the market.

(3) Parties qualified for installment payment plans. (i) Where both parties to a partitioning or disaggregation agreement qualify for installment payments, the partitionee or disaggregatee will be permitted to make installment payments on its portion of the remaining government obligation, as calculated according to § 24.714(d)(1).

(ii) Each party will be required, as a condition to approval of the partial assignment application, to execute separate financing documents (promissory note, security agreement) agreeing to pay their pro rata portion of the balance due (including accrued and unpaid interest) based upon the installment payment terms for which they qualify under the rules. The financing documents must be returned to the U.S. Treasury within thirty (30) days of the Public Notice conditionally granting the partial assignment application. Failure by either party to meet this condition will result in the automatic cancellation of the grant of the partial assignment application. The interest rate, established pursuant to § 1.2110(e)(3)(i) of this chapter at the time of the grant of the initial license in the market, shall continue to be applied to both parties' portion of the balance due. Each party will receive a license for their portion of the partitioned market or disaggregated spectrum.

(iii) A default on an obligation will only affect that portion of the market area held by the defaulting party.

(iv) Partitionees and disaggregatees that qualify for installment payment plans may elect to pay some of their pro rata portion of the balance due in a lump sum payment to the U.S. Treasury and to pay the remaining portion of the balance due pursuant to an installment payment plan.

(e) *License term.* The license term for a partitioned license area and for disaggregated spectrum shall be the remainder of the original licensee's license term as provided for in § 24.15.

(f) *Construction requirements*—(1) *Requirements for partitioning.* Parties seeking authority to partition must meet one of the following construction requirements:

(i) The partitionee may certify that it will satisfy the applicable construction requirements set forth in § 24.203 for the partitioned license area; or

(ii) The original licensee may certify that it has or will meet its five-year construction requirement and will meet the ten-year construction requirement, as set forth in § 24.203, for the entire license area. In that case, the partitionee must only satisfy the requirements for ''substantial service,'' as set forth in § 24.16(a), for the partitioned license area by the end of the original ten-year license term of the licensee.

(iii) Applications requesting partial assignments of license for partitioning must include a certification by each party as to which of the above construction options they select.

(iv) Partitionees must submit supporting documents showing compliance

with the respective construction requirements within the appropriate five- and ten-year construction benchmarks set forth in § 24.203.

(v) Failure by any partitionee to meet its respective construction requirements will result in the automatic cancellation of the partitioned or disaggregated license without further Commission action.

(2) *Requirements for disaggregation.* Parties seeking authority to disaggregate must submit with their partial assignment application a certification signed by both parties stating which of the parties will be responsible for meeting the five- and ten-year construction requirements for the PCS market as set forth in § 24.203. Parties may agree to share responsibility for meeting the construction requirements. Parties that accept responsibility for meeting the construction requirements and later fail to do so will be subject to license forfeiture without further Commission action.

[62 FR 661, Jan. 6, 1997, as amended at 63 FR 68953, Dec. 14, 1998; 65 FR 53638, Sept. 5, 2000]

§ 24.716 Upfront payments, down payments, and installment payments for licenses for frequency Block F.

(a) *Upfront Payments and Down Payments.* (1) Each eligible bidder for licenses subject to auction on frequency Block F shall pay an upfront payment as set forth in a Public Notice pursuant to the procedures in § 1.2106 of this chapter.

(2) Each winning bidder shall make a down payment and pay the balance of its winning bids pursuant to § 1.2107 and § 1.2109 of this chapter.

(b) *Installment Payments.* Each eligible licensee of frequency Block F may pay the remaining 80 percent of the net auction price for the license in installment payments pursuant to § 1.2110(e) of this chapter and under the following terms:

(1) For an eligible licensee with *gross revenues* exceeding $75 million (calculated in accordance with § 24.709 (a)(2) and (b)) in each of the two preceding years (calculated in accordance with § 24.720(f)), interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted, plus 3.5 percent; payments shall include both principal and interest amortized over the term of the license;

(2) For an eligible licensee with *gross revenues* not exceeding $75 million (calculated in accordance with § 24.709 (a)(2) and (b)) in each of the two preceding years (calculated in accordance with § 24.720(f)), interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted, plus 2.5 percent; payments shall include interest only for the first year and payments of interest and principal amortized over the remaining nine years of the license term; or

(3) For an eligible licensee that qualifies as a small business or as a consortium of small businesses, interest shall be imposed based on the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted; payments shall include interest only for the first two years and payments of interest and principal amortized over the remaining eight years of the license term.

(c) *Late installment payments. See* § 1.2110(f)(4) of this chapter.

(d) *Unjust enrichment. See* § 1.2111 of this chapter.

[60 FR 37799, July 21, 1995, as amended at 61 FR 33868, July 1, 1996; 63 FR 2349, Jan. 15, 1998; 63 FR 50799, Sept. 23, 1998]

§ 24.717 Bidding credits for licenses for frequency Block F.

(a) Except with respect to licenses won in closed bidding in auctions that begin after March 23, 1999, a winning bidder that qualifies as a small business or a consortium of small businesses as defined in § 24.720(b)(1) or § 24.720(b)(4) may use a bidding credit of fifteen percent, as specified in § 1.2110(e)(2)(iii) of this chapter, to lower the cost of its winning bid.

(b) Except with respect to licenses won in closed bidding in auctions that begin after March 23, 1999, a winning bidder that qualifies as a very small business or a consortium of very small businesses as defined in § 24.720(b)(2) or § 24.720(b)(5) may use a bidding credit of twenty-five percent as specified in § 1.2110(e)(2)(ii) of this chapter, to lower the cost of its winning bid.

(c) *Unjust enrichment. See* § 1.2111 of this chapter.

[63 FR 50800, Sept. 23, 1998, as amended at 65 FR 53638, Sept. 5, 2000]

§ 24.720 Definitions.

(a) Scope. The definitions in this section apply to §§ 24.709 through 24.717, unless otherwise specified in those sections.

(b) *Small business; very small business; consortia.* (1) A *small business* is an entity that, together with its *affiliates* and persons or entities that hold interest in such entity and their affiliates, has average annual *gross revenues* that are not more than $40 million for the preceding three years.

(2) A *very small business* is an entity that, together with its *affiliates* and persons or entities that hold interests in such entity and their *affiliates*, has average annual *gross revenues* that are not more than $15 million for the preceding three years.

(3) For purposes of determining whether an entity meets the $40 million average annual *gross revenues* size standard set forth in paragraph (b)(1) of this section or the $15 million average annual *gross revenues* size standard set forth in paragraph (b)(2) of this section, the *gross revenues* of the entity, its *affiliates*, persons or entities holding interests in the entity and their *affiliates* shall be considered on a cumulative basis and aggregated subject to the exceptions set forth in § 24.709(b).

(4) A *small business consortium* is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition of a *small business* in paragraphs (b)(1) and (b)(3) of this section.

(5) A *very small business consortium* is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition of a *very small business* in paragraphs (b)(2) and (b)(3) of this section.

(c) *Business Owned by Members of Minority Groups and/or Women.* A *business owned by members of minority groups and/or women* is an entity:

(1) In which the *qualifying investor* members of an applicant's *control group* are members of minority groups and/or women who are United States citizens; and

(2) That complies with the requirements of § 24.709 (b)(3) and (b)(5) or § 24.709 (b)(4) and (b)(6).

(d) *Small Business Owned by Members of Minority Groups and/or Women: Consortium of Small Businesses Owned by Members of Minority and/or Women.* A *Small business owned by members of minority groups and/or women* is an entity that meets the definitions in both paragraphs (b) and (c) of this section. A *consortium of small businesses owned by members of minority groups and/or women* is a conglomerate organization formed as a joint venture between mutually-independent business firms, each of which individually satisfies the definitions in paragraphs (b) and (c) of this section.

(e) *Rural Telephone Company.* A *rural telephone company* is a local exchange carrier operating entity to the extent that such entity:

(1) Provides common carrier service to any local exchange carrier study area that does not include either;

(i) Any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census; or

(ii) Any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of the Census as of August 10, 1993;

(2) Provides telephone exchange service, including exchange access, to fewer than 50,000 access lines;

(3) Provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or

(4) Has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996.

(f) *Gross Revenues. Gross revenues* shall mean all income received by an entity, whether earned or passive, before any deductions are made for costs of doing business (*e.g.*, cost of goods sold), as evidenced by audited financial statements for the relevant number of most recently completed calendar years, or, if audited financial statements were not prepared on a calendar-

year basis, for the most recently completed fiscal years preceding the filing of the applicant's short-form application (Form 175). If an entity was not in existence for all or part of the relevant period, gross revenues shall be evidenced by the audited financial statements of the entity's predecessor-in-interest or, if there is no identifiable predecessor-in-interest, unaudited financial statements certified by the applicant as accurate. When an applicant does not otherwise use audited financial statements, its gross revenues may be certified by its chief financial officer or its equivalent.

(g) *Total Assets*. *Total assets* shall mean the book value (except where generally accepted accounting principles (GAAP) require market valuation) of all property owned by an entity, whether real or personal, tangible or intangible, as evidenced by the most recent audited financial statements or certified by the applicant's chief financial officer or its equivalent if the applicant does not otherwise use audited financial statements.

(h) *Institutional Investor*. An *institutional investor* is an insurance company, a bank holding stock in trust accounts through its trust department, or an investment company as defined in 15 U.S.C. 80a–3(a), including within such definition any entity that would otherwise meet the definition of investment company under 15 U.S.C. 80a–3(a) but is excluded by the exemptions set forth in 15 U.S.C. 80a–3 (b) and (c), without regard to whether such entity is an issuer of securities; provided that, if such investment company is owned, in whole or in part, by other entities, such investment company, such other entities and the *affiliates* of such other entities, taken as a whole, must be primarily engaged in the business of investing, reinvesting or trading in securities or in distributing or providing investment management services for securities.

(i) *Members of Minority Groups*. Members of minority groups include individuals of African American, Hispanic-surnamed, American Eskimo, Aleut, American Indian, and Asian American extraction.

(j) *Nonattributable Equity*. (1) *Nonattributable equity* shall mean:

(i) For corporations, voting stock or non-voting stock that includes no more than twenty-five percent of the total voting equity, including the right to vote such stock through a voting trust or other arrangement;

(ii) For partnerships, joint ventures and other non-corporate entities, limited partnership interests and similar interests that do not afford the power to exercise control of the entity.

(2) For purposes of assessing compliance with the equity limits in § 24.709 (b)(3)(i) and (b)(4)(i), where such interests are not held directly in the applicant, the total equity held by a person or entity shall be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain.

(k) *Control Group*. A *control group* is an entity, or a group of individuals or entities, that possesses *de jure* control and *de facto* control of an applicant or licensee, and as to which the applicant's or licensee's charters, bylaws, agreements and any other relevant documents (and amendments thereto) provide:

(1) That the entity and/or its members own unconditionally at least 50.1 percent of the total voting interests of a corporation;

(2) That the entity and/or its members receive at least 50.1 percent of the annual distribution or any dividends paid on the voting stock of a corporation;

(3) That, in the event of dissolution or liquidation of a corporation, the entity and/or or its members are entitled to receive 100 percent of the value of each share of stock in its possession and a percentage of the retained earnings of the concern that is equivalent to the amount of equity held in the corporation; and

(4) That, for other types of businesses, the entity and/or its members have the right to receive dividends, profits and regular and liquidating distributions from the business in proportion to the amount of equity held in the business.

NOTE TO PARAGRAPH (k): Voting control does not always assure *de facto* control, such as for example, when the voting stock of the control group is widely dispersed (*see e.g.*, § 24.720(1)(2)(iii).

(l) *Affiliate*. (1) *Basis for Affiliation*. An individual or entity is an *affiliate* of an applicant or of a person holding an attributable interest in an applicant (both referred to herein as ''the applicant'') if such individual or entity:

(i) Directly or indirectly controls or has the power to control the applicant, or

(ii) Is directly or indirectly controlled by the applicant, or

(iii) Is directly or indirectly controlled by a third party or parties that also controls or has the power to control the applicant, or

(iv) Has an ''identity of interest'' with the applicant.

(2) *Nature of control in determining affiliation*.

(i) Every business concern is considered to have one or more parties who directly or indirectly control or have the power to control it. Control may be affirmative or negative and it is immaterial whether it is exercised so long as the power to control exists.

Example for paragraph (l)(2)(i). An applicant owning 50 percent of the voting stock of another concern would have negative power to control such concern since such party can block any action of the other stockholders. Also, the bylaws of a corporation may permit a stockholder with less than 50 percent of the voting to block any actions taken by the other stockholders in the other entity. Affiliation exists when the applicant has the power to control a concern while at the same time another person, or persons, are in control of the concern at the will of the party or parties with the power of control.

(ii) Control can arise through stock ownership; occupancy of director, officer or key employee positions; contractual or other business relations; or combinations of these and other factors. A key employee is an employee who, because of his/her position in the concern, has a critical influence in or substantive control over the operations or management of the concern.

(iii) Control can arise through management positions where a concern's voting stock is so widely distributed that no effective control can be established.

Example for paragraph (l)(2)(iii). In a corporation where the officers and directors own various size blocks of stock totaling 40 percent of the corporation's voting stock, but no officer or director has a block sufficient to give him or her control or the power to control and the remaining 60 percent is widely distributed with no individual stockholder having a stock interest greater than 10 percent, management has the power to control. If persons with such management control of the other entity are persons with attributable interests in the applicant, the other entity will be deemed an affiliate of the applicant.

(3) *Identity of interest between and among persons*. Affiliation can arise between or among two or more persons with an identity of interest, such as members of the same family or persons with common investments. In determining if the applicant controls or is controlled by a concern, persons with an identity of interest will be treated as though they were one person.

Example 1. Two shareholders in Corporation Y each have attributable interests in the same PCS application. While neither shareholder has enough shares to individually control Corporation Y, together they have the power to control Corporation Y. The two shareholders with these common investments (or identity of interest) are treated as though they are one person and Corporation Y would be deemed an affiliate of the applicant.

Example 2. One shareholder in Corporation Y, shareholder A, has an attributable interest in a PCS application. Another shareholder in Corporation Y, shareholder B, has a nonattributable interest in the same PCS application. While neither shareholder has enough shares to individually control Corporation Y, together they have the power to control Corporation Y. Through the common investment of shareholders A and B in the PCS application, Corporation Y would still be deemed an affiliate of the applicant.

(i) *Spousal Affiliation*. Both spouses are deemed to own or control or have the power to control interests owned or controlled by either of them, unless they are subject to a legal separation recognized by a court of competent jurisdiction in the United States.

(ii) *Kinship Affiliation*. Immediate family members will be presumed to own or control or have the power to control interests owned or controlled by other immediate family members. In this context ''immediate family member'' means father, mother, husband, wife, son, daughter, brother, sister, father- or mother-in-law, son- or daughter-in-law, brother- or sister-in-law, step-father, or -mother, step-

brother, or -sister, step-son, or -daughter, half brother or sister. This presumption may be rebutted by showing that

(A) The family members are estranged,

(B) The family ties are remote, or

(C) The family members are not closely involved with each other in business matters.

Example for paragraph (l)(3)(ii). A owns a controlling interest in Corporation X. A's sister-in-law, B, has an attributable interest in a PCS application. Because A and B have a presumptive kinship affiliation, A's interest in Corporation X is attributable to B, and thus to the applicant, unless B rebuts the presumption with the necessary showing.

(4) *Affiliation through stock ownership.* (i) An applicant is presumed to control or have the power to control a concern if he or she owns or controls or has the power to control 50 percent or more of its voting stock.

(ii) An applicant is presumed to control or have the power to control a concern even though he or she owns, controls or has the power to control less than 50 percent of the concern's voting stock, if the block of stock he or she owns, controls or has the power to control is large as compared with any other outstanding block of stock.

(iii) If two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, such minority holdings are equal or approximately equal in size, and the aggregate of these minority holdings is large as compared with any other stock holding, the presumption arises that each one of these persons individually controls or has the power to control the concern; however, such presumption may be rebutted by a showing that such control or power to control, in fact, does not exist.

(5) *Affiliation arising under stock options, convertible debentures, and agreements to merge.* Stock options, convertible debentures, and agreements to merge (including agreements in principle) are generally considered to have a present effect on the power to control the concern. Therefore, in making a size determination, such options, debentures, and agreements will generally be treated as though the rights held thereunder had been exercised. However, neither an affiliate nor an applicant can use such options and debentures to appear to terminate its control over another concern before it actually does so.

Example 1 for paragraph (l)(5). If company B holds an option to purchase a controlling interest in company A, who holds an attributable interest in a PCS application, the situation is treated as though company B had exercised its rights and had become owner of a controlling interest in company A. The gross revenues of company B must be taken into account in determining the size of the applicant.

Example 2 for paragraph (l)(5). If a large company, BigCo, holds 70% (70 of 100 outstanding shares) of the voting stock of company A, who holds an attributable interest in a PCS application, and gives a third party, SmallCo, an option to purchase 50 of the 70 shares owned by BigCo, BigCo will be deemed to be an affiliate of company A, and thus the applicant, until SmallCo actually exercises its options to purchase such shares. In order to prevent BigCo from circumventing the intent of the rule which requires such options to be considered on a fully diluted basis, the option is not considered to have present effect in this case.

Example 3 for paragraph (l)(5). If company A has entered into an agreement to merge with company B in the future, the situation is treated as though the merger has taken place.

(6) *Affiliation under voting trusts.* (i) Stock interests held in trust shall be deemed controlled by any person who holds or shares the power to vote such stock, to any person who has the sole power to sell such stock, and to any person who has the right to revoke the trust at will or to replace the trustee at will.

(ii) If a trustee has a familial, personal or extra-trust business relationship to the grantor or the beneficiary, the stock interests held in trust will be deemed controlled by the grantor or beneficiary, as appropriate.

(iii) If the primary purpose of a voting trust, or similar agreement, is to separate voting power from beneficial ownership of voting stock for the purpose of shifting control of or the power to control a concern in order that such concern or another concern may meet the Commission's size standards, such voting trust shall not be considered valid for this purpose regardless of

whether it is or is not recognized within the appropriate jurisdiction.

(7) *Affiliation through common management.* Affiliation generally arises where officers, directors, or key employees serve as the majority or otherwise as the controlling element of the board of directors and/or the management of another entity.

(8) *Affiliation through common facilities.* Affiliation generally arises where one concern shares office space and/or employees and/or other facilities with another concern, particularly where such concerns are in the same or related industry or field of operations, or where such concerns were formerly affiliated, and through these sharing arrangements one concern has control, or potential control, of the other concern.

(9) *Affiliation through contractual relationships.* Affiliation generally arises where one concern is dependent upon another concern for contracts and business to such a degree that one concern has control, or potential control, of the other concern.

(10) *Affiliation under joint venture arrangements.* (i) A joint venture for size determination purposes is an association of concerns and/or individuals, with interests in any degree or proportion, formed by contract, express or implied, to engage in and carry out a single, specific business venture for joint profit for which purpose they combine their efforts, property, money, skill and knowledge, but not on a continuing or permanent basis for conducting business generally. The determination whether an entity is a joint venture is based upon the facts of the business operation, regardless of how the business operation may be designated by the parties involved. An agreement to share profits/losses proportionate to each party's contribution to the business operation is a significant factor in determining whether the business operation is a joint venture.

(ii) The parties to a joint venture are considered to be affiliated with each other

(11) For purposes of § 24.709(a)(2) and paragraphs (b)(2) and (d) of this section, Indian tribes or Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 *et seq.*), or entities owned and controlled by such tribes or corporations, are not considered affiliates of an applicant (or licensee) that is owned and controlled by such tribes, corporations or entities, and that otherwise complies with the requirements of § 24.709 (b)(3) and (b)(5) or § 24.709 (b)(4) and (b)(6), except that gross revenues derived from gaming activities conducted by affiliated entities pursuant to the Indian Gaming Regulatory Act (25 U.S.C. 2701 *et seq.*) will be counted in determining such applicant's (or licensee's) compliance with the financial requirements of § 24.709(a) and paragraphs (b) and (d) of this section, unless such applicant establishes that it will not receive a substantial unfair competitive advantage because significant legal constraints restrict the applicant's ability to access such gross revenues.

(m) *Publicly Traded Corporation with Widely Dispersed Voting Power.* A *publicly traded corporation with widely dispersed voting power* is a business entity organized under the laws of the United States:

(1) Whose shares, debt, or other ownership interests are traded on an organized securities exchange within the United States;

(2) In which no person

(i) Owns more than 15 percent of the equity; or

(ii) Possesses, directly or indirectly, through the ownership of voting securities, by contract or otherwise, the power to control the election of more than 15 percent of the members of the board of directors or other governing body of such publicly traded corporation; and

(3) Over which no person other than the management and members of the board of directors or other governing body of such publicly traded corporation, in their capacities as such, has *de facto* control.

(4) The term *person* shall be defined as in section 13(d) of the Securities and Exchange Act of 1934, as amended (15 U.S.C. 78(m)), and shall also include investors that are commonly controlled under the indicia of control set forth in the definition of *affiliate* in paragraphs (1)(2) through (1) of this section.

(n) *Qualifying Investor; Qualifying Minority and/or Woman Investor.*

(1) A qualifying investor is a person who is (or holds an interest in) a member of the applicant's (or licensee's) control group and whose gross revenues and total assets, when aggregated with those of all other attributable investors and affiliates, do not exceed the gross revenues and total assets limits specified in § 24.709(a), or, in the case of an applicant (or licensee) that is a small business, do not exceed the gross revenues limit specified in paragraph (b) of this section.

(2) A *qualifying minority and/or woman investor* is a person who is a *qualifying investor* under paragraph (n)(1), who is (or holds an interest in) a member of the applicant's (or licensee's) *control group* and who is a *member of a minority group* or a woman and a United States citizen.

(3) For purposes of assessing compliance with the minimum equity requirements of § 24.709(b) (5) and (6), where such equity interests are not held directly in the applicant, interests held by qualifying investors or qualifying minority and/or woman investors shall be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain.

(4) For purposes of § 24.709 (b)(5)(i)(C) and (b)(6)(i)(C), a qualifying investor is a person who is (or holds an interest in) a member of the applicant's (or licensee's) control group and whose gross revenues and total assets do not exceed the gross revenues and total assets limits specified in § 24.709(a).

(o) *Preexisting entity; Existing investor.* A *preexisting entity* is an entity that was operating and earning revenues for at least two years prior to December 31, 1994. An *existing investor* is a person or entity that was an owner of record of a *preexisting entity's* equity as of November 10, 1994, and any person or entity acquiring *de minimus* equity holdings in a *preexisting entity* after that date.

NOTE: In applying the term *existing investor* to *de minimus* interests in preexisting entities obtained or increased after November 10, 1994, the Commission will scrutinize any significant restructuring of the preexisting entity that occurs after that date and will presume that any change of equity that is five percent or less of the preexisting entity's total equity is *de minimis*. The burden is on the applicant (or licensee) to demonstrate that changes that exceed five percent are not significant.

[59 FR 63236, Dec. 7, 1994; 60 FR 5335, Jan 27, 1995; 60 FR 8571, 8572, Feb. 15, 1995, as amended at 60 FR 37800, July 21, 1995; 61 FR 33869, July 1, 1996; 61 FR 51234, Oct. 1, 1996; 65 FR 53638, Sept. 5, 2000]

Subpart I—Interim Application, Licensing, and Processing Rules for Broadband PCS

SOURCE: 59 FR 37610, July 22, 1994, unless otherwise noted.

§§ 24.801–24.803 [Reserved]

§ 24.804 Eligibility.

(a) General. Authorizations will be granted upon proper application if:

(1) The applicant is qualified under all applicable laws and Commission regulations, policies and decisions;

(2) There are frequencies available to provide satisfactory service; and

(3) The public interest, convenience or necessity would be served by a grant.

(b) Alien ownership. A broadband PCS authorization to provide Commercial Mobile Radio Service may not be granted to or held by:

(1) Any alien or the representative of any alien.

(2) Any corporation organized under the laws of any foreign government.

(3) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or any corporation organized under the laws of another country.

(4) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country, if the Commission finds that the public interest will be served by the refusal or revocation of such a license.

(c) A broadband PCS authorization to provide Private Mobile Radio Service

may not be granted to or held by a foreign government or a representative thereof.

[59 FR 37610, July 22, 1994, as amended at 61 FR 55581, Oct. 28, 1996]

§§ 24.805–24.814 [Reserved]

§ 24.815 Technical content of applications; maintenance of list of station locations.

(a) All applications required by this part shall contain all technical information required by the application forms or associated Public Notice(s). Applications other than initial applications for a broadband PCS license must also comply with all technical requirements of the rules governing the broadband PC (*see* subparts C and E of this part as appropriate). The following paragraphs describe a number of general technical requirements.

(b) Each application (except applications for initial licenses filed on Form 175) for a license for broadband PCS must comply with the provisions of §§ 24.229–24.238 of the Commission's Rules.

(c)–(i) [Reserved]

(j) The location of the transmitting antenna shall be considered to be the station location. Broadband PCS licensees must maintain a current list of all station locations, which must describe the transmitting antenna site by its geographical coordinates and also by conventional reference to street number, landmark, or the equivalent. All such coordinates shall be specified in terms of degrees, minutes, and seconds to the nearest second of latitude and longitude.

§§ 24.816–24.829 [Reserved]

§ 24.830 Opposition to applications.

(a) Petitions to deny (including petitions for other forms of relief) and responsive pleadings for Commission consideration must comply with § 1.2108 of this chapter and must:

(1) Identify the application or applications (including applicant's name, station location, Commission file numbers and radio service involved) with which it is concerned;

(2) Be filed in accordance with the pleading limitations, filing periods, and other applicable provisions of §§ 1.41 through 1.52 of this chapter except where otherwise provided in § 1.2108 of this chapter;

(3) Contain specific allegations of fact which, except for facts of which official notice may be taken, shall be supported by affidavit of a person or persons with personal knowledge thereof, and which shall be sufficient to demonstrate that the petitioner (or respondent) is a party in interest and that a grant of, or other Commission action regarding, the application would be *prima facie* inconsistent with the public interest;

(4) Be filed within thirty (30) days after the date of public notice announcing the acceptance for filing of any such application or major amendment thereto (unless the Commission otherwise extends the filing deadline); and

(5) Contain a certificate of service showing that it has been mailed to the applicant no later than the date of filing thereof with the Commission.

(b) A petition to deny a major amendment to a previously-filed application may only raise matters directly related to the amendment which could not have been raised in connection with the underlying previously-filed application. This subsection does not apply, however, to petitioners who gain standing because of the major amendment.

§ 24.831 Mutually exclusive applications.

(a) The Commission will consider applications for broadband PCS licenses to be mutually exclusive if they relate to the same geographical boundaries (MTA or BTA) and are timely filed for the same frequency block.

(b) Mutually exclusive applications filed on Form 175 for the initial provision of broadband PCS are subject to competitive bidding in accordance with the procedures in subpart H of this part and in part 1, subpart Q of this chapter.

(c) An application will be entitled to comparative consideration with one or more conflicting applications only if the Commission determines that such comparative consideration will serve the public interest.

(d)–(j) [Reserved]

§ 24.832 [Reserved]

§ 24.833 Post-auction divestitures.

Any parties sharing a common non-controlling ownership interest who aggregate more PCS spectrum among them than a single entity is entitled to hold (*See* §§ 20.6(e), 24.710, 24.204, 24.229(c) of this chapter) will be permitted to divest sufficient properties within 90 days of the license grant to come into compliance with the spectrum aggregation limits as follows:

(a) The broadband PCS applicant shall submit a signed statement with its long-form application stating that sufficient properties will be divested within 90 days of the license grant. If the licensee is otherwise qualified, the Commission will grant the applications subject to a condition that the licensee come into compliance with the PCS spectrum aggregation limits within 90 days of grant.

(b) Within 90 days of license grant, the licensee must certify that the applicant and all parties to the application have come into compliance with the PCS spectrum aggregation limits. If the licensee fails to submit the certification within 90 days, the Commission will immediately cancel all broadband PCS licenses won by the applicant, impose the default penalty and, based on the facts presented, take any other action it may deem appropriate. Divestiture may be to an interim trustee if a buyer has not been secured in the required time frame, as long as the applicant has no interest in or control of the trustee, and the trustee may dispose of the property as it sees fit. In no event may the trustee retain the property for longer than six months from grant of license.

[59 FR 53371, Oct. 24, 1994]

§§ 24.834–24.838 [Reserved]

§ 24.839 Transfer of control or assignment of license.

(a) Restrictions on Assignments and Transfers of Licenses for Frequency Blocks C and F won in closed bidding. No assignment or transfer of control of a license for frequency Block C or frequency Block F won in closed bidding pursuant to the eligibility requirements of § 24.709 will be granted unless:

(1) The application for assignment or transfer of control is filed after five years from the date of the initial license grant; or

(2) The proposed assignee or transferee meets the eligibility criteria set forth in § 24.709 of this part at the time the application for assignment or transfer of control is filed, or the proposed assignee or transferee holds other license(s) for frequency blocks C and F and, at the time of receipt of such license(s), met the eligibility criteria set forth in § 24.709 of this part; or

(3) The application is for partial assignment of a partitioned service area to a rural telephone company pursuant to § 24.714 of this part and the proposed assignee meets the eligibility criteria set forth in § 24.709 of this part; or

(4) The application is for an involuntary assignment or transfer of control to a bankruptcy trustee appointed under involuntary bankruptcy, an independent receiver appointed by a court of competent jurisdiction in a foreclosure action, or, in the event of death or disability, to a person or entity legally qualified to succeed the deceased or disabled person under the laws of the place having jurisdiction over the estate involved; provided that, the applicant requests a waiver pursuant to this paragraph; or

(5) The assignment or transfer of control is pro forma; or

(6) The application for assignment or transfer of control is filed on or after the date the licensee has notified the Commission pursuant to § 24.203(c) that its five-year construction requirement has been satisfied.

(b) If the assignment or transfer of control of a license is approved, the assignee or transferee is subject to the original construction requirement of § 24.203 of this part.

[63 FR 68953, Dec. 14, 1998; as amended at 65 FR 53638, Sept. 5, 2000]

§§ 24.840–24.842 [Reserved]

§ 24.843 Extension of time to complete construction.

(a) If construction is not completed within the time period set forth in § 24.203, the authorization will automatically expire. Before the period for construction expires an application for

an extension of time to complete construction (FCC Form 489) may be filed. *See* paragraph (b) of this section. Within 30 days after the authorization expires an application for reinstatement may be filed on FCC Form 489.

(b) *Extension of Time to Complete Construction.* An application for extension of time to complete construction may be made on FCC Form 489. Extension of time requests must be filed prior to the expiration of the construction period. Extensions will be granted only if the licensee shows that the failure to complete construction is due to causes beyond its control.

(c) An application for modification of an authorization (under construction) does not extend the initial construction period. If additional time to construct is required, an FCC Form 489 must be submitted.

(d) [Reserved]

§ 24.844 [Reserved]

Subpart J—Required New Capabilities Pursuant to the Communications Assistance for Law Enforcement Act (CALEA)

SOURCE: 64 FR 51717, Sept. 24, 1999, unless otherwise noted.

§ 24.900 Purpose.

Pursuant to the Communications Assistance for Law Enforcement Act (CALEA), Public Law 103–414, 108 Stat. 4279 (1994) (codified as amended in sections of 18 U.S.C. and 47 U.S.C.), this subpart contains rules that require a broadband PCS telecommunications carrier to implement certain capabilities to ensure law enforcement access to authorized communications or call-identifying information.

§ 24.901 Scope.

The definitions included in this subpart shall be used solely for the purpose of implementing CALEA requirements.

§ 24.902 Definitions.

Call identifying information. Call identifying information means dialing or signaling information that identifies the origin, direction, destination, or termination of each communication generated or received by a subscriber by means of any equipment, facility, or service of a telecommunications carrier. Call identifying information is ''reasonably available'' to a carrier if it is present at an intercept access point and can be made available without the carrier being unduly burdened with network modifications.

Collection function. The location where lawfully authorized intercepted communications and call-identifying information is collected by a law enforcement agency (LEA).

Content of subject-initiated conference calls. Capability that permits a LEA to monitor the content of conversations by all parties connected via a conference call when the facilities under surveillance maintain a circuit connection to the call.

Dialed digit extraction. Capability that permits a LEA to receive on the call data channel a digits dialed by a subject after a call is connected to another carrier's service for processing and routing.

IAP. Intercept access point is a point within a carrier's system where some of the communications or call-identifying information of an intercept subject's equipment, facilities, and services are accessed.

In-band and out-of-band signaling. Capability that permits a LEA to be informed when a network message that provides call identifying information (*e.g.*, ringing, busy, call waiting signal, message light) is generated or sent by the IAP switch to a subject using the facilities under surveillance. Excludes signals generated by customer premises equipment when no network signal is generated.

J–STD–025. The interim standard developed by the Telecommunications Industry Association and the Alliance for Telecommunications Industry Solutions for wireline, cellular, and broadband PCS carriers. This standard defines services and features to support lawfully authorized electronic surveillance, and specifies interfaces necessary to deliver intercepted communications and call-identifying information to a LEA.

LEA. Law enforcement agency; *e.g.*, the Federal Bureau of Investigation or a local police department.

Party hold, join, drop on conference calls. Capability that permits a LEA to identify the parties to a conference call conversation at all times.

Subject-initiated dialing and signaling information. Capability that permits a LEA to be informed when a subject using the facilities under surveillance uses services that provide call identifying information, such as call forwarding, call waiting, call hold, and three-way calling. Excludes signals generated by customer premises equipment when no network signal is generated.

Timing information. Capability that permits a LEA to associate call-identifying information with the content of a call. A call-identifying message must be sent from the carrier's IAP to the LEA's Collection Function within eight seconds of receipt of that message by the IAP at least 95% of the time, and with the call event timestamped to an accuracy of at least 200 milliseconds.

§ 24.903 Capabilities that must be provided by a broadband PCS telecommunications carrier.

(a) Except as provided under paragraph (b) of this section, as of June 30, 2000, a broadband PCS telecommunications carrier shall provide to a LEA the assistance capability requirements of CALEA, see 47 U.S.C. 1002. A carrier may satisfy these requirements by complying with publicly available technical requirements or standards adopted by an industry association or standard-setting organization, such as J–STD–025.

(b) As of September 30, 2001, a broadband PCS telecommunications carrier shall provide to a LEA communications and call-identifying information transported by packet-mode communications and the following capabilities:

(1) Content of subject-initiated conference calls;

(2) Party hold, join, drop on conference calls;

(3) Subject-initiated dialing and signaling information ;

(4) In-band and out-of-band signaling;

(5) Timing information;

(6) Dialed digit extraction.

[64 FR 51717, Sept. 24, 1999; 65 FR 18255, Apr. 7, 2000]

PART 25—SATELLITE COMMUNICATIONS

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AUTHORITY: 47 U.S.C. 701–744. Interprets or applies Sections 4, 301, 302, 303, 307, 309 and 332 of the Communications Act, as amended, 47 U.S.C. Sections 154, 301, 302, 303, 307, 309 and 332, unless otherwise noted.

Subpart A—General

§ 25.101 Basis and scope.

(a) The rules and regulations in this part are issued pursuant to the authority contained in section 201(c)(11) of the Communications Satellite Act of 1962, as amended, section 501(c)(6) of the International Maritime Satellite Telecommunications Act, and titles I through III of the Communications Act of 1934, as amended.

(b) The rules and regulations in this part supplement, and are in addition to the rules and regulations contained in or to be added to, other parts of this chapter currently in force, or which may subsequently be promulgated, and which are applicable to matters relating to communications by satellites.

[28 FR 13037, Dec. 5, 1963, as amended at 56 FR 24015, May 28, 1991]

§ 25.102 Station authorization required.

(a) No person shall use or operate apparatus for the transmission of energy or communications or signals by space or earth stations except under, and in accordance with, an appropriate authorization granted by the Federal Communications Commission.

(b) Protection from impermissible levels of interference to the reception of signals by earth stations in the Fixed-Satellite Service from terrestrial stations in a co-equally shared band is provided through the authorizations granted under this part.

[56 FR 24016, May 28, 1991]

§ 25.103 Definitions.

(a) *Communications common carrier*. The term ''communications common carrier'' as used in this part means any person (individual, partnership, association, joint-stock company, trust, corporation, or other entity) engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or in interstate or foreign radio transmission of energy, including such carriers as are described in subsection 2(b) (2) and (3) of the Communications Act of 1934, as amended, and, in addition, for purposes of subpart H of this part, includes any individual, partnership, association, joint-stock company, trust, corporation, or other entity which owns or controls, directly or indirectly, or is under direct or indirect common control with, any such carrier.

(b) *Authorized carrier*. (1) Except as provided in paragraph (b)(2) of this section, the term ''authorized carrier'' means a communications common carrier which is authorized by the Federal Communications Commission under the Communications Act of 1934, as amended, to provide services by means of communications satellites.

(2) For the purposes of subpart H of this part, the term ''authorized carrier'' means a communications common carrier which is specifically authorized or which is a member of a class of carriers authorized by the Commission to own shares of stock in the corporation.

(c) *Communications satellite corporation*. (1) The terms ''communications satellite corporation'' or ''corporation'' as used in this part mean the corporation created pursuant to the provisions of Title III of the Communications Satellite Act of 1962.

(2) The corporation shall be deemed to be a common carrier within the meaning of section 3(h) of the Communications Satellite Act of 1962.

(d) *Communication-satellite earth station complex*. The term communication-satellite earth station complex includes transmitters, receivers, and communications antennas at the earth station site together with the interconnecting terrestrial facilities (cables, lines, or microwave facilities) and modulating and demodulating equipment necessary for processing of traffic received from the terrestrial distribution system(s) prior to transmission via satellite and of traffic received from the satellite prior to transfer of channels of communication to terrestrial distribution system(s).

(e) *Communication-satellite earth station complex functions*. The communication-satellite earth station complex interconnects with terminal equipment of common carriers or authorized entities at the interface; accepts traffic from such entities at the interface, processes for transmission via satellite and performs the transmission function; receives traffic from a satellite or satellites, processes it in a form necessary to deliver channels of communication to terrestrial common carriers or such other authorized entities and delivers the processed traffic to such entities at the interface.

(f) *Interface*. The point of interconnection between two distinct but adjacent communications systems having different functions. The interface in the communication-satellite service is that point where communications terminal equipment of the terrestrial common carriers or other authorized entities interconnects with the terminal equipment of the communication-satellite earth station complex. The interface in the communication-satellite service shall be located at the earth station site, or if this is impracticable, as close thereto as possible.

[28 FR 13037, Dec. 5, 1963, as amended at 31 FR 3289, Mar. 2, 1966]

§ 25.104 Preemption of local zoning of earth stations.

(a) Any state or local zoning, land-use, building, or similar regulation that materially limits transmission or reception by satellite earth station antennas, or imposes more than minimal costs on users of such antennas, is preempted unless the promulgating authority can demonstrate that such regulation is reasonable, except that non-federal regulation of radio frequency emissions is not preempted by this section. For purposes of this paragraph (a), reasonable means that the local regulation:

(1) Has a clearly defined health, safety, or aesthetic objective that is stated in the text of the regulation itself; and

(2) Furthers the stated health, safety or aesthetic objective without unnecessarily burdening the federal interests in ensuring access to satellite services and in promoting fair and effective competition among competing communications service providers.

(b)(1) Any state or local zoning, land-use, building, or similar regulation that affects the installation, maintenance, or use of a satellite earth station antenna that is two meters or less in diameter and is located or proposed to be located in any area where commercial or industrial uses are generally permitted by non-federal land-use regulation shall be presumed unreasonable and is therefore preempted subject to paragraph (b)(2) of this section. No civil, criminal, administrative, or other legal action of any kind shall be taken to enforce any regulation covered by this presumption unless the promulgating authority has obtained a waiver from the Commission pursuant to paragraph (e) of this section, or a final declaration from the Commission or a court of competent jurisdiction that the presumption has been rebutted pursuant to paragraph (b)(2) of this section.

(2) Any presumption arising from paragraph (b)(1) of this section may be rebutted upon a showing that the regulation in question:

(i) Is necessary to accomplish a clearly defined health or safety objective that is stated in the text of the regulation itself;

(ii) Is no more burdensome to satellite users than is necessary to achieve the health or safety objective; and

(iii) Is specifically applicable on its face to antennas of the class described in paragraph (b)(1) of this section.

(c) Any person aggrieved by the application or potential application of a state or local zoning or other regulation in violation of paragraph (a) of this section may, after exhausting all nonfederal administrative remedies, file a petition with the Commission requesting a declaration that the state or local regulation in question is preempted by this section. Nonfederal administrative remedies, which do not include judicial appeals of administrative determinations, shall be deemed exhausted when:

(1) The petitioner's application for a permit or other authorization required by the state or local authority has been denied and any administrative appeal and variance procedure has been exhausted;

(2) The petitioner's application for a permit or other authorization required by the state or local authority has been on file for ninety days without final action;

(3) The petitioner has received a permit or other authorization required by the state or local authority that is conditioned upon the petitioner's expenditure of a sum of money, including costs required to screen, pole-mount, or otherwise specially install the antenna, greater than the aggregate purchase or total lease cost of the equipment as normally installed; or

(4) A state or local authority has notified the petitioner of impending civil or criminal action in a court of law and there are no more nonfederal administrative steps to be taken.

(d) Procedures regarding filing of petitions requesting declaratory rulings and other related pleadings will be set forth in subsequent Public Notices. All allegations of fact contained in petitions and related pleadings must be supported by affidavit of a person or persons with personal knowledge thereof.

(e) Any state or local authority that wishes to maintain and enforce zoning or other regulations inconsistent with this section may apply to the Commission for a full or partial waiver of this section. Such waivers may be granted by the Commission in its sole discretion, upon a showing by the applicant that local concerns of a highly specialized or unusual nature create a necessity for regulation inconsistent with this section. No application for waiver shall be considered unless it specifically sets forth the particular regulation for which waiver is sought. Waivers granted in accordance with this section shall not apply to later-enacted or amended regulations by the local authority unless the Commission expressly orders otherwise.

(f) A satellite earth station antenna that is designed to receive direct broadcast satellite service, including direct-to-home satellite services, that is one meter or less in diameter or is located in Alaska is covered by the regulations in § 1.4000 of this chapter.

[61 FR 10898, Mar. 18, 1996, as amended at 61 FR 46562, Sept. 4, 1996]

EFFECTIVE DATE NOTE: At 61 FR 46562, Sept. 4, 1996, § 25.104 was amended by revising paragraph (b)(1) and adding paragraph (f). These paragraphs contain information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§§ 25.105–25.108 [Reserved]

§ 25.109 Cross-reference.

The space radiocommunications stations in the following services are not licensed under this part:

(a) Amateur Satellite Service, see 47 CFR part 97.

(b) Direct Broadcasting Satellite Service, see 47 CFR part 100; and

(c) Ship earth stations in the Maritime Mobile Satellite Service, see 47 CFR part 83.

[56 FR 24016, May 28, 1991]

Subpart B—Applications and Licenses

SOURCE: 56 FR 24016, May 28, 1991, unless otherwise noted.

GENERAL APPLICATION FILING REQUIREMENTS

§ 25.110 Filing of applications, fees, and number of copies.

(a) Standard application forms applicable to this part may be obtained by

writing Federal Communications Commission, Forms Distribution Center, 2803 52nd Ave., Hyattsville, MD 20781 or calling (202) 632–FORM.

(b) Applications for satellite radio station authorizations governed by this part and requiring a fee shall be mailed or hand-delivered to the locations specified in part 1, subpart G of this chapter. All other applications shall be submitted to the Secretary, Federal Communications Commission, 1919 M Street, N.W., Washington, DC 20554.

(c) All correspondence and amendments concerning an application shall clearly identify the satellite radio service, the name of the applicant, station location, the call sign or other identification of the station, and the file number of the application involved (if available).

(d) Except as otherwise specified, all applications, amendments, and correspondence shall be submitted in triplicate, including exhibits and attachments thereto. All matters relating to space station applications shall be submitted as an original and nine copies.

(e) The original copy of the application shall be signed as specified in § 1.743 of this chapter, and shall supply the information prescribed by this part for the particular authorization requested. All other copies may be conformed.

(f) Each application shall be accompanied by the appropriate fee, specified by, and submitted in accordance with, subpart G of part 1 of this chapter.

[56 FR 24016, May 28, 1991, as amended at 60 FR 5333, Jan. 27, 1995; 61 FR 9951, Mar. 12, 1996]

§ 25.111 Additional information.

(a) The Commission may request from any party at any time additional information concerning any application, or any other submission or pleading regarding an application, filed under this part.

(b) Applicants, permittees and licensees of radio stations governed by this part shall provide the Commission with all information it requires for the Advance Publication, coordination and notification of frequency assignments pursuant to the international Radio Regulations and consultations required by Article XIV of the INTELSAT Agreement and Article 8 of the INMARSAT Convention. This information includes, but is not limited to, that specified in appendices 3 and 4 of the Radio Regulations (Geneva 1979). No protection from interference caused by radio stations authorized by other Administrations is guaranteed unless coordination procedures are timely completed or, with respect to individual administrations, by successfully completing coordination agreements. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments with other Administrations.

§ 25.112 Defective applications.

(a) An application will be unacceptable for filing and will be returned to the applicant with a brief statement identifying the omissions or discrepancies if:

(1) The application is defective with respect to completeness of answers to questions, informational showings, internal inconsistencies, execution, or other matters of a formal character; or

(2) The application does not substantially comply with the Commission's rules, regulations, specific requests for additional information, or other requirements.

(b) Applications considered defective under paragraph (a) of this section may be accepted for filing if:

(1) The application is accompanied by a request which sets forth the reasons in support of a waiver of (or an exception to), in whole or in part, any specific rule, regulation, or requirement with which the application is in conflict;

(2) The Commission, upon its own motion, waives (or allows an exception to), in whole or in part, any rule, regulation or requirement.

(c) If an applicant is requested by the Commission to file any additional information or any supplementary or explanatory information not specifically required in the prescribed application form or these rules, a failure to comply with the request within a specified time period will be deemed to render the application defective and will subject it to dismissal.

§ 25.113 Construction permits, station licenses, launch authority.

(a) Except as provided in paragraph (b) of this section or in § 25.131, construction permits must be obtained for all fixed, temporary fixed or mobile earth stations governed by this part. Simultaneous application for a construction permit and station license may be made for all earth station facilities governed by this part.

(b) Construction permits are not required for satellite earth stations that operate with U.S.-licensed or non-U.S. licensed space stations. Construction of such stations may commence prior to grant of a license at the applicant's own risk. Applicants must comply with the provisions of 47 CFR 1.1312 relating to environmental processing prior to commencing construction.

(c) *FAA notification*. Before the construction of new antenna structures or alteration in the height of existing antenna structures is authorized by the FCC, a Federal Aviation Administration (FAA) determination of ''no hazard'' may be required. To apply for this determination, the FAA must be notified of the planned construction. Criteria used to determine whether FAA notification is required for a particular antenna structure are contained in part 17 of this chapter. Applications proposing construction of one or more new antenna structures or alteration of the overall height of one or more existing antenna structures, where FAA notification prior to such construction or alteration is *not* required by part 17 of this chapter, must indicate such and, unless the reason is obvious (*e.g.* structure height is less than 6.10 meters AGL) must contain a statement explaining why FAA notification is not required.

(d) *Painting and lighting*. The owner of each antenna structure required to be painted and/or illuminated under the provisions of Section 303(q) of the Communications Act of 1934, as amended, shall operate and maintain the antenna structure painting and lighting in accordance with part 17 of this chapter. In the event of default by the owner, each licensee or permittee shall be individually responsible for conforming to the requirements pertaining to antenna structure painting and lighting.

(e) *Antenna Structure Registration Number*. Applications proposing construction of one or more new antenna structures or alteration of the overall height of one or more existing structures, where FAA notification prior to such construction or alteration is required by part 17 of this chapter, must include the FCC Antenna Structure Registration Number(s) for the affected structure(s). If no such number has been assigned at the time the application is filed, the applicant must state in the application whether or not the antenna structure owner has notified the FAA of the proposed construction or alteration and applied to the FCC for an Antenna Structure Registration Number in accordance with part 17 of this chapter for the antenna structure in question.

(f) Construction permits are not required for U.S.-licensed space stations. Construction of such stations may commence, at the applicant's own risk, prior to grant of a license. Prior to commencing construction, however, applicants must notify the Commission in writing they plan to begin construction at their own risk.

(g) A launch authorization and station license (i.e., operating authoirty) must be applied for and granted before a space station may be launched and operated in orbit. Request for launch authorization may be included in an application for space station license. However, an application for authority to launch and operate an on-ground spare satellite will be considered to be a newly filed application for cut-off purposes, except where the space station to be launched is determined to be an emergency replacement for a previously authorized space station that has been lost as a result of a launch failure or a catastrophic in-orbit failure.

[56 FR 24016, May 28, 1991, as amended at 61 FR 4366, Feb. 6, 1996; 61 FR 9951, Mar. 12, 1996; 61 FR 55582, Oct. 28, 1996; 62 FR 5927, Feb. 10, 1997; 62 FR 64172, Dec. 4, 1997]

§ 25.114 Applications for space station authorizations.

(a) A comprehensive proposal shall be submitted for each proposed space station on FCC Form 312, Main Form, together along with attached exhibits as

described in paragraph (c) of this section. If an applicant is proposing more than one space station, information common to all space stations may be submitted in a consolidated system proposal.

(b) Each application for a new or modified space station authorization must constitute a concrete proposal for Commission evaluation, although the applicant may propose alternatives that increase flexibility in accommodating the satellite in orbit. Each application must also contain the formal waiver required by Section 304 of the Communications Act, 47 U.S.C. 304. The technical information for a proposed satellite system need not be filed on any prescribed form but should be complete in all pertinent details. The format of the applications should conform to the specifications of § 1.49 of this chapter.

(c) The following information in narrative form shall be contained in each application:

(1) Name, address, and telephone number of the applicant;

(2) Name, address, and telephone number of the person(s), including counsel, to whom inquiries or correspondence should be directed;

(3) Type of authorization requested (*e.g.*, launch authority, station license, modification of authorization);

(4) General description of overall system facilities, operations and services;

(5) Radio frequencies and polarization plan (including beacon, telemetry, and telecommand functions), center frequency and polarization of transponders (both receiving and transmitting frequencies), emission designators and allocated bandwidth of emission, final amplifier output power (identify any net losses between output of final amplifier and input of antenna and specify the maximum EIRP for each antenna beam), identification of which antenna beams are connected or switchable to each transponder and TT&C function, receiving system noise temperature, the relationship between satellite receive antenna gain pattern and gain-to-temperature ratio and saturation flux density for each antenna beam (may be indicated on antenna gain plot), the gain of each transponder channel (between output of receiving antenna and input of transmitting antenna) including any adjustable gain step capabilities, and predicted receiver and transmitter channel filter response characteristics;

(6)(i) For satellites in geostationary-satellite orbit, orbital location, or locations if alternatives are proposed, requested for the satellite, the factors that support such an orbital assignment, the range of orbital locations from which adequate service can be provided and the basis for determining that range of orbital locations, and a detailed explanation of all factors that would limit the orbital arc over which the satellite could adequately serve its expected users;

(ii) For satellites in non-geostationary-satellite orbits, the number of space stations and applicable information relating to the number of orbital planes, the inclination of the orbital plane(s), the orbital period, the apogee, the perigee, the argument(s) of perigee, active service arc(s), and right ascension of the ascending node(s); and

(iii) If applicable, the feeder link and inter-satellite service frequencies requested for the satellite, together with any demonstration otherwise required by this chapter for use of those frequencies (*see, e.g.*, § 25.203(j) and (k));

(7) Predicted space station antenna gain contour(s) for each transmit and each receive antenna beam and nominal orbital location requested. These contour(s) should be plotted on an area map at 2 dB intervals down to 10 dB below the peak value of the parameter and at 5 dB intervals between 10 dB and 20 dB below the peak values, with the peak value and sense of polarization clearly specified on each plotted contour;

(8) A description of the types of services to be provided, and the areas to be served, including a description of the transmission characteristics and performance objectives for each type of proposed service, details of the link noise budget, typical or baseline earth station parameters, modulation parameters, and overall link performance analysis (including an analysis of the effects of each contributing noise and interference source);

(9) For satellites in geostationary-satellite orbit, accuracy with which

the orbital inclination, the antenna axis attitude, and longitudinal drift will be maintained;

(10) Calculation of power flux density levels within each coverage area and of the energy dispersal, if any, needed for compliance with § 25.208;

(11) Arrangement for tracking, telemetry, and control;

(12) Physical characteristics of the space station including weight and dimensions of spacecraft, detailed mass (on ground and in-orbit) and power (beginning and end of life) budgets, and estimated operational lifetime and reliability of the space station and the basis for that estimate;

(13) Detailed information demonstrating the financial qualifications of the applicant to construct and launch the proposed satellites. Applications shall provide the financial information required by § 25.140 (b) through (e), § 25.142(a)(4), or § 25.143(b)(3), as appropriate;

(14) A clear and detailed statement of whether the space station is to be operated on a common carrier basis, or whether non-common carrier transactions are proposed. If non-common carrier transactions are proposed, describe the nature of the transactions and specify the number of transponders to be offered on a non-common carrier basis;

(15) Dates by which construction will be commenced and completed, launch date, and estimated date of placement into service;

(16) Public interest considerations in support of grant;

(17) Applications for authorizations for domestic fixed-satellite space stations shall also include the information specified in § 25.140;

(18) Applications for authorizations in the Radiodetermination Satellite Service shall also include the information specified in § 25.141;

(19) Applications for authorizations in the Mobile-Satellite Service in the 1545–1559/1646.5–1660.5 MHz frequency bands shall also provide all information necessary to comply with the policies and procedures set forth in Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Service, 2 FCC Rcd 485 (1987) (Available at address in § 0.445 of this chapter.);

(20) Applications to license multiple space station systems in the non-voice, non-geostationary mobile-satellite service under blanket operating authority shall also provide all information specified in § 25.142; and

(21) Applications for authorizations in the 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service shall also provide all information specified in § 25.143.

(d) Applicants requesting authority to launch and operate a system comprised of technically identical, non-geostationary satellite orbit space stations may file a single ''blanket'' application containing the information specified in paragraph (c) of this section for each representative space station.

[62 FR 5927, Feb. 10, 1997, as amended at 65 FR 59142, Oct. 4, 2000]

§ 25.115 Application for earth station authorizations.

(a) Transmitting earth stations. Except as provided under § 25.113(b), Commission authorization must be obtained for authority to construct and/or operate a transmitting earth station. Applications shall be filed on FCC Form 312, Main Form and Schedule B, and include the information specified in § 25.130.

(b) Receive-only earth stations. Applications to license or register receive only earth stations shall be filed on FCC Form 312, Main Form and Schedule B, and conform to the provisions of § 25.131.

(c)(1) Large Networks of Small Antennas operating in the 12/14 GHz frequency bands with U.S.-licensed or non-U.S. licensed satellites for domestic services. Applications to license small antenna network systems operating in the 12/14 GHz frequency band under blanket operating authority shall be filed on FCC Form 312, Main Form and Schedule B, for each large (5 meters or larger) hub station, and Schedule B for each representative type of small antenna (less than 5 meters) operating within the network.

(c)(2) Large Networks of Small Antennas operating in the 4/6 GHz frequency bands with U.S.-licensed or

non-U.S. licensed satellites for domestic services (CSATs). Applications to license small antenna network systems operating in the standard C-Band, 3700–4200 MHz and 5925–6425 MHz frequency band shall be filed electronically on FCC Form 312, Main Form and Schedule B.

(i) An initial lead application providing a detailed overview of the complete network shall be filed. Such lead applications shall fully identify the scope and nature of the service to be provided, as well as the complete technical details of each representative type of small antenna (less than 4.5 meters) that will operate within the network. Such lead applications for a single CSAT system must identify:

(A) No more than three discrete geostationary satellites to be accessed;

(B) The amount of frequency bandwidth sought, up to a maximum of 20 MHz of spectrum in each direction at each of the satellites (The same 20 MHz of uplink and 20 MHz of downlink spectrum at each satellite would be accessible by all CSAT earth stations in the system. The 20 MHz of uplink and 20 MHz of downlink spectrum need not be the same at each satellite location);

(C) The maximum number of earth station sites;

(ii) Following the issuance of a license for the lead application, the licensee shall notify the Commission of the complete technical parameters of each individual earth station site before that site is bought into operation under the lead authorization. Full frequency coordination of each individual site (e.g., for each satellite and the spectrum associated therewith) shall be completed prior to filing Commission notification. The coordination must be conducted in accordance with § 25.203. Such notification shall be done by electronic filing and shall be consistent with the technical parameters of Schedule B of FCC Form 312.

(iii) Following successful coordination of such an earth station, if the earth station operator does not file a lead application or a Schedule B within six months after it successfully completes coordination, it will be assumed that such frequency use is no longer desired, unless a second notification has been received within ten days prior to the end of the six month period. Such renewal notifications must be sent to all parties concerned. If the lead application or Schedule B, or renewal notification, is not timely received, the coordination will lapse and the licensee must re-coordinate the relevant earth stations if it still wishes to bring them into operation.

(iv) Operation of each individual site may commence immediately after the public notice is released that identifies the notification sent to the Commission and if the requirements of paragraph (c)(2)(vi) of this section are met. Continuance of operation of each station for the duration of the lead license term shall be dependent upon successful completion of the normal public notice process. If any objections are received to the new station prior to the end of the 30 day comment period of the Public Notice, the licensee shall immediately cease operation of those particular stations until the coordination dispute is resolved and the CSAT licensee informs the Commission of the resolution. If the requirements of paragraph (c)(2)(vi) of this section are not met, operation may not commence until the Commission issues the public notice acting on the CSAT terminal authorization.

(v) Each CSAT licensee shall annually provide the Commission an updated list of all operational earth stations in its system. The annual list shall also include a list of all earth stations deactivated during the year and identification of the satellites providing service to the network as of the date of the report.

(vi) *Conditional authorization.* (A) An applicant for a new CSAT radio station or modification of an existing CSAT station authorized under paragraph (c)(2)(i) of this section in the 3700–4200; or 5925–6425 MHz bands may operate the proposed station during the pendency of its application after the release of the public notice accepting the notification for filing that complies with paragraph (c)(2)(ii) of this section. The applicant, however, must first certify that the following conditions are satisfied:

(*1*) The frequency coordination procedures of § 25.203 have been successfully completed;

(*2*) The antenna structure has been previously studied by the Federal Aviation Administration and determined to pose no hazard to aviation safety as required by subpart B of part 17 of this chapter; or the antenna or tower structure does not exceed 6.1 meters above ground level or above an existing man-made structure (other than an antenna structure), if the antenna or tower has not been previously studied by the Federal Aviation Administration and cleared by the FCC;

(*3*) The grant of the application(s) does not require a waiver of the Commission's rules (with the exception of a request for waiver pertaining to fees);

(*4*) The applicant has determined that the facility(ies) will not significantly affect the environment as defined in § 1.1307 of this chapter;

(*5*) The station site does not lie within 56.3 kilometers of any international border or within a radio ''Quiet Zone'' identified in § 1.924 of this chapter; and

(*6*) The filed application is consistent with the proposal that was coordinated pursuant to § 25.251.

(B) Conditional authority ceases immediately if the Schedule B is returned by the Commission because it is not accepted for filing.

(C) A conditional authorization pursuant to paragraphs (c)(2)(vi)(A) and (c)(2)(vi)(B) of this section is evidenced by retaining a copy of the Schedule B notification with the station records. Conditional authorization does not prejudice any action the Commission may take on the subject application(s) or the Schedule B notifications.

(D) Conditional authority is accepted with the express understanding that such authority may be modified or cancelled by the Commission at any time without hearing if, in the Commission's discretion, the need for such action arises. An applicant operating pursuant to this conditional authority assumes all risks associated with such operation, the termination or modification of the conditional authority, or the subsequent dismissal or denial of its application(s).

(E) The copy of the Schedule B notification form must be posted at each station operating pursuant to this section.

(vii) *Period of construction.* Construction of each earth station must be completed and the station must be brought into regular operation within twelve months from the date that action is taken to authorize that station to operate under the lead authorization, except as may be otherwise determined by the Commission for any particular application.

(d) User transceivers in the NVNG, 1.6/2.4 GHz Mobile-Satellite Service, and 2 GHz Mobile-Satellite Service need not be individually licensed. Service vendors may file blanket applications for transceivers units using FCC Form 312, Main Form and Schedule B, and specifying the number of units to be covered by the blanket license. Each application for a blanket license under this section shall include the information described in § 25.136.

(e) Earth stations operating in the 20/30 GHz Fixed-Satellite Service with U.S.-licensed or non-U.S. licensed satellites: Applications to license individual earth stations operating in the 20/30 GHz band shall be filed on FCC Form 312, Main Form and Schedule B, and shall also include the information described in § 25.138. Earth stations belonging to a network operating in the 18.58–18.8 GHz, 19.7–20.2 GHz, 28.35–28.6 GHz or 29.5–30.0 GHz bands may be licensed on a blanket basis. Applications for such blanket authorization may be filed using FCC Form 312, Main Form and Schedule B, and specifying the number of terminals to be covered by the blanket license. Each application for a blanket license under this section shall include the information described in § 25.138.

[62 FR 5928, Feb. 10, 1997, as amended at 62 FR 64172, Dec. 4, 1997; 65 FR 54169, Sept. 7, 2000; 65 FR 59142, Oct. 4, 2000; 66 FR 31559, June 12, 2001]

§ 25.116 Amendments to applications.

(a) Unless otherwise specified, any pending application may be amended until designated for hearing, a public notice is issued stating that a substantive disposition of the application is to be considered at a forthcoming Commission meeting, or a final order disposing of the matter is adopted by the Commission.

(b) Major amendments submitted pursuant to paragraph (a) of this section are subject to the public notice requirements of § 25.151. An amendment will be deemed to be a major amendment under the following circumstances:

(1) If the amendment increases the potential for interference, or changes the proposed frequencies or orbital locations to be used.

(2) If the amendment would convert the proposal into an action that may have a significant environmental effect under § 1.1307 of this chapter.

(3) If the amendment specifies a substantial change in beneficial ownership or control (*de jure* or *de facto*) of an applicant such that the change would require, in the case of an authorized station, the filing of a prior assignment or transfer of control application under section 310(d) of the Communications Act, provided however, that the change would not be considered major where it merely amends an application to reflect a change in ownership or control of the station that had been previously approved by the Commission.

(4) If the amendment, or the cumulative effect of the amendment, is determined by the Commission otherwise to be substantial pursuant to section 309 of the Communications Act.

(c) Any application will be considered to be a newly filed application if it is amended by a major amendment (as defined by paragraph (b) of this section) after a ''cut-off'' date applicable to the application, except under the following circumstances:

(1) The amendment resolves frequency conflicts with authorized stations or other pending applications but does not create new or increased frequency conflicts;

(2) The amendment reflects only a change in ownership or control found by the Commission to be in the public interest and, for which a requested exemption from a ''cut-off'' date is granted;

(3) The amendment corrects typographical, transcription, or similar clerical errors which are clearly demonstrated to be mistakes by reference to other parts of the application, and whose discovery does not create new or increased frequency conflicts; or

(4) The amendment does not create new or increased frequency conflicts, and is demonstrably necessitated by events which the applicant could not have reasonably foreseen at the time of filing.

(d) Any amendment to an application shall be signed and submitted in the same manner, and with the same number of copies, as was the original application.

§ 25.117 Modification of station license.

(a) Except as provided for in § 25.118 (Modifications not requiring prior authorization), no modification of a radio station governed by this part which affects the parameters or terms and conditions of the station authorization shall be made except upon application to and grant of such application by the Commission. No license modification will be required if the licensee seeks to access another U.S.-licensed fixed satellite provided:

(1) Consultations pursuant to Article XIV(d) of the INTELSAT Agreement have been completed for the satellites, services and countries involved; and

(2) The operators of the U.S.-licensed systems have received specific authorization to provide the services to the proposed locations.

(b) Applications for modification of an earth station license to add, change or replace transmitters or antenna facilities conforming to § 25.209 will be considered to be minor modifications if the particulars of operations remain unchanged and frequency coordination is not required, provided however, that the maximum power and power density delivered into any antenna at the earth station site shall not exceed the values calculated by subtracting the maximum antenna gain specified in the license from the maximum authorized e.i.r.p. and e.i.r.p. density values.

(c) Applications for modification of earth station authorizations shall be submitted on FCC Form 493 except as set forth in paragraph (e) of this section.

(d) Applications for modifications of space station authorizations shall be filed in accordance with § 25.114, but only those items of information listed in § 25.114(c) that change need to be

submitted provided the applicant certifies that the remaining information has not changed.

(e) Any application for modification of authorization to extend a required date of completion (e.g., begin construction, complete construction, launch, bring into operation) shall be filed on FCC Form 701 (Application for Additional Time to Construct). The application must include a verified statement from the applicant:

(1) That states the additional time is required due to unforeseeable circumstances beyond the applicant's control, describes these circumstances with specificity, and justifies the precise extension period requested; or

(2) That states there are unique and overriding public interest concerns that justify an extension, identifies these interests and justifies a precise extension period.

[56 FR 24016, May 28, 1991, as amended at 61 FR 9952, Mar. 12, 1996; 62 FR 5928, Feb. 10, 1997]

§ 25.118 Modifications not requiring prior authorization.

(a) Equipment in an authorized earth station may be replaced without prior authorization or prior notification if the new equipment is electrically identical to the existing equipment. Licensees must notify the Commission using FCC Form 312, Main Form, within 30 days after the new equipment is installed.

(b) A licensee providing service on a private carrier basis may change its operations to common carrier status without obtaining prior Commission authorization. The licensee must notify the Commission using Form 312 within 30 days after the completed change to common carrier status.

(c) Licensees may make changes to their authorized earth stations without obtaining prior Commission authorization if frequency coordination procedures, as necessary, are complied with in accordance with § 25.251, and the modification does not involve:

(1) An increase in EIRP or EIRP density (both main lobe and side lobe);

(2) An increase in transmitted power;

(3) A change in coordinates of more than 1 second for stations operating in C-Band or 10.95 to 11.7 GHz;

(4) A change in coordinates of 10 seconds or greater for stations operating in Ku-band; or

(5) An addition to an antenna facility, including hub earth stations and remote terminals, that is already licensed, except for VSAT remote terminals.

(d) Licensees must notify the Commission using FCC Form 312 within 30 days after the modification is completed.

[62 FR 5928, Feb. 10, 1997]

§ 25.119 Assignment or transfer of control of station authorization.

(a) No station license, nor any rights thereunder, shall be transferred, assigned, or disposed of in any manner, voluntarily or involuntarily, directly or indirectly, or by transfer of control of any corporation or any other entity holding such license, to any person except upon application to the Commission and upon finding by the Commission that the pubic interest, convenience and necessity will be served thereby.

(b) For purposes of this section, transfers of control requiring Commission approval shall include any and all transactions that:

(1) Change the party controlling the affairs of the licensee, or

(2) Affect any change in a controlling interest in the ownership of the licensee, including changes in legal or equitable ownership.

(c) Assignment of license. FCC Form 312, Main Form and Schedule A, shall be submitted to assign voluntarily (as by, for example, contract or other agreement) or involuntarily (as by, for example, death, bankruptcy, or legal disability) the station authorization. In the case of involuntary assignment, the application should be filed within 10 days of the event causing the assignment. FCC Form 312, Main Form, and Schedule A shall also be used for nonsubstantial (*pro forma*) assignments.

(d) Transfer of control of corporation holding license. FCC Form 312, Main Form and Schedule A, shall be submitted in order to transfer voluntarily or involuntarily (*de jure* or *de facto*) control of a corporation holding any licenses. In the case of involuntary transfer of control, the applications

should be filed within 10 days of the event causing the transfer of control. FCC Form 312, Main Form and Schedule A shall also be used for non-substantial (*pro forma*) transfers of control.

(e) Whenever a group of station licenses in the same radio service for the same class of facility licensed to the same entity is to be assigned or transferred to a single assignee or transferee, a single application may be filed to cover the entire group, if the application identifies in an exhibit each station by call sign, station location and expiration date of license.

(f) Assignments and transfers of control shall be completed within 60 days from the date of authorization. Within 30 days of consumation, the Commission shall be notified by letter of the date of consummation and the file numbers of the applications involved in the transaction.

[56 FR 24016, May 20, 1991; 56 FR 29757, June 20, 1991. Redesignated and amended at 62 FR 5928, 5929, Feb. 10, 1997]

§ 25.120 Application for special temporary authorization.

(a) In circumstances requiring immediate or temporary use of facilities, request may be made for special temporary authority to install and/or operate new or modified equipment. The request must contain the full particulars of the proposed operation including all facts sufficient to justify the temporary authority sought and the public interest therein. No request for temporary authority will be considered unless it is received by the Commission at least 3 working days prior to the date of proposed construction or operation or, where an extension is sought, the expiration date of the existing temporary authorization. A request received within less than 3 working days may be accepted only upon due showing of extraordinary reasons for the delay in submitting the request which could not have been earlier foreseen by the applicant. A copy of the request for special temporary authority also shall be forwarded to the Commission's Columbia Operations Center, 9200 Farm House Lane, Columbia, MD 21046–1609.

(b) The Commission may grant a temporary authorization for a period not to exceed 180 days, with additional periods not exceeding 180 days, upon a finding that there are extraordinary circumstances requiring temporary operations in the public interest and that delay in the institution of these temporary operations would seriously prejudice the public interest. Convenience to the applicant, such as marketing considerations of meeting scheduled customer in-service dates, will not be deemed sufficient for this purpose.

(c) Each application proposing construction of one or more earth station antennas or alteration of the overall height of one or more existing earth station antenna structures, where FAA notification prior to such construction or alteration is required by part 17 of this chapter, must include the FCC Antenna Structure Registration Number(s) for the affected satellite earth station antenna(s). If no such number has been assigned at the time the application(s) is filed, the applicant must state in the application whether the satellite earth station antenna owner has notified the FAA of the proposed construction or alteration and applied to the FCC for an Antenna Structure Registration Number in accordance with part 17 of this chapter. Applications proposing construction of one or more earth station antennas or alteration of the overall height of one or more existing earth station antennas, where FAA notification prior to such construction or alteration is *not* required by part 17 of this chapter, must indicate such and, unless the satellite earth station antenna is 6.10 meters or less above ground level (AGL), must contain a statement explaining why FAA notification is not required.

[56 FR 24016, May 28, 1991, as amended at 61 FR 4367, Feb. 6, 1996. Redesignated and amended at 62 FR 5928, 5929, Feb. 10, 1997; 66 FR 9973, Feb. 13, 2001]

§ 25.121 License term and renewals.

(a) *License term.* Licenses for facilities governed by this part will be issued for a period of 10 years, except that licenses and authorizations in the 2 GHz Mobile-Satellite Service will be issued for a period of 15 years.

(b) The Commission reserves the right to grant or renew station licenses

for less than 10 years if, in its judgment, the public interest, convenience and necessity will be served by such action.

(c) For earth stations, the license term will be specified in the instrument of authorization.

(d) *Space stations.* (1) For geostationary satellite orbit satellites, the license term will begin at 3 a.m. EST on the date the licensee certifies to the Commission that the satellite has been successfully placed into orbit and that the operations of the satellite fully conform to the terms and conditions of the space station radio authorization.

(2) For non-geostationary satellite orbit satellites, the license term will begin at 3 a.m. EST on the date that the licensee certifies to the Commission that its initial space station has been successfully placed into orbit and that the operations of that satellite fully conform to the terms and conditions of the space station system authorization. All space stations launched and brought into service during the ten-year license term shall operate pursuant to the system authorization, and the operating authority for all space stations will terminate upon the expiration of the system license.

(e) *Renewal of licenses.* Applications for renewals of earth station licenses must be submitted on FCC Form 405 (Application for Renewal of Radio Station License in Specified Services) no earlier than 90 days, and no later than 30 days, before the expiration date of the license. Applications for space station system replacement authorization for non-geostationary orbit satellites shall be filed no earlier than 90 days, and no later than 30 days, prior to the end of the seventh year of the existing license term.

[56 FR 24016, May 28, 1991, as amended at 58 FR 68059, Dec. 23, 1993; 59 FR 53327, Oct. 21, 1994. Redesignated and amended at 62 FR 5928, 5929, Feb. 10, 1997; 65 FR 59142, Oct. 4, 2000]

EARTH STATIONS

§ 25.130 Filing requirements for transmitting earth stations.

(a) Applications for a new or modified transmitting earth station facility shall be submitted on FCC Form 312, Main Form and Schedule B, accompanied by any required exhibits.

(b) A frequency coordination analysis in accordance with § 25.203 shall be provided for earth stations transmitting in the frequency bands shared with equal rights between terrestrial and space services, except that applications for user transceiver units associated with the NVNG mobile-satellite service shall instead provide the information required by § 25.135 and applications for user transceiver units associated with the 1.6/2.4 GHz Mobile-Satellite Service shall demonstrate that user transceiver operations comply with the requirements set forth in § 25.213.

(c) In those cases where an applicant is filing a number of essentially similar applications, showings of a general nature applicable to all of the proposed stations may be submitted in the initial application and incorporated by reference in subsequent applications.

(d) Transmissions of signals or programming to non-U.S. licensed satellites, and to and/or from foreign points by means of U.S.-licensed fixed satellites may be subject to restrictions as a result of international agreements or treaties. The Commission will maintain public information on the status of any such agreements.

(e) Each application proposing construction of one or more earth station antennas or alteration of the overall height of one or more existing earth station antennas, where FAA notification prior to such construction or alteration is required by part 17 of this chapter, must include the FCC Antenna Structure Registration Number(s) for the affected satellite earth station antenna(s). If no such number has been assigned at the time the application(s) is filed, the applicant must state in the application whether the satellite earth station antenna owner has notified the FAA of the proposed construction or alteration and applied to the FCC for an antenna Structure Registration Number in accordance with part 17 of this chapter. Applications proposing construction of one or more earth station antennas or alteration of the overall height of one or more existing earth station antennas, where FAA notification prior to such

construction or notification or alteration is *not* required by part 17 of this chapter, must indicate such and, unless the satellite earth station antenna is 6.10 meters or less above ground level (AGL), must contain a statement explaining why FAA notification is not required.

[56 FR 24016, May 28, 1991, as amended at 58 FR 68059, Dec. 23, 1993; 59 FR 53327, Oct. 21, 1994; 61 FR 4367, Feb. 6, 1996; 61 FR 9952, Mar. 12, 1996; 62 FR 5929, Feb. 10, 1997; 62 FR 64172, Dec. 4, 1997]

§ 25.131 Filing requirements for receive-only earth stations.

(a) Except as provided in paragraphs (b) and (j) of this section, applications for a license for a receive-only earth station shall be submitted on FCC Form 312, Main Form and Schedule B, accompanied by any required exhibits.

(b) Except as provided in paragraph (j) of this section, receive-only earth stations in the fixed-satellite service that operate with U.S.-licensed satellites may be registered with the Commission in order to protect them from interference from terrestrial microwave stations in bands shared co-equally with the fixed service in accordance with the procedures of §§ 25.203 and 25.251 through 25.256 of this part.

(c) Licensing or registration of receive-only earth stations with the Commission confers no authority to receive and use signals or programming received from satellites. *See* section 705 of the Communications Act. 47 U.S.C. 605.

(d) Applications for registration shall be filed on FCC Form 312, Main Form and Schedule B, accompanied by the coordination exhibit required by § 25.203, and any other required exhibits. Any application that is deficient or incomplete in any respect shall be immediately returned to the applicant without processing.

(e) Complete applications for registration will be placed on public notice for 30 days and automatically granted if no objection is submitted to the Commission and served on the applicant. Additional pleadings are authorized in accordance with § 1.45 of this chapter.

(f) The registration of a receive-only earth station results in the listing of an authorized frequency band at the location specified in the registration. Interference protection levels are those agreed to during coordination.

(g) Reception of signals or programming from non-U.S. satellites may be subject to restrictions as a result of international agreements or treaties. The Commission will maintain public information on the status of any such agreements.

(h) Registration term: Registrations for receive-only earth stations governed by this section will be issued for a period of 10 years from the date on which the application was filed. Applications for renewals of registrations must be submitted on FCC Form 405 (Application for Renewal of Radio Station License in Specified Services) no earlier than 90 days and no later than 30 days before the expiration date of the registration.

(i) Applications for modification of license or registration of receive-only earth stations shall be made in conformance with § 25.117 of this part. Registrants are required to notify the Commission when a receive-only earth station is no longer operational or when it has not been used to provide any service during any 6 month period.

(j) Receive-only earth stations operating with non-U.S. licensed space stations shall file an FCC Form 312 requesting a license or modification to operate such station. Receive-only earth stations used to receive INTELNET I service from INTELSAT space stations need not file for licenses. See Deregulation of Receive-Only Satellite Earth Stations Operating with the INTELSAT Global Communications Satellite System, Declaratory Ruling, RM No. 4845, FCC 86–214 (released May 19, 1986) available through the Reference Information Center, FCC, 445 12th Street, SW., Room CY–A257, Washington, DC 20554.

[56 FR 24016, May 28, 1991, as amended at 61 FR 9952, Mar. 12, 1996; 62 FR 5929, Feb. 10, 1997; 62 FR 64172, Dec. 4, 1997; 65 FR 58466, Sept. 29, 2000]

§ 25.132 Verification of earth station antenna performance standards.

(a) All applications for transmitting earth stations in the C and Ku-bands must be accompanied by a certificate

pursuant to § 2.902 of the chapter from the manufacturer of each antenna that the results of a series of radiation pattern tests performed on representative equipment in representative configurations by the manufacturer which demonstrates that the equipment complies with the performance standards set forth in § 25.209. The licensee must be prepared to demonstrate the measurements to the Commission on request in the course of an investigation of a harmful interference incident.

(b)(1) In order to demonstrate compliance with § 25.209 (a) and (b), the following measurements on a production antenna performed on calibrated antenna range, as a minimum, shall be made at the bottom, middle and top of each allocated frequency band and submitted to the Commission:

(i) Co-polarized patterns for each of two orthogonal senses of polarizations in two orthogonal cuts of the antenna.

(A) In the azimuth plane, plus and minus 7 degrees and plus and minus 180 degrees.

(B) In the elevation plane, zero to forty-five degrees.

(ii) Cross-polarization patterns in the E- and H-planes, plus and minus 9 degrees.

(iii) Main beam gain.

(2) The FCC envelope specified in § 25.209 shall be superimposed on each pattern. The minimum tests specified above are recognized as representative of the performance of the antenna in most planes although some increase in sidelobe levels should be expected in the spar planes and orthogonal spar planes.

(c) The tests specified in paragraph (b) of this section are normally performed at the manufacturer's facility; but for those antennas that are very large and only assembled on-site, on-site measurements may be used for product qualification data. If on-site data is to be used for qualification, the test frequencies and number of patterns should follow, where possible, the recommendations in paragraph (b) of this section, and the test data is to be submitted in the same manner as described in paragraph (a) of this section.

(d) For each new or modified transmitting antenna over 3 meters in diameter, the following on-site verification measurements must be completed at one frequency on an available transponder in each frequency band of interest and submitted to the Commission.

(1) Co-polarized patterns in the elevation plane, plus and minus 7 degrees, in the transmit band.

(2) Co-polarized patterns in the azimuth and elevation planes, plus and minus 7 degrees, in the receive band.

(3) *System cross-polarization discrimination on-axis.* The FCC envelope specified in § 25.209 shall be superimposed on each pattern. The transmit patterns are to be measured with the aid of a cooperating earth station in coordination with the satellite system control center under the provisions of § 25.272.

(e) Certification that the tests required by paragraph (c) of this section have been satisfactorily performed shall be provided to the Commission in notification that construction of the facilities has been completed as required by § 25.133.

(f) Antennas less than 3 meters in diameter and antennas on simple (manual) drive mounts that are operated at a fixed site are exempt from the requirements of paragraphs (c) and (d) of this section provided that a detailed technical showing is made that confirms proper installation, pointing procedures, and polarization alignment and manufacturing quality control. These showing must also include a plan for periodic testing and field installation procedures and precautions.

(g) Records of the results of the tests required by this section must be maintained at the antenna site or the earth station operator's control center and be available for inspection.

[58 FR 13419, Mar. 11, 1993]

§ 25.133 Period of construction; certification of commencement of operation.

(a) Each license for an earth station governed by this part shall specify as a condition therein the period in which construction of facilities must be completed and station operation commenced. Construction of the earth station must be completed and the station must be brought into regular operation within 12 months from the date of the construction permit and/or license

grant except as may be otherwise determined by the Commission for any particular application.

(b) Each license for a transmitting earth station included in this part shall also specify as a condition therein that upon the completion of construction, each licensee must file with the Commission a certification containing the following information: The name of the licensee; file number of the application; call sign of the antenna; date of the license; a certification that the facility as authorized has been completed and that each antenna facility has been tested and is within 2 dB of the pattern specified in §§ 25.209, 25.135 (NVNG MSS earth stations), or § 25.213 (1.6/2.4 GHz Mobile-Satellite Service and 2 GHz Mobile-Satellite Service earth stations); the date on which the station became operational; and a statement that the station will remain operational during the license period unless the license is submitted for cancellation. For stations authorized under § 25.115(c) (Large Networks of Small Antennas operating in the 12/14 GHz bands) and § 25.115(d) (User Transceivers in the Mobile-Satellite Service), a certificate must be filed when the network is put into operation.

(c) If the facility does not meet the technical parameters set forth in § 25.209, a request for a waiver must be submitted and approved by the Commission before operations may commence.

(d) Each receiving earth station licensed or registered pursuant to § 25.131 must be constructed and placed into service within 6 months after coordination has been completed. Each licensee or registrant must file with the Commission a certification that the facility is completed and operating as provided in paragraph (b) of this section, with the exception of certification of antenna patterns.

[56 FR 24016, May 28, 1991, as amended at 58 FR 68059, Dec. 23, 1993; 59 FR 53327, Oct. 21, 1994; 65 FR 59142, Oct. 4, 2000]

§ 25.134 Licensing provisions of Very Small Aperture Terminal (VSAT) and C-band Small Aperture Terminal (CSAT) networks.

(a)(1) *VSAT networks operating in the 12/14 GHz bands.* All applications for digital VSAT networks with a maximum outbound downlink EIRP density of +6.0 dBW/4 kHz per carrier and earth station antennas with maximum input power density of −14 dBW/4 kHz and maximum hub EIRP of 78.3 dBW will be processed routinely. All applications for analog VSAT networks with maximum outbound downlink power densities of +13.0 dBW/4 kHz per carrier and maximum antenna input power densities of −8.0 dBW/4 kHz shall be processed routinely in accordance with Declaratory Order in the Matter of Routine Licensing of Earth Stations in the 6 GHz and 14 GHz Bands Using Antennas Less than 9 Meters and 5 Meters in Diameter, Respectively, for Both Full Transponder and Narrowband Transmissions, 2 FCC Rcd 2149 (1987) (Declaratory Order).

(a)(2) *Large Networks of Small Antennas operating in the 4/6 GHz frequency bands.* All applications for digital and/or analog operations will be routinely processed provided the network employs antennas that are 4.5 meter or larger in diameter, that are consistent with § 25.209, the power levels are consistent with §§ 25.211(d) and 25.212(d), and frequency coordination has been satisfactorily completed. The use of smaller antennas or non-consistent power levels require the filing of an initial lead application (§ 25.115(c)(2)) that includes all technical analyses required to demonstrate that unacceptable interference will not be caused to any and all affected adjacent satellite operators by the operation of the nonconforming earth station.

(b) *VSAT networks operating in the 12/14 GHz bands.* Each applicant for digital and/or analog VSAT network authorization proposing to use transmitted satellite carrier EIRP densities in excess of +6.0 dBW/4 kHz and +13.0 dBW/4 kHz, respectively, and/or maximum antenna input power densities of −14.0 dBW/4 kHz and maximum hub EIRPs of 78.3 dBW and −8.0 dBW/4 kHz per carrier, respectively, shall conduct an engineering analysis using the Sharp, Adjacent Satellite Interference Analysis (ASIA) program. Applicants shall submit a complete description of those baseline parameters they use in conducting their analysis and tabular

summaries of the ASIA program's output detailing potential interference shortfalls. Applicants shall also submit a narrative summary which must indicate whether there are margin shortfalls in any of the current baseline services as a result of the addition of the new applicant's high power service, and if so, how the applicant intends to resolve those margin shortfalls. Applicants shall submit link budget analyses of the operations proposed along with a detailed written explanation of how each uplink and each transmitted satellite carrier density figure is derived. Applicants shall provide proof by affidavit that all potentially affected parties acknowledge and do not object to the use of the applicant's higher power density.

(c) Licensees authorized pursuant to paragraph (b) of this section shall bear the burden of coordinating with any future applicants or licensees whose proposed compliant VSAT operations, as defined by paragraph (a) of this section, is potentially or actually adversely affected by the operation of the non-compliant licensee. If no good faith agreement can be reached, however, the non-compliant licensee shall reduce its power density levels to those compliant with the VSAT Order or the Declaratory Order, whichever is applicable.

(d) An application for VSAT authorization shall be filed on FCC Form 312, Main Form and Schedule B. A VSAT licensee applying to renew its license must include on FCC Form 405, the number of constructed VSAT units in its network.

[56 FR 66001, Dec. 20, 1991, as amended at 62 FR 5929, Feb. 10, 1997; 66 FR 31560, June 12, 2001]

§ 25.135 Licensing provisions for earth station networks in the non-voice, non-geostationary mobile-satellite service.

(a) Each applicant for a blanket earth station license in the non-voice, non-geostationary mobile-satellite service shall demonstrate that transceiver operations will not cause unacceptable interference to other authorized users of the spectrum, based on existing system information publicly available at the Commission at the time of filing, and will comply with operational conditions placed upon the systems with which they are to operate in accordance with § 25.142(b). This demonstration shall include a showing as to all the technical parameters, including duty cycle and power limits, under which the individual user transceivers will operate.

(b) Transceiver units associated with the non-voice, non-geostationary mobile-satellite service may not be operated on civil aircraft. All portable or hand-held transceiver units (including transceiver units installed in other devices that are themselves portable or hand-held) having a receiver operating in the 137–138 MHz band shall bear the following statement in a conspicuous location on the device: ''This device may not be operated while on board a civil aircraft. It must be turned off at all times while on board such an aircraft.'' This subsection shall not apply to transceiver units whose receivers are incapable of radiating in the 108–137 MHz frequency bands.

(c) Transceiver units in this service are authorized to communicate with and through U.S. authorized space stations only. No person shall transmit to a space station unless the specific transmission is first authorized by the space station licensee or by a service vendor authorized by that licensee.

(d) Any transceiver unit associated with this service will be deemed, when communicating with a particular non-voice, non-geostationary mobile-satellite service system pursuant to paragraph (c) of this section, to be temporarily associated with and licensed to the system operator or service vendor holding the blanket earth station license awarded pursuant to § 25.115(d). The domestic earth station licensee shall, for such temporary period, assume the same licensee responsibility for such transceiver as if such transceiver were regularly licensed to it.

[58 FR 68059, Dec. 23, 1993]

§ 25.136 Operating provisions for earth station networks in the 1.6/2.4 GHz mobile-satellite service and 2 GHz mobile-satellite service.

In addition to the technical requirements specified in § 25.213, earth stations operating in the 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service are subject to the following operating conditions:

(a) User transceiver units associated with the 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service may not be operated on civil aircraft unless the earth station has a direct physical connection to the aircraft Cabin Communication system.

(b) No person shall transmit to a space station unless the user transceiver is first authorized by the space station operator or by a service vendor authorized by that operator, and the specific transmission is conducted in accordance with the operating protocol specified by the system operator.

(c) Any user transceiver unit associated with this service will be deemed, when communicating with a particular 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service system pursuant to paragraph (b) of this section, to be temporarily associated with and licensed to the system operator or service vendor holding the blanket earth station license awarded pursuant to § 25.115(d). The domestic earth station licensee shall, for this temporary period, assume the same licensee responsibility for the user transceiver as if the user transceiver were regularly licensed to it.

[65 FR 59142, Oct. 4, 2000]

§ 25.137 Application requirements for earth stations operating with non-U.S. licensed space stations.

(a) Earth station applicants or entities filing a ''letter of intent'' or ''Petition for Declaratory Ruling'' requesting authority to operate with a non-U.S. licensed space station to serve the United States must attach an exhibit with their FCC Form 312 application with information demonstrating that U.S.-licensed satellite systems have effective competitive opportunities to provide analogous services in:

(1) The country in which the non-U.S. licensed space station is licensed; and

(2) All countries in which communications with the U.S. earth station will originate or terminate. The applicant bears the burden of showing that there are no practical or legal constraints that limit or prevent access of the U.S. satellite system in the relevant foreign markets. The exhibit required by this paragraph must also include a statement of why grant of the application is in the public interest. This paragraph shall not apply with respect to requests for authority to operate using a non-U.S. licensed satellite that is licensed by or seeking a license from a country that is a member of the World Trade Organization for services covered under the World Trade Organization Basic Telecommunications Agreement.

(b) Earth station applicants, or entities filing a ''letter of intent,'' or ''Petition for Declaratory Ruling,'' requesting authority to operate with a non-U.S. licensed space station must attach to their FCC Form 312 an exhibit providing legal, financial, and technical information for the non-U.S. licensed space station in accordance with part 25 and part 100 of this Chapter. If the non-U.S. licensed space station is in orbit and operating, the applicant need not include the financial information specified in §§ 25.114(c)(17) and (c)(18) of this part. If the international coordination process for the non-U.S. licensed space station has been completed, the applicant need not include the technical information specified in §§ 25.114(c)(5) through (c)(11) and (c)(14) of this part, unless the technical characteristics differ from the characteristics established in that process.

(c) A non-U.S. licensed satellite system seeking to serve the United States can be considered contemporaneously with other U.S. satellite systems if it is:

(1) In orbit and operating;

(2) Has a license from another administration; or

(3) Has been submitted for coordination to the International Telecommunication Union.

(d) Earth station applicants requesting authority to operate with a non-U.S. licensed space station must demonstrate that the space station the applicant seeks to access has complied

with all applicable Commission milestones, reporting requirements, and any other applicable service rules required for non-U.S. licensed systems to operate in the United States.

[62 FR 64172, Dec. 4, 1997, as amended at 64 FR 61792, Nov. 15, 1999; 65 FR 16327, Mar. 28, 2000; 65 FR 59143, Oct. 4, 2000]

§ 25.138 Blanket licensing provisions of GSO FSS Earth Stations in the 18.58–18.8 GHz (space-to-Earth), 19.7–20.2 GHz (space-to-Earth), 28.35–28.6 GHz (Earth-to-space) and 29.5–30.0 GHz (Earth-to-space) bands.

(a) All applications for a blanket earth station license in the GSO FSS in the 18.58–18.8 GHz, 19.7–20.2 GHz, 28.35–28.6 GHz and 29.5–30.0 GHz bands that meet the following requirements shall be routinely processed:

(1) GSO FSS earth station antenna off-axis EIRP spectral density for co-polarized signals shall not exceed the following values, within ±3° of the GSO arc, under clear sky conditions:

$18.5–25\log(\theta)–10\log(N)$	dBW/40kHz	for $2.0° \leq \theta \leq 7°$
$-2.63–10\log(N)$	dBW/40kHz	for $7° \leq \theta \leq 9.23°$
$21.5–25\log(\theta)–10\log(N)$	dBW/40kHz	for $9.23° \leq \theta \leq 48°$
$-10.5–10\log(N)$	dBW/40kHz	for $48° < \theta \leq 180°$

Where:

θ is the angle in degrees from the axis of the main lobe; for systems where more than one earth station is expected to transmit simultaneously in the same bandwidth, *e.g.*, CDMA systems,

N is the likely maximum number of simultaneously transmitting co-frequency earth stations in the receive beam of the satellite; N=1 for TDMA and FDMA systems.

(2) GSO FSS earth station antenna off-axis EIRP spectral density for co-polarized signals shall not exceed the following values, for all directions other than within ±3° of the GSO arc, under clear sky conditions:

$21.5–25\log(\theta)–10\log(N)$	dBW/40kHz	for $3.5° \leq \theta \leq 7°$
$0.37–10\log(N)$	dBW/40kHz	for $7° < \theta \leq 9.23°$
$24.5–25\log(\theta)–10\log(N)$	dBW/40kHz	for $9.23° < \theta \leq 48°$
$-7.5–10\log(N)$	dBW/40kHz	for $48° < \theta \leq 180°$

Where:

θ: is the angle in degrees from the axis of the main lobe; for systems where more than one earth station is expected to transmit simultaneously in the same bandwidth, *e.g.*, CDMA systems.

N: is the likely maximum number of simultaneously transmitting co-frequency earth stations in the receive beam of the satellite; N=1 for TDMA and FDMA systems.

(3) The values given in paragraphs (a)(1) and (2) of this section may be exceeded by 3 dB, for values of θ >10°, provided that the total angular range over which this occurs does not exceed 20° when measured along both sides of the GSO arc.

(4) GSO FSS earth station antenna off-axis EIRP spectral density for cross-polarized signals shall not exceed the following values, in all directions relative to the GSO arc, under clear sky conditions:

$8.5–25\log(\theta)–10\log(N)$	dBW/40kHz	for $2.0° \leq \theta \leq 7°$
$12.63–10\log(N)$	dBW/40kHz	for $7° < \theta \leq 9.23°$

Where:

θ: is the angle in degrees from the axis of the main lobe; for systems where more than one earth station is expected to transmit simultaneously in the same bandwidth, *e.g.*, CDMA systems.

N: is the likely maximum number of simultaneously transmitting co-frequency earth stations in the receive beam of the satellite; N=1 for TDMA and FDMA systems.

(5) For earth stations employing uplink power control, the values in paragraphs (a) (1), (2), and (4) of this section may be exceeded by up to 20 dB under conditions of uplink fading due to precipitation. The amount of such increase in excess of the actual amount of monitored excess attenuation over clear sky propagation conditions shall not exceed 1.5 dB or 15 % of the actual amount of monitored excess attenuation in dB, whichever is larger, with a confidence level of 90 percent except over transient periods accounting for no more than 0.5% of the time during which the excess is no more than 4.0 dB.

(6) Power flux-density (PFD) at the Earth's surface produced by emissions from a space station for all conditions, including clear sky, and for all methods of modulation shall not exceed a level of -118 dBW/m^2/MHz for the band 19.7–20.2 GHz.

(b) Each applicant for earth station license(s) that proposes levels in excess of those defined in paragraph (a) of this section shall submit link budget analyses of the operations proposed along with a detailed written explanation of how each uplink and each transmitted satellite carrier density figure is derived. Applicants shall also submit a narrative summary which must indicate whether there are margin shortfalls in any of the current baseline services as a result of the addition of the applicant's higher power service, and if so, how the applicant intends to resolve those margin short falls. Applicants shall certify that all potentially affected parties (i.e., those GSO FSS satellite networks that are 2, 4, and 6 degrees apart) acknowledge and do not object to the use of the applicant's higher power densities.

(c) Licensees authorized pursuant to paragraph (b) of this section shall bear the burden of coordinating with any future applicants or licensees whose proposed compliant operations at 6 degrees or smaller orbital spacing, as defined by paragraph (a) of this section, is potentially or actually adversely affected by the operation of the non-compliant licensee. If no good faith agreement can be reached, however, the non-compliant licensee shall reduce its earth station and space station power density levels to be compliant with those specified in paragraph (a) of this section.

(d) The applicant shall provide for each earth station antenna type, a series of radiation patterns measured on a production antenna performed on a calibrated antenna range and, as a minimum, shall be made at the bottom, middle, and top frequencies of the 30 GHz band. The radiation patterns are:

(1) Co-polarized patterns for each of two orthogonal senses of polarizations in two orthogonal planes of the antenna.

(i) In the azimuth plane, plus and minus 10 degrees and plus and minus 180 degrees.

(ii) In the elevation plane, zero to 30 degrees.

(2) Cross-polarization patterns in the E- and H-planes, plus and minus 10 degrees.

(3) Main beam gain.

(e) Protection of receive earth stations from adjacent satellite interference is based on either the antenna performance specified in § 25.209 (a) and (b), or the actual receiving earth station antenna performance, if actual performance provides greater isolation from adjacent satellite interference. For purposes of insuring the correct level of protection, the applicant shall provide, for each earth station antenna

type, the antenna performance plots for the 20 GHz band, including the format specified in paragraph (d) of this section.

(f) The earth station licensee shall not transmit towards a GSO FSS satellite unless it has prior authorization from the satellite operator or a space segment vendor authorized by the satellite operator. The specific transmission shall be conducted in accordance with the operating protocol specified by the satellite operator.

(g) A licensee applying to renew its license must include on FCC Form 405 the number of constructed earth stations.

[65 FR 54169, Sept. 7, 2000]

SPACE STATIONS

§ 25.140 Qualifications of fixed-satellite space station licensees.

(a) New fixed-satellites shall comply with the requirements established in Report and Order, CC Docket No. 81–704 (available at address in § 0.445 of this chapter.) Applications must also meet the requirements in paragraphs (b) through (d) of this section. The Commission may require additional or different information in the case of any individual application. Applications will be unacceptable for filing and will be returned to the applicant if they do not meet the requirements referred to in this paragraph.

(b) Each applicant for a space station authorization in the fixed-satellite service must demonstrate, on the basis of the documentation contained in its application, that it is legally, financially, technically, and otherwise qualified to proceed expeditiously with the construction, launch and/or operation of each proposed space station facility immediately upon grant of the requested authorization. Each applicant must provide the following information:

(1) The information specified in § 25.114;

(2) An interference analysis to demonstrate the compatibility of its proposed system 2 degrees from any authorized space station. An applicant should provide details of its proposed r.f. carriers which it believes should be taken into account in this analysis. At a minimum, the applicant must include, for each type of r.f. carrier, the link noise budget, modulation parameters, and overall link performance analysis. (*See, e.g.*, appendices B and C to Licensing of Space Stations in the Domestic Fixed-Satellite Service (available at address in § 0.445 of this chapter));

(3) The estimated costs of proposed construction and/or launch, and any other initial expenses for the space station(s); and

(4) Estimated operating expenses for one year after launch of the proposed space station(s).

(c) Each application for authority to construct and/or launch and operate a space station shall demonstrate the applicant's current financial ability to meet the costs specified in paragraphs (b)(3) and (b)(4) of this section by submitting the following financial information verified by affidavit:

(1) A balance sheet current for the latest fiscal year and documentation of any financial commitments reflected in the balance sheet (such as, for example, loan agreements and service contracts) together with an exhibit demonstrating that the applicant has current assets and operating income sufficient to meet the costs specified in paragraphs (b)(3) and (b)(4) of this section. If the applicant is owned by more than one corporate parent, it must submit evidence of a commitment to the proposed satellite program by management of the corporate parent upon whom it is relying for financial resources;

(2) If the submissions of paragraph (c)(1) of this section do not reflect sufficient financial resources to meet the costs specified in paragraphs (b)(3) and (b)(4) of this section, the applicant shall submit additional information as listed below:

(i) The terms of any fully negotiated loan or other form of credit arrangement intended to be used to finance the proposed construction, acquisition, or operation of the requested facilities including such information as the identity of the creditor (or creditors), the amount committed, letters of commitment, detailed terms of the transaction, including the details of any contingencies, and a statement that

the applicant complies with paragraph (d) of this section;

(ii) The terms of any fully negotiated sale or placement of any equity or other form of ownership interest, including the sale, or long-term lease for the lifetime of the satellite, of proposed satellite transponder capacity in the level of detail as specified in paragraph (c)(2)(i) of this section;

(iii) The terms of any grant or other external funding commitment intended to be used to finance the proposed construction, acquisition, or operation of the requested facilities, including such information as the identity of the grantor(s), the amount committed, letters of commitment, and detailed terms of the transaction, including the details of any contingencies; or

(iv) Any financing arrangements contingent on further performance by either party, such as marketing of satellite capacity or raising additional financing, will not be considered in evaluating an applicant's financial qualifications; and

(3) Whatever other information or details the Commission may require with regard to a specific application or applicant.

(d) Any loan or other credit arrangement providing for a chattel mortgage or secured interest in any proposed facility must include a provision for a minimum of ten (10) days prior written notification to the licensee or permittee, and to the Commission, before any such equipment may be repossessed under any default provision of the agreement.

(e) An applicant found to be qualified pursuant to this section may be initially assigned up to two orbital locations in each pair of frequency bands proposed. Authorizations to construct ground spares are at the applicant's risk that launch authorization will not be granted by the Commission.

(f) Each applicant found to be qualified pursuant to this section may be assigned no more than one additional orbital location beyond its current authorizations in each frequency band in which it is authorized to operate, provided that its in-orbit satellites are essentially filled and that it has no more than two unused orbital locations for previously authorized but unlaunched satellites in that band.

(g) In the event that one or more applications satisfying the requirements of this section are ready for grant, any orbital location occupied by a satellite that is determined to be a part of a system that is not essentially filled may be cancelled and collocation of in-orbit satellites may be required. The Commission may take this action if, in so doing, it would allow the grant of pending applications that satisfy the requirements of this section. If a cancellation is made, the licensee will be afforded a period of 30 days to notify the Commission which of its assigned locations should be cancelled.

[62 FR 5929, Feb. 10, 1997]

§ 25.141 Licensing provisions for the radiodetermination satellite service.

(a) *Space station application requirements.* Each application for a space station license in the radiodetermination satellite service shall describe in detail the proposed radiodetermination satellite system, setting forth all pertinent technical and operational aspects of the system, including its capability for providing and controlling radiodetermination service on a geographic basis, and the technical, legal and financial qualifications of the applicant. In particular, each application shall include the information specified in Appendix B of Space Station Application Filing Procedures, 93 FCC 2d 1260, 1265 (1983), except that in lieu of demonstrating compliance with item II.F (two degree spacing), applicants are required to demonstrate compatibility with licensed satellite systems in the same frequency band. Applicants must also file information demonstrating compliance with all requirements of this section, specifically including information demonstrating how the applicant has complied or plans to comply with the requirements of paragraph (f) of this section.

(b) Space station application procedures. Each application for a space station in the radiodetermination satellite service shall be placed on public notice for 60 days, during which time interested parties may file comments

and petitions related to the application. A 60 day cut-off period shall also be established for the filing of applications to be considered in conjunction with an original application.

(c) User transceivers. Individual user transceivers will not be licensed. Service vendors may file blanket applications for transceiver units using FCC Form 312, Main Form and Schedule B, and specifying the number of units to be covered by the blanket license. Each application must demonstrate that transceiver operations will not cause interference to other users of the spectrum.

(d) Permissible communications. Stations in this service are authorized to render radiodetermination service, and may not render other services except as ancillary to the radiodetermination service.

(e) Frequency allocation policies. Each radiodetermination satellite service licensee will be assigned the entire allocated frequency bands on a non-exclusive basis. Coding techniques and power limits as set forth in paragraph (f) of this section and orbital spacing shall be employed to avoid harmful interference with other radiodetermination satellite service systems.

(f) *Radiodetermination satellite service.* Licenses shall coordinate with radiodetermination satellite system licensees to avoid harmful interference to other radiodetermination satellite systems through:

(1) Power flux density limits;

(2) Use of pseudorandom-noise codes (for both the satellite-to-user link and for the user-to-satellite link); and

(3) Random access, time division multiplex techniques.

Licensees shall coordinate with 1.6/2.4 GHz Mobile-Satellite Service system licensees to avoid interference to 1.6/2.4 GHz Mobile-Satellite Service systems.

(g) License conditions. All authorizations in the radiodetermination satellite service shall be subject to the policies set forth in the Report and Order, including compliance with appendix D, and the Second Report and Order in General Docket Nos. 84–689 and 84–690 and to any policies and rules the Commission may adopt at the later date.

[56 FR 24016, May 28, 1991, as amended at 59 FR 53327, Oct. 21, 1994; 62 FR 5930, Feb. 10, 1997]

§ 25.142 Licensing provisions for the non-voice, non-geostationary mobile-satellite service.

(a) *Space station application requirements.* (1) Each application for a space station system authorization in the non-voice, non-geostationary mobile-satellite service shall describe in detail the proposed non-voice, non-geostationary mobile-satellite system, setting forth all pertinent technical and operational aspects of the system, and the technical, legal, and financial qualifications of the applicant. In particular, each application shall include the information specified in § 25.114, except that in lieu of the information concerning orbital locations requested in § 25.114(c)(6), the applicant shall specify the number of space stations and applicable information relating to the altitude(s), argument(s) of perigee, service arc(s), right ascension of ascending node(s), eccentricity, and inclination of the space stations (all referenced to the same time) that will comprise its system. Applicants must also file information demonstrating compliance with all requirements of this section, and showing, based on existing system information publicly available at the Commission at the time of filing, that they will not cause unacceptable interference to any non-voice, non-geostationary mobile-satellite service system authorized to construct or operate.

(2) Applicants for a non-voice, non-geostationary mobile-satellite must identify the power flux density produced at the Earth's surface by each space station of their system in the frequency bands 137–138 MHz and 400.15–401 MHz, to allow determination of whether coordination with terrestrial services is required under international footnotes 599A and 647B of § 2.106 of the Commission's Rules. In addition, applicants must identify the measures they would employ to protect the radio astronomy service in the 150.05–153 MHz and 406.1–410 MHz bands from harmful interference from unwanted emissions.

(3) Emission limitations. (i) Applicants in the non-voice, non-geostationary mobile-satellite service shall show that their space stations will not exceed the emission limitations of § 25.202(f) (1), (2) and (3), as calculated for a fixed point on the Earth's surface in the plane of the space station's orbit, considering the worst-case frequency tolerance of all frequency determining components, and maximum positive and negative Doppler shift of both the uplink and downlink signals, taking into account the system design.

(ii) Applicants in the non-voice, non-geostationary mobile-satellite service shall show that no signal received by their satellites from sources outside of their system shall be retransmitted with a power flux density level, in the worst 4 kHz, higher than the level described by the applicants in paragraph (a)(2) of this section.

(4) Financial qualifications. Each applicant for space station system authorization in the non-voice, non-geostationary mobile-satellite service must demonstrate, on the basis of the documentation contained in its application, that it is financially qualified to proceed expeditiously with the construction, launch and operation for one year of the first two space stations of its proposed system immediately upon grant of the requested authorization. Failure to make such a showing will result in the dismissal of the application. This showing shall include all information described in § 25.140 (c), (d) and (e).

(5) Replacement of space stations within the system license term. The licensee need not file separate applications to construct, launch and operate technically identical replacement satellites within the term of the system authorization. However, the licensee shall certify to the Commission, at least thirty days prior to launch of such replacement(s) that:

(i) The licensee intends to launch a space station that is technically identical to those authorized in its system license, and

(ii) Launch of this space station will not cause the licensee to exceed the total number of operating space stations authorized by the Commission.

(b) *Operating conditions.* In order to ensure compatible operations with authorized users in the frequency bands to be utilized for operations in the non-voice, non-geostationary mobile-satellite service, non-voice, non-geostationary mobile-satellite service systems must operate in accordance with the conditions specified in this section.

(1) Service limitation. Voice services may not be provided.

(2) Coordination requirements with Federal government users.

(i) The frequency bands allocated for use by the non-voice, non-geostationary mobile-satellite service are also authorized for use by agencies of the Federal government. The Federal use of frequencies in the non-voice, non-geostationary mobile-satellite service frequency bands is under the regulatory jurisdiction of the National Telecommunications and Information Administration (NTIA).

(ii) The Commission will use its existing procedures for liaison with NTIA to reach agreement with respect to achieving compatible operations between Federal government users under the jurisdiction of NTIA and non-voice, non-geostationary mobile-satellite service systems (including user transceivers subject to blanket licensing under § 25.115(d)) through the frequency assignment and coordination practices established by NTIA and the Interdepartment Radio Advisory Committee (IRAC). In order to facilitate such frequency assignment and coordination, applicants shall provide the Commission with sufficient information to evaluate electromagnetic compatibility with the Federal government use of the spectrum, and any additional information requested by the Commission. As part of the coordination process, applicants shall show that they will not cause unacceptable interference to authorized Federal government users, based upon existing system information provided by the Government. The frequency assignment and coordination of the satellite system with Federal government users shall be completed prior to grant of construction authorization.

(iii) The Commission shall also coordinate with NTIA/IRAC with regard to the frequencies to be shared by

those earth stations of non-voice, non-geostationary mobile-satellite service systems that are not subject to blanket licensing under § 25.115(d), and authorized Federal government stations in the fixed and mobile services, through the exchange of appropriate systems information.

(3) Coordination among non-voice, non-geostationary mobile-satellite service systems. Applicants for authority to establish non-voice, non-geostationary mobile-satellite service systems are encouraged to coordinate their proposed frequency usage with existing permittees and licensees in the non-voice, non-geostationary mobile-satellite service whose facilities could be affected by the new proposal in terms of frequency interference or restricted system capacity. All affected applicants, permittees, and licensees shall, at the direction of the Commission, cooperate fully and make every reasonable effort to resolve technical problems and conflicts that may inhibit effective and efficient use of the radio spectrum; however, the permittee or licensee being coordinated with is not obligated to suggest changes or re-engineer an applicant's proposal in cases involving conflicts.

(4) Safety and distress communications. Stations operating in the non-voice, non-geostationary mobile-satellite service that are used to comply with any statutory or regulatory equipment carriage requirements may also be subject to the provisions of sections 321(b) and 359 of the Communications Act of 1934, as amended. Licensees are advised that these provisions give priority to radio communications or signals relating to ships in distress and prohibit a charge for the transmission of maritime distress calls and related traffic.

(c) *Reporting requirements.* All operators of non-voice, non-geostationary mobile-satellite service systems shall, on June 30 of each year, file a report with the International Bureau and the Commission's Columbia Operations Center in Columbia, Maryland, containing the following information current as of May 31st of that year:

(1) A listing of any non-scheduled space station outages for more than thirty minutes and the cause(s) of such outages;

(2) A detailed description of the utilization made of the in-orbit satellite system. That description should identify the percentage of time that the system is actually used for domestic transmission, the amount of capacity (if any) sold but not in service, and the amount of unused system capacity; and

(3) Identification of any space stations not available for service or otherwise not performing to specifications, the cause(s) of these difficulties, and the date any space station was taken out of service or the malfunction identified.

(d) *Prohibition of certain agreements.* No license shall be granted to any applicant for a non-voice, non-geostationary mobile-satellite service system if that applicant, or any companies controlling or controlled by the applicant, shall acquire or enjoy any right, for the purpose of handling traffic to or from the United States, its territories or possessions, to construct or operate space segment or earth stations in the non-voice, non-geosynchronous mobile-satellite service, or to interchange traffic, which is denied to any other United States company by reason of any concession, contract, understanding, or working arrangement to which the licensee or any persons or companies controlling or controlled by the licensee are parties.

(e) *Spectrum priority.* (1) The non-voice, non-geosynchronous mobile-satellite service system that is authorized in the second application processing round to operate in the 148–148.25 MHz, 148.75–148.855 MHz, 148.905–149.81 MHz and 150–150.05 MHz uplink frequency bands and the 400.505–400.5517 MHz, 400.5983–400.645 MHz, 137.025–137.175 MHz, 137.333–137.4125 MHz, 137.475–137.525 MHz, 137.595–137.645 MHz, 137.753–137.787 MHz and 137.825–138 MHz downlink frequency bands (the ''System 2 licensee'') will have a first priority to apply for and use a limited amount of downlink spectrum duly allocated worldwide and domestically to the non-voice, non-geosynchronous mobile-satellite service by the ITU, at WRC–97 or a subsequent World Radiocommunication Conference, and by the Commission, respectively (the

''Future Spectrum''). The System 2 licensee will be eligible to apply for and use the first 210 kHz of Future Spectrum plus spectrum sufficient to account for Doppler frequency shift in the Future Spectrum (the ''Supplemental Spectrum'') to implement its non-voice, non-geosynchronous mobile-satellite service system. The System 2 licensee's application for and use of the Supplemental Spectrum is subject to the Commission's Rules and policies, such reasonable operating conditions as may be imposed by the Commission, and international spectrum coordination requirements. For so long as the System 2 licensee is permitted by the Government of France to operate in the 400.5517–400.5983 MHz band coordinated with the French system S80–1, the Supplemental Spectrum shall be reduced to an amount equivalent to 150 kHz of Future Spectrum plus spectrum sufficient to account for Doppler frequency shift in the Future Spectrum.

(2) The System 2 licensee's priority to apply for and use the Supplemental Spectrum is conditioned on the System 2 licensee's compliance with the terms and conditions of its second processing round authorization, including, but not limited to, its system construction, launch and operation milestones, and any modifications thereto, and the Commission's Rules. The System 2 licensee's priority to apply for and use the Supplemental Spectrum shall automatically terminate upon the occurrence of any of the following events:

(i) The System 2 licensee being permitted to operate in the Supplemental Spectrum;

(ii) The expiration or revocation of the System 2 licensee's second processing round authorization;

(iii) The discontinuance of use of the spectrum assigned to the System 2 licensee under its second processing round authorization; or

(iv) The surrender of the System 2 licensee's second processing round authorization to the Commission.

[58 FR 68060, Dec. 23, 1993, as amended at 62 FR 5930, Feb. 10, 1997; 62 FR 59295, Nov. 3, 1997]

§ 25.143 Licensing provisions for the 1.6/2.4 GHz mobile-satellite service.

(a) *System license.* Applicants authorized to construct and launch a system of technically identical satellites will be awarded a single ''blanket'' license. In the case of non-geostationary satellites, the blanket license will cover a specified number of space stations to operate in a specified number of orbital planes. In the case of geostationary satellites, as part of a geostationary-only satellite system or a geostationary/non-geostationary hybrid satellite system, an individual license will be issued for each satellite to be located at a geostationary orbital location.

(b) *Qualification Requirements*—(1) *General requirements.* Each application for a space station system authorization in the 1.6/2.4 GHz Mobile-Satellite Service or 2 GHz Mobile-Satellite Service shall describe in detail the proposed satellite system, setting forth all pertinent technical and operational aspects of the system, and the technical, legal, and financial qualifications of the applicant. In particular, each application shall include the information specified in § 25.114. Non-U.S. licensed systems shall comply with the provisions of § 25.137. System proponents seeking authorization in the 2 GHz Mobile-Satellite Service also shall describe the design and operational strategies that they will use, if any, to mitigate orbital debris. Applicants must submit a casualty risk assessment if planned post-mission disposal involves atmospheric re-entry of the spacecraft.

(2) *Technical qualifications.* In addition to providing the information specified in paragraph (b)(1) of this section, each applicant and letter of intent filer shall demonstrate the following:

(i) That a proposed system in the 1.6/2.4 GHz MSS frequency bands employs a non-geostationary constellation or constellations of satellites;

(ii) That a system proposed to operate using non-geostationary satellites be capable of providing mobile satellite services to all locations as far north as 70 deg. North latitude and as far south as 55 deg. South latitude for at least 75% of every 24-hour period, *i.e.*, that at least one satellite will be visible above the horizon at an elevation angle of at

least 5 deg. for at least 18 hours each day within the described geographic area;

(iii) That a system proposed to operate using non-geostationary satellites be capable of providing mobile satellite services on a continuous basis throughout the fifty states, Puerto Rico and the U.S. Virgin Islands, i.e., that at least one satellite will be visible above the horizon at an elevation angle of at least 5 deg. at all times within the described geographic areas; and

(iv) That a system only using geostationary orbit satellites, at a minimum, be capable of providing mobile satellite services on a continuous basis throughout the 50 states, Puerto Rico, and the U.S. Virgin Islands, if technically feasible.

(v) That operations will not cause unacceptable interference to other authorized users of the spectrum. In particular, each application in the 1.6/2.4 GHz frequency bands shall demonstrate that the space station(s) comply with the requirements specified in § 25.213.

(3) *Financial Qualifications:* Each applicant for a space station system authorization in the 1.6/2.4 GHz mobile-satellite service must demonstrate, on the basis of the documentation contained in its application, that it is financially qualified to meet the estimated costs of the construction and launch of all proposed space stations in the system and the estimated operating expenses for one year after the launch of the initial space station. Financial qualifications must be demonstrated in the form specified in § 25.140 (c) and (d). In addition, applicants relying on current assets or operating income must submit evidence of a management commitment to the proposed satellite system. Failure to make such a showing will result in the dismissal of the application.

(c) *Replacement of Space Stations Within the System License Term.* Licensees of 1.6/2.4 GHz mobile-satellite systems authorized through a blanket license pursuant to paragraph (a) of this section need not file separate applications to construct, launch and operate technically identical replacement satellites within the term of the system authorization. However, the licensee shall certify to the Commission, at least thirty days prior to launch of such replacement(s) that:

(1) The licensee intends to launch a space station that is technically identical to those authorized in its system authorization, and

(2) Launch of this space station will not cause the licensee to exceed the total number of operating space stations authorized by the Commission.

(d) *In-Orbit Spares.* Licensees need not file separate applications to operate technically identical in-orbit spares authorized as part of the blanket license pursuant to paragraph (a) of this section. However, the licensee shall certify to the Commission, within 10 days of bringing the in-orbit spare into operation, that operation of this space station did not cause the licensee to exceed the total number of operating space stations authorized by the Commission.

(e) *Reporting requirements.* (1) All operators of 1.6/2.4 GHz Mobile-Satellite Service systems and 2 GHz Mobile-Satellite Service systems shall, on October 15 of each year, file with the International Bureau and the Commission's Columbia Operations Center, Columbia, Maryland, a report containing the following information current as of September 30 of that year:

(i) Status of satellite construction and anticipated launch dates, including any major problems or delays encountered;

(ii) A listing of any non-scheduled space station outages for more than 30 minutes and the cause or causes of the outage;

(iii) A detailed description of the utilization made of the in-orbit satellite system. That description should identify the percentage of time that the system is actually used for U.S. domestic or transborder transmission, the amount of capacity (if any) sold but not in service within U.S. territorial geographic areas, and the amount of unused system capacity. 2 GHz Mobile Satellite systems receiving expansion spectrum as part of the unserved areas spectrum incentive must provide a report on the actual number of subscriber minutes originating or terminating in unserved areas as a percentage of the actual U.S. system use; and

(iv) Identification of any space stations not available for service or otherwise not performing to specifications, the cause or causes of these difficulties, and the date any space station was taken out of service or the malfunction identified.

(2) All operators of 1.6/2.4 GHz mobile-satellite systems shall, within 10 days after a required implementation milestone as specified in the system authorization, certify to the Commission by affidavit that the milestone has been met or notify the Commission by letter that it has not been met. At its discretion, the Commission may require the submission of additional information (supported by affidavit of a person or persons with knowledge thereof) to demonstrate that the milestone has been met.

(3) All operators of 2 GHz Mobile-Satellite Service systems must begin system construction upon award of a service link license to U.S.-based applicants, or upon designation of spectrum for non-U.S.-based systems, in accordance with milestones set forth in the respective system's authorization. All operators of 2 GHz Mobile-Satellite Service systems shall, within 10 days after a required implementation milestone as specified in the system authorization, certify to the Commission by affidavit that the milestone has been met or notify the Commission by letter that it has not been met. At its discretion, the Commission may require the submission of additional information (supported by affidavit of a person or persons with knowledge thereof) to demonstrate that the milestone has been met. Failure to file timely certification of milestones, or filing disclosure of non-compliance, will result in automatic cancellation of the authorization with no further action required on the Commission's part.

(f) *Safety and distress communications.* (1) Stations operating in the 1.6/2.4 GHz Mobile-Satellite Service and 2 GHz Mobile-Satellite Service that are voluntarily installed on a U.S. ship or are used to comply with any statute or regulatory equipment carriage requirements may also be subject to the requirements of sections 321(b) and 359 of the Communications Act of 1934. Licensees are advised that these provisions give priority to radio communications or signals relating to ships in distress and prohibits a charge for the transmission of maritime distress calls and related traffic.

(2) Licensees offering distress and safety services should coordinate with the appropriate search and rescue organizations responsible for the licensees service area.

(g) *Considerations involving transfer or assignment applications.* (1) ''Trafficking'' in bare licenses issued pursuant to paragraph (a) of this section is prohibited, except with respect to licenses obtained through a competitive bidding procedure.

(2) The Commission will review a proposed transaction to determine if the circumstances indicate trafficking in licenses whenever applications (except those involving *pro forma* assignment or transfer of control) for consent to assignment of a license, or for transfer of control of a licensee, involve facilities licensed pursuant to paragraph (a) of this section. At its discretion, the Commission may require the submission of an affirmative, factual showing (supported by affidavits of a person or persons with personal knowledge thereof) to demonstrate that no trafficking has occurred.

(3) If a proposed transfer of radio facilities is incidental to a sale of other facilities or merger of interests, any showing requested under paragraph (g)(2) of this section shall include an additional exhibit which:

(i) Discloses complete details as to the sale of facilities or merger of interests;

(ii) Segregates clearly by an itemized accounting, the amount of consideration involved in the sale of facilities or merger of interest; and

(iii) Demonstrates that the amount of consideration assignable to the facilities or business interests involved represents their fair market value at the time of the transaction.

(h) *Prohibition of certain agreements.* No license shall be granted to any applicant for a space station in the mobile satellite service operating at 1610–1626.5/2483.5–2500 MHz if that applicant, or any persons or companies controlling or controlled by the applicant,

shall acquire or enjoy any right, for the purpose of handling traffic to or from the United States, its territories or possession, to construct or operate space segment or earth stations, or to interchange traffic, which is denied to any other United States company by reason of any concession, contract, understanding, or working arrangement to which the Licensee or any persons or companies controlling or controlled by the Licensee are parties.

[59 FR 53328, Oct. 21, 1994, as amended at 61 FR 9945, Mar. 12, 1996; 62 FR 5930, Feb. 10, 1997; 65 FR 59143, Oct. 4, 2000]

§ 25.144 Licensing provisions for the 2.3 GHz satellite digital audio radio service.

(a) Qualification Requirements:

(1) Satellite CD Radio, Primosphere Limited Partnership, Digital Satellite Broadcasting Corporation, and American Mobile Radio Corporation are the applicants eligible for licensing in the satellite digital audio radio service.

(2) General Requirements: Each application for a system authorization in the satellite digital audio radio service in the 2310–2360 MHz band shall describe in detail the proposed satellite digital audio radio system, setting forth all pertinent technical and operational aspects of the system, and the technical, legal, and financial qualifications of the applicant. In particular, applicants must file information demonstrating compliance with § 25.114 and all of the requirements of this section.

(3) Technical Qualifications: In addition to the information specified in paragraph (a)(1) of this section, each applicant shall:

(i) Demonstrate that its system will, at a minimum, service the 48 contiguous states of the United States (full CONUS);

(ii) Certify that its satellite DARS system includes a receiver that will permit end users to access all licensed satellite DARS systems that are operational or under construction; and

(iii) Identify the compression rate it will use to transmit audio programming. If applicable, the applicant shall identify the compression rate it will use to transmit services that are ancillary to satellite DARS.

(b) Milestone Requirements. Each applicant for system authorization in the satellite digital audio radio service must demonstrate within 10 days after a required implementation milestone as specified in the system authorization, and on the basis of the documentation contained in its application, certify to the Commission by affidavit that the milestone has been met or notify the Commission by letter that it has not been met. At its discretion, the Commission may require the submission of additional information (supported by affidavit of a person or persons with knowledge thereof) to demonstrate that the milestone has been met. This showing shall include all information described in § 25.140 (c), (d) and (e). The satellite DARS milestones are as follows, based on the date of authorization:

(1) One year: Complete contracting for construction of first space station or begin space station construction;

(2) Two years: If applied for, complete contracting for construction of second space station or begin second space station construction;

(3) Four years: In orbit operation of at least one space station; and

(4) Six years: Full operation of the satellite system.

(c) Reporting requirements. All licensees of satellite digital audio radio service systems shall, on June 30 of each year, file a report with the International Bureau and the Commission's Laurel, Maryland field office containing the following information:

(1) Status of space station construction and anticipated launch date, including any major problems or delay encountered;

(2) A listing of any non-scheduled space station outages for more than thirty minutes and the cause(s) of such outages; and

(3) Identification of any space station(s) not available for service or otherwise not performing to specifications, the cause(s) of these difficulties, and the date any space station was taken out of service or the malfunction identified.

(d) The license term for each digital audio radio service satellite shall commence when the satellite is launched

and put into operation and the term will run for eight years.

[62 FR 11105, Mar. 11, 1997]

§ 25.145 Licensing conditions for the Fixed-Satellite Service in the 20/30 GHz bands.

(a) Except as provided in § 25.210(b), in general all rules contained in this part apply to Fixed-Satellite Service in the 20/30 GHz bands.

(b) *System License.* Applicants authorized to construct and launch a system of technically identical non-geostationary satellite orbit satellites will be awarded a single ''blanket'' license covering a specified number of space stations to operate in a specified number of orbital planes.

(c) In addition to providing the information specified in § 25.114, each non-geostationary satellite orbit applicant shall demonstrate the following:

(1) That the proposed system be capable of providing fixed-satellite services to all locations as far north as 70 deg. latitude and as far south as 55 deg. latitude for at least 75% of every 24-hour period; and

(2) That the proposed system is capable of providing fixed-satellite services on a continuous basis throughout the fifty states, Puerto Rico and the U.S. Virgin Islands, U.S.

(d) *Considerations involving transfer or assignment applications.* (1) ''Trafficking'' in bare licenses issued pursuant to paragraph (b) of this section is prohibited, except with respect to licenses obtained through a competitive bidding procedure.

(2) The Commission will review a proposed transaction to determine if the circumstances indicate trafficking in licenses whenever applications (except those involving *pro forma* assignment or transfer of control) for consent to assignment of a license, or for transfer of control of a licensee, involve facilities licensed pursuant to paragraph (b) of this section. At its discretion, the Commission may require the submission of an affirmative, factual showing (supported by affidavits of a person or persons with personal knowledge thereof) to demonstrate that no trafficking has occurred.

(3) If a proposed transfer of radio facilities is incidental to a sale of other facilities or merger of interests, any showing requested under paragraph (d)(2) of this section shall include an additional exhibit which:

(i) Discloses complete details as to the sale of facilities or merger of interests;

(ii) Segregates clearly by an itemized accounting, the amount of consideration involved in the sale of facilities or merger of interest; and

(iii) Demonstrates that the amount of consideration assignable to the facilities or business interests involved represents their fair market value at the time of the transaction.

(e) *Prohibition of certain agreements.* No license shall be granted to any applicant for a space station in the fixed-satellite service operating in the 20/30 GHz band if that applicant, or any persons or companies controlling or controlled by the applicant, shall acquire or enjoy any right, for the purpose of handling traffic to or from the United States, its territories or possession, to construct or operate space segment or earth stations, or to interchange traffic, which is denied to any other United States company by reason of any concession, contract, understanding, or working arrangement to which the Licensee or any persons or companies controlling or controlled by the Licensee are parties.

(f) *Implementation milestone schedule.* Each GSO FSS licensee in the 20/30 GHz band will be required to begin construction of its first satellite within one year of grant, to begin construction of the remainder within two years of grant, to launch at least one satellite into each of its assigned orbit locations within five years of grant, and to launch the remainder of its satellites by the date required by the International Telecommunications Union to assure international recognition and protection of those satellites. Each NGSO FSS licensee in the 20/30 GHz band will be required to begin construction of its first two satellites within one year of the unconditional grant of its authorization, and complete construction of those first two satellites within four years of that grant. Construction of the remaining authorized operating satellites in the constellation must begin within three

years of the initial authorization, and the entire authorized system must be operational within six years.

(g)(1) *Reporting Requirements.* All licensees in the 20/30 GHz band shall, on June 30 of each year, file a report with the International Bureau and the Commission's Columbia Operations Center, 9200 Farm House Lane, Columbia, MD 21046 containing the following information:

(i) Status of space station construction and anticipated launch date, including any major problems or delay encountered;

(ii) A listing of any non-scheduled space station outages for more than thirty minutes and the cause(s) of such outages; and

(iii) Identification of any space station(s) not available for service or otherwise not performing to specifications, the cause(s) of these difficulties, and the date any space station was taken out of service or the malfunction identified.

(2) Licensees shall submit to the Commission a yearly report indicating the number of earth stations actually brought into service under its blanket licensing authority. The annual report is due to the Commission no later than the first day of April of each year and shall indicate the deployment figures for the preceding calendar year.

(h) *Policy governing the relocation of terrestrial services from the 18.58 to 19.3 GHz band.* Frequencies in the 18.58–19.3 GHz band listed in parts 21, 74, 78, and 101 of this chapter have been reallocated for primary use by the Fixed-Satellite Service, subject to various provisions for the existing terrestrial licenses. In accordance with procedures specified in §§ 101.85 through 101.97 of this chapter, Fixed-Satellite Service licensees are required to relocate the existing co-primary terrestrial licensees in these bands if interference to those operations would occur during the period that the terrestrial stations remain co-primary and the terrestrial antenna is pointing within 2 degrees of the GSO satellite. Additionally, Fixed-Satellite Service operations are not entitled to protection from the co-primary operations until after that period has expired. (see §§ 21.901(e), 74.502(c), 74.602(g), 78.18(a)(4), and 101.147(r) of this chapter.

(i) *Protection of fixed services receivers in the 18.3–19.3 GHz band.* For purposes of this section, FSS space stations operating in accordance with the power flux-density limits of § 25.208 are considered not to cause unacceptable interference to fixed service receivers that are pointed more than 2 degrees from the FSS space station.

(1) *18.3–18.58 GHz.* FSS space stations transmitting in the 18.3–18.58 GHz band may not cause unacceptable interference to fixed service receive stations that were licensed or for which an application was pending prior to June 8, 2000.

(2) *18.58–18.8 GHz.* FSS space stations transmitting in the 18.58–18.8 GHz band may not cause unacceptable interference to fixed service receive stations that were licensed or for which an application was pending prior to September 18, 1998. After June 8, 2010, such fixed station receivers are no longer afforded protection from FSS space stations operating in accordance with § 25.208 and the fixed station transmitters shall not cause harmful interference to the GSO FSS receiving earth stations.

(3) *18.8–19.3 GHz.* FSS space stations transmitting in the 18.8–19.3 GHz band may not cause unacceptable interference to fixed service receive stations that were licensed or for which an application was pending prior to June 8, 2000. After June 8, 2010, such fixed station receivers (except those operating in 19.26–19.3 GHz) are no longer afforded protection from FSS space stations operating in accordance with § 25.208.

[62 FR 61456, Nov. 18, 1997, as amended at 65 FR 54171, Sept. 7, 2000]

§ 25.146 Licensing and operating authorization provisions for the non-geostationary satellite orbit fixed-satellite service (NGSO FSS) in the bands 10.7 GHz to 14.5 GHz.

(a) A comprehensive technical showing shall be submitted for the proposed non-geostationary satellite orbit fixed-satellite service (NGSO FSS) system in the bands 10.7 GHz to 14.5 GHz. The technical information shall demonstrate that the proposed NGSO FSS system would not exceed the validation

equivalent power flux-density (EPFD) limits as specified in § 25.208 (g), (k), and (l) for $EPFD_{down}$, and $EPFD_{up}$. If the technical demonstration exceeds the validation EPFD limits at any test points within the U.S. for domestic service and at any points outside of the U.S. for international service or at any points in the geostationary satellite orbit, as appropriate, the application would be unacceptable for filing and will be returned to the applicant with a brief statement identifying the non-compliance technical demonstration. The technical showing consists of the following:

(1) *Single-entry validation equivalent power flux-density, in the space-to-Earth direction, ($EPFD_{down}$) limits.* (i) Provide a set of power flux-density (pfd) masks, on the surface of the Earth, for each space station in the NGSO FSS system. The pfd masks shall be generated in accordance with the specification stipulated in the ITU–R Recommendation BO.1503, ''Functional Description to be used in Developing Software Tools for Determining Conformity of Non-GSO FSS Networks with Limits Contained in Article S22 of the Radio Regulations.'' In particular, the pfd mask must encompass the power flux-density radiated by the space station regardless of the satellite transmitter power resource allocation and traffic/beam switching strategy that are used at different periods of a NGSO FSS system life. The pfd masks shall also be in an electronic form that can be accessed by the computer program contained in paragraph (a)(1)(iii) of this section.

(ii) Identify and describe in detail the assumptions and conditions used in generating the power flux-density masks.

(iii) Provide a computer program for the single-entry $EPFD_{down}$ validation computation, including both the source code and the executable file. This computer program shall be developed in accordance with the specification stipulated in the ITU–R Recommendation BO.1503.

(iv) Identify and describe in detail the necessary input parameters for the execution of the computer program identified in paragraph (a)(1)(iii) of this section.

(v) Provide the result, the cumulative probability distribution function of EPFD, of the execution of the computer program described in paragraph (a)(1)(iii) of this section by using only the input parameters contained in paragraphs (a)(1)(i) and (a)(1)(iv) of this section. The result must contain the worst three (3) test points in the U.S. for domestic service and the worst three (3) test points on each continent, except Antarctica, outside of the U.S. for international services, and as many points as the number of service areas; *i.e.,* foot-prints. The center of each beam service area should be the test point coordinate.

(2) *Single-entry validation equivalent power flux-density, in the Earth-to-space direction, $EPFD_{up}$ limits.* (i) Provide a set of NGSO FSS earth station maximum equivalent isotropically radiated power (e.i.r.p.) mask as a function of the off-axis angle generated by a NGSO FSS earth station. The maximum e.i.r.p. mask shall be generated in accordance with the specification stipulated in the ITU–R Recommendation BO.1503. In particular, the results of calculations encompass what would be radiated regardless of the earth station transmitter power resource allocation and traffic/beam switching strategy are used at different periods of a NGSO FSS system life. The e.i.r.p. masks shall also be in an electronic form that can be accessed by the computer program contained in paragraph (a)(2)(iii) of this section.

(ii) Identify and describe in detail the assumptions and conditions used in generating the maximum earth station e.i.r.p. mask.

(iii) Provide a computer program for the single-entry $EPFD_{up}$ validation computation, including both the source code and the executable file. This computer program shall be developed in accordance with the specification stipulated in ITU–R Recommendation BO.1503.

(iv) Identify and describe in detail the necessary input parameters for the execution of the computer program identified in paragraph (a)(2)(iii) of this section.

(v) Provide the result of the execution of the computer program described in paragraph (a)(2)(iii) of this section

by using only the input parameters contained in paragraphs (a)(2)(i) and (a)(2)(iv) of this section. The result must contain an $EPFD_{up}$ for every longitudinal location on the geostationary satellite orbit at every two-degree spacing that is visible to the U.S. for domestic service and every three-degree longitudinal location in the geostationary satellite orbit for service outside of the U.S.

(b) Ninety days prior to the initiation of service to the public, the NGSO FSS system licensee shall submit a comprehensive technical showing for the non-geostationary satellite orbit fixed-satellite service (NGSO FSS) system in the bands 10.7 GHz to 14.5 GHz. The technical information shall demonstrate that the NGSO FSS system is expected not to operate in excess of the additional operational $EPFD_{down}$ limits and the operational $EPFD_{down}$ limits as specified in § 25.208 (i), (j) and notes 2 and 3 to the table in paragraph (l). If the technical demonstration exceeds the additional operational $EPFD_{down}$ limits or the operational $EPFD_{down}$ limits at any test points with the U.S. for domestic service and at any test points out side of the U.S. for international service, the NGSO FSS system licensee shall not initiate service to the public until the deficiency has been rectified by reducing satellite transmission power or other adjustments. This must be substantiated by subsequent technical showings. The technical showings consist of the following:

(1) *Single-entry additional operational equivalent power flux-density, in the space-to-Earth direction, (additional operational $EPFD_{down}$) limits.* (i) Provide a set of anticipated operational power flux-density (pfd) masks, on the surface of the Earth, for each space station in the NGSO FSS system. The anticipated operational power flux-density masks could be generated by using the method specified in ITU–R Recommendation BO.1503. In particular, the anticipated operational pfd mask shall take into account the expected maximum traffic loading distributions and geographic specific scheduling of the actual measured space station antenna patterns (see § 25.210(k)). The anticipated operational power flux-density masks shall also be in an electronic form that can be accessed by the computer program contained in paragraph (b)(1)(iii) of this section.

(ii) Identify and describe in detail the assumptions and conditions used in generating the anticipated operational power flux-density masks.

(iii) Provide a computer program for the single-entry additional operational $EPFD_{down}$ verification computation, including both the source code and the executable file. This computer program could be developed by using the method specified in ITU–R Recommendation BO.1503.

(iv) Identify and describe in detail the necessary input parameters for the execution of the additional operational $EPFD_{down}$ verification computer program identified in paragraph (b)(1)(iii) of this section.

(v) Provide the result, the cumulative probability distribution function of EPFD, of the execution of the verification computer program described in paragraph (b)(1)(iii) of this section by using only the input parameters contained in paragraphs (b)(1)(i) and (b)(1)(iv) of this section. The result must contains the worst three (3) test points in the U.S. for domestic service and the worst three (3) test points in each continent, excluding Antarctica, out side of the U.S. for international service plus as many points as the number of service areas; *i.e.*, footprints. The center of each beam service area should be the test point coordinate.

(2) *Operational equivalent power flux-density, space-to-Earth direction, (operational $EPFD_{down}$) limits.* Using the information contained in (b)(1) of this section plus the measured space station antenna patterns, provide the result of the execution of the computer simulation for the anticipated in-line operational $EPFD_{down}$ levels for the 3.0, 4.5, 6.2 and 10 m GSO FSS receiving earth station antennas having an efficiency of 65%. The result must contain the worst three (3) test points in the U.S. for domestic service and the worst three (3) test points per continent, exclude Antarctica, out side of the U.S. for international service plus as many points as the number of service areas; i.e., foot-prints. The center of each

beam service area should be the test point coordinate. In addition, also using the information contained in (b)(1) of this section plus the measured space station antenna patterns, provide the result of the execution of the computer simulation for the anticipated in-line operational $EPFD_{down}$ levels for the 180 cm GSO BSS receiving earth station antennas in Hawaii, and for 240 cm GSO BSS receiving earth station antennas in Alaska, assuming an efficiency of 65%. The result must contain the worst test point in Alaska and Hawaii, plus as many points as the number of service areas; *i.e.*, foot-prints in these areas, using the center of each beam service area should be the test point coordinate.

(c) The NGSO FSS system licensee shall, on June 30 of each year, file a report with the International Bureau and the Commission's Columbia Operations Center in Columbia, Maryland, certifying the status of the additional operational $EPFD_{down}$ levels into the 3 m and 10 m GSO FSS receiving earth station antennas, the operational $EPFD_{down}$ levels into the 3 m, 4.5 m, 6.2 m and 10 m GSO FSS receiving earth station antennas and the operational $EPFD_{down}$ levels into the 180 cm GSO BSS receiving earth station antennas in Hawaii and 240 GSO BSS receiving earth station antennas Alaska.

(d) The Commission may request at any time additional information from the NGSO FSS system applicant or licensee concerning the EPFD levels and the related technical showings.

(e) A NGSO FSS system licensee operating a system in compliance with the limits specified in § 25.208 (g), (i), (j), (k), (l) and (m) shall be considered as having fulfilled its obligations under ITU Radio Regulations provision S22.2 with respect to any GSO network. However, such NGSO FSS system shall not claim protection from GSO FSS and BSS networks operating in accordance with this part 25 or part 100 of this chapter, respectively, and the ITU Radio Regulations.

(f) Coordination will be required between NGSO FSS systems and GSO FSS earth stations in the frequency band 10.7–12.75 GHz when all of the following threshold conditions are met:

(1) Bandwidth overlap; and

(2) The satellite network using the GSO has specific receive earth stations which meet all of the following conditions: earth station antenna maximum isotropic gain greater than or equal to 64 dBi; G/T of 44 dB/K or higher; and emission bandwidth of 250 MHz; and the $EPFD_{down}$ radiated by the satellite system using the NGSO into the GSO specific receive earth station, either within the U.S. for domestic service or any points outside the U.S. for international service, exceeds −174.5 dB(W/(m^2/40 kHz)) for any percentage of time for NGSO systems with all satellites only operating at or below 2500 km altitude, or −202 dB(W/(m^2/40 kHz)) for any percentage of the time for NGSO systems with any satellites operating above 2500 km altitude.

[66 FR 10619, Feb. 16, 2001]

PROCESSING OF APPLICATIONS

§ 25.150 Receipt of applications.

Applications received by the Commission are given a file number and (domestic only) a unique station identifier for administrative convenience. Neither the assignment of a file number and/or other identifier nor the listing of the application on public notice as received for filing indicates that the application has been found acceptable for filing or precludes the subsequent return or dismissal of the application if it is found to be defective or not in accordance with the Commission's rules.

§ 25.151 Public notice period.

(a) At regular intervals, the Commission will issue public notices listing:

(1) The receipt of applications for new station authorizations;

(2) The receipt of applications for license or registration of receive-only earth stations;

(3) The receipt of applications for major modifications to station authorizations;

(4) The receipt of major amendments to pending applications;

(5) The receipt of applications to assign or transfer control of space station facilities, transmitting earth station facilities, or international receive-only earth station facilities;

(6) Significant Commission actions regarding applications;

(7) Information which the Commission in its discretion believes to be of public significance; and

(8) Special environmental considerations as required by part 1 of this chapter.

(b) Special public notices may also be issued at other times under special circumstances involving non-routine matters where speed is of the essence and efficiency of Commission process will be served thereby.

(c) A public notice will not normally be issued for receipt of any of the following applications:

(1) For authorization of a minor technical change in the facilities of an authorized station;

(2) For temporary authorization pursuant to § 25.119;

(3) For an authorization under any of the proviso clauses of section 308(a) of the Communications Act of 1934, as amended [47 U.S.C. 308(a)];

(4) For consent to an involuntary assignment or transfer of control of a transmitting earth station authorization; or

(5) For consent to an assignment or transfer of control of a space station authorization or a transmitting earth station authorization, where the assignment or transfer does not involve a substantial change in ownership or control; or

(6) For change in location of an earth station operating in the 4/6 GHz and 10.95–11.7 GHz bands by no more than 1″ in latitude and/or longitude and for change in location of an earth station operating in the 12/14 GHz bands by no more than 10″ in latitude and/or longitude.

(d) No application that has appeared on public notice will be granted until the expiration of a period of thirty days following the issuance of the public notice listing the application, or any major amendment thereto. Any comments or petitions must be delivered to the Commission by that date in accordance with § 25.154.

[56 FR 24016, May 28, 1991, as amended at 58 FR 68061, Dec. 23, 1993]

§ 25.152 Dismissal and return of applications.

(a) Any application may be dismissed without prejudice as a matter of right if the applicant requests its dismissal prior to final Commission action.

(b) The Commission will dismiss an application for failure to prosecute or for failure to respond substantially within a specified time period to official correspondence or requests for additional information. Dismissal will be without prejudice unless the application is mutually exclusive pursuant to § 25.155, in which case it will be dismissed with prejudice.

§ 25.153 Repetitious applications.

(a) Where an application has been denied or dismissed with prejudice, the Commission will not consider a like application involving service of the same kind to the same area by the same applicant, or by its successor or assignee, or on behalf of or for the benefit of any of the original parties in interest, until after the lapse of 12 months from the effective date of the Commission's action. The Commission may, for good cause shown, waive the requirements of this section.

(b) Where an appeal has been taken from the action of the Commission denying a particular application, another application for the same class of station and for the same area, in whole or in part, filed by the same applicant or by his successor or assignee, or on behalf or for the benefit of the original parties in interest, will not be considered until the final disposition of the appeal.

§ 25.154 Opposition to applications and other pleadings.

(a) Petitions to deny, petitions for other forms of relief, and other objections or comments must:

(1) Identify the application or applications (including applicant's name, station location, Commission file numbers, and radio service involved) with which it is concerned;

(2) Be filed within thirty (30) days after the date of public notice announcing the acceptance for filing of the application or major amendment thereto (unless the Commission otherwise extends the filing deadline);

(3) Filed in accordance with the pleading limitations, periods and other applicable provisions of §§ 1.41 through 1.52 of this chapter;

(4) Contain specific allegations of fact (except for those of which official notice may be taken) to support the specific relief requested, which shall be supported by affidavit of a person or persons with personal knowledge thereof, and which shall be sufficient to demonstrate that the petitioner (or respondent) is a party of interest and that a grant of, or other Commission action regarding, the application would be prima facie inconsistent with the public interest; and

(5) Contain a certificate of service showing that it has been mailed to the applicant no later than the date the pleading is filed with the Commission.

(b) The Commission will classify as informal objections:

(1) Any pleading not filed in accordance with paragraph (a) of this section;

(2) Any pleading to which the thirty (30) day public notice period of § 25.151 does not apply; or

(3) Any objections to the grant of an application when the objections do not conform to either paragraph (a) of this section or to other Commission rules and requirements.

(c) Oppositions to petitions to deny an application or responses to comments and informal objections regarding an application may be filed within 10 days after the petition, comment, or objection is filed and must be in accordance with other applicable provisions of §§ 1.41 through 1.52 of this chapter.

(d) Reply comments by the party that filed the original petition may be filed with respect to pleadings filed pursuant to paragraph (c) of this section within 5 days after the time for filing oppositions has expired unless the Commission otherwise extends the filing deadline and must be in accordance with other applicable provisions of §§ 1.41 through 1.52 of this chapter.

§ 25.155 Mutually exclusive applications.

(a) The Commission will consider applications to be mutually exclusive if their conflicts are such that the grant of one application would effectively preclude by reason of harmful electrical interference, or other practical reason, the grant of one or more other applications.

(b) A space station application will be entitled to comparative consideration with one or more conflicting applications only if:

(1) The application is mutually exclusive with another application; and

(2) The application is received by the Commission in a condition acceptable for filing by the ''cut-off'' date specified in a public notice.

[56 FR 24076, May 28, 1991, as amended at 62 FR 5931, Feb. 10, 1997]

§ 25.156 Consideration of applications.

(a) Applications for a radio station authorization, or for modification or renewal of an authorization, will be granted if, upon examination of the application, any pleadings or objections filed, and upon consideration of such other matters as it may officially notice, the Commission finds that the applicant is legally, technically, and otherwise qualified, that the proposed facilities and operations comply with all applicable rules, regulations, and policies, and that grant of the application will serve the public interest, convenience and necessity.

(b) Whenever the Commission grants any application in part, or subject to any terms or conditions other than those routinely applied to applications of the same type, the grant shall be considered final unless the Commission should revise its action (either by granting the application as originally requested, or by designating the application for hearing) in response to a petition for reconsideration which:

(1) Is filed by the applicant within thirty (30) days from the release date of the conditioned grant; and

(2) Rejects the grant as made and explains the reasons why the application should be granted as originally requested.

(c) Reconsideration or review of any final action taken by the Commission will be in accordance with subpart A of part 1 of this chapter.

FORFEITURE, TERMINATION, AND REINSTATEMENT OF STATION AUTHORIZATION

§ 25.160 Administrative sanctions.

(a) A forfeiture may be imposed for failure to operate in conformance with

the Communications Act, license specifications, any conditions imposed on an authorization, or any of the Commission's rules and regulations; or for failure to comply with Commission requests for information needed to complete international coordination or for failure to cooperate in Commission investigations with respect to international coordination.

(b) A forfeiture will be imposed and the station license may be terminated for the malicious transmissions of any signal that causes harmful interference with any other radio communications or signals.

(c) A station license may be revoked for any repeated and willful violation of the kind set forth in paragraphs (a) and (b) of this section.

(d) The sanctions specified in paragraphs (a), (b), and (c) of this section will be imposed only after the licensee has been provided an opportunity to be heard pursuant to titles III and V of the Communications Act of 1934, as amended.

(e) For purposes of this section, the term ''repeated'' and ''willful'' are defined as set out in section 312(f) of the Communications Act, 47 U.S.C. 312(f).

§ 25.161 Automatic termination of station authorization.

A station authorization shall be automatically terminated in whole or in part without further notice to the licensee upon:

(a) The expiration of the required date of completion of construction or other required action specified in the authorization, or after any additional time authorized by the Commission, if a certification of completion of the required action has not been filed with the Commission unless a request for an extension of time has been filed with the Commission but has not been acted on;

(b) The expiration of the license period, unless an application for renewal of the license has been filed with the Commission pursuant to § 25.120(e); or

(c) The removal or modification of the facilities which renders the station not operational for more than 90 days, unless specific authority is requested.

§ 25.162 Cause for termination of interference protection.

The protection from interference afforded by the registration of a receiving earth station shall be automatically terminated if:

(a) The request for registration is not submitted to the Commission within 3 months of the completion of the frequency coordination process, except as provided for in § 25.203;

(b) The receiving earth station is not constructed and placed into service within 6 months after completion of coordination;

(c) The Commission finds that the station has been used less than 50% of the time during any 12 month period;

(d) The Commission finds that the station has been used for an unlawful purpose or otherwise in violation of the Commission's rules, regulations or policies;

(e) The Commission finds that the actual use of the facility is inconsistent with what was set forth in the registrant's application; or

(f) The Commission finds that the frequency coordination exhibit, upon which the granted registration is based, is incomplete or does not conform with established coordination procedures.

§ 25.163 Reinstatement.

(a) A station authorization terminated in whole or in part under the provisions of § 25.161 may be reinstated if the Commission, in its discretion, determines that reinstatement would best serve the public interest, convenience and necessity. Petitions for reinstatement will be considered only if:

(1) The petition is filed within 30 days after the expiration date set forth in § 25.161(a) or § 25.161(b), whichever is applicable;

(2) The petition explains the failure to file a timely notification or renewal application; and

(3) The petition sets forth with specificity the procedures which have been established to insure timely filings in the future.

(b) A special temporary authorization shall automatically terminate upon the expiration date specified therein, or upon failure of the grantee to comply with any special terms or

conditions set forth in the authorization. Temporary operation may be extended beyond the termination date only upon application to the Commission.

Subpart C—Technical Standards

SOURCE: 30 FR 7176, May 28, 1965, as amended at 36 FR 2562, Feb. 6, 1971, unless otherwise noted.

§ 25.200 Interim equipment authorization.

(a) For purposes of this section, a ''GMPCS system'' is defined as ''any satellite system, (i.e., fixed or mobile, broadband or narrow-band, global or regional, geostationary or non-geostationary, existing or planned) providing telecommunication services directly to end users from a constellation of satellites.''

(b) Subsequent to receiving a blanket authorization under this part, terminals used in conjunction with GMPCS systems, as defined under § 25.200 (a) of this part, may also obtain an equipment authorization from the Commission in accordance with the certification procedure for use under this part. The certification procedure is found in part 2, subpart J of this chapter.

(c) In order to be granted certification, a transmitter shall comply with the technical specifications in this part. In addition, mobile earth satellite terminals for use in the band of 1610–1626.5 MHz shall meet a specific out-of-band emissions limit. Emissions in the band 1559–1605 MHz shall be limited to −70 dBW/MHz averaged over any 20 millisecond period for wideband signals, and a standard of −80 dBW across within the measurement bandwidth of 700 Hz or less for narrowband signals.

(d) Licensees and manufacturers are subject to the radiofrequency radiation exposure requirements specified in §§ 1.1307(b), 2.1091 and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section shall contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement shall be submitted to the Commission upon request.

(e) Equipment authorizations issued pursuant to this section will be conditioned on the equipment meeting all relevant technical requirements that are adopted by the Commission in implementing the GMPCS Arrangements.

[64 FR 4997, Feb. 2, 1999]

§ 25.201 Definitions.

Active satellite. An earth satellite carrying a station intended to transmit or re-transmit radiocommunication signals.

Base Earth Station. An earth station in the fixed-satellite service or, in some cases, in the land mobile-satellite service, located at a specified fixed point or within a specified area on land to provide a feeder link for the land mobile-satellite service. (RR)

Coordination distance. For the purposes of this part, the expression ''coordination distance'' means the distance from an earth station, within which there is a possibility of the use of a given transmitting frequency at this earth station causing harmful interference to stations in the fixed or mobile service, sharing the same band, or of the use of a given frequency for reception at this earth station receiving harmful interference from such stations in the fixed or mobile service.

Earth station. A station located either on the Earth's surface or within the major portion of the Earth's atmosphere intended for communication:

(a) With one or more space stations; or

(b) With one or more stations of the same kind by means of one or more reflecting satellites or other objects in space.

Equivalent power flux-density. The equivalent power flux-density (EPFD) is the sum of the power flux-densities produced at a geostationary satellite orbit (GSO) receive earth or space station on the Earth's surface or in the geostationary satellite orbit, as appropriate, by all the transmit stations within a non-geostationary satellite orbit fixed-satellite service (NGSO FSS) system, taking into account the off-axis discrimination of a reference

receiving antenna assumed to be pointing in its nominal direction. The equivalent power flux-density, in dB(W/m²) in the reference bandwidth, is calculated using the following formula:

$$\mathrm{EPFD} = 10 \cdot \log_{10}\left[\sum_{i=1}^{N_a} 10^{\frac{P_i}{10}} \cdot \frac{G_t(\theta_i)}{4.\pi d_i^2} \cdot \frac{G_r(\phi_i)}{G_{r,max}}\right]$$

Where:

N_a is the number of transmit stations in the non-geostationary satellite orbit system that are visible from the GSO receive station considered on the Earth's surface or in the geostationary satellite orbit, as appropriate;

i is the index of the transmit station considered in the non-geostationary satellite orbit system;

P_i is the RF power at the input of the antenna of the transmit station, considered in the non-geostationary satellite orbit system in dBW in the reference bandwidth;

2_i is the off-axis angle between the boresight of the transmit station considered in the non-geostationary satellite orbit system and the direction of the GSO receive station;

$G_t(2_i)$ is the transmit antenna gain (as a ratio) of the station considered in the non-geostationary satellite orbit system in the direction of the GSO receive station;

d_i is the distance in meters between the transmit station considered in the non-geostationary satellite orbit system and the GSO receive station;

N_i is the off-axis angle between the boresight of the antenna of the GSO receive station and the direction of the ith transmit station considered in the non-geostationary satellite orbit system;

$G_r(N_i)$ is the receive antenna gain (as a ratio) of the GSO receive station in the direction of the ith transmit station considered in the non-geostationary satellite orbit system;

$G_{r,max}$ is the maximum gain (as a ratio) of the antenna of the GSO receive station;

Fixed earth station. An earth station intended to be used at a specified fixed point.

Fixed-Satellite Service. A radiocommunication service between earth stations at given positions, when one or more satellites are used; the given position may be a specified fixed point or any fixed point within specified areas; in some cases this service includes satellite-to-satellite links, which may also be operated in the inter-satellite service; the fixed-satellite service may also include feeder links of other space radiocommunication services. (RR)

Geostationary satellite. A geosynchronous satellite whose circular and direct orbit lies in the plane of the Earth's equator and which thus remains fixed relative to the Earth; by extension, a satellite which remains approximately fixed relative to the Earth.

2 GHz Mobile-Satellite Service. A mobile-satellite service that operates in the 1990–2025 MHz and 2165–2200 MHz frequency bands, or in any portion thereof.

Inter-Satellite Service. A radiocommunication service providing links between artificial earth satellites.

Land Earth Station. An earth station in the fixed-satellite service or, in some cases, in the mobile-satellite service, located at a specified fixed point or within a specified area on land to provide a feeder link for the mobile-satellite service. (RR)

Land Mobile Earth Station. A mobile earth station in the land mobile-satellite service capable of surface movement within the geographical limits of a country or continent. (RR)

Mobile earth station. An earth station intended to be used while in motion or during halts at unspecified points.

Mobile-Satellite Service. A radiocommunication service:

(1) Between mobile earth stations and one or more space stations, or between space stations used by this service; or

(2) Between mobile earth stations, by means of one or more space stations.

This service may also include feeder links necessary for its operation. (RR)

NGSO FSS gateway earth station. A gateway earth station is an earth station complex consisting of multiple interconnecting earth station antennas supporting the communication routing and switching functions of a non-geostationary satellite orbit fixed-satellite service (NGSO FSS) system as a whole. A gateway earth station in the NGSO FSS:

(1) Does not originate or terminate radiocommunication traffic, but interconnects multiple non-collocated user earth stations operating in frequency bands other than designated gateway bands, through a satellite with other primary terrestrial networks, such as the public switched telephone network (PSTN) and/or Internet networks.

(2) Is prohibited from connecting directly with a private communication network.

(3) May also be used for telemetry, tracking, and command transmissions for the same NGSO FSS system.

(4) May include multiple antennas, each required to meet the antenna performance standard in §25.209(h), located within an area of one second latitude by one second longitude.

(5) Is considered as a separate gateway earth station complex if it is out side of the area of one second latitude by one second longitude of paragraph (4) of this definition, for the purposes of coordination with terrestrial services.

Non-Voice, Non-Geostationary Mobile-Satellite Service. A mobile-satellite service reserved for use by non-geostationary satellites in the provision of non-voice communications which may include satellite links between land earth stations at fixed locations.

1.6/2.4 GHz Mobile-Satellite Service. A mobile-satellite service that operates in the 1610–1626.5 MHz and 2483.5–2500 MHz frequency bands, or in any portion thereof.

Passive satellite. An earth satellite intended to transmit radio communication signals by reflection.

Protection areas. The geographic regions on the surface of the Earth where United States Department of Defense (''DoD'') meteorological satellite systems or National Oceanic and Atmospheric Administration (''NOAA'') meteorological satellite systems, or both such systems, are receiving signals from low earth orbiting satellites.

Radiodetermination-Satellite Service. A radiocommunication service for the purpose of radiodetermination involving the use of one of more space stations. This service may also include feeder links necessary for its own operation. (RR)

Satellite Digital Audio Radio Service (''DARS''). A radiocommunication service in which audio programming is digitally transmitted by one or more space stations directly to fixed, mobile, and/or portable stations, and which may involve complementary repeating terrestrial transmitters, telemetry, tracking and control facilities.

Satellite system. A space system using one or more artificial earth satellites.

Spacecraft. A man-made vehicle which is intended to go beyond the major portion of the Earth's atmosphere.

Space operation service. A radiocommunication service concerned exclusively with the operation of spacecraft, in particular space tracking, space telemetry and space telecommand. These functions will normally be provided within the service in which the space station is operating.

Space radiocommunication. Any radiocommunication involving the use of one or more space stations or the use of one or more reflecting satellites or other objects in space.

Space station. A station located on an object which is beyond, is intended to go beyond, or has been beyond, the major portion of the Earth's atmosphere.

Space system. Any group of cooperating earth stations and/or space stations employing space radiocommunication for specific purposes.

Space telecommand. The use of radiocommunication for the transmission of signals to a space station to initiate, modify or terminate function of the equipment on a space object, including the space station.

Space telemetering. The use of telemetering for the transmission from a space station of results of measurements made in a spacecraft, including those relating to the functioning of the spacecraft.

Space tracking. Determination of the orbit, velocity or instantaneous position of an object in space by means of radiodetermination, excluding primary radar, for the purpose of following the movement of the object.

Terrestrial radiocommunication. Any radiocommunication other than space radiocommunication or radio astronomy.

Terrestrial station. A station effecting terrestrial radiocommunication.

[30 FR 7176, May 28, 1965, as amended at 36 FR 2562, Feb. 6, 1971; 48 FR 40254, Sept. 6, 1983; 51 FR 18445, May 20, 1986; 54 FR 49993, Dec. 4, 1989; 56 FR 42706, Aug. 29, 1991; 58 FR 68059, Dec. 23, 1993; 59 FR 53329, Oct. 21, 1994; 62 FR 11105, Mar. 11, 1997; 62 FR 59296, Nov. 3, 1997; 65 FR 59143, Oct. 4, 2000; 66 FR 10621, Feb. 16, 2001]

§ 25.202 Frequencies, frequency tolerance and emission limitations.

(a)(1) *Frequency band*. The following frequencies are available for use by the fixed-satellite service. Precise frequencies and bandwidths of emission shall be assigned on a case-by-case basis. The Table follows:

Space-to-Earth (GHz)	Earth-to-Space (GHz)
3.7–4.2 [1]	5.925–6.425 [1]
10.7–10.95 [1 12]	12.75–13.15 [1 12]
10.95–11.2 [1 2 12]	13.2125–13.25 [1 12]
11.2–11.45 [1 12]	13.75–14 [4 12]
11.45–11.7 [1 2 12]	14–14.2 [5]
11.7–12.2 [3]	14.2–14.5
12.2–12.7 [13]	13 17.3–17.8 [9]
18.3–18.58 [1 10]	27.5–29.5 [1]
18.58–18.8 [6 10 11]	29.5–30
18.8–19.3 [7 10]	48.2–50.2
19.3–19.7 [8 10]	
19.7–20.2 [10]	
37.6–38.6	
40–41	

[1] This band is shared coequally with terrestrial radiocommunication services.

[2] Use of this band by geostationary satellite orbit satellite systems in the fixed-satellite service is limited to international systems; *i.e.*, other than domestic systems.

[3] Fixed-satellite transponders may be used additionally for transmissions in the broadcasting-satellite service.

[4] This band is shared on an equal basis with the Government radiolocation service and grandfathered space stations in the Tracking and Data Relay Satellite System.

[5] In this band, stations in the radionavigation service shall operate on a secondary basis to the fixed-satellite service.

[6] The band 18.58–18.8 GHz is shared co-equally with existing terrestrial radiocommunication systems until June 8, 2010.

[7] The band 18.8–19.3 GHz is shared co-equally with terrestrial radiocommunication services, until June 8, 2010. After this date, the sub-band 19.26–19.3 GHz is shared co-equally with existing terrestrial radiocommunication systems.

[8] The use of the band 19.3–19.7 GHz by the fixed-satellite service (space-to-Earth) is limited to feeder links for the mobile-satellite service.

[9] The use of the band 17.3–17.8 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for broadcasting-satellite service, and the sub-band 17.7–17.8 GHz is shared co-equally with terrestrial fixed services.

[10] This band is shared co-equally with the Federal Government fixed-satellite service.

[11] The band 18.6–18.8 GHz is shared co-equally with the non-Federal Government and Federal Government Earth exploration-satellite (passive) and space research (passive) services.

[12] Use of this band by non-geostationary satellite orbit systems in the fixed-satellite service is limited to gateway earth station operations.

[13] Use of this band by the fixed-satellite service is limited to non-geostationary satellite orbit systems.

(2) The following frequencies are available for use by the Radiodetermination Satellite Service:

1610–1626.5 MHz: User-to-Satellite Link
2483.5–2500 MHz: Satellite-to-User Link

Fixed-Satellite service frequencies may be used for links between radiodetermination satellites and control centers, including the following designated bands, subject to the Rules in this subpart:

5150–5216 MHz: Satellite-to-Control Center Link
6525–6541.5 MHz: Control Center-to-Satellite Link

(3) The following frequencies are available for use by the non-voice, non-geostationary mobile-satellite service:

137–138 MHz: space-to-Earth
148–149.9 MHz: Earth-to-space
149.9–150.05 MHz: Earth-to-space
399.9–400.05 MHz: Earth-to-space
400.15–401 MHz: space-to-Earth

Until January 1, 1997, the allocations in the 149.9–150.05 MHz and 399.9–400.05 MHz bands may be used on a secondary basis only. Since the 399.9–400.05 MHz band is not allocated internationally to the mobile-satellite service, all operations outside the United States will be on a non-interference basis only.

(4)(i) The following frequencies are available for use by the 1.6/2.4 GHz Mobile-Satellite Service:

1610–1626.5 MHz: User-to-Satellite Link
1613.8–1626.5 MHz: Satellite-to-User Link (secondary)
2483.5–2500 MHz: Satellite-to-User Link

(ii) The following frequencies are available for use by the 2 GHz Mobile-Satellite Service:

1990–2025 MHz: User-to-Satellite Link
2165–2200 MHz: Satellite-to-User Link

(5) The following frequencies are available for use by the inter-satellite service:

22.55–23.00 GHz
23.00–23.55 GHz
24.45–24.65 GHz
24.65–24.75 GHz

(6) The following spectrum is available for exclusive use by the satellite digital audio radio service:

2320–2345 MHz: space-to-Earth (primary).

(b) Other frequencies and associated bandwidths of emission may be assigned on a case-by-case basis to space systems under this part in conformance with § 2.106 of this chapter and the Commission's rules and policies.

(c) Orbital locations assigned to space stations licensed under this part by the commission are subject to change by summary order of the Commission on 30 days notice. An authorization to construct and/or to launch a space station becomes null and void if the construction is not begun or is not completed, or if the space station is not launched and positioned at its assigned orbital location and operations commenced in accordance with the station authorization, by the respective date(s) specified in the authorization. Frequencies and orbital location assignments are subject to the policies set forth in the Report and Order, FCC 83–184, adopted April 27, 1983 in CC Docket No. 81–704 and the Report and Order, adopted July 25, 1985 in CC Docket No. 84–1299 as modified by the Report and Order, adopted January 19, 1996 in IB Docket No. 95–41.

(d) *Frequency tolerance, Earth stations.* The carrier frequency of each earth station transmitter authorized in these services shall be maintained within 0.001 percent of the reference frequency.

(e) *Frequency tolerance, space stations.* The carrier frequency of each space station transmitter authorized in these services shall be maintained within 0.002 percent of the reference frequency.

(f) *Emission limitations.* The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:

(1) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: 25 dB;

(2) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: 35 dB;

(3) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: An amount equal to 43 dB plus 10 times the logarithm (to the base 10) of the transmitter power in watts;

(4) In any event, when an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in paragraphs (f) (1), (2) and (3) of this section.

(g) Telemetry, tracking and telecommand functions for U.S. domestic satellites shall be conducted at either or both edges of the allocated band(s). Frequencies, polarization and coding shall be selected to minimize interference into other satellite networks and within their own satellite system.

[30 FR 7176, May 28, 1965, as amended at 36 FR 2562, Feb. 6, 1971; 38 FR 8573, Apr. 4, 1973; 39 FR 33527, Sept. 18, 1974; 48 FR 40254, Sept. 6, 1983; 50 FR 36079, Sept. 5, 1985; 51 FR 18445, May 20, 1986; 51 FR 20975, June 10, 1986; 54 FR 49993, Dec. 4, 1989; 56 FR 24024, May 28, 1991; 58 FR 13419, Mar. 11, 1993; 58 FR 68061, Dec. 23, 1993; 59 FR 53329, Oct. 21, 1994; 61 FR 9952, Mar. 12, 1996; 61 FR 52307, Oct. 7, 1996; 62 FR 11105, Mar. 11, 1997; 64 FR 2591, Jan. 15, 1999; 64 FR 6565, Feb. 10. 1999; 65 FR 54171, Sept. 7, 2000; 65 FR 59144, Oct. 4, 2000; 66 FR 10622, Feb. 16, 2001]

§ 25.203 Choice of sites and frequencies.

(a) Sites and frequencies for earth stations, operating in frequency bands shared with equal rights between terrestrial and space services, shall be selected, to the extent practicable, in areas where the surrounding terrain and existing frequency usage are such as to minimize the possibility of harmful interference between the sharing services.

(b) An applicant for an earth station authorization in a frequency band shared with equal rights with terrestrial microwave services shall compute the great circle coordination distance contour(s) for the proposed station in accordance with the procedures set forth in § 25.251. The applicant shall submit with the application a map or maps drawn to appropriate scale and in

a form suitable for reproduction indicating the location of the proposed station and these contours. These maps, together with the pertinent data on which the computation of these contours is based, including all relevant transmitting and/or receiving parameters of the proposed station that is necessary in assessing the likelihood of interference, an appropriately scaled plot of the elevation of the local horizon as a function of azimuth, and the electrical characteristics of the earth station antenna(s), shall be submitted by the applicant in a single exhibit to the application. The coordination distance contour plot(s), horizon elevation plot, and antenna horizon gain plot(s) required by this section may also be submitted in tabular numerical format at 5° azimuthal increments instead of graphical format. At a minimum, this exhibit shall include the information listed in paragraph (c)(2) of this section. An earth station applicant shall also include in the application relevant technical details (both theoretical calculations and/or actual measurements) of any special techniques, such as the use of artificial site shielding, or operating procedures or restrictions at the proposed earth station which are to be employed to reduce the likelihood of interference, or of any particular characteristics of the earth station site which could have an effect on the calculation of the coordination distance.

(c) Prior to the filing of its application, an earth station applicant shall coordinate the proposed frequency usage with existing terrestrial users and with applicants for terrestrial station authorizations with previously filed applications in accordance with the following procedure:

(1) An applicant for an earth station authorization shall perform an interference analysis in accordance with the procedures set forth in § 25.251 for each terrestrial station, for which a license or construction permit has been granted or for which an application has been accepted for filing, which is or is to be operated in a shared frequency band to be used by the proposed earth station and which is located within the great circle coordination distance contour(s) of the proposed earth station.

(2) The earth station applicant shall provide each such terrestrial station licensee, permittee, and prior filed applicant with the technical details of the proposed earth station and the relevant interference analyses that were made. At a minimum, the earth station applicant shall provide the terrestrial user with the following technical information:

(i) The geographical coordinates of the proposed earth station antenna(s),

(ii) Proposed operating frequency band(s) and emission(s),

(iii) Antenna center height above ground and ground elevation above mean sea level,

(iv) Antenna gain pattern(s) in the plane of the main beam,

(v) Longitude range of geostationary satellite orbit (GSO) satellites at which antenna may be pointed, for proposed earth station antenna(s) accessing GSO satellites,

(vi) Horizon elevation plot,

(vii) Antenna horizon gain plot(s) determined in accordance with § 25.251 for satellite longitude range specified in paragraph (c)(2)(v) of this section, taking into account the provisions of § 25.251 for earth stations operating with non-geostationary satellites,

(viii) Minimum elevation angle,

(ix) Maximum equivalent isotropically radiated power (e.i.r.p.) density in the main beam in any 4 kHz band, (dBW/4 kHz) for frequency bands below 15 GHz or in any 1 MHz band (dBW/MHz) for frequency band above 15 GHz,

(x) Maximum available RF transmit power density in any 1 MHz band and in any 4 kHz band at the input terminals of the antenna(s),

(xi) Maximum permissible RF interference power level as determined in accordance with § 25.251 for all applicable percentages of time, and

(xii) A plot of great circle coordination distance contour(s) and rain scatter coordination distance contour(s) as determined by § 25.251.

(3) The coordination procedures specified in § 101.103 of this chapter and § 25.251 shall be applicable except that the information to be provided shall be that set forth in paragraph (c)(2) of this

section, and that the 30-day period allowed for response to a request for coordination may be increased to a maximum of 45 days by mutual consent of the parties.

(4) Where technical problems are resolved by an agreement or operating arrangement between the parties that would require special procedures be taken to reduce the likelihood of harmful interference (such as the use of artificial site shielding) or would result in lessened quality or capacity of either system, the details thereof shall be contained in the application.

(5) The Commission may, in the course of examining any application, require the submission of additional showings, complete with pertinent data and calculations in accordance with § 25.251, showing that harmful interference is not likely to result from the proposed operation.

(d) An applicant for an earth station authorization shall also ascertain whether the great circle coordination distance contours and rain scatter coordination distance contours, computed for those values of parameters indicated in § 25.251 (Appendix S7 of the ITU RR) for international coordination, cross the boundaries of another Administration. In this case, the applicant shall furnish the Commission copies of these contours on maps drawn to appropriate scale for use by the Commission in effecting coordination of the proposed earth station with the Administration(s) affected.

(e) Protection for Table Mountain Radio Receiving Zone, Boulder County, Colorado.

(1) Applicants for a station authorization to operate in the vicinity of Boulder County, Colorado under this part are advised to give due consideration, prior to filing applications, to the need to protect the Table Mountain Radio Receiving Zone from harmful interference. These are the research laboratories of the Department of Commerce, Boulder County, Colorado. To prevent degradation of the present ambient radio signal level at the site, the Department of Commerce seeks to ensure that the field strengths of any radiated signals (excluding reflected signals) received on this 1800 acre site (in the vicinity of coordinates 40°07′50″ N Latitude, 105°14′40″ W Longitude) resulting from new assignments (other than mobile stations) or from the modification or relocation of existing facilities do not exceed the following values:

Frequency range	In authorized bandwidth of service	
	Field strength (mV/m)	Power flux density[1] (dBW/m^2)
Below 540 kHz	10	−65.8
540 to 1600 kHz	20	−59.8
1.6 to 470 MHz	10	[2] −65.8
470 to 890 MHz	30	[2] −56.2
Above 890 MHz	1	[2] −85.8

[1] Equivalent values of power flux density are calculated assuming free space characteristic impedance of 376.7=120π ohms.

[2] Space stations shall conform to the power flux density limits at the earth's surface specified in appropriate parts of the FCC rules, but in no case should exceed the above levels in any 4 kHz band for all angles of arrival.

(2) Advance consultation is recommended particularly for those applicants who have no reliable data which indicates whether the field strength or power flux density figures in the above table would be exceeded by their proposed radio facilities (except mobile stations). In such instances, the following is a suggested guide for determining whether coordination is recommended:

(i) All stations within 2.5 kilometers;

(ii) Stations within 5 kilometers with 50 watts or more average effective radiated power (ERP) in the primary plane of polarization in the azimuthal direction of the Table Mountain Radio Receiving Zone;

(iii) Stations within 15 kilometers with 1 kW or more average ERP in the primary plane of polarization in the azimuthal direction of Table Mountain Receiving Zone;

(iv) Stations within 80 kilometers with 25 kW or more average ERP in the primary plane of polarization in the azimuthal direction of Table Mountain Receiving Zone.

(3) Applicants concerned are urged to communicate with the Radio Frequency Management Coordinator, Department of Commerce, Research Support Services, NOAA R/E5X2, Boulder Laboratories, Boulder, CO 80303; telephone (303) 497–6548, in advance of filing their applications with the Commission.

(4) The Commission will not screen applications to determine whether advance consultation has taken place. However, applicants are advised that such consultation can avoid objections from the Department of Commerce or proceedings to modify any authorization which may be granted which, in fact, delivers a signal at the site in excess of the field strength specified herein.

(f) Notification to the National Radio Astronomy Observatory: In order to minimize possible harmful interference at the National Radio Astronomy Observatory site located at Green Bank, Pocahontas County, W. Va., and at the Naval Radio Research Observatory site at Sugar Grove, Pendleton County, W. Va. any applicant for a station authorization other than mobile, temporary base, temporary fixed, Personal Radio, Civil Air Patrol, or amateur seeking a station license for a new station, a construction permit to construct a new station or to modify an existing station license in a manner which would change either the frequency, power, antenna height or directivity, or location of such a station within the area bounded by 39°15′ N. on the north, 78°30′ W. on the east, 37°30′ N. on the south and 80°30′ W. on the west shall, at the time of filing such application with the Commission, simultaneously notify the Director, National Radio Astronomy Observatory, P.O. Box No. 2, Green Bank, W. Va. 24944, in writing, of the technical particulars of the proposed station. Such notification shall include the geographical coordinates of the antenna, antenna height, antenna directivity if any, proposed frequency, type of emission, and power. In addition, the applicant shall indicate in his application to the Commission the date notification was made to the observatory. After receipt of such applications, the Commission will allow a period of 20 days for comments or objections in response to the notifications indicated. If an objection to the proposed operation is received during the 20-day period from the National Radio Astronomy Observatory for itself or on behalf of the Naval Radio Research Observatory, the Commission will consider all aspects of the problem and take whatever action is deemed appropriate.

(g) Protection for Federal Communications Commission monitoring stations:

(1) Applicants in the vicinity of an FCC monitoring station for a radio station authorization to operate new transmitting facilities or changed transmitting facilities which would increase the field strength produced over the monitoring station over that previously authorized are advised to give consideration, prior to filing applications, to the possible need to protect the FCC stations from harmful interference. Geographical coordinates of the facilities which require protection are listed in §0.121(c) of the Commission's Rules. Applications for stations (except mobile stations) which will produce on any frequency a direct wave fundamental field strength of *greater than 10 mV/m* in the authorized bandwidth of service (-65.8 dBW/m^2 power flux density assuming a free space characteristic impedance of 120 ohms) at the referenced coordinates, may be examined to determine extent of possible interference. Depending on the theoretical field strength value and existing root-sum-square or other ambient radio field signal levels at the indicated coordinates, a clause protecting the monitoring station may be added to the station authorization.

(2) In the event that calculated value of expected field exceeds 10 mV/m (-65.8 dBW/m^2) at the reference coordinates, or if there is any question whether field strength levels might exceed the threshold value, advance consultation with the FCC to discuss any protection necessary should be considered. Prospective applicants may communicate with: Chief, Compliance and Information Bureau, Federal Communications Commission, Washington, DC 20554, Telephone (202) 632–6980.

(3) Advance consultation is suggested particularly for those applicants who have no reliable data which indicates whether the field strength or power flux density figure indicated would be exceeded by their proposed radio facilities (except mobile stations). In such instances, the following is a suggested guide for determining whether an applicant should coordinate:

(i) All stations within 2.5 kilometers;

(ii) Stations within 5 kilometers with 50 watts or more average effective radiated power (ERP) in the primary plane of polarization in the azimuthal direction of the Monitoring Station;

(iii) Stations within 15 kilometers with 1 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station;

(iv) Stations within 80 kilometers with 25 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station.

(4) Advance coordination for stations operating above 1000 MHz is recommended only where the proposed station is in the vicinity of a monitoring station designated as a satellite monitoring facility in §0.121(c) of the Commission's Rules and also meets the criteria outlined in paragraphs (h)(2) and (3) of this section.

(5) The Commission will not screen applications to determine whether advance consultation has taken place. However, applicants are advised that such consultation can avoid objections from the Federal Communications Commission or modification of any authorization which will cause harmful interference.

(h) Sites and frequencies for GSO and NGSO earth stations, operating in a frequency band where both have a co-primary allocation, shall be selected to avoid earth station antenna mainlobe-to-satellite antenna mainlobe coupling, between NGSO systems and between NGSO and GSO systems, in order to minimize the possibility of harmful interference between these services. Prior to filing an earth station application, in bands with co-primary allocations to NGSO and GSO earth stations, the applicant shall coordinate the proposed site and frequency usage with existing earth station licensees and with current earth station authorization applicants.

(i) Any applicant for a new permanent transmitting fixed earth station authorization to be located on the islands of Puerto Rico, Desecheo, Mona, Vieques, and Culebra, or for a modification of an existing authorization which would change the frequency, power, antenna height, directivity, or location of such station on these islands and would increase the likelihood of the authorized facility causing interference, shall notify the Interference Office, Arecibo Observatory, Post Office Box 995, Arecibo, Puerto Rico 00613, in writing or electronically, of the technical parameters of the proposal. Applicants may wish to consult interference guidelines, which will be provided by Cornell University. Applicants who choose to transmit information electronically should e-mail to: prcz@naic.edu

(1) The notification to the Interference Office, Arecibo Observatory shall be made prior to, or simultaneously with, the filing of the application with the Commission. The notification shall state the geographical coordinates of the antenna (NAD–83 datum), antenna height above ground, ground elevation at the antenna, antenna directivity and gain, proposed frequency and FCC Rule Part, type of emission, effective radiated power, and whether the proposed use is itinerant. Generally, submission of the information in the technical portion of the FCC license application is adequate notification. In addition, the applicant shall indicate in its application to the Commission the date notification was made to the Arecibo Observatory.

(2) After receipt of such applications, the Commission will allow the Arecibo Observatory a period of 20 days for comments or objections in response to the notification indicated. The applicant will be required to make reasonable efforts in order to resolve or mitigate any potential interference problem with the Arecibo Observatory and to file either an amendment to the application or a modification application, as appropriate. If the Commission determines that an applicant has satisfied its responsibility to make reasonable efforts to protect the Observatory from interference, its application may be granted.

(3) The provisions of this paragraph do not apply to operations that transmit on frequencies above 15 GHz.

(j) Applicants for non-geostationary 1.6/2.4 GHz Mobile-Satellite Service/Radiodetermination satellite service feeder links in the bands 17.7–20.2 GHz

and 27.5–30.0 GHz shall indicate the frequencies and spacecraft antenna gain contours towards each feeder-link earth station location and will coordinate with licensees of other fixed-satellite service and terrestrial-service systems sharing the band to determine geographic protection areas around each non-geostationary mobile-satellite service/radiodetermination satellite service feeder-link earth station.

(k) An applicant for an earth station that will operate with a geostationary satellite or non-geostationary satellite in a shared frequency band in which the non-geostationary system is (or is proposed to be) licensed for feeder links, shall demonstrate in its applications that its proposed earth station will not cause unacceptable interference to any other satellite network that is authorized to operate in the same frequency band, or certify that the operations of its earth station shall conform to established coordination agreements between the operator(s) of the space station(s) with which the earth station is to communicate and the operator(s) of any other space station licensed to use the band.

[30 FR 7176, May 28, 1965, as amended at 36 FR 2562, Feb. 6, 1971; 38 FR 8573, Apr. 4, 1973; 42 FR 8329, Feb. 9, 1977; 44 FR 77167, Dec. 31, 1979; 50 FR 40862, Oct. 7, 1985; 58 FR 13419, Mar. 11, 1993; 58 FR 44904, Aug. 25, 1993; 59 FR 53329, Oct. 21, 1994; 61 FR 8477, Mar. 5, 1996; 61 FR 9945, Mar. 12, 1996; 61 FR 44181, Aug. 28, 1996; 62 FR 55531, Oct. 27, 1997; 65 FR 38325, June 20, 2000; 65 FR 59144, Oct. 4, 2000; 66 FR 10622, Feb. 16, 2001]

§ 25.204 Power limits.

(a) In bands shared coequally with terrestrial radio communication services, the equivalent isotropically radiated power transmitted in any direction towards the horizon by an earth station operating in frequency bands between 1 and 15 GHz, shall not exceed the following limits except as provided for in paragraph (c) of this section:

+40 dBW in any 4 KHz band for $\theta 0°$
+40+3 θ dBW in any 4 KHz band for $\theta < 0° \leqq 05°$

where θ is the angle of elevation of the horizon viewed from the center of radiation of the antenna of the earth station and measured in degrees as positive above the horizontal plane and negative below it.

(b) In bands shared coequally with terrestrial radio-communication services, the equivalent isotropically radiated power transmitted in any direction towards the horizon by an earth station operating in frequency bands above 15 GHz shall not exceed the following limits except as provided for in paragraph (c) of this section:

+64 dBW in any 1 MHz band for $\theta < 0°$
+64+3 θ dBW in any 1 MHz band for $0° < \alpha < 5°$

where θ is as defined in paragraph (a) of this section.

(c) For angles of elevation of the horizon greater than 5° there shall be no restriction as to the equivalent isotropically radiated power transmitted by an earth station towards the horizon.

(d) Notwithstanding the e.i.r.p. and e.i.r.p. density limits specified in the station authorization, each earth station transmission shall be conducted at the lowest power level that will provide the required signal quality as indicated in the application and further amended by coordination agreements.

(e) For operations at frequencies above 10 GHz, earth station operators may exceed the uplink e.i.r.p. and e.i.r.p. density limits specified in the station authorization under the conditions of uplink fading due to precipitation by an amount not to exceed 1 dB above the actual amount of monitored excess attenuation over clear sky propagation conditions. The e.i.r.p. levels shall be returned to normal as soon as the attenuating weather pattern subsides. The maximum power level for power control purposes shall be coordinated between and among adjacent satellite operators.

(f) In the band 13.75–14 GHz, an earth station in the fixed-satellite service shall have a minimum antenna diameter of 4.5 m and the e.i.r.p. of any emission should be at least 68 dBW and should not exceed 85 dBW. The e.i.r.p. density of emissions from any earth station in the FSS operating with a space station in geostationary-satellite orbit shall not exceed 71 dBW in any 6 MHz band from 13.77 to 13.78 GHz. The e.i.r.p. density of emissions from any earth station in the FSS operating

with a space station in non-geostationary-satellite orbit shall not exceed 51 dBW in any 6 MHz band from 13.77 to 13.78 GHz. Automatic power control may be used to increase the e.i.r.p. density in the 6 MHz band in this frequency range to compensate for rain attenuation, to the extent that the power flux-density at the FSS space station does not exceed the value resulting from use by an earth station of an e.i.r.p. of 71 dBW or 51 dBW, as appropriate, in the 6 MHz band in clear-sky conditions.

(g) All earth stations in the Fixed Satellite Service in the 20/30 GHz band shall employ uplink adaptive power control or other methods of fade compensation such that the earth station transmissions shall be conducted at the power level required to meet the desired link performance while reducing the level of mutual interference between networks.

[48 FR 40255, Sept. 6, 1983, as amended at 58 FR 13420, Mar. 11, 1993; 61 FR 52307, Oct. 7, 1996; 62 FR 61457, Nov. 18, 1997; 66 FR 10623, Feb. 16, 2001]

§ 25.205 Minimum angle of antenna elevation.

Earth station antennas shall not normally be authorized for transmission at angles less than 5° measured from the horizontal plane to the direction of maximum radiation. However, upon a showing that the transmission path will be seaward and away from land masses or upon special showing of need for lower angles by the applicant, the Commission will consider authorizing transmissions at angles between 3° and 5° in the pertinent directions. In certain instances, it may be necessary to specify minimum angles greater than 5° because of interference considerations.

[48 FR 40255, Sept. 6, 1983]

§ 25.206 Station identification.

The requirement for transmission of station identification is waived for all radio stations licensed under this part with the exception of satellite uplinks carrying broadband video information which are required to incorporate ATIS in accordance with the provisions set forth under § 25.308 of these rules.

[55 FR 21551, May 25, 1990]

§ 25.207 Cessation of emissions.

Space stations shall be made capable of ceasing radio emissions by the use of appropriate devices (battery life, timing devices, ground command, etc.) that will ensure definite cessation of emissions.

§ 25.208 Power flux density limits.

(a) In the band 3700–4200 MHz, the power flux density at the Earth's surface produced by emissions from a space station for all conditions and for all methods of modulation shall not exceed the following values:

-152 dB(W/m^2) in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;

$-152+(\delta-5)/2$ dB(W/m^2) in any 4 kHz band for angles of arrival δ (in degrees) between 5 and 25 degrees above the horizontal plane; and

-142 dB(W/m^2) in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane

These limits relate to the power flux density which would be obtained under assumed free-space propagation conditions.

(b) In the bands 10.95–11.2 and 11.45–11.7 GHz for GSO FSS space stations and 10.7–11.7 GHz for NGSO FSS space stations, the power flux-density at the Earth's surface produced by emissions from a space station for all conditions and for all methods of modulation shall not exceed the lower of the following values:

(1) -150 dB(W/m^2) in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane; $-150 + (\delta-5)/2$ dB(W/m^2) in any 4 kHz band for angles of arrival (δ) (in degrees) between 5 and 25 degrees above the horizontal plane; and -140 dB(W/m^2) in any 4 kHz band for angles of arrival between 25 and 90 degrees above the horizontal plane; or

(2) -126 dB(W/m^2) in any 1 MHz band for angles of arrival between 0 and 5 degrees above the horizontal plane; $-126 + (\delta-5)/2$ dB(W/m^2) in any 1 MHz band

for angles of arrival (δ) (in degrees) between 5 and 25 degrees above the horizontal plane; and −116 dB(W/m²) in any 1 MHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

NOTE TO PARAGRAPH (b): These limits relate to the power flux density, which would be obtained under assumed free-space propagation conditions.

(c) In the 19.3–19.7 GHz, 22.55–23.00 GHz, 23.00–23.55 GHz, and 24.45–24.75 GHz frequency bands, the power flux-density at the Earth's surface produced by emissions from a space station for all conditions and for all methods of modulation shall not exceed the following values:

(1) −115 dB (W/m²) in any 1 MHz band for angles of arrival between 0 and 5 degrees above the horizontal plane.

(2) −115+0.5 (d−5) dB (W/m²) in any 1 MHz band for angles of arrival d (in degrees) between 5 and 25 degrees above the horizontal plane.

(3) −105 dB (W/m²) in any 1 MHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

(d) In the 18.3–18.8 GHz frequency bands, the power flux-density at the Earth's surface produced by emissions from a space station for all conditions and for all methods of modulation shall not exceed the following values:

(1) −118 dB (W/m²) in any 1 MHz band for angles of arrival between 0 and 5 degrees above the horizontal plane.

(2) −118+0.65 (d−5) dB (W/m²) in any 1 MHz band for angles of arrival d (in degrees) between 5 and 25 degrees above the horizontal plane.

(3) −105 dB (W/m²) in any 1 MHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

(e) In addition to the limits specified in paragraph (d) of this section, the power flux-density across the 200 MHz band 18.6–18.8 GHz produced at the Earth's surface by emissions from a space station under assumed free-space propagation conditions shall not exceed −95 dB(W/m²) for all angles of arrival. This limit may be exceeded by up to 3 dB for no more than 5% of the time.

(f) In the 18.8–19.3 GHz frequency band, the power flux-density at the Earth's surface produced by emissions from a space station for all conditions and for all methods of modulation shall not exceed the following values:

$-115 - X$ dB(W/m²÷MHz)	for $0° \le \delta < 5°$
$-115 - X + ((10+X)/20)(\delta - 5)$ dB(W/m²÷MHz)	for $5° \le \delta < 25°$
-105 dB(W/m²÷MHz)	for $25° \le \delta < 90°$

Where:

δ: is the angle of arrival above the horizontal plane; and

X is defined as a function of the number of satellites in the non-GSO FSS constellation, n, as follows:

for $n \le 50$	$X = 0$ (dB)
for $50 < n \le 288$	$X = (5/119)(n - 50)$ (dB)
for $n > 288$	$X = (1/69)(n + 402)$ (dB)

(g) In the frequency bands 10.7–11.7 GHz and 11.7–12.2 GHz, the single-entry equivalent power-flux density in the space-to-Earth direction ($EPFD_{down}$), at any point on the Earth's surface, produced by emissions from all co-frequency space stations of a single non-geostationary-satellite orbit (NGSO) system operating in the fixed-satellite service (FSS) shall not exceed the following limits for the given percentages of time. Tables 1G and 2G follow:

TABLE 1G.—SINGLE-ENTRY $EPFD_{down}$ LIMITS FOR PROTECTION OF 0.6, 1.2, 3 AND 10 METER GSO FSS EARTH STATION ANTENNAS [1] [2]

Frequency band (GHz) for International Allocations	Single-entry $EPFD_{down}$ dB(W/m²)	Percentage of time during which $EPFD_{down}$ level may not be exceeded	Reference bandwidth (kHz)	Reference antenna diameter and reference radiation pattern [3]
10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3.	−175.4 −174 −170.8 −165.3 −160.4 −160 −160	0 90 99 99.73 99.991 99.997 100	40	60 cm, Recommendation ITU–R S.1428.
10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3.	−181.9 −178.4 −173.4 −173 −164 −161.6 −161.4 −160.8 −160.5 −160 −160	0 99.5 99.74 99.857 99.954 99.984 99.991 99.997 99.997 99.9993 100	40	1.2 m, Recommendation ITU–R S.1428.
10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3.	−190.45 −189.45 −187.45 −182.4 −182 −168 −164 −162 −160 −160	0 90 99.5 99.7 99.855 99.971 99.988 99.995 99.999 100	40	3 m, Recommendation ITU–R S.1428.
10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3.	−195.45 −195.45 −190 −190 −172.5 −160 −160	0 99 99.65 99.71 99.99 99.998 100	40	10 m, Recommendation ITU–R S.1428.

[1] In addition to the limits shown in Table 1G, the limits shown in Table 2G shall apply to all antenna sizes greater than 60 cm in the frequency bands listed in Table 1G.
[2] For each reference antenna diameter, the limit consists of the complete curve on a plot which is linear in decibels for the EPFD levels and logarithmic for the time percentages, with straight lines joining the data points.
[3] The earth station antenna reference radiation patterns are to be used only for the calculation of interference from NGSO FSS systems into GSO FSS systems.

TABLE 2G.—SINGLE-ENTRY $EPFD_{down}$ LIMITS RADIATED BY NON-GSO FSS SYSTEMS AT CERTAIN LATITUDES

100% of the time $EPFD_{down}$ dB(W/(m²/40 kHz))	Latitude (North or South in degrees)
–160	0 < | Latitude | ≤ 57.5.
–160 + 3.4 (57.5 − | Latitude |)/4	57.5 < | Latitude | ≤ 63.75
–165.3	63.75 ≤ | Latitude |

NOTE TO PARAGRAPH (g): These limits relate to the equivalent power flux density, which would be obtained under free-space propagation conditions, for all conditions and for all methods of modulation.

(h) In the frequency bands 10.7–11.7 GHz and 11.7–12.2 GHz, the aggregate equivalent power-flux density in the space-to-Earth direction ($EPFD_{down}$), at any point on the Earth's surface, produced by emissions from all co-frequency space stations of all non-geostationary-satellite orbit systems operating in the fixed-satellite service

(FSS) shall not exceed the following limits for the given percentages of time. Tables 1H and 2H follow:

TABLE 1H.—AGGREGATE $EPFD_{down}$ LIMITS FOR PROTECTION OF 0.6, 1.2, 3 AND 10 METER GSO FSS EARTH STATION ANTENNAS [1]

Frequency band (GHz) for International Allocations	Aggregate $EPFD_{down}$ dB(W/m^2)	Percentage of time during which $EPFD_{down}$ may not be exceeded	Reference bandwidth (kHz)	Reference antenna diameter and reference radiation pattern [2]
10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3.	−170	0	40	60 cm, Recommendation ITU–R S.1428.
	−168.6	90		
	−165.3	99		
	−160.4	99.97		
	−160	99.99		
	−160	100		
10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3.	−176.5	0	40	1.2 m, Recommendation ITU–R S.1428.
	−173	99.5		
	−164	99.84		
	−161.6	99.945		
	−164.4	99.97		
	−160.8	99.99		
	−160.5	99.99		
	−160	99.9975		
	−160	100		
10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3.	−185	0	40	3 m, Recommendation ITU–R S.1428.
	−184	90		
	−182	99.5		
	−168	99.9		
	−164	99.96		
	−162	99.982		
	−160	99.997		
	−160	100		
10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3.	−190	0	40	10 m, Recommendation ITU–R S.1428.
	−190	99		
	−166	99.99		
	−160	99.998		
	−160	100		

[1] In addition to the limits shown in Table 1H, the aggregate $EPFD_{down}$ limits shown in Table 2H shall apply to all antenna sizes greater than 60 cm in the frequency bands listed in Table 1H.
[2] The earth station antenna reference patterns are to be used only for the calculation of interference from NGSO FSS systems into GSO FSS systems.

TABLE 2H.—SINGLE-ENTRY $EPFD_{down}$ LIMITS RADIATED BY NON-GSO FSS SYSTEMS AT CERTAIN LATITUDES

100% of the time $EPFD_{down}$ dB(W/(m^2/40 kHz))	Latitude (North or South in degrees)
–160	0 < | Latitude | ≤ 57.5
–160 + 3.4 (57.5 − | Latitude |)/4	57.5 < | Latitude | ≤ 63.75
–165.3	63.75 ≤ | Latitude |

NOTE TO PARAGRAPH (h): These limits relate to the equivalent power flux density, which would be obtained under free-space propagation conditions, for all conditions and for all methods of modulation.

(i) In the frequency bands 10.7–11.7 GHz and 11.7–12.2 GHz, the additional operational equivalent power-flux density, in the space-to-Earth direction, (additional operational $EPFD_{down}$) at any point on the Earth's surface, produced by actual operational emissions from all co-frequency space stations of a non-geostationary-satellite orbit (NGSO) system operating in the fixed-satellite service (FSS) shall not exceed the following operational limits for the given percentages of time:

ADDITIONAL OPERATIONAL LIMITS ON THE $EPFD_{down}$ RADIATED BY NON-GSO FSS SYSTEMS INTO 3 M AND 10 M GSO FSS EARTH STATION ANTENNAS

$EPFD_{down}$ dB(W/(m²/40 kHz))	Percentage of time during which $EPFD_{down}$ may not be exceeded	Receive GSO earth station antenna diameter (m)
−182	99.9.	
−179	99.94.	
−176	99.97.	
−171	99.98.	
−168	99.984	3.
−165	99.993.	
−163	99.999.	
−161.25	99.99975.	
−161.25	100.	
−185	99.97.	
−183	99.98.	
−179	99.99.	
−175	99.996.	
−171	99.998	10.
−168	99.999.	
−166	99.9998.	
−166	100.	

NOTE TO PARAGRAPH (i): These limits relate to the equivalent power flux density, which is obtained under free-space propagation conditions, for all conditions and for all methods of modulation.

(j) In the frequency bands 10.7–11.7 GHz and 11.7–12.2 GHz, the operational equivalent power-flux density, in the space-to-Earth direction, (operational $EPFD_{down}$) at any point on the Earth's surface, produced by actual operational emissions from the in-line co-frequency space station of a non-geostationary-satellite orbit (NGSO) system operating in the fixed-satellite service (FSS) shall not exceed the following operational limits for 100% of the time:

OPERATIONAL LIMITS TO THE $EPFD_{down}$ RADIATED BY NON-GSO FSS SYSTEMS IN CERTAIN FREQUENCY BANDS[1]

Frequency band (GHz) for International allocations	$EPFD_{down}$ dB(W/m²)	Percentage of time during which $EPFD_{down}$ may not be exceeded	Reference bandwidth (kHz)	Receive GSO earth station antenna diameter [2] (m)	Orbital inclination of GSO satelite (degrees)
Prior to 31 December 2005: 10.7–11.7 in all Regions; 11.7–12.2 in Regions 2; 12.2–12.5 in Region 3; and 12.5;–12.75 in Regions 1 and 3	−163	100	40	3	≤2.5
	−166			6	
	−167.5			9	
	−169.5			≥18	
Prior to 31 December 2005: 10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3	−160	100	40	3	>2.5 and ≤4.5
	−163			6	
	−164.5			9	
	−166.5			≥18	
From 31 December 2005: 10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3	−161.25	100	40	3	≤2.5
	−164			6	
	−165.5			9	
	−167.5			≥18	

OPERATIONAL LIMITS TO THE $EPFD_{down}$ RADIATED BY NON-GSO FSS SYSTEMS IN CERTAIN FREQUENCY BANDS[1]—Continued

Frequency band (GHz) for International allocations	$EPFD_{down}$ dB(W/m^2)	Percentage of time during which $EPFD_{down}$ may not be exceeded	Reference bandwidth (kHz)	Receive GSO earth station antenna diameter[2] (m)	Orbital inclination of GSO satelite (degrees)
From 31 December 2005: 10.7–11.7 in all Regions; 11.7–12.2 in Region 2; 12.2–12.5 in Region 3; and 12.5–12.75 in Regions 1 and 3	−158.25 −161 −162.5 −164.5	100	40	3 6 9 ≥18	>2.5 and ≤4.5

[1] The operational limits on the $EPFD_{down}$ radiated by non-GSO FSS systems shall be the values given in Table 2G or this table, whichever are the more stringent.

[2] For antenna diameters between the values given in this table, the limits are given by linear interpolation using a linear scale for $EPFD_{down}$ in decibels and a logarithmic scale for antenna diameter in meters.

NOTE TO PARAGRAPH (j): These limits relate to the operational equivalent power flux-density which would be obtained under free-space propagation conditions, for all conditions, for all methods of modulation and for the specified inclined GSO FSS operations.

(k) In the frequency bands 12.75–13.15 GHz, 13.2125–13.25 GHz and 13.75–14.5 GHz, the equivalent power flux-density, in the Earth-to-space direction, ($EPFD_{up}$) produced at any point on the geostationary satellite orbit (GSO) by the emissions from all co-frequency earth stations in a non-geostationary satellite orbit fixed-satellite service (NGSO FSS) system, for all conditions and for all methods of modulation, shall not exceed the following limits for the specified percentages of time limits:

LIMITS TO THE $EPFD_{up}$ RADIATED BY NGSO FSS SYSTEMS IN CERTAIN FREQUENCY BANDS

Frequency band (GHz) for International Allocations	$EPFD_{up}$ dB(W/m^2)	Percentage of time during which $EPFD_{up}$ may not be exceeded	Reference bandwidth (kHz)	Reference antenna beamwidth and reference radiation pattern[1]
12.5–12.75; 12.75–13.25; 13.75–14.5	−160	100	40	4° ITU–R S.672–4, Ls=−20

[1] For the case of $L_s = -10$, the values a = 1.83 and b = 6.32 should be used in the equations in the Annex of Recommendation ITU–R S.672–4 for single-feed circular beams. In all cases of L_s, the parabolic main beam equation should start at zero.

NOTE TO PARAGRAPH (k): These limits relate to the uplink equivalent power flux density, which would be obtained under free-space propagation conditions, for all conditions and for all methods of modulation.

(l) In the frequency bands 11.7–12.2 GHz and 12.5–12.75 GHz in Region 3, 11.7–12.5 GHz in Region 1 and 12.2–12.7 GHz in Region 2, the single-entry equivalent power-flux density, in the space-to-Earth direction, (EPFD**down**), at any point on the Earth's surface, produced by emissions from all co-frequency space stations of a single non-geostationary-satellite orbit (NGSO) system operating in the fixed-satellite service (FSS) shall not exceed the following limits in Tables 1L and 2L for the given percentages of time:

TABLE 1L.—SINGLE-ENTRY EPFD DOWN LIMITS FOR PROTECTION OF 30, 45, 60, 90, 120, 180, 240 AND 300 CM GSO BSS EARTH STATION ANTENNAS [1 2 3]

Frequency band (GHz) for international allocations	$EPDF_{down}$ dB(W/m²)	Percentage of time during which $EPFD_{down}$ level may not be exceeded	Reference bandwidth (kHz)	Reference antenna diameter and reference radiation pattern [4]
11.7–12.5 in Region 1; 1.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2.	−165.841	0	40	30 cm Recommendation ITU–R BO.1443 Annex 1
	−165.541	25		
	−164.041	96		
	−158.6	98.857		
	−158.6	99.429		
	−158.33	99.429		
	−158.33	99.429		
		100		
11.7–12.5 in Region 1; 1.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2.	−175.441	0	40	45 cm Recommendation ITU–R BO.1443 Annex 1
	−172.441	66		
	−169.441	97.75		
	−164	99.357		
	−160.75	99.809		
	−160	99.986		
	−160	100		
11.7–12.5 in Region 1; 1.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2.	−176.441	0	40	60 cm Recommendation ITU–R BO. 1443 Annex 1
	−173.191	97.8		
	−167.75	99.371		
	−162	99.886		
	−161	99.943		
	−160.2	99.971		
	−160	99.997		
	−160	100		
11.7–12.5 in Region 1; 1.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2.	−178.94	0	40	90 cm Recommendation ITU–R BO.1443 Annex 1
	−178.44	33		
	−176.44	98		
	−171	99.429		
	−165.5	99.714		
	−163	99.857		
	−161	99.943		
	−160	99.991		
	−160	100		
11.7–12.5 in Region 1; 1.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2.	−182.44	0	40	120 cm Recommendation ITU–R BO.1443 Annex 1
	−180.69	90		
	−179.19	98.9		
	−178.44	98.9		
	−174.94	99.5		
	−173.75	99.68		
	−173	99.68		
	−169.5	99.85		
	−167.8	99.915		
	−164	99.94		
	−161.9	99.97		
	−161	99.99		
	−160.4	99.998		
	−160	100		
11.7–12.5 in Region 1; 1.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2.	−184.941	0	40	180 cm [3] Recommendation ITU–R BO.1443 Annex 1
	−184.101	33		
	−181.691	98.5		
	−176.25	99.571		
	−163.25	99.946		
	−161.5	99.974		
	−160.35	99.993		
	−160	99.999		
	−160	100		

TABLE 1L.—SINGLE-ENTRY EPFD DOWN LIMITS FOR PROTECTION OF 30, 45, 60, 90, 120, 180, 240 AND 300 CM GSO BSS EARTH STATION ANTENNAS [1 2 3]—Continued

Frequency band (GHz) for international allocations	EPDF $_{down}$ dB(W/m^2)	Percentage of time during which EPFD$_{down}$ level may not be exceeded	Reference bandwidth (kHz)	Reference antenna diameter and reference radiation pattern [4]
11.7–12.5 in Region 1; 1.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2.	−187.441	0	40	240 cm [2]
	−186.341	33		Recommendation ITU–R
	−183.441	99.25		BO.1443 Annex 1
	−178	99.786		
	−161.4	99.957		
	−161.9	99.983		
	−160.5	99.994		
	−160	99.999		
	−160	100		
11.7–12.5 in Region 1; 1.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2.	−191.941	0	40	300 cm
	−189.441	33		Recommendation ITU–R
	−185.941	99.5		BO.1443 Annex 1
	−180.5	99.857		
	−173	99.914		
	−167	99.951		
	−162	99.983		
	−160	99.991		
	−160	100		

[1] For BSS antenna diameters 180 cm, 240 cm and 300 cm, in addition to the single-entry limits shown in Table 1L, the limits in Table 2L shall also apply in the frequency band listed in Table 1L.

[2] For 240 cm GSO BSS earth station antennas located in Alaska, communicating with GSO BSS satellites at the 91° W.L., 101° W.L., 110° W.L., 119° W.L. and 148° W.L. nominal orbital locations with elevation angles greater than 5°, −167 dB(W/(m^2/40 kHz)) single-entry 100% of the time operational EPFD$_{down}$ limit also applies to receive antennas.

[3] For 180 cm GSO BSS earth station antennas located in Hawaii communicating with GSO BSS satellites that are operational as of December 30, 1999 at the 110° W.L., 119° W.L. and 148° W.L. nominal orbital positions, −162.5 dB(W/(m^2/40 kHz)) single-entry 100% of the time operational EPFD$_{down}$ limit also applies.

[4] Under the section reference pattern of Annex 1 to Recommendation ITU-R BO.1443 shall be used only for the calculation of interference from non-GSO FSS systems into BSS systems.

TABLE 2L.—SINGLE-ENTRY EPFD$_{down}$ LIMITS RADIATED BY NON-GSO FSS SYSTEMS AT CERTAIN LATITUDES

100% of the time EPFD$_{down}$ dB(W/(m^2/40 kHz))	Latitude (North or South in degrees)
−160.0	0 ≤ | Latitude | ≤ 57.5
−160.0 + 3.4 (57.5 − | Latitude |)/4	57.5 ≤ | Latitude | ≤ 63.75
−165.3	63.75 ≤ | Latitude |

NOTE TO PARAGRAPH (l): These limits relate to the equivalent power flux density, which would be obtained under free-space propagation conditions, for all conditions and for all methods of modulation.

(m) In the frequency bands 11.7–12.2 GHz and 12.5–12.75 GHz in Region 3, 11.7–12.5 GHz in Region 1 and 12.2–12.7 GHz in Region 2, the aggregate equivalent power-flux density, in the space-to-Earth direction, (EPFD$_{down}$) at any point on the Earth's surface, produced by emissions from all co-frequency space stations of all non-geostationary-satellite orbit systems operating in the fixed-satellite service (FSS) shall not exceed the following limits in Tables 1M and 2M for the given percentages of time:

TABLE 1M.—AGGREGATE $EPFD_{down}$ LIMITS FOR PROTECTION OF 30, 45, 60, 90, 120, 180, 240 AND 300 CM GSO BSS EARTH STATION ANTENNAS [1, 2, 3]

Frequency band (GHz) for international allocations	$EPFD_{down}$ dB (W/m²)	Percentage of time during which $EPFD_{down}$ level may not be exceeded	Reference bandwidth (kHz)	Reference antenna diameter, and reference radiation pattern [4]
11.7–12.5 in Region 1; 11.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2	−160.4 −160.1 −158.6 −158.6 −158.33 −158.33	0 25 96 98 98 100	40	30 cm Recommendation ITU–R BO.1443 Annex 1.
11.7–12.5 in Region 1; 11.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2	−170 −167 −164 −160.75 −160 −160	0 66 97.75 99.33 99.95 100	40	45 cm Recommendation ITU–R BO.1443 Annex 1.
11.7–12.5 in Region 1; 11.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2	−171 −168.75 −167.75 −162 −161 −160.2 −160 −160	0 90 97.8 99.6 99.8 99.9 99.99 100	40	60 cm Recommendation ITU–R BO.1443 Annex 1.
11.7–12.5 in Region 1; 11.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2	−173.75 −173 −171 −165.5 −163 −161 −160 −160	0 33 98 99.1 99.5 99.8 99.97 100	40	90 cm Recommendation ITU–R BO.1443 Annex 1.

11.7–12.5 in Region 1; 11.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2	−177 −175.25 −173.75 −173 −169.5 −167.8 −164 −161.9 −161 −160.4 −160	0 90 98.9 98.9 99.5 99.7 99.82 99.9 99.965 99.993 100	40	120 cm Recommendation ITU–R BO.1443 Annex 1.
11.7–12.5 in Region 1; 11.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2	−179.5 −178.66 −176.25 −163.25 −161.5 −160.35 −160 −160	0 33 98.5 99.81 99.91 99.975 99.995 100	40	180 cm Recommendation ITU–R BO.1443 Annex 1.
11.7–12.5 in Region 1; 11.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2	−182 −180.9 −178 −164.4 −161.9 −160.5 −160 −160	0 33 99.25 99.85 99.94 99.98 99.995 100	40	240 cm Recommendation ITU–R BO.1443 Annex 1.
11.7–12.5 in Region 1; 11.7–12.2 and 12.5–12.75 in Region 3; 12.2–12.7 in Region 2	−186.5 −184 −180.5 −173 −167 −162 −160 −160	0 33 99.5 99.7 99.83 99.94 99.97 100	40	300 cm Recommendation ITU–R BO.1443 Annex 1.

[1] For BSS antenna diameters 180 cm, 240 cm and 300 cm, in addition to the aggregate limit shown in Table 1M, the limits in Table 2M shall also apply.

[2] For 240 cm GSO BSS earth station antennas located in Alaska, communicating with GSO BSS satellites at the 91° W.L., 101° W.L., 110° W.L., 119° W.L. and 148° W.L. nominal orbital locations with elevation angles greater than 5°, −167 dB(W/(m²/40 kHz)) aggregate 100% of the time operational $EPFD_{down}$ limit also applies to receive antennas.

[3] For 180 cm GSO BSS earth station antennas located in Hawaii communicating with GSO BSS satellites that are operational as of December 30, 1999 at the 110° W.L., 119° W.L. and 148° W.L. nominal orbital positions, −162.5 dB(W/(m²/40 kHz)) aggregate 100% of the time operational $EPFD_{down}$ limit also applies.

[4] Under the section reference pattern of Annex 1 to Recommendation ITU–R BO.1443 shall be used only for the calculation of interference from non-GSO FSS systems into GSO BSS systems.

TABLE 2M.—AGGREGATE $EPFD_{down}$ LIMITS RADIATED BY NON-GSO FSS SYSTEMS AT CERTAIN LATITUDES

00% of the time $EPFD_{down}$ dB(W/(m²/40 kHz))	Latitude (North or South in degrees)
160.0	0 ≤ | Latitude | ≤ 57.5.
160.0 + 3.4 (57.5 − | Latitude |)/4	57.5 ≤ | Latitude | ≤ 63.75.
165.3	63.75 ≤ | Latitude |.

NOTE TO PARAGRAPH (m): These limits relate to the equivalent power flux density, which would be obtained under free-space propagation conditions, for all conditions and for all methods of modulation.

[48 FR 40255, Sept. 6, 1983, as amended at 52 FR 45636, Dec. 1, 1987; 59 FR 53329, Oct. 21, 1994; 65 FR 54171, Sept. 7, 2000; 66 FR 10623, Feb. 16, 2001]

§ 25.209 Antenna performance standards.

(a) The gain of any antenna to be employed in transmission from an earth station in the geostationary satellite orbit fixed-satellite service (GSO FSS) shall lie below the envelope defined as follows:

(1) In the plane of the geostationary satellite orbit as it appears at the particular earth station location:

$$29\text{-}25 \log_{10} (\text{Theta}) \text{ dBi } 1° \text{ </= Theta } \text{</= } 7°$$

$$+8 \text{ dBi } 7° < \text{Theta } \text{</= } 9.2°$$

$$32\text{-}25 \log_{10} (\text{Theta}) \text{ dBi } 9.2° < \text{Theta } \text{</= } 48°$$

$$-10 \text{ dBi } 48° < \text{Theta } \text{</= } 180°$$

where Theta is the angle in degrees from the axis of the main lobe, and dBi refers to dB relative to an isotropic radiator. For the purposes of this section, the peak gain of an individual sidelobe may not exceed the envelope defined above for Theta between 1.0 and 7.0 degrees. For Theta greater than 7.0 degrees, the envelope may be exceeded by no more than 10% of the sidelobes, provided no individual sidelobe exceeds the gain envelope given above by more than 3 dB.

(2) In all other directions, or in the plane of the horizon including any out-of-plane potential terrestrial interference paths:

Outside the main beam, the gain of the antenna shall lie below the envelope defined by:

$$32\text{-}25 \log_{10} (\text{Theta}) \text{ dBi } 1° \text{ </= Theta } \text{</= } 48°$$

$$-10 \text{ dBi } 48° < \text{Theta } \text{</= } 180°$$

where Theta and dBi are defined above. For the purposes of this section, the envelope may be exceeded by no more than 10% of the sidelobes provided no individual sidelobe exceeds the gain envelope given above by more than 6 dB. The region of the main reflector spillover energy is to be interpreted as a single lobe and shall not exceed the envelope by more than 6 dB.

(b) The off-axis cross-polarization gain of any antenna to be employed in transmission from an earth station to a space station in the domestic fixed-satellite service shall be defined by:

$$19\text{-}25 \log_{10} (\text{Theta}) \text{ dBi } 1.8° < \text{Theta } \text{</= } 7°$$

$$-2 \text{ dBi } 7° < \text{Theta } \text{</= } 9.2°$$

(c) Earth station antennas licensed for reception of radio transmissions from a space station in the fixed-satellite service are protected from radio interference caused by other space stations only to the degree to which harmful interference would not be expected to be caused to an earth station employing an antenna conforming to the referenced patterns defined in paragraphs (a) and (b) of this section, and protected from radio interference caused by terrestrial radio transmitters identified by the frequency coordination process only to the degree to which harmful interference would not be expected to be caused to an earth station conforming to the reference pattern defined in paragraph (a)(2) of this section.

(d) The patterns specified in paragraphs (a) and (b) of this section shall apply to all new earth station antennas initially authorized after February 15, 1985 and shall apply to all earth station antennas after March 11, 1994.

(e) The operations of any earth station with an antenna not conforming to the standards of paragraphs (a) and (b) of this section shall impose no limitations upon the operation, location or design of any terrestrial station, any other earth station, or any space station beyond those limitations that would be expected to be imposed by an earth station employing an antenna conforming to the reference patterns defined in paragraphs (a) and (b) of this section.

(f) An earth station with an antenna not conforming to the standards of paragraphs (a) and (b) of this section will be routinely authorized after February 15, 1985 upon a finding by the Commission that unacceptable levels of interference will not be caused under conditions of uniform 2° orbital spacings. An earth station antenna initially authorized on or before Feburary 15, 1985 will be authorized by the Commission to continue to operate as long as such operations are found not to cause any unacceptable levels of adjacent satellite interference. In either case, the Commission will impose appropriate terms and conditions in its authorization of such facilities and operations.

(g) The antenna performance standards of small antennas operating in the 12/14 GHz band with diameters as small as 1.2 meters starts at 1.25° instead of 1° as stipulated in paragraph (a) of this section.

(h)(1) The gain of any antennas to be employed in transmission from a gateway earth station antenna operating in the frequency bands 10.7–11.7 GHz, 12.75–13.15 GHz, 13.2125–13.25 GHz, 13.8–14.0 GHz, and 14.4–14.5 GHz and communicating with NGSO FSS satellites shall lie below the envelope defined as follows:

$$29 - 25\log_{10}(\theta)\ \text{dBi} - 10\ \text{dBi}$$

$$1^{B} \leq \theta \leq 36^{B}$$

$$36^{B} \leq \theta \leq 180^{B}$$

Where: θ is the angle in degrees from the axis of the main lobe, and dBi refers to dB relative to an isotropic radiator.

(2) For the purposes of this section, the peak gain of an individual sidelobe may not exceed the envelope defined in paragraph (h)(1) of this section.

[48 FR 40255, Sept. 6, 1983, as amended at 50 FR 2675, Jan. 18, 1985; 50 FR 39004, Sept. 26, 1985; 58 FR 13420, Mar. 11, 1993; 66 FR 10630, Feb. 16, 2001]

§ 25.210 Technical requirements for space stations in the Fixed-Satellite Service.

(a) All space stations in the Fixed-Satellite Service used for domestic service in the 4/6 GHz frequency band shall:

(1) Use orthogonal linear polarization with one of the planes defined by the equatorial plane;

(2) Be designed so that the polarization sense of uplink transmissions is opposite to that of downlink transmissions on the same transponder; and

(3) Shall be capable of switching polarization sense upon ground command.

(b) All space stations in the Fixed-Satellite Service in the 20/30 GHz band shall use either orthogonal linear or orthogonal circular polarization. Those space stations utilizing orthogonal linear polarization shall also comply with paragraph (a) of this section.

(c) All space stations in the Fixed-Satellite Service shall have a minimum capability to change transponder saturation flux densities by ground command in 4 dB steps over a range of 12 dB.

(d) All space stations in the Fixed Satellite Service in the 20/30 GHz band shall employ state-of-the-art full frequency reuse either through the use of orthogonal polarizations within the same beam and/or through the use of spatially independent beams.

(e) All space stations in the Fixed-Satellite Service shall be designed to derive the maximum capacity feasible from the assigned orbital location. In particular, space stations in the Fixed-Satellite Service are required to employ state-of-the-art full frequency reuse using both horizontal and vertical polarization.

(f) For fixed-satellite space stations providing domestic service, full frequency re-use is defined as re-use of the frequency bands by polarization discrimination in both the uplink and downlink directions using state-of-the-art equipment and techniques.

(g) For fixed-satellite space stations providing international service, full frequency re-use is defined as follows:

(1) Satellites must employ polarization discrimination so that, through the use of dual polarization, they shall be able to reuse both the uplink and downlink frequency band assignments.

(2) Satellites must be configured so that all assigned frequencies (in both polarizations) could be reused in beams serving widely separate areas.

(h) [Reserved]

(i) Space station antennas in the Fixed-Satellite Service must be designed to provide a cross-polarization isolation such that the ratio of the on axis co-polar gain to the cross-polar gain of the antenna in the assigned frequency band shall be at least 30 dB within its primary coverage area.

(j) Space stations to be operated in the geostationary satellite orbit must be:

(1) Designed with the capability of being maintained in orbit within 0.05° of their assigned orbital longitude,

(2) Maintained in orbit at their assigned orbital longitude within the longitudinal tolerance specified by the Commission, and

(3) The Commission may authorize operations at assigned orbital longitudes offset by 0.05° or multiples thereof from the nominal orbital location specified in the station authorizations.

(k) Antenna measurements of both co-polarized and cross-polarized performance must be made on all antennas employed by space stations both within the primary coverage area to facilitate coordination with other Commission space station licensees and outside the primary coverage area to facilitate international frequency coordination with other Administrations. The results of such measurements shall be submitted to the Commission within thirty days after preliminary in-orbit testing is completed.

(l) All operators of space stations shall, on June 30 of each year, file a report with the International Bureau and the Commission's Columbia Operations Center in Columbia, Maryland, containing the following information current as of May 31 of that year:

(1) Status of satellite construction and anticipated launch dates, including any major problems or delays encountered;

(2) A listing of any non-scheduled transponder outages for more than thirty minutes and the cause(s) of such outages;

(3) A detailed description of the utilization made of each transponder on each of the in-orbit satellites. This description should identify the total capacity or the percentage of time each transponder is actually used for transmission, and the amount of unused system capacity in the transponder. This information is not required for those transponders that are sold on a non-common carrier basis. In that case, operators should indicate the number of transponders sold on each in-satellite orbit.

(4) Identification of any transponders not available for service or otherwise not performing to specifications, the cause of these difficulties, and the date any transponder was taken out of service or the malfunction identified.

[58 FR 13420, Mar. 11, 1993, as amended at 61 FR 9952, Mar. 12, 1996; 62 FR 5931, Feb. 10, 1997; 62 FR 61457, Nov. 18, 1997]

§ 25.211 Video transmissions in the Fixed-Satellite Service.

(a) Downlink analog video transmissions in the band 3700–4200 MHz shall be transmitted only on a center frequency of 3700+20N MHz, where N=1 to 24. The corresponding uplink frequency shall be 2225 MHz higher.

(b) All 4/6 GHz analog video transmissions shall contain an energy dispersal signal at all times with a minimum peak-to-peak bandwidth set at whatever value is necessary to meet the power flux density limits specified in § 25.208(a) and successfully coordinated internationally and accepted by adjacent U.S. satellite operators based on the use of state of the art space and earth station facilities. Further, all transmissions operating in frequency bands described in § 25.208 (b) and (c) shall also contain an energy dispersal signal at all times with a minimum peak-to-peak bandwidth set at whatever value is necessary to meet the power flux density limits specified in

§ 25.208(b) and (c) and successfully coordinated internationally and accepted by adjacent U.S. satellite operators based on the use of state of the art space and earth station facilities. The transmission of an unmodulated carrier at a power level sufficient to saturate a transponder is prohibited, except by the space station licensee to determine transponder performance characteristics. All 12/14 GHz video transmissions for TV/FM shall identify the particular carrier frequencies for necessary coordination with adjacent U.S. satellite systems and affected satellite systems of other administrations.

(c) All initial analog video transmissions shall be preceded by a video test transmission at an uplink e.i.r.p. at least 10 dB below the normal operating level. The earth station operator shall not increase power until receiving notification from the satellite network control center that the frequency and polarization alignment are satisfactory pursuant to the procedures specified in § 25.272. The stationary earth station operator that has successfully transmitted an initial video test signal to a satellite pursuant to this paragraph is not required to make subsequent video test transmissions if subsequent transmissions are conducted using exactly the same parameters as the initial transmission.

(d) In the 6 GHz band, an earth station with an equivalent diameter of 9 meters or smaller may be routinely licensed for transmission to full transponder services if the maximum power into the antenna does not exceed 450 watts (26.5 dBW). In the 14 GHz band, an earth station with an equivalent diameter of 5 meters or smaller may be routinely licensed for transmission of full transponder services if the maximum power into the antenna does not exceed 500 watts (27 dBW).

[58 FR 13421, Mar. 11, 1993, as amended at 61 FR 9952, Mar. 12, 1996; 62 FR 5931, Feb. 10, 1997]

§ 25.212 Narrowband transmissions in the 12/14 GHz GSO Fixed-Satellite Service.

(a) Except as otherwise provided by this part, criteria for unacceptable levels of interference caused by other satellite networks shall be established on the basis of nominal operating conditions and with the objective of minimizing orbital separations between satellites.

(b) Emissions with an occupied bandwidth of less than 2 MHz are not protected from interference from wider bandwidth transmissions if the r.f. carrier frequency of the narrowband signal is within ±1 MHz of one of the frequencies specified in § 25.211(a).

(c) In the 14 GHz band, an earth station with an equivalent diameter of 1.2 meters or greater may be routinely licensed for transmission of narrowband analog services with bandwidths up to 200 kHz if the maximum input power density into the antenna does not exceed −8 dBW/4 kHz and the maximum transmitted satellite carrier EIRP density does not exceed 13 dBW/4 kHz, and for transmission of narrowband and/or wideband digital services, if the maximum input power density into the antenna does not exceed −14 dBW/4 kHz and the maximum transmitted satellite carrier EIRP density does not exceed +6.0 dBW/4 kHz.

(d) In the 6 GHz band, an earth station with an equivalent diameter of 4.5 meters or greater may be routinely licensed for transmission of SCPC services if the maximum power densities into the antenna do not exceed +0.5 dBW/4 kHz for analog SCPC carriers with bandwidths up to 200 kHz, and do not exceed −2.7 dBW/4 kHz for narrow and/or wideband digital SCPC carriers.

[58 FR 13421, Mar. 11, 1993, as amended at 62 FR 5931, Feb. 10, 1997; 62 FR 51378, Oct. 1, 1997]

§ 25.213 Inter-Service coordination requirements for the 1.6/2.4 GHz mobile-satellite service.

(a) Protection of the radio astronomy service in the 1610.6–1613.8 MHz band against interference from 1.6/2.4 GHz Mobile-Satellite Service systems.

(1) *Protection zones.* All 1.6/2.4 GHz Mobile Satellite Service systems shall be capable of determining the position of the user transceivers accessing the space segment through either internal radiodetermination calculations or external sources such as LORAN–C or the Global Positioning System. During periods of radio astronomy observations,

land mobile earth stations shall not operate when located within geographic protection zones defined by the radio observatory coordinates and separation distances as follows:

(i) In the band 1610.6–1613.8 MHz, within a 160 km radius of the following radio astronomy sites:

Observatory	Latitude (DMS)	Longitude (DMS)
Arecibo, PR	18 20 46	66 45 11
Green Bank Telescope, WV	38 25 59	79 50 24
	38 26 09	79 49 42
Very Large Array, NM	34 04 43	107 37 04
Owens Valley, CA	37 13 54	118 17 36
Ohio State, OH	40 15 06	83 02 54

(ii) In the band 1610.6–1613.8 MHz, within a 50 km radius of the following sites:

Observatory	Latitude (DMS)	Longitude (DMS)
Pile Town, NM	34 18 04	108 07 07
Los Alamos, NM	35 46 30	106 14 42
Kitt Peak, AZ	31 57 22	111 36 42
Ft. Davis, TX	30 38 06	103 56 39
N. Liberty, IA	41 46 17	91 34 26
Brewster, WA	48 07 53	119 40 55
Owens Valley, CA	37 13 54	118 16 34
St. Croix, VI	17 45 31	64 35 03
Mauna Kea, HI	19 48 16	155 27 29
Hancock, NH	42 56 01	71 59 12

(iii) Out-of-band emissions of a mobile earth station licensed to operate within the 1610.0–1626.5 MHz band shall be attenuated so that the power flux density it produces in the 1610.6–1613.8 MHz band at any radio astronomy site listed in paragraph (a)(1) (i) or (ii) of this section shall not exceed the emissions of a mobile earth station operating within the 1610.6–1613.8 MHz band at the edge of the protection zone applicable for that site. As an alternative, a mobile earth station shall not operate during radio astronomy observations within the 1613.8–1615.8 MHz band within 100 km of the radio astronomy sites listed in paragraph (a)(1)(i) of this section, and within 30 km of the sites listed in paragraph (a)(1)(ii) of this section, there being no restriction on a mobile earth station operating within the 1615.8–1626.5 MHz band.

(iv) For airborne mobile earth stations operating in the 1610.0–1626.5 MHz band, the separation distance shall be the larger of the distances specified in paragraph (a)(1) (i), (ii) or (iii) of this section, as applicable, or the distance, d, as given by the formula:

d (km) = 4.1 square root of (h)

where h is the altitude of the aircraft in meters above ground level.

(v) Smaller geographic protection zones may be used in lieu of the areas specified in paragraphs (a)(1) (i), (ii), (iii), and (iv) of this section if agreed to by the Mobile-Satellite Service licensee and the Electromagnetic Spectrum Management Unit (ESMU), National Science Foundation, Washington, D.C. upon a showing by the Mobile-Satellite Service licensee that the operation of a mobile earth station will not cause harmful interference to a radio astronomy observatory during periods of observation.

(vi) The ESMU shall notify Mobile-Satellite Service space station licensees authorized to operate mobile earth terminals in the 1610.0–1626.5 MHz band of periods of radio astronomy observations. The mobile-satellite systems shall be capable of terminating operations within the frequency bands and protection zones specified in paragraphs (a)(1) (i) through (iv) of this section, as applicable, after the first position fix of the mobile earth terminal either prior to transmission or, based upon its location within the protection zone at the time of initial transmission of the mobile earth terminal. Once the mobile-satellite system determines that a mobile earth terminal is located within an RAS protection zone, the mobile-satellite system shall immediately initiate procedures to relocate the mobile earth terminal operations to a non-RAS frequency.

(vii) A beacon-actuated protection zone may be used in lieu of fixed protection zones in the 1610.6–1613.8 MHz band if a coordination agreement is reached between a mobile-satellite system licensee and the ESMU on the specifics of beacon operations.

(viii) Additional radio astronomy sites, not located within 100 miles of the 100 most populous urbanized areas as defined by the United States Census Bureau at the time, may be afforded similar protection one year after notice to the mobile-satellite system licensees by issuance of a public notice by the Commission.

(2) Mobile-Satellite Service space stations transmitting in the 1613.8–1626.5 MHz band shall take whatever steps necessary to avoid causing harmful interference to the radio astronomy facilities listed in paragraphs (a)(1)(i) and (ii) of this section during periods of observation.

(3) Mobile-Satellite Service space stations operating in the 2483.5–2500 MHz frequency band shall limit spurious emission levels in the 4990–5000 MHz band so as not to exceed −241 dB (W/m²/Hz) at the surface of the Earth.

(4) The Radioastronomy Service shall avoid scheduling radio astronomy observations during peak MSS/RDSS traffic periods to the greatest extent practicable.

(b) Protection of the radionavigation-satellite service. Mobile earth stations operating in the 1610–1626.5 MHz band shall limit out-of-band emissions in the 1574.397–1576.443 MHz band so as not to exceed an e.i.r.p. density level of −70 dB (W/MHz) averaged over any 20 ms period. The e.i.r.p. of any discrete spurious emission (*i.e.*, bandwidth less than 600 Hz) in the 1574.397–1576.443 MHz band shall not exceed −80 dBW.

[59 FR 53329, Oct. 21, 1994, as amended at 61 FR 9945, Mar. 12, 1996]

§ 25.214 Technical requirements for space stations in the satellite digital audio radio service.

(a) Definitions.

(1) *Allocated bandwidth*. The term ''allocated bandwidth'' refers to the entry in the Table of Frequency Allocations of a given frequency band for the purpose of its use by one or more terrestrial or space radiocommunication services under specified conditions. This term shall be applied to the 2310–2360 MHz band for satellite DARS.

(2) *Frequency Assignment*. The term ''frequency assignment'' refers to the authorization given by the Commission for a radio station to use a radio frequency or radio frequency channel under specified conditions. This term shall be applied to the two frequency bands (A) 2320.0–2332.5 MHz and (B) 2332.5–2340.0 MHz for satellite DARS.

(b) Each system authorized under this section will be conditioned upon construction, launch and operation milestones as outlined in § 25.144(b). The failure to meet any of the milestones contained in an authorization will result in its cancellation, unless such failure is due to circumstances beyond the licensee's control or unless otherwise determined by the Commission upon proper showing by the licensee in any particular case.

(c) Frequency assignments will be made for each satellite DARS system as follows:

(1) Exclusive satellite DARS licenses are limited to the 2320–2345 MHz band segment of the allocated bandwidth for satellite DARS;

(2) Two, 12.5 MHz frequency assignments are available for satellite DARS: 2320.0–2332.5 MHz and 2332.5–2345.0 MHz;

(3) Satellite DARS licensees may reduce their assigned bandwidth occupancy to provide telemetry beacons in their exclusive frequency assignments;

(4) Each licensee may employ cross polarization within its exclusive frequency assignment and/or may employ cross polarized transmissions in frequency assignments of other satellite DARS licensees under mutual agreement with those licensees. Licensees who come to mutual agreement to use cross-polarized transmissions shall apply to the Commission for approval of the agreement before coordination is initiated with other administrations by the licensee of the exclusive frequency assignment; and

(5) Feeder uplink networks are permitted in the following Fixed-Satellite Service frequency bands: 7025–7075 MHz and 6725–7025 MHz (101° W.L. orbital location only).

[62 FR 11106, Mar. 11, 1997]

§§ 25.215–25.249 [Reserved]

§ 25.250 Sharing between NGSO MSS Feeder links Earth Stations in the 19.3–19.7 GHz and 29.1–29.5 GHz Bands.

(a) NGSO MSS applicants shall be licensed to operate in the 29.1–29.5 GHz band for Earth-to-space transmissions and 19.3–19.7 GHz for space-to-Earth transmissions from feeder link earth station complexes. A ''feeder link earth station complex'' may include up to three (3) earth station groups, with each earth station group having up to

four (4) antennas, located within a radius of 75 km of a given set of geographic coordinates provided by NGSO–MSS licensees or applicants.

(b) Licensees of NGSO MSS feeder link earth stations separated by 800 km or less are required to coordinate their operations, see § 25.203. The results of the coordination shall be reported to the Commission.

[61 FR 44181, Aug. 28, 1996]

§ 25.251 Special requirements for coordination.

(a) The administrative aspects of the coordination process are set forth in § 101.103 of this chapter in the case of coordination of terrestrial stations with earth stations, and in § 25.203 in the case of coordination of earth stations with terrestrial stations.

(b) The technical aspects of coordination are based on Appendix S7 of the International Telecommunication Union Radio Regulations and certain recommendations of the ITU Radiocommunication Sector (available at the FCC's Reference Information Center, Room CY–A257, 445 12th Street, SW., Washington, DC 20554).

[66 FR 10630, Feb. 16, 2001]

§§ 25.252–25.256 [Reserved]

§ 25.257 Special requirements for operations in the band 29.1–29.25 GHz between NGSO MSS and LMDS.

(a) Non-geostationary mobile satellite service (NGSO MSS) operators shall be licensed to use the 29.1–29.25 GHz band for Earth-to-space transmissions from feeder link earth station complexes. A ''feeder link earth station complex'' may include up to three (3) earth station groups, with each earth station group having up to four (4) antennas, located within a radius of 75 km of a given set of geographic coordinates provided by a NGSO MSS licensees or applicants pursuant to § 101.147.

(b) A maximum of seven (7) feeder link earth station complexes in the contiguous United States, Alaska and Hawaii may be placed into operation, in the largest 100 MSAs, in the band 29.1–29.25 GHz in accordance with § 25.203 and § 101.147 of this chapter.

(c) One of the NGSO MSS operators licensed to use the 29.1–29.25 GHz band may specify geographic coordinates for a maximum of eight feeder link earth station complexes that transmit in the 29.1–29.25 GHz band. The other NGSO MSS operator licensed to use the 29.1–29.25 GHz band may specify geographic coordinates for a maximum of two feeder link earth station complexes that transmit in the 29.1–29.25 GHz band.

(d) Additional NGSO MSS operators may be licensed in this band if the additional NGSO MSS operator shows that its system can share with the existing NGSO MSS systems.

(e) All NGSO MSS operators shall cooperate fully and make reasonable efforts to identify mutually acceptable locations for feeder link earth station complexes. In this connection, any single NGSO MSS operator shall only identify one feeder link earth station complex protection zone in each category identified in § 101.147(c)(2) of this chapter until the other NGSO MSS operator has been given an opportunity to select a location from the same category.

[61 FR 44181, Aug. 28, 1996]

§ 25.258 Sharing between NGSO MSS Feeder links Stations and GSO FSS services in the 29.25–29.5 GHz Bands.

(a) Operators of NGSO MSS feeder link earth stations and GSO FSS earth stations in the band 29.25 to 29.5 GHz where both services have a co-primary allocation shall cooperate fully in order to coordinate their systems. During the coordination process both service operators shall exchange the necessary technical parameters required for coordination.

(b) Licensed GSO FSS systems shall, to the maximum extent possible, operate with frequency/polarization selections, in the vicinity of operational or planned NGSO MSS feeder link earth station complexes, that will minimize instances of unacceptable interference to the GSO FSS space stations.

(c) NGSO MSS satellites operating in this frequency band shall compensate for nodal regression due to the oblate shape of the Earth, and thus maintain constant successive sub-satellite ground tracks on the surface of the Earth.

(d) NGSO MSS systems applying to use the 29.25–29.5 GHz band, for feeder link earth station uplink, will have to demonstrate that their system can share with the authorized U.S. GSO/FSS systems operating in this band.

[61 FR 44181, Aug. 28, 1996]

§ 25.259 Time sharing between NOAA meteorological satellite systems and non-voice, non-geostationary satellite systems in the 137–138 MHz band.

(a) A non-voice, non-geostationary mobile-satellite service system licensee (''NVNG licensee'') time-sharing spectrum in the 137–138 MHz frequency band shall not transmit signals into the ''protection areas'' of National Oceanic and Atmospheric Administration (''NOAA'') satellite systems. When calculating the protection areas for a NOAA satellite in the 137.333–137.367 MHz, 137.485–137.515 MHz, 137.605–137.635 MHz and 137.753–137.787 MHz bands, a NVNG licensee shall use an earth station elevation angle of five degrees towards the NOAA satellite and will cease its transmissions prior to the NVNG licensee's service area, based on an elevation angle of zero degrees towards the NVNG licensee's satellite, overlapping the NOAA protection area. When calculating the protection areas for a NOAA satellite in the 137.025–137.175 MHz and 137.825–138 MHz bands, a NVNG licensee shall use an earth station elevation angle of zero degrees, or less if reasonably necessary, towards the NOAA satellite and will cease its transmissions prior to the NVNG licensee's service area, based on an elevation angle of zero degrees towards the NVNG licensee's satellite, overlapping the NOAA protection area. A NVNG licensee is responsible for obtaining the necessary ephemeris data. This information shall be updated system-wide on at least a weekly basis. A NVNG licensee shall use an orbital propagator algorithm with an accuracy equal to or greater than the NORAD propagator used by NOAA.

(b) A NVNG licensee time sharing spectrum in the 137–138 MHz band shall establish a 24-hour per day contact person and telephone number so that claims of harmful interference into NOAA earth station users and other operational issues can be reported and resolved expeditiously. This contact information shall be made available to NOAA or its designee. If the National Telecommunications and Information Administration (''NTIA'') notifies the Commission that NOAA is receiving unacceptable interference from a NVNG licensee, the Commission will require such NVNG licensee to terminate its interfering operations immediately unless it demonstrates to the Commission's reasonable satisfaction, and that of NTIA, that it is not responsible for causing harmful interference into the worldwide NOAA system. A NVNG licensee assumes the risk of any liability or damage that it and its directors, officers, employees, affiliates, agents and subcontractors may incur or suffer in connection with an interruption of its non-voice, non-geostationary mobile-satellite service, in whole or in part, arising from or relating to its compliance or noncompliance with the requirements of this paragraph (b). The Commission will not hesitate to impose sanctions on a NVNG licensee time-sharing spectrum in the 137–138 MHz band with NOAA, including monetary forfeitures and license revocations, when appropriate.

(c) Each satellite in a NVNG licensee's system time-sharing spectrum with NOAA in the 137–138 MHz band shall automatically turn off and cease satellite transmissions if, after 72 consecutive hours, no reset signal is received from the NVNG licensee's gateway earth station and verified by the satellite. All satellites in such NVNG licensee's system shall be capable of instantaneous shutdown on any sub-band upon command from such NVNG licensee's gateway earth station.

[62 FR 59296, Nov. 3, 1997]

§ 25.260 Time sharing between DoD meteorological satellite systems and non-voice, non-geostationary satellite systems in the 400.15–401 MHz band.

(a) A non-voice, non-geostationary mobile-satellite service system licensee (''NVNG licensee'') time-sharing spectrum in the 400.15–401.0 MHz band shall not transmit signals into the ''protection areas'' of Department of Defense (''DoD''). When calculating the

protection areas for a DoD satellite in the 400.15–401 MHz band, a NVNG licensee shall use an earth station elevation angle of five degrees towards the DoD satellite and will shut off its transmissions prior to the NVNG licensee's service area, based on an elevation angle of zero degrees towards the NVNG licensee's satellite, overlapping the DoD protection area. A NVNG licensee is responsible for obtaining the necessary ephemeris data. This information shall be updated system-wide at least once per week. A NVNG licensee shall use an orbital propagator algorithm with an accuracy equal to or greater than the NORAD propagator used by DoD.

(b) A NVNG licensee time sharing spectrum in the 400.15–401 MHz band shall establish a 24-hour per day contact person and telephone number so that claims of harmful interference into DoD earth station users and other operational issues can be reported and resolved expeditiously. This contact information shall be made available to DoD or its designee. If the National Telecommunications and Information Administration (''NTIA'') notifies the Commission that DoD is receiving unacceptable interference from a NVNG licensee, the Commission will require such NVNG licensee to terminate its interfering operations immediately unless it demonstrates to the Commission's reasonable satisfaction, and that of NTIA, that it is not responsible for causing harmful interference into the worldwide DoD system. A NVNG licensee assumes the risk of any liability or damage that it and its directors, officers, employees, affiliates, agents and subcontractors may incur or suffer in connection with an interruption of its non-voice, non-geostationary mobile-satellite service, in whole or in part, arising from or relating to its compliance or noncompliance with the requirements of this paragraph (b). The Commission will not hesitate to impose sanctions on a NVNG licensee time-sharing spectrum in the 400.15–401 MHz band with DoD, including monetary forfeitures and license revocations, when appropriate.

(c) Each satellite in a NVNG licensee's system time-sharing spectrum with DoD in the 400.15–401 MHz band shall automatically turn off and cease satellite transmissions if, after 72 consecutive hours, no reset signal is received from the NVNG licensee's gateway earth station and verified by the satellite. All satellites in such NVNG licensee's system shall be capable of instantaneous shutdown on any sub-band upon command from such NVNG licensee's gateway earth station.

(d) Initially, a NVNG licensee time-sharing spectrum with DoD in the 400.15–401 MHz band shall be able to change the frequency on which its system satellites are operating within 125 minutes of receiving notification from a DoD required frequency change in the 400.15–401 MHz band. Thereafter, when a NVNG licensee constructs additional gateway earth stations located outside of North and South America, it shall use its best efforts to decrease to 90 minutes the time required to implement a DoD required frequency change. A NVNG licensee promptly shall notify the Commission and NTIA of any decrease in the time it requires to implement a DoD required frequency change.

(e) Once a NVNG licensee time-sharing spectrum with DoD in the 400.15–401 MHz band demonstrates to DoD that it is capable of implementing a DoD required frequency change within the time required under paragraph (d) of this section, thereafter, such NVNG licensee shall demonstrate its capability to implement a DoD required frequency change only once per year at the instruction of DoD. Such demonstrations shall occur during off-peak hours, as determined by the NVNG licensee, unless otherwise agreed by the NVNG licensee and DoD. Such NVNG licensee will coordinate with DoD in establishing a plan for such a demonstration. In the event that a NVNG licensee fails to demonstrate to DoD that it is capable of implementing a DoD required frequency change in accordance with a demonstration plan established by DoD and the NVNG licensee, upon the Commission's receipt of a written notification from NTIA describing such failure, the Commission shall impose additional conditions or requirements on the NVNG licensee's authorization as may be necessary to protect DoD operations in the 400.15–401

MHz downlink band until the Commission is notified by NTIA that the NVNG licensee has successfully demonstrated its ability to implement a DoD required frequency change. Such additional conditions or requirements may include, but are not limited to, requiring such NVNG licensee immediately to terminate its operations interfering with the DoD system.

[62 FR 59296, Nov. 3, 1997]

Subpart D—Technical Operations

SOURCE: 58 FR 13421, Mar. 11, 1993, unless otherwise noted.

§ 25.271 Control of transmitting stations.

(a) The licensee of a facility licensed under this part is responsible for the proper operation and maintenance of the station.

(b) The licensee of a transmitting earth station licensed under this part shall ensure that a trained operator is present on the earth station site, or at a designated remote control point for the earth station, at all times that transmissions are being conducted. No operator's license is required for a person to operate or perform maintenance on facilities authorized under this part.

(c) Authority will be granted to operate a transmitting earth station by remote control only on the conditions that:

(1) The parameters of the transmissions of the remote station monitored at the control point, and the operational functions of the remote earth stations that can be controlled by the operator at the control point, are sufficient to insure that the operations of the remote station(s) are at times in full compliance with the remote station authorization(s);

(2) The earth station facilities are protected by appropriate security measures to prevent unauthorized entry or operations;

(3) Upon detection by the license, or upon notification from the Commission of a deviation or upon notification by another licensee of harmful interference, the operation of the remote station shall be immediately suspended by the operator at the control point until the deviation or interference is corrected, except that transmissions concerning the immediate safety of life or property may be conducted for the duration of the emergency; and

(4) The licensee shall have available at all times the technical personnel necessary to perform expeditiously the technical servicing and maintenance of the remote stations.

(d) The licensee shall insure that the licensed facilities are properly secured against unauthorized access or use whenever an operator is not present at the transmitter.

(e) The licensee of an NGSO FSS system operating in the 10.7–14.5 GHz bands shall maintain an electronic web site bulletin board to list the satellite ephemeris data, for each satellite in the constellation, using the North American Aerospace Defense Command (NORAD) two-line orbital element format. The orbital elements shall be updated at least once every three days.

[58 FR 13421, Mar. 11, 1993, as amended at 66 FR 10631, Feb. 16, 2001]

§ 25.272 General inter-system coordination procedures.

(a) Each space station licensee in the Fixed-Satellite Service shall establish a satellite network control center which will have the responsibility to monitor space-to-Earth transmissions in its system. This would indirectly monitor uplink earth station transmissions in its system and to coordinate transmissions in its satellite system with those of other systems to prevent harmful interference incidents or, in the event of a harmful interference incident, to identify the source of the interference and correct the problem promptly.

(b) Each space station licensee shall maintain on file with the Commission and with its Columbia Operations Center in Columbia, Maryland, a current listing of the names, titles, addresses and telephone numbers of the points of contact for resolution of interference problems. Contact personnel should include those responsible for resolution of short term, immediate interference problems at the system control center, and those responsible for long term engineering and technical design issues.

(c) The transmitting earth station licensee shall provide the operator(s) of the satellites, on which the licensee is authorized to transmit, contact telephone numbers for the control center of the earth station and emergency telephone numbers for key personnel; a current file of these contacts shall be maintained at each satellite system control center.

(d) An earth station licensee shall ensure that each of its authorized earth stations complies with the following:

(1) The earth station licensee shall ensure that there is continuously available means of communications between the satellite network control center and the earth station operator or its remote control point as designated by the licensee.

(2) The earth station operator shall notify the satellite network control center and receive permission from the control center before transmitting to the satellite or changing the basic characteristics of a transmission.

(3) The earth station operator shall keep the space station licensee informed of all actual and planned usage.

(4) Upon approval of the satellite network control center, the earth station operator may radiate an RF carrier into the designated transponder. Should improper illumination of the transponder or undue adjacent transponder interference be observed by the satellite network control center, the earth station operator shall immediately take whatever measures are needed to eliminate the problem.

(5) The space station licensee may delegate the responsibility and duties of the satellite network control center to a technically qualified user or group of users, but the space station licensee shall remain ultimately responsible for the performance of those duties.

[58 FR 13421, Mar. 11, 1993, as amended at 62 FR 5931, Feb. 10, 1997]

§ 25.273 Duties regarding space communications transmissions.

(a) No person shall:

(1) Transmit to a satellite unless the specific transmission is first authorized by the satellite network control center;

(2) Conduct transmissions over a transponder unless the operator is authorized by the satellite licensee or the satellite licensee's successor in interest to transmit at that time; or

(3) Transmit in any manner that causes unacceptable interference to the authorized transmission of another licensee.

(b) Satellite operators shall provide upon request by the Commission and by earth station licensees authorized to transmit on their satellites relevant information needed to avoid unacceptable interference to other users, including the polarization angles for proper illumination of a given transponder.

(c) Space station licensees are responsible for maintaining complete and accurate technical details of current and planned transmissions over their satellites, and shall require that authorized users of transponders on their satellites, whether by tariff or contract, provide any necessary technical information in this regard including that required by § 25.272. Based on this information, space station licensees shall exchange among themselves general technical information concerning current and planned transmission parameters as needed to identify and promptly resolve any potential cases of unacceptable interference between their satellite systems.

(d) Space stations authorized after May 10, 1993 which do not satisfy the requirements of § 25.210 may be required to accept greater constraints in resolving interference problems than complying ones. The extent of these constraints shall be determined on a case-by-case basis.

§ 25.274 Procedures to be followed in the event of harmful interference.

(a) The earth station operator whose transmission is suffering harmful interference shall first check the earth station equipment to ensure that the equipment is functioning properly.

(b) The earth station operator shall then check all other earth stations in the licensee's network that could be causing the harmful interference to ensure that none of the licensee's earth stations are the source of the interference and to verify that the source of interference is not from a local terrestrial source.

(c) After the earth station operator has determined that the source of the interference is not another earth station operating in the same network or from a terrestrial source, the earth station operator shall contact the satellite system control center and advise the satellite operator of the problem. The control center operator shall observe the interference incident and make reasonable efforts to determine the source of the problem. A record shall be maintained by the control center operator and the earth station operator of all harmful interference incidents and their resolution. These records shall be made available to an FCC representative on request.

(d) Where the suspected source of the interference incident is the operation of an earth station licensed to operate on one or more of the satellites in the satellite operator's system, the control center operator shall advise the offending earth station of the harmful interference incident and assist in the resolution of the problem where reasonably possible.

(e) The earth station licensee whose operations are suspected of causing harmful interference to the operations of another earth station shall take reasonable measures to determine whether its operations are the source of the harmful interference problem. Where the operations of the suspect earth station are the source of the interference, the licensee of that earth station shall take all measures necessary to eliminate the interference.

(f) At any point, the system control center operator may contact the Commission's Columbia Operations Center in Columbia, Maryland, to assist in resolving the matter. This office specializes in the resolution of satellite interference problems. All licensees are required to cooperate fully with the Commission in any investigation of interference problems.

(g) Where the earth station suspected of causing interference to the operations of another earth station cannot be identified or is identified as an earth station operating on a satellite system other than the one on which the earth station suffering undue interference is operating, it is the responsibility of a representative of the earth station suffering harmful interference to contact the control center of other satellite systems.

[58 FR 13421, Mar. 11, 1993, as amended at 62 FR 5931, Feb. 10, 1997]

§ 25.275 Particulars of operation.

(a) Radio station authorizations issued under this part will normally specify only the frequency bands authorized for transmission and/or reception of the station.

(b) When authorized frequency bands are specified in the station authorization, the licensee is authorized to transmit any number of r.f. carriers on any discrete frequencies within an authorized frequency band in accordance with the other terms and conditions of the authorization and the requirements of this part. Specific r.f. carrier frequencies within the authorized frequency band shall be selected by the licensee to avoid unacceptable levels of interference being caused to other earth, space or terrestrial stations. Any coordination agreements, both domestic and international, concerning specific frequency usage constraints, including non-use of any particular frequencies within the frequency bands listed in the station authorization, are considered to be conditions of the station authorization.

(c) A license for a transmitting earth station will normally specify only the r.f. carriers having the highest e.i.r.p. density, the narrowest bandwidth, and the largest bandwidth authorized for transmission from that station. Unless otherwise specified in the station authorization, the licensee is authorized to transmit any other type of carrier not specifically listed which does not exceed the highest e.i.r.p., e.i.r.p. density and bandwidth prescribed for any listed emission.

(d) Only the most sensitive emission(s) for which protection is being afforded from interference in the authorized receive frequency band(s) will be specified in the station authorization.

§ 25.276 Points of communication.

(a) Unless otherwise specified in the station authorization, an earth station is authorized to transmit to any space

station in the same radio service provided that permission has been received from the space station operator to access that space station.

(b) Space stations licensed under this part are authorized to provide service to earth stations located within the specified service area. Coastal waters within the outer continental shelf shall be considered to be included within the service area specified by the named land mass.

(c) Transmission to or from foreign points over space stations in the Fixed-Satellite Service, other than those operated by the International Telecommunications Satellite Organization and Inmarsat, are subject to the policies set forth in the Report and Order, adopted January 19, 1996 in IB Docket No. 95–41.

[58 FR 13421, Mar. 11, 1993, as amended at 61 FR 9953, Mar. 12, 1996]

§ 25.277 Temporary fixed earth station operations.

(a) When an earth station in the Fixed-Satellite Service is to remain at a single location for fewer than 6 months, the location may be considered to be temporary fixed. Services provided at a single location which are initially known to be of longer than six months' duration shall not be provided under a temporary fixed authorization.

(b) When a station, authorized as a temporary fixed earth station, is to remain at a single location for more than six months, application for a regular station authorization at that location shall be filed at least 30 days prior to the expiration of the six-month period.

(c) The licensee of an earth station which is authorized to conduct temporary fixed operations in bands shared co-equally with terrestrial fixed stations shall provide the following information to the Director of the Columbia Operations Center at 9200 Farmhouse Lane, Columbia, Maryland 21046, and to the licensees of all terrestrial facilities lying within the coordination contour of the proposed temporary fixed earth station site before beginning transmissions:

(1) The name of the person operating the station and the telephone number at which the operator can be reached directly;

(2) The exact frequency or frequencies used and the type of emissions and power levels to be transmitted; and

(3) The commencement and anticipated termination dates of operation from each location.

(d) Transmissions may not be commenced until all affected terrestrial licensees have been notified and the earth station operator has confirmed that unacceptable interference will not be caused to such terrestrial stations.

(e) Operations of temporary fixed earth stations shall cease immediately upon notice of harmful interference from the Commission or the affected licensee.

[58 FR 13421, Mar. 11, 1993, as amended at 62 FR 5931, Feb. 10, 1997]

§ 25.278 Additional coordination obligation for non-geostationary and geostationary satellite systems in frequencies allocated to the fixed-satellite service.

Licensees of non-geostationary satellite systems that use frequency bands allocated to the fixed-satellite service for their feeder link operations shall coordinate their operations with licensees of geostationary fixed-satellite service systems licensed by the Commission for operation in the same frequency bands. Licensees of geostationary fixed-satellite service systems in the frequency bands that are licensed to non-geostationary satellite systems for feeder link operations shall coordinate their operations with the licensees of such non-geostationary satellite systems.

[59 FR 53330, Oct. 21, 1994]

§ 25.279 Inter-satellite service.

(a) Any satellite communicating with other space stations may use frequencies in the inter-satellite service as indicated in § 2.106 of this chapter. This does not preclude the use of other frequencies for such purposes as provided for in several service definitions, *e.g.*, FSS. The technical details of the proposed inter-satellite link shall be provided in accordance with § 25.114(c).

(b) *Operating conditions.* In order to ensure compatible operations with authorized users in the frequency bands to be utilized for operations in the

inter-satellite service, these inter-satellite service systems must operate in accordance with the conditions specified in this section.

(1) *Coordination requirements with federal government users.* (i) In frequency bands allocated for use by the inter-satellite service that are also authorized for use by agencies of the federal government, the federal use of frequencies in the inter-satellite service frequency bands is under the regulatory jurisdiction of the National Telecommunications and Information Administration (NTIA).

(ii) The Commission will use its existing procedures to reach agreement with NTIA to achieve compatible operations between federal government users under the jurisdiction of NTIA and inter-satellite service systems through frequency assignment and coordination practice established by NTIA and the Interdepartment Radio Advisory Committee (IRAC). In order to facilitate such frequency assignment and coordination, applicants shall provide the Commission with sufficient information to evaluate electromagnetic compatibility with the federal government users of the spectrum, and any additional information requested by the Commission. As part of the coordination process, applicants shall show that they will not cause interference to authorized federal government users, based upon existing system information provided by the government. The frequency assignment and coordination of the satellite system shall be completed prior to grant of construction authorization.

(2) *Coordination among inter-satellite service systems.* Applicants for authority to establish inter-satellite service are encouraged to coordinate their proposed frequency usage with existing permittees and licensees in the inter-satellite service whose facilities could be affected by the new proposal in terms of frequency interference or restricted system capacity. All affected applicants, permittees, and licensees, shall at the direction of the Commission, cooperate fully and make every reasonable effort to resolve technical problems and conflicts that may inhibit effective and efficient use of the radio spectrum; however, the permittee or licensee being coordinated with is not obligated to suggest changes or re-engineer an applicant's proposal in cases involving conflicts.

[59 FR 53331, Oct. 21, 1994, as amended at 65 FR 59144, Oct. 4, 2000]

§ 25.280 Inclined orbit operations.

(a) Satellite operators may commence operation in inclined orbit mode without obtaining prior Commission authorization provided that the Commission is notified by letter within 30 days after operators commence. The notification shall include:

(1) The operator's name;

(2) The date of commencement of inclined orbit operation;

(3) The initial inclination;

(4) The rate of change in inclination per year; and

(5) The expected end-of-life of the satellite accounting for inclined orbit operation.

(b) Licensees operating in inclined-orbit are required to:

(1) Periodically correct the satellite altitude to achieve a stationary spacecraft antenna pattern on the surface of the Earth and centered on the satellite's designated service area;

(2) Control all interference to adjacent satellites, as a result of operating in an inclined orbit, to levels not to exceed that which would be caused by the satellite operating without an inclined orbit;

(3) Not claim protection in excess of the protection that would be received by the satellite network operating without an inclined orbit; and

(4) Continue to maintain the space station at the authorized longitude orbital location in the geostationary satellite arc with the appropriate east-west station-keeping tolerance.

[62 FR 5931, Feb 10, 1997]

§ 25.281 Automatic Transmitter Identification System (ATIS).

All satellite uplink transmissions carrying broadband video information shall be identified through the use of an automatic transmitter identification system as specified below.

(a) Effective March 1, 1991, all satellite video uplink facilities shall be

equipped with an ATIS encoder meeting the specifications set forth in paragraph (d) of this section.

(b) All video uplink facilities utilizing a transmitter manufactured on or after March 1, 1991 shall be equipped with an ATIS encoder meeting the performance specifications set forth in paragraph (d) of this section and the encoder shall be integrated into the uplink transmitter chain in a method that cannot easily be defeated.

(c) The ATIS signal shall be a separate subcarrier which is automatically activated whenever any RF emissions occur. The ATIS information shall continuously repeat.

(d) The ATIS signal shall consist of the following:

(1) A subcarrier signal generated at a frequency of 7.1 MHz +/− 25 KHz and injected at a level no less than −26 dB (referenced to the unmodulated carrier). The subcarrier deviation shall not exceed 25 kHz peak deviation.

(2) The protocol shall be International Morse Code keyed by a 1200 Hz +/− 800 Hz tone representing a mark and a message rate of 15 to 25 words per minute. The tone shall frequency modulate the subcarrier signal.

(3) The ATIS signal as a minimum shall consist of the following:

(i) The FCC assigned earth station call sign;

(ii) A telephone number providing immediate access to personnel capable of resolving ongoing interference or coordination problems with the station;

(iii) A unique ten digit serial number of random number code programmed into the ATIS device in a permanent manner such that it cannot be readily changed by the operator on duty;

(iv) Additional information may be included within the ATIS data stream provided the total message length, including ATIS, does not exceed 30 seconds.

[55 FR 21551, May 25, 1990. Redesignated at 62 FR 5932, Feb. 10, 1997]

Subpart E [Reserved]

Subpart F—Competitive Bidding Procedures for DARS

SOURCE: 62 FR 11106, Mar. 11, 1997, unless otherwise noted.

§ 25.401 Satellite DARS applications subject to competitive bidding.

Mutually exclusive initial applications filed by Satellite CD Radio, Primosphere Limited Partnership, Digital Satellite Broadcasting Corporation, and American Mobile Radio Corporation, to provide DARS service are subject to competitive bidding procedures. The procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise specified in this subpart.

§ 25.402 Competitive bidding mechanisms.

(a) *Tie bids*. Where a tie bid occurs, the high bidder will be determined by the order in which the bids were received by the Commission.

(b) *Maximum bid increments*. The Commission may, by announcement before or during the auction, establish maximum bid increments in dollar or percentage terms.

(c) *Minimum opening bid*. The Commission will establish a minimum opening bid for the DARS spectrum, and the amount of which will be announced by Public Notice prior to the auction.

(d) *Activity rules*. The Commission will establish activity rules which require a minimum amount of bidding activity. Bidders will be entitled to request and be granted waivers of such rule. The Commission will specify the number of waivers permitted in an auction, the frequency with which they may be exercised, and the method of operation of waivers by Public Notice prior to the auction.

§ 25.403 Bidding application and certification procedures.

Submission of Supplemental Application Information. In order to be eligible to bid, each pending applicant must

timely submit certain supplemental information. All supplemental information shall be filed by the applicant five days after publication of these rules in the FEDERAL REGISTER. The supplemental information must be certified and include the following:

(a) Applicant's name;

(b) Mailing Address (no Post Office boxes);

(c) City;

(d) State;

(e) ZIP Code;

(f) Auction Number 15;

(g) FCC Account Number;

(h) Person(s) authorized to make or withdraw a bid (list up to three individuals);

(i) Certifications and name and title of person certifying the information provided;

(j) Applicant's contact person and such person's telephone number, E-mail address and FAX number; and

(k) Signature and date.

§ 25.404 Submission of down payment and filing of long-form applications.

(a) After bidding has ended, the Commission will identify and notify the high bidder and declare the bidding closed.

(b) Within ten (10) business days of a Public Notice announcing the high bidder on a particular license(s), a high bidder must submit to the Commission's lockbox bank such additional funds (the ''down payment'') as are necessary to bring its total deposits (not including upfront payments applied to satisfy bid withdrawal or default payments) up to twenty (20) percent of its high bid(s). This down payment must be made by wire transfer or cashier's check drawn in U.S. dollars from a financial institution whose deposits are insured by the Federal Deposit Insurance Corporation and must be made payable to the Federal Communications Commission. Down payments will be held by the Commission until the high bidder has been awarded the license and has paid the remaining balance due on the license, in which case it will not be returned, or until the winning bidder is found unqualified to be a licensee or has defaulted, in which case it will be returned, less applicable payments. No interest on any down payment will be paid to a bidder.

(c) A high bidder that meets its down payment obligations in a timely manner must, within thirty (30) business days after being notified that it is a high bidder, submit an amendment to its pending application to provide the information required by § 25.144.

§ 25.405 Prohibition of collusion.

Upon the deadline for filing the supplemental information required by § 25.403, all applicants are prohibited from cooperating, collaborating, discussing or disclosing in any manner the substance of their bids or bidding strategies, or discussing or negotiating settlement agreements, with other applicants until after the high bidder makes the required down payment.

§ 25.406 License grant, denial, default, and disqualification.

(a) Unless otherwise specified in these rules, auction winners are required to pay the balance of their winning bids in a lump sum within ten (10) business days following public notice by the Commission that it is prepared to award the licenses. Grant of the license will be conditioned on full and timely payment of the winning bid.

(b) If a winning bidder withdraws its bid after the Commission has declared competitive bidding closed or fails to remit the required down payment within ten (10) business days after the Commission has declared competitive bidding closed, the bidder will be deemed to have defaulted, its application will be dismissed, and it will be liable for the default payment specified in § 1.2104(g)(2). In such event, the Commission may either re-auction the license to existing or new applicants or offer it to the other highest bidders (in descending order) at their final bids. The down payment obligations set forth in § 25.404(b) will apply.

(c) A winning bidder who is found unqualified to be a licensee, fails to remit the balance of its winning bid in a timely manner, or defaults or is disqualified for any reason after having made the required down payment, will be deemed to have defaulted and will be liable for the penalty set forth in

§ 1.2104(g)(2). In such event, the Commission will conduct another auction for the license, affording new parties an opportunity to file an application for the license.

(d) Bidders who are found to have violated the antitrust laws or the Commission's rules in connection with their participation in the competitive bidding process may be subject, in addition to any other applicable sanctions, to forfeiture their up front payment, down payment or full bid amount, and may be prohibited from participating in future auctions.

Subpart G [Reserved]

Subpart H—Authorization To Own Stock in the Communications Satellite Corporation

SOURCE: 28 FR 13037, Dec. 5, 1963, unless otherwise noted.

§ 25.501 Scope of this subpart.

The provisions of this subpart govern the administration of section 304 of the Communications Satellite Act of 1962. These rules provide the procedure by which Commission authorization may be obtained for the purchase of stock in the corporation, the form and content of the application, and the scope of the authorization which may be granted.

§ 25.502 Definitions.

(a) *Communications common carrier*. See § 25.103(a).

(b) *Authorized carrier*. For the purposes of this subpart, the term ''authorized carrier'' means a communications common carrier which is specifically authorized or which is a member of a class of carriers authorized by the Commission to own shares of stock in the corporation.

§§ 25.503–25.504 [Reserved]

§ 25.505 Persons requiring authorization.

(a) No communications common carrier, as defined in § 25.103(a), shall purchase, obtain, own, or otherwise hold at any time, either directly or indirectly through a subsidiary or affiliated company, nominee, person or other entity subject to its control or direction, shares of stock in the corporation created pursuant to the Communications Satellite Act of 1962 unless authorized to do so by the Commission.

(b) No individual, partnership, association, joint-stock company, trust, corporation, or other entity which owns or controls, directly or indirectly, or is under direct or indirect common control with, any such carrier, shall purchase, obtain, own, or otherwise hold, at any time, shares of stock in the corporation in its own name or right unless authorization previously shall have been obtained from the Commission by such entity or on behalf of such entity.

§§ 25.506–25.514 [Reserved]

§ 25.515 Method of securing authorization.

Any person, corporation, or other entity, described in § 25.505, desiring authorization to purchase, obtain, own, or otherwise hold shares of stock in the corporation, shall file an application therefor with the Commission in accordance with §§ 25.520–25.525.

§§ 25.516–25.519 [Reserved]

§ 25.520 Contents of application.

Every request for authorization submitted under this subpart shall contain or incorporate the following information:

(a) If applicant is a corporation:

(1) The name and address of the applicant.

(2) Place of incorporation.

(3) Names and addresses of directors of applicant.

(4) Names and addresses of applicant's ten principal stockholders and percentages of stock of applicant owned by each.

(5) Names and addresses of principal officers of applicant and percentage of stock of applicant owned by each.

(6) A copy of applicant's annual report to stockholders for the last full year of its operations covered by such report.

(7) A copy of applicant's corporate charter. (If such charter is already on file with the Commission, applicant may so state.)

(8) Names and addresses of all companies in which applicant has financial interests, the nature and extent of such interests, and a description of the principal business and activities of such companies.

(9) Description of the intrastate, interstate, and foreign communication services rendered by applicant itself or jointly with other carriers, and the state or states or other political subdivisions in which applicant's operations are conducted.

(10) Statement of why applicant believes a grant of its application will be consistent with the public interest, convenience, and necessity.

(b) If applicant is an individual or business organization other than a corporation:

(1) Name and address of the applicant.

(2) Name and address of each person having a financial interest in the entity and a description of the nature and extent of such interest.

(3) Principal place of business of applicant.

(4) Copy of applicant's balance sheet and income statement for the last full year of applicant's operations.

(5) Description of the intrastate, interstate, and foreign communications services rendered by applicant itself or jointly with other carriers and the state or states or other political subdivisions in which applicant's operations are conducted.

(6) Statement of why applicant believes a grant of its application will be consistent with the public interest, convenience, and necessity.

(c) If application is made on behalf of any entity other than the applicant itself, the application shall so state and shall include or incorporate the information for said entity specified in paragraph (a) or (b) of this section as appropriate.

§ 25.521 Who may sign applications.

(a) Except as provided in paragraph (b) of this section, every application or amendment thereto shall be personally signed by the applicant, if the applicant is an individual; by one of the partners, if the applicant is a partnership; by an officer if the applicant is a corporation; or by a member who is an officer, if the applicant is an unincorporated association.

(b) Applications and amendments thereto may be signed by the applicant's attorney in case of the applicant's physical disability, or in case the applicant does not reside in any of the contiguous 48 states of the United States or in the District of Columbia. The attorney shall in that event separately set forth the reason why the application is not signed by the applicant. In addition, if any matter is stated on the basis of the attorney's belief only (rather than his knowledge), he shall separately set forth his reasons for believing that such statements are true.

(c) Only the original of applications and amendments thereto need be signed; copies may be conformed.

(d) Applications and amendments thereto need not be signed under oath; however, willful false statements made therein, are punishable by fine and imprisonment, U.S. Code, Title 18, section 1001, and by appropriate administrative sanctions, including refusal or revocation of authorization to purchase, obtain, own, or otherwise hold shares of stock in the corporation.

§ 25.522 Full disclosures.

Each application shall contain full and complete disclosures with regard to the real party or parties in interest and as to all matters and things required to be disclosed in the application.

§ 25.523 Form of application, number of copies, fees, etc.

(a) The original application and five copies thereof shall be filed with the Commission. Each copy shall bear the dates and signatures that appear on the original and shall be complete in itself.

(b) All applications shall be on paper 8 by 10½ inches with left hand margin not less than 1½ inches wide. The impression shall be on one side of the paper only and shall be double spaced. All applications and accompanying papers, except charts, shall be typewritten or prepared by mechanical

processing methods. All copies must be clearly legible.

[28 FR 13037, Dec. 5, 1963, as amended at 52 FR 5294, Feb. 20, 1987]

§ 25.524 [Reserved]

§ 25.525 Action upon applications.

No application filed under this subpart will be granted by the Commission earlier than 20 days following issuance of public notice by the Commission of the acceptance for filing of such application or any substantial amendment thereto. Any interested party may file comments with respect to the application (or amendment thereto) within this 20-day period. Such comments must also be served on the applicant who shall be afforded 10 days in which to file reply comments. If upon examination of any such application (or amendment thereto) together with any comments filed with respect thereto the Commission is unable to make a finding that a grant of authorization will be consistent with the public interest, convenience, and necessity, it will deny the application or institute such further proceedings as in its discretion appear appropriate.

§ 25.526 Amendments.

The Commission may at any time order or require the applicant to amend his application so as to make it more definite and certain or to submit such additional documents, or statements, as in the judgment of the Commission may be necessary.

§ 25.527 Defective applications.

(a) Applications not in accordance with the applicable rules in this chapter may be deemed defective and returned by the Commission without acceptance of such applications for filing and consideration.

(b) The assignment of a file number, if any, to an application is for the administrative convenience of the Commission and does not indicate the acceptance of the application for filing and consideration.

§§ 25.528–25.529 [Reserved]

§ 25.530 Scope of authorization.

(a) In order to effectuate the purpose of the Communications Satellite Act of 1962 of promoting the widest possible distribution of stock among the authorized carriers, each authorization issued pursuant to this subpart by the Commission shall be so conditioned that in the event any voting stock authorized to be issued by the corporation, which is reserved and available for purchase by authorized carriers, is oversubscribed, the Commission may specify the dollar amount or percentage of such stock which may be purchased pursuant to such authorization.

(b) All authorizations shall be issued to, or on behalf of the named applicant and shall not be transferable.

(c) The Commission may attach such other conditions to the authorization as it determines to be consistent with the public interest, convenience, and necessity.

§ 25.531 Revocation of authorization.

Where any person to whom an authorization has been issued pursuant to this subpart has willfully failed to make a complete disclosure with regard to the real party or parties in interest or as to all matters and things required to be disclosed in the application, the Commission at any time may order such person to show cause why such authorization should not be revoked. Such person will be given reasonable opportunity to respond in writing to the order to show cause. Upon consideration of the response, the Commission will determine whether an order of revocation should issue or whether further proceedings, as may be appropriate, should be instituted. If an order of revocation is issued, immediate disposition shall be made of the shares of stock purchased or otherwise obtained pursuant to said authorization.

Subpart I—Equal Employment Opportunities

§ 25.601 Equal employment opportunity requirement.

Notwithstanding other EEO provisions within § 1.815 of this chapter, an entity that uses an owned or leased fixed satellite service facility (operating under this part) to provide more than one channel of video programming directly to the public must comply with the equal employment opportunity requirements set forth in part 76, subparts E and U of this chapter, if such entity exercises control (as defined in part 76, subparts E and U of this chapter) over the video programming it distributes.

[58 FR 42249, Aug. 9, 1993, as amended at 65 FR 53614, Sept. 5, 2000]

PART 26—GENERAL WIRELESS COMMUNICATIONS SERVICE

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AUTHORITY: 47 U.S.C. sections 154, 301, 302, 303, 309 and 332, unless otherwise noted.

SOURCE: 60 FR 40719, Aug. 9, 1995, unless otherwise noted.

Subpart A—General Information

§ 26.1 Basis and purpose.

This section contains the statutory basis for this part of the rules and provides the purpose for which this part is issued.

(a) *Basis*. The rules for the general wireless communications service (GWCS) in this part are promulgated under the provisions of the Communications Act of 1934, as amended, that vests authority in the Federal Communications Commission to regulate radio transmission and to issue licenses for stations.

(b) *Purpose*. This part states the conditions under which portions of the radio spectrum are made available and licensed for GWCS.

(c) *Scope*. The rules in this part apply only to stations authorized under this part.

§ 26.2 Other applicable rule parts.

Other FCC rule parts applicable to licensees in the general wireless communications service include the following:

(a) Part 0. This part describes the Commission's organization and delegations of authority. Part 0 of this chapter also lists available Commission publications, standards and procedures for access to Commission records, and location of Commission Field Offices.

(b) Part 1. This part includes rules of practice and procedure for license applications, adjudicatory proceedings, procedures for reconsideration and review of the Commission's actions; provisions concerning violation notices and forfeiture proceedings; and the environmental requirements that, if applicable, must be complied with prior to the initiation of construction. Subpart F includes the rules for the Wireless Telecommunications Services and the procedures for filing electronically via the ULS.

(c) Part 2. This part contains the Table of Frequency Allocations and special requirements in international regulations, recommendations, agreements, treaties. This part also contains standards and procedures concerning the marketing and importation of radio frequency devices, and for obtaining equipment authorization.

(d) Part 5. This part contains rules prescribing the manner in which parts of the radio frequency spectrum may be made available for experimentation.

(e) Part 17. This part contains requirements for construction, marking and lighting of antenna towers.

(f) Part 68. This part contains technical standards for connection of terminal equipment to the telephone network.

[60 FR 40719, Aug. 9, 1995, as amended at 63 FR 68953, Dec. 14, 1998]

§ 26.3 Permissible communications.

GWCS licensees may provide any fixed or mobile communications service on their assigned spectrum. Broadcasting services, Radiolocation services and satellite services as defined in § 2.1 of this chapter are prohibited.

§ 26.4 Terms and definitions.

Affiliate. See § 1.2110(b)(4) of this chapter.

Assigned frequency. The center of the frequency band assigned to a station.

Authorized bandwidth. The maximum width of the band of frequencies permitted to be used by a station. This is normally considered to be the necessary or occupied bandwidth, whichever is greater.

Average terrain. The average elevation of terrain between 3 and 16 kilometers from the antenna site.

Controlling interest. (a) For purposes of this section, controlling interest includes individuals or entities with both *De jure* and *De facto* control of the applicant. *De jure* control is greater than 50 percent of the voting stock of a corporation, or in the case of a partnership, the general partner. *De facto* control is determined on a case-by-case basis. An entity must disclose its equity interest and demonstrate at least the following indicia of control to establish that it retains *De facto* control of the applicant:

(1) The entity constitutes or appoints more than 50 percent of the board of directors or management committee;

(2) The entity has authority to appoint, promote, demote, and fire senior executives that control the day-to-day activities of the licensee; and

(3) The entity plays an integral role in management decisions.

(b) Calculation of certain interests.

(1) Ownership interests shall be calculated on a fully diluted basis; all agreements such as warrants, stock options and convertible debentures will generally be treated as if the rights thereunder already have been fully exercised.

(2) Partnership and other ownership interests and any stock interest equity, or outstanding stock, or outstanding voting stock shall be attributed as specified below.

(3) Stock interests held in trust shall be attributed to any person who holds or shares the power to vote such stock, to any person who has the sole power to sell such stock, and, to any person who has the right to revoke the trust at will or to replace the trustee at will. If the trustee has a familial, personal, or extra-trust business relationship to the grantor or the beneficiary, the grantor or beneficiary, as appropriate, will be attributed with the stock interests held in trust.

(4) Non-voting stock shall be attributed as an interest in the issuing entity.

(5) Limited partnership interests shall be attributed to limited partners and shall be calculated according to both the percentage of equity paid in and the percentage of distribution of profits and losses.

(6) Officers and directors of an entity shall be considered to have an attributable interest in the entity. The officers and directors of an entity that controls a licensee or applicant shall be considered to have an attributable interest in the licensee or applicant.

(7) Ownership interests that are held indirectly by any party through one or more intervening corporations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that if the ownership percentage for an interest in any link in the chain exceeds 50 percent or represents actual control, it shall be treated as if it were a 100 percent interest.

(8) Any person who manages the operations of an applicant or licensee pursuant to a management agreement shall be considered to have an attributable interest in such applicant or licensee if such person or its affiliate pursuant to § 1.2110(b)(4), has authority to make decisions or otherwise engages in practices or activities that determine, or significantly influence:

(i) The nature or types of services offered by such an applicant or licensee;

(ii) The terms upon which such services are offered; or

(iii) The prices charged for such services.

(9) Any licensee or its affiliate who enters into a joint marketing arrangement with an applicant or licensee, or its affiliate, shall be considered to have an attributable interest, if such applicant or licensee, or its affiliate, has authority to make decisions or otherwise engage in practices or activities that determine, or significantly influence:

(i) The nature or types of services offered by such an applicant or licensee;

(ii) The terms upon which such services are offered; or

(iii) The prices charged for such services.

Effective radiated power (e.r.p.) (in a given direction). The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

Equivalent isotropically radiated power (e.i.r.p.). The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

Fixed service. A radio communication service between specified fixed points.

Fixed station. A station in the fixed service.

Gross Revenues. See § 1.2110(m) of this chapter.

Land mobile service. A mobile service between base stations and land mobile stations, or between land mobile stations.

Land mobile station. A mobile station in the land mobile service capable of surface movement within the geographic limits of a country or continent.

Land station. A station in the mobile service not intended to be used while in motion.

Mobile service. A radio communication service between mobile and land stations, or between mobile stations.

Mobile station. A station in the mobile service intended to be used while in motion or during halts at unspecified points.

National Geodetic Reference System (NGRS): The name given to all geodetic control data contained in the National Geodetic Survey (NGS) data base. (Source: National Geodetic Survey, U.S. Department of Commerce)

Rural telephone companies. A rural telephone company is any local exchange carrier operating entity to the extent that such entity—

(a) Provides common carrier service to any local exchange carrier study area that does not include either

(1) Any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census, or

(2) Any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of the Census as of August 10, 1993;

(b) Provides telephone exchange service, including exchange access, to fewer than 50,000 access lines;

(c) Provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or

(d) Has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996.

Small business: consortium of small businesses. (a) A small business is an entity that, together with its affiliates and entities holding controlling interests in the entity, has average annual gross revenues that are not more than $40 million for the preceding three years.

(b) A small business consortium is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition of a small business. Where an applicant (or licensee) is a consortium of small businesses, the gross revenues of each business shall not be aggregated.

(c) Applicants without identifiable controlling interests. Where an applicant (or licensee) cannot identify controlling interests under the standards set forth in this section, the gross revenues of all interest holders in the applicant, and their affiliates, will be attributable.

Total assets. Total assets shall mean the book value (except where generally accepted accounting principles (GAAP) require market valuation) of all property owned by an entity, whether real or personal, tangible or intangible, as evidenced by the most recent audited financial statements.

Universal Licensing System. The Universal Licensing System (ULS) is the consolidated database, application filing system, and processing system for all Wireless Radio Services. ULS supports electronic filing of all applications and related documents by applicants and licensees in the Wireless Radio Services, and provides public access to licensing information.

[60 FR 40719, Aug. 9, 1995, as amended at 64 FR 56577, Oct. 22, 1998; 63 FR 68953, Dec. 14, 1998]

Subpart B—Applications and Licenses

§ 26.11 Initial authorization.

(a) An applicant must file a single application for an initial authorization for all markets won and frequency blocks desired.

(b) Blanket licenses are granted for each market and frequency block. Applications for individual sites are not required and will not be accepted.

[60 FR 40719, Aug. 9, 1995, as amended at 63 FR 68953, Dec. 14, 1998]

§ 26.12 Eligibility.

Any entity, other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. § 310, is eligible to hold a license under this part.

§ 26.13 License period.

Licenses for service areas will be granted for ten year terms from the date of original issuance or renewal.

§ 26.14 Criteria for comparative renewal proceedings.

A renewal applicant involved in a comparative renewal proceeding shall receive a preference, commonly referred to as a renewal expectancy, which is the most important comparative factor to be considered in the proceeding, if its past record for the relevant license period demonstrates that the renewal applicant:

(a) Has provided ''substantial'' service during its past license term. ''Substantial'' service is defined as service which is sound, favorable, and substantially above a level of mediocre service which might just minimally warrant renewal; and

(b) Has substantially complied with applicable Commission rules, policies and the Communications Act.

Subpart C—Technical Standards

§ 26.51 Equipment authorization.

(a) Each transmitter utilized for operation under this part and each transmitter marketed, as set forth in § 2.803 of this chapter, must be of a type that has been authorized by the Commission under its type certification procedure.

(b) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in Subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter.

[63 FR 36604, July 7, 1998]

§ 26.52 RF safety.

Licensees and manufacturers are subject to the radiofrequency radiation exposure requirements specified in § 1.1307(b), § 2.1091 and § 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emmissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

[62 FR 47968, Sept. 12, 1997]

§ 26.53 Emission limits.

(a) The power of any emission at the edges of the 4660–4685 MHz band shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ or 80 decibels, whichever is less.

(b) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

(c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the license's frequency block edges, both upper and lower, as the design permits.

(d) The measurements of emission power can be expressed in peak or average values, provided that they are expressed in the same parameters as the transmission power.

(e) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

§ 26.54 Frequency stability.

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

§ 26.55 Field strength limits.

The predicted or measured median field strength at any location on the border of the GWCS service area shall not exceed 55 dBu unless licensees operating in adjacent areas agree to higher field strength along their mutual borders.

§ 26.56 Antenna structures; air navigation safety.

Licensees that own their antenna structures must not allow these antenna structures to become a hazard to air navigation. In general, antenna structure owners are responsible for registering antenna structures with the FCC if required by part 17 of this chapter, and for installing and maintaining any required marking and lighting. However, in the event of default of this responsibility by an antenna structure owner, each FCC permittee or licensee authorized to use an affected antenna structure will be held responsible by the FCC for ensuring that the antenna structure continues to meet the requirements of part 17 of this chapter. See § 17.6 of this chapter.

(a) *Marking and lighting.* Antenna structures must be marked, lighted and maintained in accordance with part 17 of this chapter and all applicable rules and requirements of the Federal Aviation Administration.

(b) *Maintenance contracts.* Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) may enter into contracts with other entities to

monitor and carry out necessary maintenance of antenna structures. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) that make such contractual arrangements continue to be responsible for the maintenance of antenna structures in regard to air navigation safety.

[63 FR 71041, Dec. 23, 1998]

Subpart D—Miscellaneous

§ 26.101 Multiple ownership restrictions.

(a) GWCS licensees shall not have an ownership interest in more than three of the five, 5 megahertz wide channels available in any geographic area. For purposes of this restriction, a GWCS licensee is:

(1) Any institutional investor, as defined in § 26.4, with an ownership interest of ten or more percent in a GWCS license; and

(2) Any other person or entity with an ownership interest of five or more percent in a GWCS license.

(b) In cases where a party had indirect ownership, through an interest in an intervening entity (or entities) that has ownership in the GWCS license, that indirect ownership shall be attributable if the percentages of ownership at each level, multiplied together, equal five or more percent ownership of the GWCS license, except that if the ownership percentage for an interest in any link in the chain exceeds 50 percent or represents actual control, it shall be treated as if it were a 100 percent interest.

Example. Party X has a non-controlling ownership interest of 25 percent in Company Y, which in turn has a non-controlling ownership interest of 10 percent in Company Z, the GWCS licensee. Party X's effective ownership interest in Company Z is Party X's ownership interest in Company Y (25 percent) times Company Y's ownership interest in Company Z (10 percent). Therefore, Party X's effective ownership interest in Company Z is 2.5 percent, and is not attributable.

(c) Notwithstanding paragraph (b) of this section, the following interests shall not constitute attributable ownership interests for purposes of paragraph (a) of this section.

(1) A limited partnership interest held by an institutional investor (as defined § 26.4) where the limited partner is not materially involved, directly or indirectly, in the management or operation of the GWCS holdings of the partnership, and the licensee so certifies. The criteria which would assure adequate insulation for the purposes of this certification require:

(i) Prohibiting limited partners from acting as employees of the limited partnership if responsibilities relate to the carrier activities of the licensee;

(ii) Barring the limited partners from serving as independent contractors;

(iii) Restricting communication among limited partners and the general partner regarding day-to-day activities of the licensee;

(iv) Empowering the general partner to veto admissions of new general partners;

(v) Restricting the circumstances in which the limited partners can remove the general partner;

(vi) Prohibiting the limited partners from providing services to the partnership relating to the GWCS holdings of the licensee; and

(vii) Stating that the limited partners may not become involved in the management or operation of the licensee.

§ 26.102 Service areas.

GWCS service areas are based on Economic Areas developed by the Bureau of Economic Analysis, Department of Commerce, referred to as ''EAs'' and three additional EA-like service areas: Guam and the Northern Mariana Islands (combined as one service area), Puerto Rico and the United States Virgin Islands (combined as one service area), and American Samoa.

(a) *Economic Areas.* Codes from 001 to 172 are assigned to the EAs in approximate geographic order, beginning with 001 in northern Maine, continuing south to Florida, then north to the Great Lakes, and continuing in a serpentine pattern to the West Coast. Except for the Western Oklahoma EA (126), the Northern Michigan EA (058), and the 17 EAs that mainly correspond to consolidated metropolitan statistical areas (CMSAs), each EA is named for the metropolitan area or city that

is the node of its largest component economic area (CEA) and that is usually, but not always, the largest metropolitan area or city in the EA. Each CEA consists of a single economic node and the surrounding counties that are economically related to the node. The following list provides EA codes and names.

Code and Name

001 Bangor, ME
002 Portland, ME
003 Boston-Worcester-Lawrence-Lowell-Brockton, MA–NH
004 Burlington, VT
005 Albany-Schenectady-Troy, NY
006 Syracuse, NY
007 Rochester, NY
008 Buffalo-Niagara Falls, NY
009 State College, PA
010 New York-No. New Jersey-Long Island, NY–NJ–CT–PA
011 Harrisburg-Lebanon-Carlisle, PA
012 Philadelphia-Wilmington-Atlantic City, PA–NJ–DE–MD
013 Washington-Baltimore, DC–MD–VA–WV
014 Salisbury, MD
015 Richmond-Petersburg, VA
016 Staunton, VA
017 Roanoke, VA
018 Greensboro-Winston-Salem-High Point, NC
019 Raleigh-Durham-Chapel Hill, NC
020 Norfolk-Virginia Beach-Newport News, VA–NC
021 Greensville, NC
022 Fayettesville, NC
023 Charlotte-Gastonia-Rock Hill, NC–SC
024 Columbia, SC
025 Wilmington, NC
026 Charleston-North Charleston, SC
027 Augusta-Aiken, GA–SC
028 Savannah, GA
029 Jacksonville, FL
030 Orlando, FL
031 Miami-Fort Lauderdale, FL
032 Fort Myers-Cape Coral, FL
033 Sarasota-Bradenton, FL
034 Tampa-St. Petersburg-Clearwater, FL
035 Tallahassee, FA
036 Dothan, AL
037 Albany, GA
038 Macon, GA
039 Columbus, GA–AL
040 Atlanta, GA
041 Greenville-Spartanburg-Anderson, SC
042 Asheville, NC
043 Chattanooga, TN–GA
044 Knoxville, TN
045 Johnson City-Kingsport-Bristol, TN–VA
046 Hickory-Morganton, NC
047 Lexington, KY
048 Charleston, WV
049 Cincinnati-Hamilton, OH–KY–IN
050 Dayton-Springfield, OH
051 Columbus, OH
052 Wheeling, WV–OH
053 Pittsburgh, PA
054 Erie, PA
055 Cleveland-Akron, OH
056 Toledo, OH
057 Detroit-Ann Arbor-Flint, MI
058 Northern Michigan, MI
059 Green Bay, WI
060 Appleton-Oshkosh-Neenah, WI
061 Traverse City, MI
062 Grand Rapids-Muskegon-Holland, MI
063 Milwaukee-Racine, WI
064 Chicago-Gary-Kenosha, IL–IN–WI
065 Elkhart-Goshen, IN
066 Fort Wayne, IN
067 Indianapolis, IN
068 Champaign-Urbana, IL
069 Evansville-Henderson, IN–KY
070 Louisville, KY–IN
071 Nashville, TN
072 Paducah, KY
073 Memphis, TN–AR–MS
074 Huntsville, AL
075 Tupelo, MS
076 Greenville, MS
077 Jackson, MS
078 Birmingham, AL
079 Montgomery, AL
080 Mobile, AL
081 Pensacola, FL
082 Biloxi-Gulfport-Pascagoula, MS
083 New Orleans, LA
084 Baton Rouge, LA
085 Lafayette, LA
086 Lake Charles, LA
087 Beaumont-Port Arthur, TX
088 Shreveport-Bossier City, LA
089 Monroe, LA
090 Little Rock-North Little Rock, AR
091 Fort Smith, AR–OK
092 Fayetteville-Springdale-Rogers, AR
093 Joplin, MO
094 Springfield, MO

095 Jonesboro, AR
096 St. Louis, MO–IL
097 Springfield, IL
098 Columbia, MO
099 Kansas City, MO–KS
100 Des Moines, IA
101 Peoria-Pekin, IL
102 Davenport-Moline-Rock Island, IA–IL
103 Cedar Rapids, IA
104 Madison, WI
105 La Crosse, WI–MN
106 Rochester, MN
107 Minneapolis-St. Paul, MN–WI
108 Wausau, WI
109 Duluth-Superior, MN–WI
110 Grand Forks, ND–MN
111 Minot, ND
112 Bismarck, ND
113 Fargo-Moorhead, ND–MN
114 Aberdeen, SD
115 Rapid City, SD
116 Sioux Falls, SD
117 Sioux City, IA–NE
118 Omaha, NE–IA
119 Lincoln, NE
120 Grand Island, NE
121 North Platte, NE
122 Wichita, KS
123 Topeka, KS
124 Tulsa, OK
125 Oklahoma City, OK
126 Western Oklahoma, OK
127 Dallas-Fort Worth, TX
128 Abilene, TX
129 San Angelo, TX
130 Austin-San Marcos, TX
131 Houston-Galveston-Brazoria, TX
132 Corpus Christi, TX
133 McAllen-Edinburg-Mission, TX
134 San Antonio, TX
135 Odessa-Midland, TX
136 Hobbs, NM
137 Lubbock, TX
138 Amarillo, TX
139 Santa Fe, NM
140 Pueblo, CO
141 Denver-Boulder-Greeley, CO
142 Scottsbluff, NE
143 Casper, WY
144 Billings, MT
145 Great Fallas, MT
146 Missoula, MT
147 Spokane, WA
148 Idaho Falls, ID
149 Twin Falls, ID
150 Boise City, ID
151 Reno, NV
152 Salt Lake City-Ogden, UT
153 Las Vegas, NV–AZ
154 Flagstaff, AZ
155 Farmington, NM
156 Albuquerque, NM
157 El Paso, TX
158 Phoenix-Mesa, AZ
159 Tucson, AZ
160 Los Angeles-Riverside-Orange County, CA
161 San Diego, CA
162 Fresno, CA
163 San Francisco-Oakland-San Jose, CA
164 Sacramento-Yolo, CA
165 Redding, CA
166 Eugene-Springfield, OR
167 Portland-Salem, OR–WA
168 Pendleton, OR
169 Richland-Kennewick-Pasco, WA
170 Seattle-Tacoma-Bremerton, WA
171 Anchorage, AK
172 Honolulu, HI

(b) Other eligible areas not included in the Bureau of Economic Analysis's list of EAs include: Guam and the Northern Mariana Islands, Puerto Rico and United States Virgin Islands, and American Samoa.

§ 26.103 Frequencies.

The following frequencies are available for GWCS in the Economic Areas and other areas described in § 26.102 as shown below.

Channel Block and Frequency Band

Block A: 4660–4665 MHz
Block B: 4665–4670 MHz
Block C: 4670–4675 MHz
Block D: 4675–4680 MHz
Block E: 4680–4685 MHz

§ 26.104 Construction requirements.

(a) GWCS licensees shall within five years of initial license grant date offer service to one-third of the population in the area in which they are licensed. Licensees shall serve two-thirds of the population in the area in which they are licensed within ten years of initial license grant date.

(b) In demonstrating compliance with the above construction requirements, licensees must base their calculations on signal field strengths that ensure reliable service for the technology utilized. Licensees may use any service radius contour formula developed or generally used by industry, provided

that such formula is based on the technical characteristics of their system.

(c) Upon meeting the five and ten year benchmarks in paragraph (a) of this section, licensees shall file a map and other supporting documentation that demonstrates compliance with the geographic area or population coverage requirement. Licensees shall file a statement indicating commencement of service. The filing must be received at the Commission on or before expiration of the relevant period.

(d) If the sale of a license is approved, the new licensee is held to the original build-out requirement.

(e) The licensee must notify the FCC electronically by using FCC Form 601 via the ULS, no later than by the end of the five-and ten-year periods, respectively, that it has met the applicable service requirements. If the licensee fails to respond within the allotted time, then the authorization will automatically terminate.

NOTE TO § 26.104: Population-based construction requirements contained in this section shall be based on the 1990 census.

[60 FR 40719, Aug. 9, 1995, as amended at 63 FR 68953, Dec. 14, 1998]

EFFECTIVE DATE NOTE: At 60 FR 40719, Aug. 9, 1995, § 26.104 was added. This section contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

§ 26.105 Notification to the Arecibo Observatory.

(a) The requirements in this section are intended to minimize possible interference at the Arecibo Observatory in Puerto Rico. Licensees must make reasonable efforts to protect the Observatory from interference. Licensees planning to construct and operate a new station at a permanent fixed location on the islands of Puerto Rico, Desecheo, Mona, Vieques or Culebra in services in which individual station licenses are issued by the FCC; planning to construct and operate a new station at a permanent fixed location on these islands that may cause interference to the operations of the Arecibo Observatory in services in which individual station licenses are not issued by the FCC; or planning a modification of any existing station at a permanent fixed location on these islands that would increase the likelihood of causing interference to the operations of the Arecibo Observatory must notify the Interference Office, Arecibo Observatory, Post Office Box 995, Arecibo, Puerto Rico 00613, in writing or electronically (e-mail address: prcz@naic.edu), of the technical parameters of the planned operation. Carriers may wish to use the interference guidelines provided by Cornell University as guidance in designing facilities to avoid interference to the Observatory. The notification must include identification of the geographical coordinates of the antenna location (NAD–83 datum), the antenna height, antenna directivity (if any), proposed channel and FCC rule part, type of emission, and effective isotropic radiated power.

(b) In services in which individual station licenses are issued by the FCC, the notification required in paragraph (a) of this section should be sent at the same time the application is filed with the FCC, and at least 20 days in advance of the applicant's planned operation. The application must state the date that notification in accordance with paragraph (a) was made. In services in which individual station licenses are not issued by the FCC, the notification required in paragraph (a) of this section should be sent at least 45 days in advance of the applicant's planned operation. In the latter services, the Interference Office must inform the FCC of a notification by an applicant within 20 days if the Office plans to file comments or objections to the notification. After the FCC receives an application from a service applicant or is informed by the Interference Office of a notification from a service applicant, the FCC will allow the Interference Office a period of 20 days for comments or objections in response to the application or notification.

(c) If an objection to any planned service operation is received during the 20-day period from the Interference Office, the FCC will take whatever action is deemed appropriate.

[63 FR 41203, Aug. 3, 1998]

Subpart E—Competitive Bidding Procedures for GWCS

§ 26.201 GWCS subject to competitive bidding.

Mutually exclusive initial applications to provide GWCS service are subject to competitive bidding procedures. The general competitive bidding procedures found in 47 CFR part 1, subpart Q, will apply unless otherwise provided in this part.

§ 26.202 Competitive bidding design for GWCS licensing.

(a) The Commission will employ the following competitive bidding designs when choosing from among mutually exclusive initial applications to provide GWCS service:

(1) Simultaneous multiple round actions

(2) Sequential oral auctions

(b) The Commission may design and test alternative procedures. The Commission will announce by Public Notice before each auction the competitive bidding design to be employed in a particular auction.

(c) The Commission may use single combined auctions, which combine bidding for two or more substitutable licenses and award licenses to the highest bidders until the available licenses are exhausted. This technique may be used in conjunction with any type of auction.

§ 26.203 Competitive bidding mechanisms.

See § 1.2104 of this chapter.

[63 FR 56578, Oct. 22, 1998]

§ 26.204 [Reserved]

§ 26.205 Bidding application (FCC form 175 and 175–S short-form).

See § 1.2105 of this chapter.

[63 FR 56578, Oct. 22, 1998]

§ 26.206 Submission of upfront payments and down payments.

See § 1.2106 of this chapter.

[63 FR 56578, Oct. 22, 1998]

§ 26.207 Long-form applications.

Winning bidders will be required to submit a long-form application on FCC form 601 within ten business days after being notified that they are the winning bidder. A single application for all winning markets must be filed. Applications on FCC Form 601 shall be submitted pursuant to the procedures set forth in Subpart G of this Part and § 1.2107(c) and (d) of this chapter and any associated Public Notices. Only auction winners will be eligible to file applications on FCC Form 601 for initial GWCS licenses in the event of mutual exclusivity between applicants filing Form 175.

[63 FR 68954, Dec. 14, 1998]

§ 26.208 License grant, denial, default, and disqualification.

See § 1.2109 of this chapter.

[63 FR 56578, Oct. 22, 1998]

§ 26.209 Eligibility for partitioned licenses.

(a) Notwithstanding § 26.102, an applicant that is a rural telephone company, as defined in § 26.4, may be granted a GWCS license that is geographically partitioned from a separately licensed EA, so long as the EA applicant or licensee has voluntarily agreed (in writing) to partition a portion of the license to the rural telephone company.

(b) If partitioned licenses are being applied for in conjunction with a license(s) to be awarded through competitive biding procedures—

(1) The applicable procedures for filing short-form applications and for submitting upfront payments and down payments contained in this part and part 1 of this chapter shall be followed by the applicant, who must disclose as part of its short-form application all parties to agreement(s) with or among rural telephone companies to partition the license pursuant to this section, if won at auction (*see* § 1.2105(a)(2)(viii));

(2) Each rural telephone company that is a party to an agreement to partition the license shall file, either electronically via the ULS or with a paper form, a long-form application for its respective, mutually agreed-upon geographic area together with the application for the remainder of the Economic Area filed by the auction winner.

(c) If the partitioned license is being applied for as a partial assignment of

the EA license following grant of the initial license, request for authorization for partial assignment of a license shall be made pursuant to § 26.324.

(d) Each application for a partitioned area (long-form initial application or partial assignment application) shall contain a partitioning plan that must propose to establish a partitioned area to be licensed that meets the following criteria:

(1) Conforms to established geopolitical boundaries (such as county lines);

(2) Includes the wireline service area of the rural telephone company applicant; and

(3) Is reasonably related to the rural telephone company's wireline service area.

NOTE TO PARAGRAPH (d)(3): A partitioned service area will be presumed to be reasonably related to the rural telephone company's wireline service area if the partitioned service area contains no more than twice the population overlap between the rural telephone company's wireline service area and the partitioned area.

(e) Each licensee in each partitioned area will be responsible for meeting the construction requirements in its area (*see* § 26.104).

[60 FR 40719, Aug. 9, 1995, as amended at 63 FR 68954, Dec. 14, 1998]

§ 26.210 Provisions for small businesses.

(a) *Bidding credits*. A winning bidder that qualifies as a small business or a consortium of small businesses may use the bidding credit specified in § 1.2110(e)(2)(iii) of this chapter.

(b) *Demonstrating small business qualifications*. See § 1.2110(i) of this chapter.

(c) *Audits*. See § 1.2110(l) of this chapter.

(d) *Unjust enrichment*. See § 1.2111 of this chapter.

[63 FR 56578, Oct. 22, 1998]

Subpart F—Application, Licensing, and Processing Rules for GWCS

§ 26.301 Authorization required.

No person shall use or operate any device for the transmission of energy or communications by radio in the services authorized by this part except as provided in this part.

§ 26.302 Eligibility.

(a) General. Authorizations will be granted upon proper application if:

(1) The applicant is qualified under the applicable laws and the regulations, policies and decisions issued under those laws, including §§ 26.101 and 26.12;

(2) There are frequencies available to provide satisfactory service; and

(3) The public interest, convenience or necessity would be served by a grant.

(b) Alien ownership. A GWCS authorization to provide Commercial Mobile Radio Service may not be granted to or held by:

(1) Any alien or the representative of any alien.

(2) Any corporation organized under the laws of any foreign government.

(3) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or any corporation organized under the laws of a foreign country.

(4) Any corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country, if the Commission finds that the public interest will be served by the refusal or revocation of such license.

(c) A GWCS authorization to provide Private Mobile Radio Service may not be granted to or held by a foreign government or a representative thereof.

[60 FR 40719, Aug. 9, 1995, as amended at 61 FR 55581, Oct. 28, 1996]

§ 26.303–26.307 [Reserved]

§ 26.308 Technical content of applications; maintenance of list of station locations.

All applications required by this part shall contain all technical information required by the application forms or

associated Public Notice(s). Applications other than initial applications for a GWCS license must also comply with all technical requirements of the rules governing the GWCS (see subparts C and D as appropriate).

§§ 26.309–26.320 [Reserved]

§ 26.321 Mutually exclusive applications.

(a) The Commission will consider applications to be mutually exclusive if their conflicts are such that the grant of one application would effectively preclude by reason of harmful electrical interference, or other practical reason, the grant of one or more of the other applications. The Commission will presume ''harmful electrical interference'' to mean interference which would result in a material impairment to service rendered to the public despite full cooperation in good faith by all applicants or parties to achieve reasonable technical adjustments which would avoid electrical conflict.

(b) Mutually exclusive applications filed on Form 175 for the initial provision of GWCS service are subject to competitive bidding in accordance with the procedures in subpart F of this part and in part 1, subpart Q of this chapter.

(c) An application will be entitled to comparative consideration with one or more conflicting applications only if the Commission determines that such comparative consideration will serve the public interest.

§ 26.322 [Reserved]

§ 26.323 Post-action divestitures.

Any parties sharing a common noncontrolling ownership interests who aggregate more GWCS spectrum among them than a single entity is entitled to hold will be permitted to divest sufficient properties within 90 days of the license grant to come into compliance with the spectrum aggregation limits as follows:

(a) The GWCS applicant shall submit electronically via the ULS, a signed statement with its long-form application (FCC Form 601) stating that sufficient properties will be divested within ninety days of the license grant. If the licensee is otherwise qualified, the Commission will grant the applications subject to a condition that the licensee come into compliance with the GWCS spectrum aggregation limits within 90 days of grant of the license.

(b) Within 90 days of license grant, the licensee must certify that the applicant and all parties to the application have come into compliance with the GWCS spectrum aggregation limits. If the licensee fails to submit the certification within 90 days, the Commission will immediately cancel all broadband GWCS licenses won by the applicant, impose the default payment and, based on the facts presented, take any other action it deems appropriate. Divestiture may be an interim trustee if a buyer has not been secured in the required time frame, as long as the applicant has no interest in or control of the trustee, and the trustee may dispose of the property as it sees fit. In no event may the trustee retain the property for longer than six months from grant of license.

[60 FR 40719, Aug. 9, 1995, as amended at 63 FR 68954, Dec. 14, 1998]

§§ 26.324–26.326 [Reserved]

PART 27—MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

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AUTHORITY: 47 U.S.C. 154, 301, 302, 303, 307, 309, 332, 336, and 337 unless otherwise noted.

SOURCE: 62 FR 9658, Mar. 3, 1997, unless otherwise noted.

Subpart A—General Information

§ 27.1 Basis and purpose.

This section contains the statutory basis for this part of the rules and provides the purpose for which this part is issued.

(a) *Basis*. The rules for miscellaneous wireless communications services (WCS) in this part are promulgated under the provisions of the Communications Act of 1934, as amended, that vest authority in the Federal Communications Commission to regulate radio transmission and to issue licenses for radio stations.

(b) *Purpose*. This part states the conditions under which spectrum is made available and licensed for the provision of wireless communications services in the following bands.

(1) 2305–2320 MHz and 2345–2360 MHz.

(2) 746–764 MHz and 776–794 MHz.

(c) *Scope*. The rules in this part apply only to stations authorized under this part.

[62 FR 9658, Mar. 3, 1997, as amended at 65 FR 3144, Jan. 20, 2000; 65 FR 17601, Apr. 4, 2000]

§ 27.2 Permissible communications.

(a) *Miscellaneous wireless communications services*. Except as provided in paragraph (b) of this section and subject to technical and other rules contained in this part, a licensee in the frequency bands specified in § 27.5 may provide any services for which its frequency bands are allocated, as set forth in the non-Federal Government column of the Table of Allocations in § 2.106 of this chapter (column 5).

(b) *746–747 MHz, 776–777 MHz, 762–764 MHz and 792–794 MHz bands*. Operators in the 746–747 MHz, 776–777 MHz, 762–764 MHz and 792–794 MHz bands may not employ a cellular system architecture. A cellular system architecture is defined, for purposes of this part, as one

that consists of many small areas or cells (segmented from a larger geographic service area), each of which uses its own base station, to enable frequencies to be reused at relatively short distances.

(c) *Satellite DARS.* Satellite digital audio radio service (DARS) may be provided using the 2310–2320 and 2345–2360 MHz bands. Satellite DARS service shall be provided in a manner consistent with part 25 of this chapter.

[65 FR 3144, Jan. 20, 2000, as amended at 65 FR 17601, Apr. 4, 2000]

§ 27.3 Other applicable rule parts.

Other FCC rule parts applicable to the Wireless Communications Service include the following:

(a) *Part 0.* This part describes the Commission's organization and delegations of authority. Part 0 of this chapter also lists available Commission publications, standards and procedures for access to Commission records, and location of Commission Field Offices.

(b) *Part 1.* This part includes rules of practice and procedure for license applications, adjudicatory proceedings, procedures for reconsideration and review of the Commission's actions; provisions concerning violation notices and forfeiture proceedings; competitive bidding procedures; and the environmental requirements that, if applicable, must be complied with prior to the initiation of construction. Subpart F includes the rules for the Wireless Telecommunications Services and the procedures for filing electronically via the ULS.

(c) *Part 2.* This part contains the Table of Frequency Allocations and special requirements in international regulations, recommendations, agreements, and treaties. This part also contains standards and procedures concerning the marketing and importation of radio frequency devices, and for obtaining equipment authorization.

(d) *Part 5.* This part contains rules prescribing the manner in which parts of the radio frequency spectrum may be made available for experimentation.

(e) *Part 15.* This part sets forth the requirements and conditions applicable to certain radio frequency devices.

(f) *Part 17.* This part contains requirements for construction, marking and lighting of antenna towers.

(g) *Part 20.* This part sets forth the requirements and conditions applicable to commercial mobile radio service providers.

(h) *Part 21.* This part sets forth rules the requirements and conditions applicable to point-to-point microwave services relating to communications common carriers.

(i) *Part 22.* This part sets forth the requirements and conditions applicable to public mobile services.

(j) *Part 24.* This part sets forth the requirements and conditions applicable to personal communications services.

(k) *Part 25.* This part contains the requirements for satellite communications, including satellite DARS.

(l) *Part 51.* This part contains general duties of telecommunications carriers to provide for interconnection with other telecommunications carriers.

(m) *Part 68.* This part contains technical standards for connection of terminal equipment to the telephone network.

(n) *Part 101.* This part sets forth the requirements and conditions applicable to fixed microwave services.

[62 FR 9658, Mar. 3, 1997, as amended at 63 FR 68954, Dec. 14, 1998; 65 FR 3144, Jan. 20, 2000]

§ 27.4 Terms and definitions.

Affiliate. This term shall have the same meaning as that for ''affiliate'' in part 1, § 1.2110(b)(4) of this chapter.

Assigned frequency. The center of the frequency band assigned to a station.

Authorized bandwidth. The maximum width of the band of frequencies permitted to be used by a station. This is normally considered to be the necessary or occupied bandwidth, whichever is greater.

Average terrain. The average elevation of terrain between 3 and 16 kilometers from the antenna site.

Base station. A land station in the land mobile service.

Broadcast services. This term shall have the same meaning as that for ''broadcasting'' in section 3(6) of the Communications Act of 1934, *i.e.*, ''the dissemination of radio communications intended to be received by the public,

directly or by the intermediary of relay stations.'' 47 U.S.C. 153(6).

Effective Radiated Power (ERP) (in a given direction). The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

Equivalent Isotropically Radiated Power (EIRP). The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

Fixed service. A radio communication service between specified fixed points.

Fixed station. A station in the fixed service.

Guard band manager. The term *Guard band manager* refers to a commercial licensee in the 746–747 MHz, 762–764 MHz, 776–777 MHz, and 792–794 MHz bands that functions solely as a spectrum broker by subdividing its licensed spectrum and making it available to system operators or directly to end users for fixed or mobile communications consistent with Commission Rules. A *Guard band manager* is directly responsible for any interference or misuse of its licensed frequency arising from its use by such non-licensed entities.

Land mobile service. A mobile service between base stations and land mobile stations, or between land mobile stations.

Land mobile station. A mobile station in the land mobile service capable of surface movement within the geographic limits of a country or continent.

Land station. A station in the mobile service not intended to be used while in motion.

Mobile service. A radio communication service between mobile and land stations, or between mobile stations.

Mobile station. A station in the mobile service intended to be used while in motion or during halts at unspecified points.

National Geodetic Reference System (NGRS). The name given to all geodetic control data contained in the National Geodetic Survey (NGS) data base. (Source: National Geodetic Survey, U.S. Department of Commerce)

Portable device. Transmitters designed to be used within 20 centimeters of the body of the user.

Radiodetermination. The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves.

Radiolocation. Radiodetermination used for purposes other than those of radionavigation.

Radiolocation land station. A station in the radiolocation service not intended to be used while in motion.

Radiolocation mobile station. A station intended to be used while in motion or during halts at unspecified points.

Radionavigation. Radiodetermination used for the purpose of navigation, including obstruction warning.

Satellite Digital Audio Radio Service (satellite DARS). A radiocommunication service in which compact disc quality programming is digitally transmitted by one or more space stations.

Time division multiple access (TDMA). A multiple access technique whereby users share a transmission medium by being assigned and using (one-at-a-time) for a limited number of time division mulitplexed channels; implies that several transmitters use one channel for sending several bit streams.

Time division multiplexing (TDM). A multiplexing technique whereby two or more channels are derived from a transmission medium by dividing access to the medium into sequential intervals. Each channel has access to the entire bandwidth of the medium during its interval. This implies that one transmitter uses one channel to send several bit streams of information.

Universal Licensing System. The Universal Licensing System (ULS) is the consolidated database, application filing system, and processing system for all Wireless Radio Services. ULS supports electronic filing of all applications and related documents by applicants and licensees in the Wireless Radio Services, and provides public access to licensing information.

Wireless communications service. A radiocommunication service licensed pursuant to this part for the frequency bands specified in § 27.5.

[62 FR 9658, Mar. 3, 1997, as amended at 62 FR 16497, Apr. 7, 1997; 63 FR 68954, Dec. 14, 1998; 65 FR 3145, Jan. 20, 2000; 65 FR 17602, Apr. 4, 2000]

§ 27.5 Frequencies.

(a) *2305–2320 MHz and 2345–2360 MHz bands*. The following frequencies are available for WCS in the 2305–2320 MHz and 2345–2360 MHz bands:

(1) Two paired channel blocks are available for assignment on a Major Economic Area basis as follows:

Block A: 2305–2310 and 2350–2355 MHz; and
Block B: 2310–2315 and 2355–2360 MHz.

(2) Two unpaired channel blocks are available for assignment on a Regional Economic Area Grouping basis as follows:

Block C: 2315–2320 MHz; and
Block D: 2345–2350 MHz.

(b) *746–764 MHz and 776–794 MHz bands*. The following frequencies are available for licensing pursuant to this part in the 746–764 MHz and 776–794 MHz bands:

(1) Two paired channels of 1 megahertz each are available for assignment solely to Guard band managers. Block A: 746–747 MHz and 776–777 MHz.

(2) Two paired channels of 2 megahertz each are available for assignment solely to Guard band managers. Block B: 762–764 MHz and 792–794 MHz.

(3) Two paired channels of 5 megahertz each are available for assignment. Block C: 747–752 MHz and 777–782 MHz.

(4) Two paired channels of 10 megahertz each are available for assignment. Block D: 752–762 MHz and 782–792 MHz.

[62 FR 9658, Mar. 3, 1997, as amended at 65 FR 3145, Jan. 20, 2000; 65 FR 17602, Apr. 4, 2000]

§ 27.6 Service areas.

(a) *2305–2320 MHz and 2345–2360 MHz bands*. WCS service areas for the 2305–2320 MHz and 2345–2360 MHz bands are Major Economic Areas (MEAs) and Regional Economic Area Groupings (REAGs) as defined below. Both MEAs and REAGs are based on the U.S. Department of Commerce's 172 Economic Areas (EAs). See 60 FR 13114 (March 10, 1995). In addition, the Commission shall separately license Guam and the Northern Mariana Islands, Puerto Rico and the United States Virgin Islands, American Samoa, and the Gulf of Mexico, which have been assigned Commission-created EA numbers 173–176, respectively. Maps of the EAs, MEAs, and REAGs and the FEDERAL REGISTER Notice that established the 172 EAs are available for public inspection and copying at the FCC Public Reference Room, Room CY–A257, 445 12th Street SW, Washington, D.C. 20554.

(1) The 52 MEAs are composed of one or more EAs and the 12 REAGs are composed of one or more MEAs, as defined in the table below:

REAGs	MEAs	EAs
1 (Northeast)	1 (Boston)	1–3.
	2 (New York City)	4–7, 10.
	3 (Buffalo)	8.
	4 (Philadelphia)	11–12.
2 (Southeast)	5 (Washington)	13–14.
	6 (Richmond)	15–17, 20.
	7 (Charlotte-Greensboro-Greenville-Raleigh).	18–19, 21–26, 41–42, 46.
	8 (Atlanta)	27–28, 37–40, 43.
	9 (Jacksonville)	29, 35.
	10 (Tampa-St. Petersburg-Orlando)	30, 33–34.
	11 (Miami)	31–32.
3 (Great Lakes)	12 (Pittsburgh)	9, 52–53.
	13 (Cincinnati-Dayton)	48–50.
	14 (Columbus)	51.
	15 (Cleveland)	54–55.
	16 (Detroit)	56–58, 61–62.
	17 (Milwaukee)	59–60, 63, 104–105, 108.
	18 (Chicago)	64–66, 68, 97, 101.
	19 (Indianapolis)	67.
	20 (Minneapolis-St. Paul)	106–107, 109–114, 116.
	21 (Des Moines-Quad Cities)	100, 102–103, 117.
4 (Mississippi Valley)	22 (Knoxville)	44–45.
	23 (Louisville-Lexington-Evansville)	47, 69–70, 72.
	24 (Birmingham)	36, 74, 78–79.
	25 (Nashville)	71.
	26 (Memphis-Jackson)	73, 75–77.
	27 (New Orleans-Baton Rouge)	80–85.

REAGs	MEAs	EAs
	28 (Little Rock)	90–92, 95.
	29 (Kansas City)	93, 99, 123.
	30 (St. Louis)	94, 96, 98.
5 (Central)	31 (Houston)	86–87, 131.
	32 (Dallas-Fort Worth)	88–89, 127–130, 135, 137–138.
	33 (Denver)	115, 140–143.
	34 (Omaha)	118–121.
	35 (Wichita)	122.
	36 (Tulsa)	124.
	37 (Oklahoma City)	125–126.
	38 (San Antonio)	132–134.
	39 (El Paso-Albuquerque)	136, 139, 155–157.
	40 (Phoenix)	154, 158–159.
6 (West)	41 (Spokane-Billings)	144–147, 168.
	42 (Salt Lake City)	148–150, 152.
	43 (San Francisco-Oakland-San Jose)	151, 162–165.
	44 (Los Angeles-San Diego)	153, 160–161.
	45 (Portland)	166–167.
	46 (Seattle)	169–170.
7 (Alaska)	47 (Alaska)	171.
8 (Hawaii)	48 (Hawaii)	172.
9 (Guam and the Northern Mariana Islands).	49 (Guam and the Northern Mariana Islands).	173.
10 (Puerto Rico and U.S. Virgin Islands)	50 (Puerto Rico and U.S. Virgin Islands)	174.
11 (American Samoa)	51 (American Samoa)	175.
12 (Gulf of Mexico)	52 (Gulf of Mexico)	176.

(2) The Gulf of Mexico EA extends from 12 nautical miles off the U.S. Gulf coast outward into the Gulf.

(b) *746–764 MHz and 776–794 MHz bands*. WCS service areas for the 746–764 MHz and 776–794 MHz bands are as follows.

(1) Service areas for Block A in the 746–747 and 776–777 MHz bands and Block B in the 762–764 and 792–794 MHz bands are based on Major Economic Areas (MEAs), as defined in paragraphs (a)(1) and (a)(2) of this section.

(2) Service areas for Blocks C and D in the 747–762 MHz and 777–792 MHz bands are based on Economic Area Groupings (EAGs) as defined by the Federal Communications Commission. *See* 62 FR 15978 (April 3, 1997) extended with the Gulf of Mexico. *See* also paragraphs (a)(1) and (a)(2) of this section and 62 FR 9636 (March 3, 1997), in which the Commission created an additional four economic area-like areas for a total of 176. Maps of the EAGs and the FEDERAL REGISTER Notice that established the 172 Economic Areas (EAs) are available for public inspection and copying at the Reference Center, Room CY A–257, 445 12th St., S.W., Washington, DC 20554. These maps and data are also available on the FCC website at *www.fcc.gov/oet/info/maps/areas/*.

(i) There are 6 EAGs, which are composed of multiple EAs as defined in the table below:

Economic area groupings	Name	Economic areas
EAG001	Northeast	1–11, 54
EAG002	Mid-Atlantic	12–26, 41, 42, 44–53, 70
EAG003	Southeast	27–40, 43, 69, 71–86, 88–90, 95, 96, 174, 176(part)
EAG004	Great Lakes	55–68, 97, 100–109
EAG005	Central/Mountain	87, 91–94, 98, 99, 110–146, 148, 149, 152, 154–159, 176(part)
EAG006	Pacific	147, 150, 151, 153, 160–173, 175

NOTE 1 TO PARAGRAPH (b)(2)(i): Economic Area Groupings are defined by the Federal Communications Commission; *see* 62 FR 15978 (April 3, 1997) extended with the Gulf of Mexico.

NOTE 2 TO PARAGRAPH (b)(2)(i): Economic Areas are defined by the Regional Economic Analysis Division, Bureau of Economic Analysis, U.S. Department of Commerce February 1995 and extended by the Federal Communications Commission, *see* 62 FR 9636 (March 3, 1997).

(ii) For purposes of paragraph (b)(2)(i) of this section, EA 176 (the Gulf of Mexico) will be divided between EAG003 (the Southeast EAG) and EAG005 (the Central/Mountain EAG) in accordance with the configuration of the Eastern/Central and Western Planning Area established by the Mineral Management Services Bureau of the Department of the Interior (MMS). That portion of EA 176 contained in the Eastern and Central Planning Areas as defined by MMS will be included in EAG003; that portion of EA 176 contained in the Western Planning Area as defined by MMS will be included in EAG005. Maps of these areas may be found on the following MMS website: *www.gomr.mms.gov/homepg/offshore/offshore.html*.

[62 FR 9658, Mar. 3, 1997, as amended at 64 FR 60726, Nov. 8, 1999; 65 FR 3145, Jan. 20, 2000; 65 FR 17602, Apr. 4, 2000; 65 FR 60113, Oct. 10, 2000]

Subpart B—Applications and Licenses

§ 27.10 Regulatory status.

Except with respect to Guard band manager licenses, which are subject to subpart G of this part, the following rules apply concerning the regulatory status of licensees in the frequency bands specified in § 27.5.

(a) *Single authorization*. Authorization will be granted to provide any or a combination of the following services in a single license: common carrier, non-common carrier, and broadcast. A licensee may render any kind of communications service consistent with the regulatory status in its license and with the Commission's rules applicable to that service. An applicant or licensee may submit a petition at any time requesting clarification of the regulatory status for which authorization is required to provide a specific communications service.

(b) *Designation of regulatory status in initial application*. An applicant shall specify in its initial application if it is requesting authorization to provide common carrier, non-common carrier, or broadcast services, or a combination thereof.

(c) *Amendment of pending applications*. The following rules apply to amendments of a pending application.

(1) Any pending application may be amended to:

(i) Change the carrier regulatory status requested, or

(ii) Add to the pending request in order to obtain common carrier, non-common carrier, or broadcast status, or a combination thereof, in a single license.

(2) Amendments to change, or add to, the carrier regulatory status in a pending application are minor amendments filed under § 1.927 of this chapter.

(d) *Modification of license*. The following rules apply to amendments of a license.

(1) A licensee may modify a license to:

(i) Change the regulatory status authorized, or

(ii) Add to the status authorized in order to obtain a combination of services of different regulatory status in a single license.

(2) Applications to change, or add to, the carrier status in a license are modifications not requiring prior Commission authorization. The licensee must notify the Commission within 30 days of the change. If the change results in the discontinuance, reduction, or impairment of an existing service, the licensee is subject to the provisions of § 27.66.

[65 FR 3146, Jan. 20, 2000, as amended at 65 FR 17602, Apr. 4, 2000]

§ 27.11 Initial authorization.

(a) An applicant must file a single application for an initial authorization for all markets won and frequency blocks desired. Initial authorizations shall be granted in accordance with § 27.5. Applications for individual sites are not required and will not be accepted, except where required for environmental assessments, in accordance with §§ 1.1301 through 1.1319 of this chapter.

(b) *2305–2320 MHz and 2345–2360 MHz bands*. Initial authorizations for the 2305–2320 MHz and 2345–2360 MHz bands shall be for 10 megahertz of spectrum in accordance with § 27.5(a).

(1) Authorizations for Blocks A and B will be based on Major Economic Areas (MEAs), as specified in § 27.6(a)(1).

(2) Authorizations for Blocks C and D will be based on Regional Economic

Area Groupings (REAGs), as specified in § 27.6(a)(2).

(c) *746–764 MHz and 776–794 MHz bands.* Initial authorizations for the 746–764 MHz and 776–794 MHz blocks shall be for 1, 2, 5, or 10 megahertz of spectrum in accordance with § 27.5(b).

(1) Authorizations for Block A, consisting of two paired channels of 1 megahertz each, will be based on those geographic areas specified in § 27.6(b)(1).

(2) Authorizations for Block B, consisting of two paired channels of 2 megahertz each, will be based on those geographic areas specified in § 27.6(b)(1).

(3) Authorizations for Block C, consisting of two paired channels of 5 megahertz each, will be based on Economic Area Groupings (EAGs), as specified in § 27.6(b)(2).

(4) Authorizations for Block D, consisting of two paired channels of 10 megahertz each, will be based on EAGs, as specified in § 27.6(b)(2).

[62 FR 9658, Mar. 3, 1997, as amended at 63 FR 68954, Dec. 14, 1998; 65 FR 3146, Jan. 20, 2000]

§ 27.12 Eligibility.

Except as provided in § 27.604 any entity other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. 310, is eligible to hold a license under this part.

[65 FR 17602, Apr. 4, 2000]

§ 27.13 License period.

(a) *2305–2320 MHz and 2345–2360 MHz bands.* Initial WCS authorizations for the 2305–2320 MHz and 2345–2360 MHz bands will have a term not to exceed ten years from the date of original issuance or renewal.

(b) *746–764 MHz and 776–794 MHz bands.* Initial authorizations for the 746–764 MHz and 776–794 MHz bands, will extend until January 1, 2015, except that a part 27 licensee commencing broadcast services, will be required to seek renewal of its license for such services at the termination of the eight-year term following commencement of such operations.

[65 FR 3146, Jan. 20, 2000; 65 FR 12483, Mar. 9, 2000, as amended at 65 FR 17602, Apr. 4, 2000; 65 FR 57267, Sept. 21, 2000]

§ 27.14 Construction requirements; Criteria for comparative renewal proceedings.

(a) WCS licensees must make a showing of ''substantial service'' in their license area within the prescribed license term set forth in § 27.13.. ''Substantial'' service is defined as service which is sound, favorable, and substantially above a level of mediocre service which just might minimally warrant renewal. Failure by any licensee to meet this requirement will result in forfeiture of the license and the licensee will be ineligible to regain it.

(b) A renewal applicant involved in a comparative renewal proceeding shall receive a preference, commonly referred to as a renewal expectancy, which is the most important comparative factor to be considered in the proceeding, if its past record for the relevant license period demonstrates that:

(1) The renewal applicant has provided ''substantial'' service during its past license term; and

(2) The renewal applicant has substantially complied with applicable FCC rules, policies and the Communications Act of 1934, as amended.

(c) In order to establish its right to a renewal expectancy, a WCS renewal applicant involved in a comparative renewal proceeding must submit a showing explaining why it should receive a renewal expectancy. At a minimum, this showing must include:

(1) A description of its current service in terms of geographic coverage and population served;

(2) An explanation of its record of expansion, including a timetable of new construction to meet changes in demand for service;

(3) A description of its investments in its WCS system; and

(4) Copies of all FCC orders finding the licensee to have violated the Communications Act or any FCC rule or policy; and a list of any pending proceedings that relate to any matter described in this paragraph.

(d) In making its showing of entitlement to a renewal expectancy, a renewal applicant may claim credit for any system modification applications that were pending on the date it filed its renewal application. Such credit

will not be allowed if the modification application is dismissed or denied.

[62 FR 9658, Mar. 3, 1997, as amended at 65 FR 3146, Jan. 20, 2000]

§ 27.15 Geographic partitioning and spectrum disaggregation.

(a) *Eligibility*. (1) Parties seeking approval for partitioning and disaggregation shall request from the Commission an authorization for partial assignment of a license pursuant to § 1.948.

(2) WCS licensees may apply to partition their licensed geographic service area or disaggregate their licensed spectrum at any time following the grant of their licenses.

(b) *Technical Standards*—(1) *Partitioning*. In the case of partitioning, applicants and licensees must file FCC Form 603 pursuant to section 1.948 and list the partitioned service area on a schedule to the application. The geographic coordinates must be specified in degrees, minutes, and seconds to the nearest second of latitude and longitude and must be based upon the 1983 North American Datum (NAD83).

(2) *Disaggregation*. Spectrum may be disaggregated in any amount.

(3) *Combined partitioning and disaggregation*. The Commission will consider requests for partial assignment of licenses that propose combinations of partitioning and disaggregation.

(4) *Signal levels*. For purposes of partitioning and disaggregation, part 27 systems must be designed so as not to exceed the signal level specified for the particular spectrum block in § 27.55 at the licensee's service area boundary, unless the affected adjacent service area licensees have agreed to a different signal level.

(c) *Unjust Enrichment*—(1) *Bidding credits*. Licensees that received a bidding credit and partition their licenses or disaggregate their spectrum to entities not meeting the eligibility standards for such a bidding credit, will be subject to the provisions concerning unjust enrichment as set forth in section 27.209(c).

(2) *Apportioning unjust enrichment payments*. Unjust enrichment payments for partitioned license areas shall be calculated based upon the ratio of the population of the partitioned license area to the overall population of the license area and by utilizing the most recent census data. Unjust enrichment payments for disaggregated spectrum shall be calculated based upon the ratio of the amount of spectrum disaggregated to the amount of spectrum held by the licensee.

(d) *License term*. The license term for a partitioned license area and for disaggregated spectrum shall be the remainder of the original licensee's license term as provided for in § 27.13.

(e) *Compliance with construction requirements*. The following rules apply for purposes of implementing the construction requirements set forth in § 27.14.

(1) *Partitioning*. Parties to partitioning agreements have two options for satisfying the construction requirements set forth in § 27.14. Under the first option, the partitioner and partitionee each certifies that it will independently satisfy the substantial service requirement for its respective partitioned area. If a licensee subsequently fails to meet its substantial service requirement, its license will be subject to automatic cancellation without further Commission action. Under the second option, the partitioner certifies that it has met or will meet the substantial service requirement for the entire, pre-partitioned geographic service area. If the partitioner subsequently fails to meet its substantial service requirement, only its license will be subject to automatic cancellation without further Commission action.

(2) *Disaggregation*. Parties to disaggregation agreements have two options for satisfying the construction requirements set forth in § 27.14. Under the first option, the disaggregator and disaggregatee each certifies that it will share responsibility for meeting the substantial service requirement for the geographic service area. If the parties choose this option and either party subsequently fails to satisfy its substantial service responsibility, both parties' licenses will be subject to forfeiture without further Commission action. Under the second option, both parties certify either that the disaggregator or the disaggregatee will

meet the substantial service requirement for the geographic service area. If the parties choose this option, and the party responsible subsequently fails to meet the substantial service requirement, only that party's license will be subject to forfeiture without further Commission action.

[62 FR 9658, Mar. 3, 1997, as amended at 63 FR 68954, Dec. 14, 1998; 65 FR 3146, Jan. 20, 2000; 65 FR 57268, Sept. 21, 2000]

Subpart C—Technical Standards

§ 27.50 Power and antenna height limits.

(a) The following power limits apply to the 2305–2320 MHz and 2345–2360 MHz bands:

(1) Fixed, land, and radiolocation land stations transmitting are limited to 2000 watts peak equivalent isotropically radiated power (EIRP).

(2) Mobile and radiolocation mobile stations transmitting are limited to 20 watts EIRP peak power.

(b) The following power and antenna height limits apply to transmitters operating in the 746–764 MHz and 776–794 MHz bands:

(1) Fixed and base stations transmitting in the 746–764 MHz band and the 777–792 MHz band must not exceed an effective radiated power (ERP) of 1000 watts and an antenna height of 305 m height above average terrain (HAAT), except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts ERP in accordance with Table 1 of this section;

(2) Control stations and mobile stations transmitting in the 747–762 MHz band and the 776–794 MHz band and fixed stations transmitting in the 776–777 MHz band and the 792–794 MHz band are limited to 30 watts ERP;

(3) Portable stations (hand-held devices) transmitting in the 747–762 MHz band and the 776–794 MHz band are limited to 3 watts ERP;

(4) Maximum composite transmit power shall be measured over any interval of continuous transmission using instrumentation calibrated in terms of RMS-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, etc., so as to obtain a true maximum composite measurement for the emission in question over the full bandwidth of the channel.

(c) Peak transmit power shall be measured over any interval of continuous transmission using instrumentation calibrated in terms of rms-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, *etc.*, so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

TABLE 1—PERMISSIBLE POWER AND ANTENNA HEIGHTS FOR BASE AND FIXED STATIONS IN THE 746–764 MHZ AND 777–792 MHZ BANDS

Antenna height (AAT) in meters (feet)	Effective radiated power (ERP) (watts)
Above 1372 (4500)	65
Above 1220 (4000) To 1372 (4500)	70
Above 1067 (3500) To 1220 (4000)	75
Above 915 (3000) To 1067 (4000)	100
Above 763 (2500) To 915 (3000)	140
Above 610 (2000) To 763 (2500)	200
Above 458 (1500) To 610 (2000)	350
Above 305 (1000) To 458 (1500)	600
Up to 305 (1000)	1000

[62 FR 16497, Apr. 7, 1997, as amended at 65 FR 3147, Jan. 20, 2000; 65 FR 17602, Apr. 4, 2000; 65 FR 42882, July 12, 2000; 65 FR 57267, Sept. 21, 2000]

§ 27.51 Equipment authorization.

(a) Each transmitter utilized for operation under this part must be of a type that has been authorized by the Commission under its certification procedure.

(b) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter.

[65 FR 3147, Jan. 20, 2000]

§ 27.52 RF safety.

Licensees and manufacturers are subject to the radio frequency radiation exposure requirements specified in sections 1.1307(b), 2.1091, and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

§ 27.53 Emission limits.

(a) For operations in the bands 2305–2320 MHz and 2345–2360 MHz, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by the following amounts:

(1) *For fixed, land, and radiolocation land stations:* By a factor not less than 80 + 10 log (p) dB on all frequencies between 2320 and 2345 MHz;

(2) *For mobile and radiolocation mobile stations:* By a factor not less than 110 + 10 log (p) dB on all frequencies between 2320 and 2345 MHz;

(3) *For fixed, land, mobile, radiolocation land and radiolocation mobile stations:* By a factor not less than 70 + 10 log (p) dB on all frequencies below 2300 MHz and on all frequencies above 2370 MHz; and not less than 43 + 10 log (p) dB on all frequencies between 2300 and 2320 MHz and on all frequencies between 2345 and 2370 MHz that are outside the licensed bands of operation;

(4) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth;

(5) In complying with the requirements in § 27.53(a)(1) and § 27.53(a)(2), WCS equipment that uses opposite sense circular polarization from that used by Satellite DARS systems in the 2320–2345 MHz band shall be permitted an allowance of 10 dB;

(6) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the edges, both upper and lower, of the licensee's bands of operation as the design permits;

(7) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power;

(8) Waiver requests of any of the out-of-band emission limits in paragraphs (a)(1) through (a)(7) of this section shall be entertained only if interference protection equivalent to that afforded by the limits is shown;

(9) In the 2305–2315 MHz band, if portable devices comply with all of the following requirements, then paragraph (a)(2) of this section shall not apply to portable devices, which instead shall attenuate all emissions into the 2320–2345 MHz band by a factor of not less than 93 + 10 log (p) dB:

(i) The portable device has a duty cycle of 12.5% or less, with at most a 312.5 microsecond pulse every 2.5 milliseconds;

(ii) The portable device must employ time division multiple access (TDMA) technology;

(iii) The nominal peak transmit output power of the portable device is no more than 200 milliwatts (25 milliwatts average power);

(iv) The portable device operates with the minimum power necessary for successful communications;

(v) The nominal average base station transmit output power is no more than 800 milliwatts when the base station antennas is located at a height of at least 8 meters (26.25 feet) above the ground;

(vi) Only fixed and portable devices and services may be provided: vehicle-mounted units are not permitted; and

(vii) Transmitting antennas shall employ linear polarization or another polarization that provides equivalent of better discrimination with respect to a DARS antenna;

(10) The out-of-band emissions limits in paragraphs (a)(1) through (a)(9) of this section may be modified by the private contractual agreement of all affected licensees, who shall maintain a copy of the agreement in their station files and disclose it to prospective

assignees or transferees and, upon request, to the Commission.

(b) *For WCS Satellite DARS operations:* The limits set forth in § 25.202(f) of this chapter shall apply, except that Satellite DARS operations shall be limited to a maximum power flux density of −197 dBW/m²/4 kHz in the 2370–2390 MHz band at Arecibo, Puerto Rico.

(c) For operations in the 747 to 762 MHz band and the 777 to 792 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 747 to 762 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(2) On any frequency outside the 777 to 792 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(3) On all frequencies between 764 to 776 MHz and 794 to 806 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;

(4) On all frequencies between 764 to 776 MHz and 794 to 806 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(d) For operations in the 746–747 MHz, 762–764 MHz, 776–777 MHz, and 792–794 MHz bands, transmitters must meet the following emission limitations:

(1) The adjacent channel coupled power (ACCP) requirements for transmitters designed for various channel sizes are shown in the following tables. Mobile station requirements apply to handheld, car mounted and control station units. The tables specify a maximum value for the ACCP relative to maximum output power as a function of the displacement from the channel center frequency. In addition, the ACCP for a mobile station transmitter at the specified frequency displacement must not exceed the value shown in the tables. For transmitters that have power control, the latter ACCP requirement can be met at maximum power reduction. In the following charts, ''(s)'' means that a swept measurement is to be used.

6.25 kHz Mobile Transmitter ACCP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACCP relative (dBc)	Maximum ACCP absolute (dBm)
6.25	6.25	−40	not specified
12.50	6.25	−60	−45
18.75	6.25	−60	−45
25.00	6.25	−65	−50
37.50	25.00	−65	−50
62.50	25.00	−65	−50
87.50	25.00	−65	−50
150.00	100.00	−65	−50
250.00	100.00	−65	−50
>400 to receive band	30(s)	−75	−55
In the receive band	30(s)	−100	−70

12.5 kHz Mobile Transmitter ACCP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACCP relative (dBc)	Maximum ACCP absolute (dBm)
9.375	6.25	−40	not specified
15.625	6.25	−60	−45
21.875	6.25	−60	−45
37.500	25.00	−65	−50
62.500	25.00	−65	−50
87.500	25.00	−65	−50
150.000	100.00	−65	−50
250.000	100.00	−65	−50
>400 to receive band	30(s)	−75	−55
In the receive band	30(s)	−100	−70

25 kHz Mobile Transmitter ACCP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACCP relative (dBc)	Maximum ACCP absolute (dBm)
15.625	6.25	−40	not specified
21.875	6.25	−60	−45
37.500	25.00	−65	−50
62.500	25.00	−65	−50
87.500	25.00	−65	−50
150.000	100.00	−65	−50
250.000	100.00	−65	−50
>400 to receive band	30(s)	−75	−55
In the receive band	30(s)	−100	−70

150 kHz Mobile Transmitter ACCP Requirements 12.5 kHz Mobile Transmitter ACCP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACCP relative (dBc)	Maximum ACCP absolute (dBm)
100	50	−40	not specified
200	50	−50	−35
300	50	−50	−35
400	50	−50	−35
600 to 1000	30(s)	−60	−45
1000 to receive band	30(s)	−70	−55
In the receive band	30(s)	−100	−75

6.25 kHz Base Transmitter ACCP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACCP (dBc)
6.25	6.25	−40
12.50	6.25	−60
18.75	6.25	−60
25.00	6.25	−65
37.50	25.00	−65
62.50	25.00	−65
87.50	25.00	−65
150.00	100.00	−65
250.00	100.00	−65
>400 to receive band	30(s)	−80 (continues @ −6dB/oct)
In the receive band	30(s)	−100

12.5 kHz Base Transmitter ACCP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACCP (dBc)
9.375	6.25	−40

12.5 kHz Base Transmitter ACCP Requirements—Continued

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACCP (dBc)
15.625	6.25	−60
21.875	6.25	−60
37.500	25.00	−60
62.500	25.00	−65
87.500	25.00	−65
150.000	100.00	−65
250.000	100.00	−65
>400 to receive band	30(s)	−80 (continues @ −6dB/oct)
In the receive band	30(s)	−100

25 kHz Base Transmitter ACCP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACCP (dBc)
15.625	6.25	−40
21.875	6.25	−60
37.500	25.00	−60
62.500	25.00	−65
87.500	25.00	−65
150.000	100.00	−65
250.000	100.00	−65
>400 to receive band	30(s)	−80 (continues @ −6dB/oct)
In the receive band	30(s)	−100

150 kHz Base Transmitter ACCP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACCP (dBc)
100	50	−40
200	50	−50
300	50	−55
400	50	−60
600 to 1000	30(s)	−65
1000 to receive band	30(s)	−75 (continues @ −6dB/oct)
In the receive band	30(s)	−100

(2) *ACCP measurement procedure*. The following procedures are to be followed for making ACCP transmitter measurements. For time division multiple access (TDMA) systems, the measurements are to be made under TDMA operation only during time slots when the transmitter is on. All measurements must be made at the input to the transmitter's antenna. Measurement bandwidth used below implies an instrument that measures the power in many narrow bandwidths (e.g. 300 Hz) and integrates these powers across a larger band to determine power in the measurement bandwidth.

(i) *Setting reference level:* Using a spectrum analyzer capable of ACCP measurements, set the measurement bandwidth to the channel size. For example, for a 6.25 kHz transmitter, set the measurement bandwidth to 6.25 kHz; for a 150 kHz transmitter, set the measurement bandwidth to 150 kHz. Set the frequency offset of the measurement bandwidth to zero and adjust the center frequency of the spectrum analyzer to give the power level in the measurement bandwidth. Record this power level in dBm as the ''reference power level''.

(ii) *Measuring the power level at frequency offsets <600kHz:* Using a spectrum analyzer capable of ACCP measurements, set the measurement bandwidth as shown in the tables above.

Measure the ACCP in dBm. These measurements should be made at maximum power. Calculate the coupled power by subtracting the measurements made in this step from the reference power measured in the previous step. The absolute ACCP values must be less than the values given in the table for each condition above.

(iii) *Measuring the power level at frequency offsets >600kHz:* Set a spectrum analyzer to 30 kHz resolution bandwidth, 1 MHz video bandwidth and sample mode detection. Sweep ±6 MHz from the carrier frequency. Set the reference level to the RMS value of the transmitter power and note the absolute power. The response at frequencies greater than 600 kHz must be less than the values in the tables above.

(iv) *Upper Power Limit Measurement:* The absolute coupled power in dBm measured above must be compared to the table entry for each given frequency offset. For those mobile stations with power control, these measurements should be repeated with power control at maximum power reduction. The absolute ACCP at maximum power reduction must be less than the values in the tables above.

(3) *Out-of-band emission limit*. On any frequency outside of the frequency ranges covered by the ACCP tables in this section, the power of any emission must be reduced below the unmodulated carrier power (P) by at least 43 + 10 log (P) dB.

(4) *Authorized bandwidth*. Provided that the ACCP requirements of this section are met, applicants may request any authorized bandwidth that does not exceed the channel size.

(e) For operations in the 746–764 MHz and 776–794 MHz bands, emissions in the band 1559–1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

(f) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

[62 FR 16497, Apr. 7, 1997, as amended at 65 FR 3147, Jan. 20, 2000; 65 FR 17602, Apr. 4, 2000; 65 FR 42883, July 12, 2000]

§ 27.54 Frequency stability.

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

§ 27.55 Field strength limits.

The predicted or measured median field strength at any location on the geographical border of a part 27 service area shall not exceed the value specified for the following bands, unless the adjacent affected service area licensees agree to a different field strength. This value applies to both the initially offered service areas and to partitioned, service areas.

(a) 2305–2320 and 2345–2360 MHz bands: 47 dBuV/m.

(b) 746–764 and 776–794 MHz bands: 40dBu V/m

[65 FR 3148, Jan. 20, 2000, as amended by 65 FR 17605, Apr. 4, 2000]

§ 27.56 Antenna structures; air navigation safety.

A licensee that owns its antenna structure(s) must not allow such antenna structure(s) to become a hazard to air navigation. In general, antenna structure owners are responsible for registering antenna structures with the FCC if required by part 17 of this chapter, and for installing and maintaining any required marking and lighting. However, in the event of default of this responsibility by an antenna structure owner, the FCC permittee or licensee authorized to use an affected antenna structure will be held responsible by the FCC for ensuring that the antenna structure continues to meet the requirements of part 17 of this chapter. See § 17.6 of this chapter.

(a) *Marking and lighting*. Antenna structures must be marked, lighted and maintained in accordance with part 17 of this chapter and all applicable rules and requirements of the Federal Aviation Administration. For any construction or alteration that would exceed the requirements of section 17.7 of this

chapter, licensees must notify the appropriate Regional Office of the Federal Aviation Administration (FAA Form 7460–1) and file a request for antenna height clearance and obstruction marking and lighting specifications (FCC Form 854) with the FCC, WTB, 1270 Fairfield Road, Gettysburg, PA 17325.

(b) *Maintenance contracts.* Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) may enter into contracts with other entities to monitor and carry out necessary maintenance of antenna structures. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) that make such contractual arrangements continue to be responsible for the maintenance of antenna structures in regard to air navigation safety.

§ 27.57 International coordination.

WCS operations in the border areas shall be subject to coordination with those countries and provide protection to non-U.S. operations in the 2305–2320 and 2345–2360 MHz bands as appropriate. In addition, satellite DARS operations in WCS spectrum shall be subject to international satellite coordination procedures.

§ 27.58 Interference to MDS/ITFS receivers.

(a) WCS licensees shall bear full financial obligation to remedy interference to MDS/ITFS block downconverters if all of the following conditions are met:

(1) The complaint is received by the WCS licensee prior to February 20, 2002;

(2) The MDS.ITFS downconverter was installed prior to August 20, 1998;

(3) The WCS fixed or land station transmits at 50 or more watts peak EIRP;

(4) The MDS/ITFS downconverter is located within a WCS transmitter's free space power flux density contour of -34 dBW/m^2; and

(5) The MDS/ITFS customer or licensee has informed the WCS licensee of the interference within one year from the initial operation of the WCS transmitter or within one year from any subsequent power increases at the WCS station.

(b) Resolution of the complaint shall be at no cost to the complainant.

(c) Two or more WCS licensees collocating their antennas on the same tower shall assume shared responsibility for remedying interference complaints within the area determined by paragraph (a)(4) of this section unless an offending station can be readily determined and then that station shall assume full financial responsibility.

(d) If the WCS licensee cannot otherwise eliminate interference caused to MDS/ITFS reception, then that licensee must cease operations from the offending WCS facility.

(e) At least 30 days prior to commencing operations from any new WCS transmission site or with increased power from any existing WCS transmission site, a WCS licensee shall notify all MDS/ITFS licensees in or through whose licensed service area they intend to operate of the technical parameters of the WCS transmission facility. WCS and MDS/ITFS licensees are expected to coordinate voluntarily and in good faith to avoid interference problems and to allow the greates operational flexibility in each other's operations.

[62 FR 16498, Apr. 7, 1997]

§ 27.59 [Reserved]

§ 27.60 TV/DTV interference protection criteria.

Base, fixed, control, and mobile transmitters in the 746–764 MHz and 776–794 MHz frequency bands must be operated only in accordance with the rules in this section to reduce the potential for interference to public reception of the signals of existing TV and DTV broadcast stations transmitting on TV Channels 59 through 68.

(a) *D/U ratios.* Licensees must choose site locations that are a sufficient distance from co-channel and adjacent channel TV and DTV stations, and/or must use reduced transmitting power or transmitting antenna height such that the following minimum desired signal-to-undesired signal ratios (D/U ratios) are met.

(1) The minimum D/U ratio for co-channel stations is 40 dB at the hypothetical Grade B contour (64 dBμV/m) (88.5 kilometers (55 miles)) of the TV station or 17 dB at the equivalent Grade B contour (41 dBμV/m) (88.5 kilometers (55 miles)) of the DTV station.

(2) The minimum D/U ratio for adjacent channel stations is 0 dB at the hypothetical Grade B contour (64 dBμV/m) (88.5 kilometers (55 miles)) of the TV station or −23 dB at the equivalent Grade B contour (41 dBμV/m) (88.5 kilometers (55 miles)) of the DTV station.

(b) *TV stations and calculation of contours.* The methods used to calculate TV contours and antenna heights above average terrain are given in §§ 73.683 and 73.684 of this chapter. Tables to determine the necessary minimum distance from the 746–764 MHz or 776–794 MHz station to the TV/DTV station, assuming that the TV/DTV station has a hypothetical or equivalent Grade B contour of 88.5 kilometers (55 miles), are located in § 90.309 of this chapter and labeled as Tables B, D, and E. Values between those given in the tables may be determined by linear interpolation. The locations of existing and proposed TV/DTV stations during the period of transition from analog to digital TV service are given in Part 73 of this chapter and in the final proceedings of MM Docket No. 87–268.

State	City	NTSC TV Ch.	DTV Ch.	ERP (kW)	HAAT (m.)
California	Concord	42	63	61	856
California	Long Beach	18	61	413.6	725
California	Los Angeles	2	60	865.9	1107
California	Los Angeles	11	65	688.7	896
California	Los Angeles	13	66	679.7	899
California	Riverside	62	68	180.1	723
California	Sacramento	10	61	1000	595
California	Stockton	64	62	63.5	874
New Jersey	Newark	13	61	198.7	500
New Jersey	Vineland	65	66	107.8	280
Pennsylvania	Allentown	39	62	50	302
Pennsylvania	Philadelphia	6	64	1000	332
Pennsylvania	Philadelphia	10	67	791.8	354
Puerto Rico	Aguada	50	62	50.1	343
Puerto Rico	Arecibo	60	61	55	242
Puerto Rico	Mayaguez	16	63	50.1	347
Puerto Rico	Naranjito	64	65	50.1	142
Puerto Rico	Ponce	7	66	407.4	826
Wisconsin	Milwaukee	18	61	519.8	307

NOTE: DTV stations on Channel 59 must be considered even though they are not indicated in the above table. The transition period is scheduled to end on December 31, 2006. After that time, unless otherwise directed by the Commission, 746–764 MHz and 776–794 MHz stations will no longer be required to protect reception of co-channel or adjacent channel TV/DTV stations.

(1) Licensees of stations operating within the ERP and HAAT limits of § 27.50 must select one of three methods to meet the TV/DTV protection requirements, subject to Commission approval:

(i) Utilize the geographic separation specified in the tables referenced below;

(ii) Submit an engineering study justifying the proposed separations based on the actual parameters of the land mobile station and the actual parameters of the TV/DTV station(s) it is trying to protect; or,

(iii) Obtain written concurrence from the applicable TV/DTV station(s). If this method is chosen, a copy of the agreement must be submitted with the application.

(2) The following is the method for geographic separations.

(i) Base and fixed stations that operate in the 746–764 MHz and 777–792 MHz bands having an antenna height (HAAT) less than 152 m. (500 ft.) shall afford protection to co-channel and adjacent channel TV/DTV stations in accordance with the values specified in Table B (co-channel frequencies based

on 40 dB protection) and Table E (adjacent channel frequencies based on 0 dB protection) in § 90.309 of this chapter. For base and fixed stations having an antenna height (HAAT) between 152–914 meters (500–3,000 ft.) the effective radiated power must be reduced below 1 kilowatt in accordance with the values shown in the power reduction graph in Figure B in § 90.309 of this chapter. For heights of more than 152 m. (500 ft.) above average terrain, the distance to the radio path horizon will be calculated assuming smooth earth. If the distance so determined equals or exceeds the distance to the hypothetical or equivalent Grade B contour of a co-channel TV/DTV station (*i.e.*, it exceeds the distance from the appropriate Table in § 90.309 of this chapter to the relevant TV/DTV station), an authorization will not be granted unless it can be shown in an engineering study (*see* paragraph (b)(1)(ii) of this section) that actual terrain considerations are such as to provide the desired protection at the actual Grade B contour (64 dBμV/m for TV and 41 dBμV/m for DTV stations) or unless the effective radiated power will be further reduced so that, assuming free space attenuation, the desired protection at the actual Grade B contour (64 dBμV/m for TV and 41 dBμV/m coverage contour for DTV stations) will be achieved. Directions for calculating powers, heights, and reduction curves are listed in § 90.309 of this chapter for land mobile stations. Directions for calculating coverage contours are listed in §§ 73.683–685 of this chapter for TV stations and in § 73.625 of this chapter for DTV stations.

(ii) Control, fixed, and mobile stations (including portables) that operate in the 776–777 MHz and 792–794 MHz bands and control and mobile stations (including portables) that operate in the 747–762 MHz and 777–792 MHz bands are limited in height and power and therefore shall afford protection to co-channel and adjacent channel TV/DTV stations in accordance with the values specified in Table D (co-channel frequencies based on 40 dB protection for TV stations and 17 dB for DTV stations) in § 90.309 of this chapter and a minimum distance of 8 kilometers (5 miles) from all adjacent channel TV/DTV station hypothetical or equivalent Grade B contours (adjacent channel frequencies based on 0 dB protection for TV stations and −23 dB for DTV stations). Since control, fixed, and mobile stations may affect different TV/DTV stations than the associated base or fixed station, particular care must be taken by applicants/licensees to ensure that all appropriate TV/DTV stations are considered (*e.g.* a base station may be operating within TV Channel 62 and the mobiles within TV Channel 67, in which case TV Channels 61, 62, 63, 66, 67 and 68 must be protected). Control, fixed, and mobile stations shall keep a minimum distance of 96.5 kilometers (60 miles) from all adjacent channel TV/DTV stations. Since mobiles and portables are able to move and communicate with each other, licensees must determine the areas where the mobiles can and cannot roam in order to protect the TV/DTV stations.

(iii) In order to protect certain TV/DTV stations and to ensure protection from these stations which may have extremely large contours due to unusual height situations, an additional distance factor must be used by all base, fixed, control, and mobile stations. For all co-channel and adjacent channel TV/DTV stations which have an HAAT between 350 and 600 meters, licensees must add the following DISTANCE FACTOR to the value obtained from the referenced Tables in § 90.309 of this chapter and to the distance for control, fixed, and mobile stations on adjacent TV/DTV channels (96.5 km).

DISTANCE FACTOR = (TV/DTV HAAT − 350) ÷ 14 in kilometers, where HAAT is the TV or DTV station antenna height above average terrain obtained from its authorized or proposed facilities, whichever is greater.

(iv) For all co-channel and adjacent channel TV/DTV stations which have an antenna height above average terrain greater than 600 meters, licensees must add 18 kilometers as the DISTANCE FACTOR to the value obtained from the referenced Tables in § 90.309 of this chapter and to the distance for control, fixed, and mobile stations on adjacent TV/DTV channels (96.5 km).

NOTE TO § 27.60: The 88.5 km (55 mi) Grade B service contour (64 dBμV/m) is based on a

hypothetical TV station operating at an effective radiated power of one megawatt, a transmitting antenna height above average terrain of 610 meters (2000 feet) and the Commission's R–6602 F(50,50) curves. *See* § 73.699 of this chapter. Maximum facilities for TV stations operating in the UHF band are 5 megawatts effective radiated power at an antenna HAAT of 610 meters (2,000 feet). *See* § 73.614 of this chapter. The equivalent contour for DTV stations is based on a 41 dBμV/m signal strength and the distance to the F (50,90) curve. *See* § 73.625 of this chapter.

[65 FR 3148, Jan. 20, 2000, as amended at 65 FR 17605, Apr. 4, 2000; 65 FR 42883, July 12, 2000]

§§ 27.61–27.62 [Reserved]

§ 27.63 Disturbance of AM broadcast station antenna patterns.

WCS licensees that construct or modify towers in the immediate vicinity of AM broadcast stations are responsible for measures necessary to correct disturbance of the AM station antenna pattern which causes operation outside of the radiation parameters specified by the FCC for the AM station, if the disturbance occurred as a result of such construction or modification.

(a) *Non-directional AM stations.* If tower construction or modification is planned within 1 kilometer (0.6 mile) of a non-directional AM broadcast station tower, the WCS licensee must notify the licensee of the AM broadcast station in advance of the planned construction or modification. Measurements must be made to determine whether the construction or modification would affect the AM station antenna pattern. The WCS licensee is responsible for the installation and continued maintenance of any detuning apparatus necessary to restore proper non-directional performance of the AM station tower.

(b) *Directional AM stations.* If tower construction or modification is planned within 3 kilometers (1.9 miles) of a directional AM broadcast station array, the WCS licensee must notify the licensee of the AM broadcast station in advance of the planned construction or modification. Measurements must be made to determine whether the construction or modification would affect the AM station antenna pattern. The WCS licensee is responsible for the installation and continued maintenance of any detuning apparatus necessary to restore proper performance of the AM station array.

§ 27.64 Protection from interference.

Wireless Communications Service (WCS) stations operating in full accordance with applicable FCC rules and the terms and conditions of their authorizations are normally considered to be non-interfering. If the FCC determines, however, that interference which significantly interrupts or degrades a radio service is being caused, it may, after notice and an opportunity for a hearing, require modifications to any WCS station as necessary to eliminate such interference.

(a) *Failure to operate as authorized.* Any licensee causing interference to the service of other stations by failing to operate its station in full accordance with its authorization and applicable FCC rules shall discontinue all transmissions, except those necessary for the immediate safety of life or property, until it can bring its station into full compliance with the authorization and rules.

(b) *Intermodulation interference.* Licensees should attempt to resolve such interference by technical means.

(c) *Situations in which no protection is afforded.* Except as provided elsewhere in this part, no protection from interference is afforded in the following situations:

(1) *Interference to base receivers from base or fixed transmitters.* Licensees should attempt to resolve such interference by technical means or operating arrangements.

(2) *Interference to mobile receivers from mobile transmitters.* No protection is provided against mobile-to-mobile interference.

(3) *Interference to base receivers from mobile transmitters.* No protection is provided against mobile-to-base interference.

(4) *Interference to fixed stations.* Licensees should attempt to resolve such interference by technical means or operating arrangements.

(5) *Anomalous or infrequent propagation modes.* No protection is provided against interference caused by tropospheric and ionospheric propagation of signals.

§ 27.66 Discontinuance, reduction, or impairment of service.

(a) *Involuntary act*. If the service provided by a fixed common carrier licensee, or a fixed common carrier operating on spectrum licensed to a Guard Band Manager, is involuntarily discontinued, reduced, or impaired for a period exceeding 48 hours, the licensee must promptly notify the Commission, in writing, as to the reasons for discontinuance, reduction, or impairment of service, including a statement when normal service is to be resumed. When normal service is resumed, the licensee must promptly notify the Commission.

(b) *Voluntary act by common carrier*. If a fixed common carrier licensee, or a fixed common carrier operating on spectrum licensed to a Guard Band Manager, voluntarily discontinues, reduces, or impairs service to a community or part of a community, it must obtain prior authorization as provided under § 63.71 of this chapter. An application will be granted within 31 days after filing if no objections have been received.

(c) *Voluntary act by non-common carrier*. If a fixed non-common carrier licensee, or a fixed non-common carrier operating on spectrum licensed to a Guard Band Manager, voluntarily discontinues, reduces, or impairs service to a community or part of a community, it must given written notice to the Commission within seven days.

(d) *Notifications and requests*. Notifications and requests identified in paragraphs(a) through (c) of this section should be sent to: Federal Communications Commission, Common Carrier Radio Services, 1270 Fairfield Road, Gettysburg, Pennsylvania, 17325.

[65 FR 3149, Jan. 20, 2000; 65 FR 12483, Mar. 9, 2000, as amended at 65 FR 17605, Apr. 4, 2000; 65 FR 57267, Sept. 21, 2000]

Subpart D—Competitive Bidding Procedures for the 2305–2320 MHz and 2345–2360 MHz Bands

§ 27.201 WCS in the 2305–2320 MHz and 2345–2360 MHz bands subject to competitive bidding.

Mutually exclusive initial applications to provide WCS in the 2305–2320 MHz and 2345–2360 MHz bands service are subject to competitive bidding procedures. The procedures set forth in part 1, subpart Q of this chapter will apply unless otherwise specified in this part.

[62 FR 9658, Mar. 3, 1997, as amended at 65 FR 57268, Sept. 21, 2000]

§ 27.202 Competitive bidding mechanisms.

In addition to the provisions of § 1.2104(a) through (f), (h) and (i) of this chapter, the following provision will apply to WCS in the 2305–2320 and 2345–2360 bands: Where a tie bid occurs, the high bidder will be determined by the order in which the bids were received by the Commission.

[62 FR 9658, Mar. 3, 1997, as amended at 65 FR 57268, Sept. 21, 2000]

§ 27.203 Withdrawal, default and disqualification payments.

When the Commission conducts a simultaneous multiple round auction pursuant to § 27.202, the Commission will impose payments on bidders who withdraw high bids during the course of an auction, or who default on payments due after an auction closes or who are disqualified. When the amount of such a payment cannot be determined, a deposit of up to 20 percent of the amount bid on the license will be required.

(a) Bid withdrawal prior to close of auction. A bidder who withdraws a high bid during the course of an auction will be subject to a payment equal to the difference between the amount bid and the amount of the winning bid the next time the license is offered by the Commission. No withdrawal payment would be assessed if the subsequent winning bid exceeds the withdrawn bid. This payment amount will be deducted from any upfront payments or down payments that the withdrawing bidder has deposited with the Commission.

(b) *Default or disqualification after close of auction*. *See* § 1.2104(g)(2) of this chapter.

[62 FR 9658, Mar. 3, 1997, as amended at 63 FR 2349, Jan. 15, 1998]

§ 27.204 Bidding application and certification procedures; prohibition of collusion.

(a) *Submission of Short-Form Application (FCC Form 175).* In order to be eligible to bid, an applicant must timely submit, by means of electronic filing, a short-form application (FCC Form 175). Unless otherwise provided by public notice, the Form 175 need not be accompanied by an upfront payment (see § 27.205).

(1) All Form 175s will be due on the date specified by public notice.

(2) The Form 175 must contain the following information:

(i) Identification of each license on which the applicant wishes to bid;

(ii) The applicant's name, if the applicant is an individual. If the applicant is a corporation, then the short-form application will require the name and address of the corporate office and the name and title of an officer or director. If the applicant is a partnership, then the application will require the names, citizenship and addresses of all partners, and, if a partner is not a natural person, then the name and title of a responsible person should be included as well. If the applicant is a trust, then the name and address of the trustee will be required. If the applicant is none of the above, then it must identify and describe itself and its principals or other responsible persons;

(iii) The identity of the person(s) authorized to make or withdraw a bid;

(iv) If the applicant applies as a designated entity pursuant to section 27.210(b), a statement to that effect and a declaration, under penalty of perjury, that the applicant is qualified as a designated entity under § 27.210(b).

(v) Certification that the applicant is legally, technically, financially and otherwise qualified pursuant to section 308(b) of the Communications Act of 1934, as amended. The Commission will accept applications certifying that a request for waiver or other relief from the requirements of section 310 is pending;

(vi) Certification that the applicant is in compliance with the foreign ownership provisions of section 310 of the Communications Act of 1934, as amended;

(vii) Certification that the applicant is and will, during the pendency of its application(s), remain in compliance with any service-specific qualifications applicable to the licenses on which the applicant intends to bid including, but not limited to, financial qualifications. The Commission may require certification in certain services that the applicant will, following grant of a license, come into compliance with certain service-specific rules, including, but not limited to, ownership eligibility limitations;

(viii) An exhibit, certified as truthful under penalty of perjury, identifying all parties with whom the applicant has entered into partnerships, joint ventures, consortia or other agreements, arrangements or understandings of any kind relating to the licenses being auctioned, including any such agreements relating to the post-auction market structure;

(ix) Certification under penalty of perjury that it has not entered and will not enter into any explicit or implicit agreements, arrangements or understandings of any kind with any parties other than those identified pursuant to paragraph (a)(2)(viii) of this section regarding the amount of their bids, bidding strategies or the particular licenses on which they will or will not bid; and

(x) Certification under penalty of perjury that it is not in default on any Commission licenses and that it is not delinquent on any extension of credit from any federal agency.

NOTE TO PARAGRAPH (a): The Commission may also request applicants to submit additional information for informational purposes to aid in its preparation of required reports to Congress.

(b) Modification and Amendment of Application. Applicants will be permitted to amend their Form 175 applications to make minor amendments to correct minor errors or defects such as typographical errors. Applicants will also be permitted to amend FCC Form 175 to make changes to the information required by § 27.204(a) (such as ownership changes or changes in the identification of parties to bidding consortia), provided such changes do not

result in a change in control of the applicant and do not involve another applicant (or parties in interest to an applicant) who has applied for licenses in any of the same geographic license areas as the applicant. Amendments which change control of the applicant will be considered major amendments. An FCC Form 175 which is amended by a major amendment will be considered to be newly filed and cannot be resubmitted after applicable filing deadlines. See also § 1.2105 of this chapter.

(c) Prohibition of collusion. (1) Except as provided in paragraphs (c)(2), (c)(3) and (c)(4) of this section, after the filing of short-form applications, all applicants are prohibited from cooperating, collaborating, discussing or disclosing in any manner the substance of their bids or bidding strategies, or discussing or negotiating settlement agreements, with other applicants until after the high bidder makes the required down payment, unless such applicants are members of a bidding consortium or other joint bidding arrangement identified on the bidder's short-form application pursuant to § 27.204(a)(2)(viii).

(2) Applicants may modify their short-form applications to reflect formation of consortia or changes in ownership at any time before or during an auction, provided such changes do not result in a change in control of the applicant, and provided that the parties forming consortia or entering into ownership agreements have not applied for licenses in any of the same geographic license areas. Such changes will not be considered major modifications of the application.

(3) After the filing of short-form applications, applicants may make agreements to bid jointly for licenses, provided the parties to the agreement have not applied for licenses in any of the same geographic license areas.

(4) After the filing of short-form applications, a holder of a non-controlling attributable interest in an entity submitting a short-form application may acquire an ownership interest in, form a consortium with, or enter into a joint bidding arrangement with, other applicants for licenses in the same geographic license area, provided that:

(i) The attributable interest holder certifies to the Commission that it has not communicated and will not communicate with any party concerning the bids or bidding strategies of more than one of the applicants in which it holds an attributable interest, or with which it has a consortium or joint bidding arrangement, and which have applied for licenses in the same geographic license area(s); and

(ii) The arrangements do not result in any change in control of an applicant.

(5) Applicants must modify their short-form applications to reflect any changes in ownership or in the membership of consortia or joint bidding arrangements.

(6) For purposes of this paragraph:

(i) The term ''applicant'' shall include the entity submitting a short-form application to participate in an auction (FCC Form 175), as well as all holders of partnership and other ownership interests and any stock interest amounting to 5 percent or more of the entity, or outstanding stock, or outstanding voting stock of the entity submitting a short-form application, and all officers and directors of that entity; and

(ii) The term ''bids or bidding strategies'' shall include capital calls or requests for additional funds in support of bids or bidding strategies.

§ 27.205 Submission of upfront payments.

(a) Each eligible bidder for WCS in the 2305–2320 and 2345–2360 bands licenses subject to auction shall pay an upfront payment pursuant to this chapter and procedures specified by public notice. No interest will be paid on upfront payments.

(b) Upfront payments must be made by wire transfer.

(c) If the applicant does not submit at least the minimum upfront payment, it will be ineligible to bid, its application will be dismissed and any upfront payment it has made will be returned.

(d) The upfront payment(s) of a bidder will be credited toward any down payment required for licenses on which the bidder is the high bidder. Where the upfront payment amount exceeds the

required deposit of a winning bidder, the Commission will refund the excess amount after determining that no bid withdrawal payments are owed by that bidder.

(e) In accordance with the provisions of paragraph (d) of this section, in the event a payment is assessed pursuant to § 27.203 for bid withdrawal or default, upfront payments or down payments on deposit with the Commission will be used to satisfy the bid withdrawal or default payment before being applied toward any additional payment obligations that the high bidder may have.

[62 FR 9658, Mar. 3, 1997, as amended at 65 FR 57268, Sept. 21, 2000]

§ 27.206 Submission of down payment and filing of long-form applications.

(a) After bidding has ended, the Commission will identify and notify the high bidder and declare the bidding closed.

(b) Within ten (10) business days after being notified that it is a high bidder on a particular license(s), a high bidder must submit to the Commission's lockbox bank such additional funds (the ''down payment'') as are necessary to bring its total deposits (not including upfront payments applied to satisfy bid withdrawal or default payments) up to twenty (20) percent of its high bid(s). This down payment must be made by wire transfer or cashier's check drawn in U.S. dollars from a financial institution whose deposits are insured by the Federal Deposit Insurance Corporation and must be made payable to the Federal Communications Commission. Down payments will be held by the Commission until the high bidder has been awarded the license and has paid the remaining balance due on the license, in which case it will not be returned, or until the winning bidder is found unqualified to be a licensee or has defaulted, in which case it will be returned, less applicable payments. No interest will be paid on any down payment.

(c) A high bidder that meets its down payment obligations in a timely manner must, within ten (10) business days after being notified that it is a high bidder, submit an additional application (the ''long-form application'') pursuant to the rules governing the service in which the applicant is the high bidder. Notwithstanding any other provision in title 47 of the Code of Federal Regulations to the contrary, high bidders need not submit an additional application filing fee with their long-form applications. Notwithstanding any other provision in Title 47 of the Code of Federal Regulations to the contrary, the high bidder's long-form application must be mailed or otherwise delivered to: Office of the Secretary, Federal Communications Commission, Attention: Auction Application Processing Section, 1919 M Street, NW, Room 222, Washington, DC 20554. An applicant that fails to submit the required long-form application as required under this section, and fails to establish good cause for any late-filed submission, shall be deemed to have defaulted and will be subject to the payments set forth in section 27.203.

(d) As an exhibit to its long-form application, the applicant must provide a detailed explanation of the terms and conditions and parties involved in any bidding consortia, joint venture, partnership or other agreement or arrangement it had entered into relating to the competitive bidding process prior to the time bidding was completed. Such agreements must have been entered into prior to the filing of short-form applications pursuant to § 27.204.

§ 27.207 [Reserved]

§ 27.208 License grant, denial, default, and disqualification.

(a) Unless otherwise specified in these rules, auction winners are required to pay the balance of their winning bids in a lump sum within ten (10) business days following award of the license. Grant of the license will be conditioned on full and timely payment of the winning bid.

(b) If a winning bidder withdraws its bid after the Commission has declared competitive bidding closed or fails to remit the required down payment within ten (10) business days after the Commission has declared competitive bidding closed, the bidder will be deemed to have defaulted, its application will be dismissed, and it will be liable for the default penalty specified in § 27.203.

In such event, the Commission may either re-auction the license to existing or new applicants or offer it to the other highest bidders (in descending order) at their final bids. The down payment obligations set forth in § 27.206(b) will apply.

(c) A winning bidder who is found unqualified to be a licensee, fails to remit the balance of its winning bid in a timely manner, or defaults or is disqualified for any reason after having made the required down payment, will be deemed to have defaulted and will be liable for the payment set forth in § 27.203. In such event, the Commission will conduct another auction for the license, affording new parties an opportunity to file applications for the license.

(d) Bidders who are found to have violated the antitrust laws or the Commission's rules in connection with their participation in the competitive bidding process may be subject, in addition to any other applicable sanctions, to forfeiture of their upfront payment, down payment or full bid amount, and may be prohibited from participating in future auctions.

§ 27.209 Designated entities; bidding credits; unjust enrichment.

(a) Designated entities entitled to preferences in the WCS in the 2305–2320 and 2345–2360 bands auction are small businesses and very small businesses as defined in § 27.110(b). Designated entities will be eligible for bidding credits, as defined in paragraphs (b) and (c) of this section.

(b) A winning bidder that qualifies as a *small business* may use a bidding credit of 25 percent to lower the cost of its winning bid.

(c) A winning bidder that qualifies as a *very small business* may use a bidding credit of 35 percent to lower the cost of its winning bid.

(d) *Unjust enrichment*. *See* § 1.2111 of this chapter.

[62 FR 9658, Mar. 3, 1997, as amended at 63 FR 2349, Jan. 15, 1998; 65 FR 57268, Sept. 21, 2000]

§ 27.210 Definitions.

(a) Scope. The definitions in this section apply to § 27.209, unless otherwise specified in those sections.

(b) Small Business; Very Small Business; Consortia.

(1) A *small business* is an entity that, together with its affiliates and controlling principals, has average annual gross revenues that are not more than $40 million for the preceding three years.

(2) A *very small business* is an entity that, together with its affiliates and controlling principals, has average annual gross revenues that are not more than $15 million for the preceding three years.

(3) For purposes of determining whether an entity meets the $40 million average annual gross revenues size standard set forth in paragraph (b)(1) of this section or the $15 million average annual gross revenues size standard set forth in paragraph (b)(2) of this section, the gross revenues of the applicant and its affiliates shall be considered on a cumulative basis and aggregated subject to the following exceptions:

(i) For purposes of paragraphs (b)(1) and (b)(2) of this section, the personal net worth of an applicant and its affiliates is not included in the applicant's gross revenues; and

(ii) For purposes of paragraphs (b)(1) and (b)(2) of this section, Indian tribes or Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), or entities owned and controlled by such tribes or corporations, are not considered affiliates of an applicant (or licensee) that is owned and controlled by such tribes, corporations or entities, and that otherwise complies with the requirements of paragraphs (b)(1) and (b)(2) of this section, except that gross revenues derived from gaming activities conducted by affiliated entities pursuant to the Indian Gaming Regulatory Act (25 U.S.C. 2701 et seq.) will be counted in determining such applicant's (or licensee's) compliance with the financial requirements of paragraphs (b)(1) and (b)(2) of this section, unless such applicant establishes that it will not receive a substantial unfair competitive advantage because significant legal constraints restrict the applicant's ability to access such gross revenues.

(4) A consortium of small businesses (or a consortium of very small businesses) is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (b)(1) of this section or each of which satisfies the definition in paragraph (b)(2) of this section. Where an applicant (or licensee) is a consortium of small businesses, the gross revenues of each small business shall not be aggregated.

(c) *Gross Revenues.* Gross revenues shall mean all income received by an entity, whether earned or passive, before any deductions are made for costs of doing business (*e.g.*, cost of goods sold), as evidenced by audited financial statements for the relevant number of most recently completed calendar years, or, if audited financial statements were not prepared on a calendar-year basis, for the most recently completed fiscal years preceding the filing of the applicant's short-form application (Form 175). If an entity was not in existence for all or part of the relevant period, gross revenues shall be evidenced by the audited financial statements of the entity's predecessor-in-interest or, if there is no identifiable predecessor-in-interest, unaudited financial statements certified by the applicant as accurate. When an applicant does not otherwise use audited financial statements, its gross revenues may be certified by its chief financial officer or its equivalent.

(d) *Affiliate.*—(1) *Basis for affiliation.* An individual or entity is an affiliate of an applicant if such individual or entity:

(i) Directly or indirectly controls or has the power to control the applicant;

(ii) Is directly or indirectly controlled by the applicant;

(iii) Is directly or indirectly controlled by a third party or parties who also control or have the power to control the applicant; or

(iv) Has an ''identity of interest'' with the applicant.

(2) *Nature of control in determining affiliation.* (i) Every business concern is considered to have one or more parties who directly or indirectly control or have the power to control it. Control may be affirmative or negative and it is immaterial whether it is exercised so long as the power to control exists.

Example for paragraph (d)(2)(i). An applicant owning 50 percent of the voting stock of another concern would have negative power to control such concern since such party can block any action of the other stockholders. Also, the bylaws of a corporation may permit a stockholder with less than 50 percent of the voting stock to block any actions taken by the other stockholders in the other entity. Affiliation exists when the applicant has the power to control a concern while at the same time another person, or persons, are in control of the concern at the will of the party or parties with the power of control.

(ii) Control can arise through stock ownership; occupancy of director, officer, or key employee positions; contractual or other business relations; or combinations of these and other factors. A key employee is an employee who, because of his/her position in the concern, has a critical influence in or substantive control over the operations or management of the concern.

(iii) Control can arise through management positions if the voting stock is so widely distributed that no effective control can be established.

Example for paragraph (d)(2)(iii). In a corporation where the officers and directors own various size blocks of stock totaling 40 percent of the corporation's voting stock, but no officer or director has a block sufficient to give him/her control or the power to control and the remaining 60 percent is widely distributed with no individual stockholder having a stock interest greater than 10 percent, management has the power to control. If persons with such management control of the other entity are controlling principals of the applicant, the other entity will be deemed an affiliate of the applicant.

(3) *Identity of interest between and among persons.* Affiliation can arise between or among two or more persons with an identity of interest, such as members of the same family or persons with common investments. In determining if the applicant controls or is controlled by a concern, persons with an identity of interest will be treated as though they were one person.

(i) *Spousal affiliation.* Both spouses are deemed to own or control or have the power to control interests owned or controlled by either of them, unless they are subject to a legal separation

recognized by a court of competent jurisdiction in the United States.

(ii) *Kinship affiliation.* Immediate family members will be presumed to own or control or have the power to control interests owned or controlled by other immediate family members. In this context ''immediate family member'' means father, mother, husband, wife, son, daughter, brother, sister, father- or mother-in-law, son- or daughter-in-law, brother- or sister-in-law, step-father or -mother, step-brother or -sister, step-son or -daughter, half-brother or -sister. This presumption may be rebutted by showing that:

(A) The family members are estranged;

(B) The family ties are remote;

(C) The family members are not closely involved with each other in business matters.

Example for paragraph (d)(3)(ii). A owns a controlling interest in Corporation X. A's sister-in-law, B, has a controlling interest in a WCS in the 2305–2320 and 2345–2360 bands geographic area license application. Because A and B have a presumptive kinship affiliation, A's interest in Corporation X is attributable to B, and thus to the applicant, unless B rebuts the presumption with the necessary showing.

(4) *Affiliation through stock ownership.* (i) An applicant is presumed to control or have the power to control a concern if he/she owns or controls or has the power to control 50 percent or more of its voting stock.

(ii) An applicant is presumed to control or have the power to control a concern even though he/she owns, controls, or has the power to control less than 50 percent of the concern's voting stock, if the block of stock he/she owns, controls, or has the power to control is large as compared with any other outstanding block of stock.

(iii) If two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, such minority holdings are equal or approximately equal in size, and the aggregate of these minority holdings is large as compared with any other stock holding, the presumption arises that each one of these persons individually controls or has the power to control the concern; however, such presumption may be rebutted by a showing that such control or power to control, in fact, does not exist.

(5) *Affiliation arising under stock options, convertible debentures, and agreements to merge.* Stock options, convertible debentures, and agreements to merge (including agreements in principle) are generally considered to have a present effect on the power to control the concern. Therefore, in making a size determination, such options, debentures, and agreements will generally be treated as though the rights held thereunder had been exercised. However, neither an affiliate nor an applicant can use such options and debentures to appear to terminate its control over another concern before it actually does so.

Example 1 for paragraph (d)(5). If company B holds an option to purchase a controlling interest in company A, who holds a controlling interest in a WCS in the 2305–2320 and 2345–2360 bands geographic area license application, the situation is treated as though company B had exercised its rights and had become owner of a controlling interest in company A. The gross revenues of company B must be taken into account in determining the size of the applicant.

Example 2 for paragraph (d)(5). If a large company, BigCo, holds 70% (70 of 100 outstanding shares) of the voting stock of company A, who holds a controlling interest in a WCS in the 2305–2320 MHz and 2345–2360 MHz bands geographic area license application, and gives a third party, SmallCo, an option to purchase 50 of the 70 shares owned by BigCo, BigCo will be deemed to be an affiliate of company A, and thus the applicant, until SmallCo actually exercises its options to purchase such shares. In order to prevent BigCo from circumventing the intent of the rule, which requires such options to be considered on a fully diluted basis, the option is not considered to have present effect in this case.

Example 3 for paragraph (d)(5). If company A has entered into an agreement to merge with company B in the future, the situation is treated as though the merger has taken place.

(6) *Affiliation under voting trusts.* (i) Stock interests held in trust shall be deemed controlled by any person who holds or shares the power to vote such stock, to any person who has the sole power to sell such stock, and to any person who has the right to revoke the trust at will or to replace the trustee at will.

(ii) If a trustee has a familial, personal or extra-trust business relationship to the grantor or the beneficiary, the stock interests held in trust will be deemed controlled by the grantor or beneficiary, as appropriate.

(iii) If the primary purpose of a voting trust, or similar agreement, is to separate voting power from beneficial ownership of voting stock for the purpose of shifting control of or the power to control a concern in order that such concern or another concern may meet the Commission's size standards, such voting trust shall not be considered valid for this purpose regardless of whether it is or is not recognized within the appropriate jurisdiction.

(7) *Affiliation through common management.* Affiliation generally arises where officers, directors, or key employees serve as the majority or otherwise as the controlling element of the board of directors and/or the management of another entity.

(8) *Affiliation through common facilities.* Affiliation generally arises where one concern shares office space and/or employees and/or other facilities with another concern, particularly where such concerns are in the same or related industry or field of operations, or where such concerns were formerly affiliated, and through these sharing arrangements one concern has control, or potential control, of the other concern.

(9) *Affiliation through contractual relationships.* Affiliation generally arises where one concern is dependent upon another concern for contracts and business to such a degree that one concern has control, or potential control, of the other concern.

(10) *Affiliation under joint venture arrangements.* (i) A joint venture for size determination purposes is an association of concerns and/or individuals, with interests in any degree or proportion, formed by contract, express or implied, to engage in and carry out a single, specific business venture for joint profit for which purpose they combine their efforts, property, money, skill and knowledge, but not on a continuing or permanent basis for conducting business generally. The determination whether an entity is a joint venture is based upon the facts of the business operation, regardless of how the business operation may be designated by the parties involved. An agreement to share profits/losses proportionate to each party's contribution to the business operation is a significant factor in determining whether the business operation is a joint venture.

(ii) The parties to a joint venture are considered to be affiliated with each other.

[62 FR 9658, Mar. 3, 1997, as amended at 65 FR 57268, Sept. 21, 2000]

Subpart E—Application, Licensing, and Processing Rules for WCS

§ 27.301 [Reserved]

§ 27.302 Eligibility.

(a) General. Authorizations will be granted upon proper application if:

(1) The applicant is qualified under the applicable laws and the regulations, policies and decisions issued under those laws, including § 27.12;

(2) There are frequencies available to provide satisfactory service; and

(3) The public interest, convenience or necessity would be served by a grant.

(b) Alien Ownership. A WCS authorization may not be granted to or held by an entity not meeting the requirements of section 310 of the Communications Act of 1934, as amended, 47 U.S.C. section 310 insofar as applicable to the particular service in question.

§§ 27.303–27.307 [Reserved]

§ 27.308 Technical content of applications.

All applications required by this part shall contain all technical information required by the application forms or associated public notice(s). Applications other than initial applications for a WCS license must also comply with all technical requirements of the rules governing the applicable frequency band (see subparts C, D, F, and G of this part, as appropriate).

[65 FR 57268, Sept. 21, 2000]

§§ 27.310–27.320 [Reserved]

§ 27.321 Mutually exclusive applications.

(a) Two or more pending applications are mutually exclusive if the grant of one application would effectively preclude the grant of one or more of the others under the Commission's rules governing the Wireless Communications Services involved. The Commission uses the general procedures in this section for processing mutually exclusive applications in the Wireless Communications Services.

(b) An application will be entitled to comparative consideration with one or more conflicting applications only if the Commission determines that such comparative consideration will serve the public interest.

§§ 27.322–27.325 [Reserved]

Subpart F—Competitive Bidding Procedures for the 746–764 MHz and 776–794 MHz Bands

SOURCE: 65 FR 3149, Jan. 20, 2000, unless otherwise noted.

§ 27.501 746–764 MHz and 776–794 MHz bands subject to competitive bidding.

(a) Mutually exclusive initial applications for licenses in the 746–764 MHz and 776–794 MHz bands are subject to competitive bidding procedures. The procedures set forth in part 1, subpart Q, of this chapter will apply unless otherwise provided in this part.

(b) For auctions of licenses in the 747–762 and 777–792 MHz Bands using a package bidding design, the payments imposed on bidders who default on payments due after an auction closes or who are disqualified, set forth in § 1.2104(g) of this chapter, shall be calculated as follows. The default payment consists of a deficiency portion and an additional payment. The additional payment shall be 25 percent of the subsequent winning bid or the defaulted bid, whichever is less. In the case that either the subsequent winning bid or the defaulted bid is subject to bidding credits, the additional payment will be calculated in an analogous manner to that used in § 1.2104(g)(2) of this chapter. The deficiency portion of the default payment shall be calculated as set forth in § 27.501(b)(1) through (b)(4). In the case that any of the relevant bids are subject to bidding credits, the default payment will be adjusted in an analogous manner to that used in § 1.2104(g)(1) of this chapter. In calculating the additional payment portion of the default payment, to determine whether the defaulted bid(s) or the subsequent winning bid(s) is the lesser amount, the defaulted and subsequent bid(s) will be compared according to the rules set forth in paragraphs (b)(1) through (4) of this section for calculation of the deficiency portion of the default payment.

(1) Where a defaulting bidder won licenses individually (*i.e.*, not as part of a package), and in a subsequent auction the licenses are also won individually, we will calculate the deficiency portion as we do in our simultaneous multiple round auctions, and on a license-by-license basis (*i.e.*, the differences between the amount originally bid and the amount subsequently bid will not be aggregated to determine a net amount owed). Where a license is sold individually and not as part of a package, we find no reason to modify the calculation of the deficiency portion of the default payment.

(2) Where a defaulting bidder won licenses in package(s), and in a subsequent auction the licenses are won either in the same package(s), or in smaller packages or as individual licenses that correlate to the defaulted package(s), the deficiency portion will be determined on a package-by-package basis, and the differences between the amount originally bid and the amount(s) subsequently bid will not be aggregated to determine a net amount owed. Thus, in this situation, we will calculate the deficiency portion in a manner analogous to where the licenses are sold individually. However, because a bid on a package does not imply any specific allocation of the total amount to the individual licenses making up that package, where the licenses are subsequently sold individually or as part of smaller packages, we believe we should aggregate the amounts received in the subsequent

auction in order to determine any deficiency.

(3) Where a defaulting bidder or bidders won licenses either individually or as part of packages, and in a subsequent auction the licenses are won as larger packages or different packages (not including the situation described in § 27.501(b)(2)), the deficiency portion will be calculated by subtracting the aggregate amount originally bid for the licenses from the aggregate amount bid in the subsequent auction for the licenses. As stated in § 27.501(b)(2), a bid on a package does not imply any specific allocation of the total amount to the licenses making up that package. We believe that in this situation we should aggregate the amounts bid on the various packages in order to calculate the deficiency portion owed.

(4) When in the situation described in § 27.501(b)(3), there are multiple defaulting bidders, the default payment (both the deficiency portion and the additional amount portion) will be allocated to the defaulting bidders in proportion to the amount they originally bid. For example, if Bidder 1 defaults on Package ABC for $200, and Bidder 2 defaults on Package DE for $400, and in a subsequent auction the licenses are won in Package AB for $150 and Package CDE for $350, Bidder 1 would be liable for ⅓ of the default payment and Bidder 2 would be responsible for ⅔. The total default payment would be equal to the difference between the total of the original bids ($600) and the total of the subsequent amounts bid ($500) plus an additional amount of 25 percent of the total of the subsequent amounts bid. The total default payment therefore would equal $100 ($600–$500) plus 25 percent of $500 ($125), for a total default payment of $225.

[65 FR 17065, Apr. 4, 2000, as amended at 66 FR 10377, Feb. 15, 2001; 66 FR 21287, Apr. 30, 2001]

§ 27.502 Designated entities.

(a) Eligibility for small business provisions. (1) A small business is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding $40 million for the preceding three years.

(2) A very small business is an entity that, together with its controlling interests and affiliates, has average gross revenues not exceeding $15 million for the preceding three years.

(3) For purposes of determining whether an entity meets either of the definitions set forth in paragraphs (a)(1) and (a)(2) of this section, the gross revenues of the entity, its controlling interests and affiliates shall be considered on a cumulative basis and aggregated. An applicant seeking status as a small business or very small business under this section must disclose on its short-and long-form applications, separately and in the aggregate, the gross revenues of the applicant (or licensee), its controlling interests and affiliates for each of the previous three years.

(4) Persons or entities that hold interests in an applicant (or licensee) that are affiliates of each other or have an identity of interests identified in § 1.2110(b)(4)(iii) of this chapter will be treated as though they were one person or entity and their ownership interests aggregated for purposes of determining an applicant's (or licensee's) compliance with the requirements of this section.

(5) Where an applicant (or licensee) cannot identify controlling interests under the standards set forth in this section, the gross revenues of all interest holders in the applicant, and their affiliates, will be attributable.

(6) A consortium of small businesses (or a consortium of very small businesses) is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(1) of this section (or each of which individually satisfies the definition in paragraph (a)(2) of this section). Where an applicant or licensee is a consortium of small businesses (or very small businesses), the gross revenues of each small business (or very small business) shall not be aggregated.

(7) Designated entities must describe on their long-form applications how they satisfy the requirements for eligibility for designated entity status, and must list and summarize on their long-form applications all agreements that

affect designated entity status such as partnership agreements, shareholder agreements, management agreements and other agreements, including oral agreements, establishing, as applicable, de facto or de jure control of the entity. Such information must be maintained at the licensee's facilities or by its designated agent for the term of the license in order to enable the Commission to audit designated entity eligibility on an ongoing basis.

(b) *Controlling interest.* (1) For purposes of this section, a controlling interest includes individuals or entities with either *de jure or de facto* control of the applicant. *De jure* control is evidenced by holdings of greater than 50 percent of the voting stock of a corporation, or in the case of a partnership, general partnership interests. *De facto* control is determined on a case-by-case basis. An entity must disclose its equity interest and demonstrate at least the following indicia of control to establish that it retains *de facto* control of the applicant:

(i) The entity constitutes or appoints more than 50 percent of the board of directors or management committee;

(ii) The entity has authority to appoint, promote, demote, and fire senior executives that control the day-to-day activities of the licensee; and

(iii) The entity plays an integral role in management decisions.

(2) The following rules apply for the calculation of certain interests. (i) Ownership interests shall be calculated on a fully diluted basis; all agreements such as warrants, stock options, and convertible debentures will generally be treated as if the rights thereunder already have been fully exercised.

(ii) Partnership and other ownership interests and any stock interest equity, or outstanding stock or outstanding voting stock shall be attributed as specified below.

(iii) Stock interests held in trust shall be attributed to any person who holds or shares the power to vote such stock, to any person who has the sole power to sell such stock, and to any person who has the right to revoke the trust at will or to replace the trustee at will. If the trustee has a familial, personal, or extra-trust business relationship to the grantor or the beneficiary, the stock interests held in trust will be attributed to the grantor or beneficiary, as appropriate.

(iv) Non-voting stock shall be attributed as an interest in the issuing entity.

(v) Limited partnership interests shall be attributed to limited partners and shall be calculated according to both the percentage of equity paid in and the percentage of distribution of profits and losses.

(vi) Officers and directors of an entity shall be considered to have an attributable interest in the entity. The officers and directors of an entity that controls a licensee or applicant shall be considered to have an attributable interest in the licensee or applicant.

(vii) Ownership interests that are held indirectly by any party through one or more intervening corporations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that if the ownership percentage for an interest in any link in the chain exceeds 50 percent or represents actual control, it shall be treated as if it were a 100 percent interest.

(viii) Any person who manages the operations of an applicant or licensee pursuant to a management agreement shall be considered to have a controlling interest in such applicant or licensee if such person, or its affiliate, has authority to make decisions or otherwise engage in practices or activities that determine, or significantly influence:

(A) The nature or types of services offered by such an applicant or licensee;

(B) The terms upon which such services are offered; or

(C) The prices charged for such services.

(ix) Any licensee or its affiliate who enters into a joint marketing arrangement with an applicant or licensee, or its affiliate, shall be considered to have a controlling interest, if such applicant or licensee, or its affiliate, has authority to make decisions or otherwise engage in practices or activities that determine, or significantly influence:

(A) The nature or types of services offered by such an applicant or licensee;

(B) The terms upon which such services are offered; or the prices charged for such services.

(c) *Bidding credits.* A winning bidder that qualifies as a small business or a consortium of small businesses as defined in this section may use the bidding credit specified in §1.2110(e)(2)(iii) of this chapter. A winning bidder that qualifies as a very small business or a consortium of very small businesses as defined in this section may use the bidding credit specified in §1.2110(e)(2)(ii) of this chapter.

Subpart G—Guard Band Managers

SOURCE: 65 FR 17605, Apr. 4, 2000, unless otherwise noted.

§ 27.601 Guard Band Manager authority and coordination requirements.

(a) Subject to the provisions of §27.2(b) and paragraphs (c) and (d) of this section, a Guard Band Manager may allow a spectrum user, pursuant to a written agreement, to construct and operate stations at any available site within the licensed area and on any channel for which the Guard Band Manager is licensed, provided such stations comply with Commission Rules and coordination requirements.

(b) Subject to the provisions of §27.2(b) and paragraphs (c) and (d) of this section, a Guard Band Manager may allow a spectrum user, pursuant to a written agreement, to delete, move or change the operating parameters of any of the user's stations that are covered under the Guard Band Manager's license without prior Commission approval, provided such stations comply with Commission Rules and coordination requirements.

(c)(1) A Guard Band Manager must file a separate station application and obtain all appropriate Commission approvals or authorizations prior to construction of stations that—

(i) Require submission of an Environmental Assessment under §1.1307 of this chapter;

(ii) Require international coordination; or

(iii) Would affect the radio frequency quiet zones described in §90.177 of this chapter.

(2) Prior to construction of a station, a Guard Band Manager must register with the Commission any station antenna structure for which notification to the Federal Aviation Administration is required by part 17 of this chapter.

(3) It is the Guard Band Manager's responsibility to determine whether a referral to the Commission is needed for any individual station constructed in the Guard Band Manager's license area.

(d)(1) A Guard Band Manager must notify Commission-recognized public safety frequency coordinators for the 700 MHz public safety band and adjacent-area Guard Band Managers within one business day after the Guard Band Manager has:

(i) Coordinated a new station or modification of an existing station; or

(ii) Filed an application for an individual station license with the Commission.

(2) The notification required in paragraph (d)(1) of this section must include, at a minimum—

(i) The frequency or frequencies coordinated;

(ii) Antenna location and height;

(iii) Type of emission;

(iv) Effective radiated power;

(v) A description of the service area, date of coordination, and user name or, in the alternative, a description of the type of operation.

(3) In the event a Guard Band Manager partitions its service area or disaggregates its spectrum, it is required to submit the notification required in paragraph (d)(1) of this section to other Guard Band Managers in the same geographic area.

(4) Entities coordinated by a Guard Band Manager must wait at least 10 business days after the notification required in paragraph (d)(1) of this section before operating under the Guard Band Manager's license;

(5) If, in the event of harmful interference, the Guard Band Manager is unable to resolve the problem by mutually satisfactory arrangements, the Commission may impose restrictions on the operations of any of the parties involved.

(e) Where a deletion, move or change authorized under paragraph (b) of this section constitutes a discontinuance, reduction, or impairment of service under § 27.66 or where discontinuance, reduction or impairment of service results from an involuntary act subject to § 27.66(a), the Guard Band Manager must comply with the notification and authorization requirements set forth in that section.

§ 27.602 Guard Band Manager agreements.

Guard Band Managers are required to enter into written agreements regarding the use of their licensed spectrum by others, subject to the following conditions:

(a) The duration of spectrum user agreements may not extend beyond the term of the Guard Band Manager's FCC license.

(b) The spectrum user agreement must specify in detail the operating parameters of the spectrum user's system, including power, maximum antenna heights, frequencies of operation, base station location(s), area(s) of operation, and other parameters specified in Commission rules for the use of spectrum identified in § 27.5(b)(1) and (b)(2).

(c) The spectrum user agreement must require the spectrum user to use Commission-approved equipment where appropriate and to complete post-construction proofs of system performance prior to system activation.

(d) The spectrum user must agree to operate its system in compliance with all technical specifications for the system contained in the agreement and agree to cooperate fully with any investigation or inquiry conducted by either the Commission or the Guard Band Manager.

(e) The spectrum user must agree to comply with all applicable Commission rules, and the spectrum user must accept Commission oversight and enforcement.

(f) The spectrum user agreement must stipulate that if the Guard Band Manager determines that there is an ongoing violation of the Commission's rules or that the spectrum user's system is causing harmful interference, the Guard Band Manager shall have the right to suspend or terminate operation of the spectrum user's system. The spectrum user agreement must stipulate that if the spectrum user refuses to comply with a suspension or termination order, the Guard Band Manager will be free to use all legal means necessary to enforce the order.

(g) The spectrum user agreement may not impose unduly restrictive requirements on use of the licensed frequencies, including any requirement that is not reasonably related to the efficient management of the spectrum licensed to the Guard Band Manager.

(h) Guard Band Managers shall maintain their written agreements with spectrum users at their principal place of business, and retain such records for at least two years after the date such agreements expire. Such records shall be kept current and be made available upon request for inspection by the Commission or its representatives.

§ 27.603 Access to the Guard Band Manager's spectrum.

(a) A Guard Band Manager may not engage in unjust or unreasonable discrimination among spectrum users and may not unreasonably deny prospective spectrum users access to the Guard Band Manager's licensed spectrum.

(b) A Guard Band Manager may not impose unduly restrictive requirements on use of its licensed frequencies, including any requirement that is not reasonably related to the efficient management of the spectrum licensed to the Guard Band Manager.

(c) A Guard Band Manager may lease a reasonable amount of its spectrum to an affiliate for the affiliate's own internal use or for the affiliate's provision of commercial or private radio services. However, a Guard Band Manager must lease the predominant amount of its spectrum to non-affiliates.

§ 27.604 Limitation on licenses won at auction.

(a) For the first auction of licenses in Blocks A and B, as defined in § 27.5, no applicant may be deemed the winning bidder of both a Block A and a Block B license in a single geographic service area.

(b) For purposes of paragraph (a) of this section, licenses will be deemed to be won by the same bidder if an entity that wins one license at the auction is an affiliate of any other entity that wins a license at the auction.

§ 27.605 Geographic partitioning and spectrum disaggregation.

An entity that acquires a portion of a Guard Band Manager's geographic area or spectrum subject to a geographic partitioning or spectrum disaggregation agreement under § 27.15 must function as a Guard Band Manager and is subject to the obligations and restrictions on Guard Band Manager licenses set forth in this subpart.

§ 27.606 Complaints against Guard Band Managers.

Guard Band Managers are expected to resolve disputes with their customers or disputes between multiple customers of the Guard Band Manager in the same manner that the parties would resolve other commercial disputes arising out of the spectrum user agreement. The Commission will also consider complaints filed against a Guard Band Manager for violating the Communications Act or the Commission's regulations or policies. When there is a dispute between a Guard Band Manager, or its spectrum user, and a non-contracting party, and the Guard Band Manager is unable or unwilling to resolve such dispute in a timely fashion, the non-contracting party may file a complaint with the Commission pursuant to § 1.41 of this chapter.

§ 27.607 Performance requirements and annual reporting requirement.

(a) Guard Band Managers are subject to the performance requirements specified in § 27.14(a).

(b) Guard Band Managers are required to file an annual report providing the Commission with information about the manner in which their spectrum is being utilized. Such reports shall be filed with the Commission on a calendar year basis, no later than the March 1 following the close of each calendar year, unless another filing date is specified by Public Notice.

(c) Guard Band Managers must, at a minimum, include the following information in their annual reports:

(1) The total number of spectrum users and the number of those users that are affiliates of the Guard Band Manager;

(2) The amount of the Guard Band Manager's spectrum being used by the Guard Band Manager's affiliates in any part of the licensed service area;

(3) The amount of Guard Band Manager's spectrum being used pursuant to agreements with unaffiliated third parties;

(4) The nature of the spectrum use of the Guard Band Manager's customers; and

(5) The length of the term of each spectrum user agreement.

(d) The specific information that Guard Band Managers will provide and the procedures that they will follow in submitting their annual reports will be announced in a Public Notice issued by the Wireless Telecommunications Bureau.

PART 32—UNIFORM SYSTEM OF ACCOUNTS FOR TELECOMMUNICATIONS COMPANIES

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AUTHORITY: 47 U.S.C. 154(i), 154(j) and 220 as amended, unless otherwise noted..

SOURCE: 51 FR 43499, Dec. 2, 1986, unless otherwise noted.

Subpart A—Preface

§ 32.1 Background.

The revised Uniform System of Accounts (USOA) is a historical financial accounting system which reports the results of operational and financial events in a manner which enables both management and regulators to assess these results within a specified accounting period. The USOA also provides the financial community and others with financial performance results. In order for an accounting system to fulfill these purposes, it must exhibit consistency and stability in financial reporting (including the results published for regulatory purposes). Accordingly, the USOA has been designed to

reflect stable, recurring financial data based to the extent regulatory considerations permit upon the consistency of the well established body of accounting theories and principles commonly referred to as generally accepted accounting principles.

§ 32.2 Basis of the accounts.

(a) The financial accounts of a company are used to record, in monetary terms, the basic transactions which occur. Certain natural groupings of these transactions are called (in different contexts) transaction cycles, business processes, functions or activities. The concept, however, is the same in each case; i.e., the natural groupings represent what happens within the company on a consistent and continuing basis. This repetitive nature of the natural groupings, over long periods of time, lends an element of stability to the financial account structure.

(b) Within the telecommunications industry companies, certain recurring functions (natural groupings) do take place in the course of providing products and services to customers. These accounts reflect, to the extent feasible, those functions. For example, the primary bases of the accounts containing the investment in telecommunications plant are the functions *performed by* the assets. In addition, because of the anticipated effects of future innovations, the telecommunications plant accounts are intended to permit technological distinctions. Similarly, the primary bases of plant operations, customer operations and corporate operations expense accounts are the functions *performed by* individuals. The revenue accounts, on the other hand, reflect a market perspective of natural groupings based primarily upon the products and services *purchased by* customers.

(c) In the course of developing the bases for this account structure, several other alternatives were explored. It was, for example, determined that, because of the variety and continual changing of various cost allocation mechanisms, the financial accounts of a company should not reflect an *a priori* allocation of revenues, investments or expenses to products or services, jurisdictions or organizational structures. (Note also § 32.14 (c) and (d) of subpart B.) It was also determined that costs (in the case of assets) should not be recorded based solely upon physical attributes such as location, description or size.

(d) Care has been taken in this account structure to avoid confusing a function with an organizational responsibility, particularly as it relates to the expense accounts. Whereas in the past, specific organizations may have performed specific functions, the future environment with its increasing mechanization and other changes will result in entirely new or restructured organizations. Thus, any relationships drawn between organizations and accounts would become increasingly meaningless with the passage of time.

(e) These accounts, then, are intended to reflect a functional and technological view of the telecommunications industry. This view will provide a stable and consistent foundation for the recording of financial data.

(f) The financial data contained in the accounts, together with the detailed information contained in the underlying financial and other subsidiary records required by this Commission, will provide the information necessary to support separations, cost of service and management reporting requirements. The basic account structure has been designed to remain stable as reporting requirements change.

§ 32.3 Authority.

This Uniform System of Accounts has been prepared under the following authority: Section 4 of the Communications Act of 1934, as amended, 47 U.S.C. section 154 (1984); sections 219, 220 of the Communications Act of 1934, as amended, 47 U.S.C. sections 219, 220, (1984).

§ 32.4 Communications Act.

Attention is directed to the following extract from section 220 of the Communications Act of 1934, 47 U.S.C. 220 (1984):

(e) Any person who shall willfully make any false entry in the accounts of any book of accounts or in any record or memoranda kept by any such carrier, or who shall willfully destroy, mutilate, alter, or by any

other means or device falsify any such account, record, or memoranda, or who shall willfully neglect or fail to make full, true, and correct entries in such accounts, records, or memoranda of all facts and transactions appertaining to the business of the carrier, shall be deemed guilty of a misdemeanor, and shall be subject, upon conviction, to a fine of not less than $1,000 nor more than $5,000 or imprisonment for a term of not less than one year nor more than three years, or both such fine and imprisonment: Provided, that the Commission may in its discretion issue orders specifying such operating, accounting or financial papers, records, books, blanks, or documents which may, after a reasonable time, be destroyed, and prescribing the length of time such books, papers, or documents shall be preserved.

For regulations governing the periods for which records are to be retained, see part 42, Preservation of Records of Communications Common Carriers, of this chapter which relates to preservation of records.

Subpart B—General Instructions

§ 32.11 Classification of companies.

(a) For accounting purposes, companies are divided into classes as follows:

(1) *Class A*. Companies having annual revenues from regulated telecommunications operations that are equal to or above the indexed revenue threshold.

(2) *Class B*. Companies having annual revenues from regulated telecommunications operations that are less than the indexed revenue threshold.

(b) Class A companies, except mid-sized incumbent local exchange carriers, as defined by § 32.9000, shall keep all the accounts of this system of accounts which are applicable to their affairs and are designated as Class A accounts. Class A companies which include mid-sized incumbent local exchange carriers shall keep Basic Property Records in compliance with the requirements of §§ 32.2000(e) and (f) of this part.

(c) Class B companies shall keep all accounts of this system of accounts which are applicable to their affairs and are designated as Class B accounts. Class B companies shall keep Continuing Property Records in compliance with the requirements of §§ 32.2000(e)(7)(A) and 32.2000(f) of this part.

(d) Class B companies and mid-sized incumbent local exchange carriers, as defined by § 32.9000 of this part, that desire more detailed accounting may adopt the accounts prescribed for Class A companies upon the submission of a written notification to the Commission. Mid-sized incumbent local exchange carriers shall maintain subsidiary record categories necessary to provide the pole attachment data currently provided in the Class A accounts.

(e) The classification of a company shall be determined at the start of the calendar year following the first time its annual operating revenue from regulated operations equals, exceeds, or falls below the indexed revenue threshold.

[51 FR 43499, Dec. 2, 1986, as amended at 61 FR 50245, Sept. 25, 1996; 62 FR 39777, July 24, 1997; 64 FR 50006, Sept. 15, 1999]

§ 32.12 Records.

(a) The company's financial records shall be kept in accordance with generally accepted accounting principles to the extent permitted by this system of accounts.

(b) The company's financial records shall be kept with sufficient particularity to show fully the facts pertaining to all entries in these accounts. The detail records shall be filed in such manner as to be readily accessible for examination by representatives of this Commission.

(c) The Commission shall require a company to maintain financial and other subsidiary records in such a manner that specific information, of a type not warranting disclosure as an account or subaccount, will be readily available. When this occurs, or where the full information is not otherwise recorded in the general books, the subsidiary records shall be maintained in sufficient detail to facilitate the reporting of the required specific information. The subsidiary records, in which the full details are shown, shall be sufficiently referenced to permit ready identification and examination by representatives of this Commission.

§ 32.13 Accounts—general.

(a) As a general rule, all accounts kept by reporting companies shall conform in numbers and titles to those prescribed herein. However, reporting companies may use different numbers for internal purposes when separate accounts (or subaccounts) maintained are consistent with the title and content of accounts and subaccounts prescribed in this system.

(1) For Class A reporting companies, accounts which are clearly summaries of other accounts or subaccounts are to be used for reporting purposes and are not otherwise required to be maintained.

(2) A company may subdivide any of the accounts prescribed. The titles of all such subaccounts shall refer by number or title to the controlling account.

(3) A company may establish temporary or experimental accounts without prior notice to the Commission.

(b) Exercise of the preceding options shall be allowed only if the integrity of the prescribed accounts is not impaired.

(c) As of the date a company becomes subject to the system of accounts, the company is authorized to make any such subdivisions, reclassifications or consolidations of existing balances as are necessary to meet the requirements of this system of accounts.

(d) Nothing contained in this part shall prohibit or excuse any company, receiver, or operating trustee of any carrier from subdividing the accounts hereby prescribed for the purpose of:

(1) Complying with the requirements of the state commission(s) having jurisdiction; or

(2) Securing the information required in the prescribed reports to such commission(s).

(e) Where the use of subsidiary records is considered necessary in order to secure the information required in reports to any state commission, the company shall incorporate the following controls into their accounting system with respect to such subsidiary records:

(1) Subsidiary records shall be reconciled to the company's general ledger or books of original entry, as appropriate.

(2) The company shall adequately document the accounting procedures related to subsidiary records.

(3) The subsidiary records shall be maintained at an adequate level of detail to satisfy state regulators.

[51 FR 43499, Dec. 2, 1986, as amended at 65 FR 16334, Mar. 28, 2000]

§ 32.14 Regulated accounts.

(a) In the context of this part, the regulated accounts shall be interpreted to include the investments, revenues and expenses associated with those telecommunications products and services to which the tariff filing requirements contained in Title II of the Communications Act of 1934, as amended, are applied, except as may be otherwise provided by the Commission. Regulated telecommunications products and services are thereby fully subject to the accounting requirements as specified in Title II of the Communications Act of 1934, as amended, and as detailed in subparts A through F of this part of the Commission's Rules and Regulations.

(b) In addition to those amounts considered to be regulated by the provisions of paragraph (a) of this section, those telecommunications products and services to which the tariff filing requirements of the several state jurisdictions are applied shall be accounted for as regulated, except where such treatment is proscribed or otherwise excluded from the requirements pertaining to regulated telecommunications products and services by this Commission.

(c) In the application of detailed accounting requirements contained in this part, when a regulated activity involves the common or joint use of assets and resources in the provision of regulated and nonregulated products and services, companies shall account for these activities within the accounts prescribed in this system for telephone company operations. Assets and expenses shall be subdivided in subsidiary records among amounts solely assignable to nonregulated activities, amounts solely assignable to regulated activities, and amounts related to assets used and expenses incurred jointly or in common, which will be allocated between regulated and nonregulated

activities. Companies shall submit reports identifying regulated and nonregulated amounts in the manner and at the times prescribed by this Commission. Nonregulated revenue items not qualifying for incidental treatment, as provided in § 32.4999(l), shall be recorded in Account 5280, Nonregulated operating revenue.

(d) Other income items which are incidental to the provision of regulated products and services shall be accounted for as regulated activities.

(e) All costs and revenues related to the offering of regulated products and services which result from arrangements for joint participation or apportionment between two or more telephone companies (e.g., joint operating agreements, settlement agreements, cost-pooling agreements) shall be recorded within the detailed accounts. Under joint operating agreements, the creditor will initially charge the entire expenses to the appropriate primary accounts. The proportion of such expenses borne by the debtor shall be credited by the creditor and charged by the debtor to the account initially charge. Any allowances for return on property used will be accounted for as provided in Account 5240, Rent Revenue.

(f) All items of nonregulated revenue, investment and expense that are not properly includible in the detailed, regulated accounts prescribed in subparts A through F of this part, as determined by paragraphs (a) through (e) of this section shall be accounted for and included in reports to this Commission as specified in § 32.23 of this subpart.

[51 FR 43499, Dec. 2, 1986, as amended at 52 FR 6560, Mar. 4, 1987; 53 FR 49321, Dec. 7, 1988]

§ 32.15 [Reserved]

§ 32.16 Changes in accounting standards.

(a) The company's records and accounts shall be adjusted to apply new accounting standards prescribed by the Financial Accounting Standards Board or successor authoritative accounting standard-setting groups, in a manner consistent with generally accepted accounting principles. The change in an accounting standard will automatically take effect 90 days after the company informs this Commission of its intention to follow the new standard, unless the Commission notifies the company to the contrary. Concurrent with informing this Commission of its intent to adopt an accounting standards change, the company shall also file a revenue requirement study for the current year analyzing the effects of the accounting standards change. Furthermore, any change subsequently adopted shall be disclosed in annual reports to this Commission.

(b) The changes in accounting standards which this Commission approves will not necessarily be binding on the ratemaking practices of the various state commissions.

[51 FR 43499, Dec. 2, 1986, as amended at 64 FR 50007, Sept. 15, 1999]

§ 32.17 Interpretation of accounts.

To the end that uniform accounting shall be maintained within the prescribed system, questions involving matters of significant which are not clearly provided for shall be submitted to the Chief, Common Carrier Bureau, for explanation, interpretation, or resolution. Questions and answers thereto with respect to this system of accounts will be maintained by the Common Carrier Bureau.

§ 32.18 Waivers.

A waiver from any provision of this system of accounts shall be made by the Federal Communications Commission upon its own initiative or upon the submission of written request therefor from any telecommunications company, or group of telecommunications companies, provided that such a waiver is in the public interest and each request for waiver expressly demonstrates that: existing peculiarities or unusual circumstances warrant a departure from a prescribed procedure or technique; a specifically defined alternative procedure or technique will result in a substantially equivalent or more accurate portrayal of operating results or financial condition, consistent with the principles embodied in the provisions of this system of accounts; and the application of such alternative procedure will maintain or

improve uniformity in substantive results as among telecommunications companies.

§ 32.19 Address for reports and correspondence.

Reports, statements, and correspondence submitted to the Federal Communications Commission in accordance with or relating to instructions and requirements contained herein shall be addressed to the Common Carrier Bureau, Federal Communications Commission, Washington, DC 20554.

§ 32.20 Numbering convention.

(a) The number ''32'' (appearing to the left of the first decimal point) indicates the part number.

(b) The numbers immediately following to the right of the decimal point indicate, respectively, the section or account. *All Part 32 Account numbers contain 4 digits to-the-right-of the decimal point.*

(c) Cross references to accounts are made by citing the account numbers to the right of the decimal point; e.g., Account 2232 rather than the corresponding complete part 32 reference number 32.2232.

§ 32.21 Sequence of accounts.

The order in which the accounts are presented in this system of accounts is not to be considered as necessarily indicative of the order in which they will be scheduled at all times in reports to this Commission.

§ 32.22 Comprehensive interperiod tax allocation.

(a) Companies shall apply interperiod tax allocation (tax normalization) to all book/tax temporary differences which would be considered material for published financial report purposes. Furthermore, companies shall also apply interperiod tax allocation if any item or group of similar items when aggregated would yield debit or credit entries which exceed or would exceed 5 percent of the gross deferred income tax expense debits or credits during any calendar year over the life of the temporary difference. The tax effects of book/tax temporary differences shall be normalized and the deferrals shall be included in the following accounts:

4100, Net Current Deferred Operating Income Taxes;
4110, Net Current Deferred Nonoperating Income Taxes;
4340, Net Noncurrent Deferred Operating Income Taxes;
4350, Net Noncurrent Deferred Nonoperating Income Taxes.

In lieu of the accounting prescribed herein, any company shall treat the increase or reduction in current income taxes payable resulting from the use of flow through accounting in prior years as an increase or reduction in current tax expense.

(b) Supporting documentation shall be maintained so as to separately identify the amount of deferred taxes which arise from the use of an accelerated method of depreciation.

(c) Subsidiary records shall be used to reduce the deferred tax assets contained in the accounts specified in paragraph (a) of this section when it is likely that some portion or all of the deferred tax asset will not be realized. The amount recorded in the subsidiary record should be sufficient to reduce the deferred tax asset to the amount that is likely to be realized.

(d) The records supporting the activity in the deferred income tax accounts shall be maintained in sufficient detail to identify the nature of the specific temporary differences giving rise to both the debits and credits to the individual accounts.

(e) Any company that uses accelerated depreciation (or recognizes taxable income or losses upon the retirement of property) for income tax purposes shall normalize the tax differentials occasioned thereby as indicated in paragraphs (e)(1) and (e)(2) of this section.

(1) With respect to the retirement of property the book/tax difference between (i) the recognition of proceeds as income and the accrual for salvage value and (ii) the book and tax capital recovery, shall be normalized.

(2) Records shall be maintained so as to show the deferred tax amounts by vintage year separately for each class or subclass of eligible depreciable telephone plant for which an accelerated method of depreciation has been used for income tax purposes. When property is transferred to nonregulated activities, the associated deferred income

taxes and unamortized investment tax credits shall also be identified and transferred to the appropriate nonregulated accounts.

(f) The tax differentials to be normalized as specified in this section shall also encompass the additional effect of state and local income tax changes on Federal income taxes produced by the provision for deferred state and local income taxes for book/tax temporary differences related to such income taxes.

(g) Companies that receive the tax benefits from the filing of a consolidated income tax return by the parent company, (pursuant to closing agreements with the Internal Revenue Service, effective January 1, 1966) representing the deferred income taxes from the elimination of intercompany profits for income tax purposes on sales of regulated equipment, may credit such deferred taxes directly to the plant account which contains such intercompany profit rather than crediting such deferred taxes to the applicable accounts in paragraph (a) of this section. If the deferred income taxes are recorded as a reduction of the appropriate plant accounts, such reduction shall be treated as reducing the original cost of the plant and accounted for as such.

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 9418, Feb. 28, 1994]

§ 32.23 Nonregulated activities.

(a) This section describes the accounting treatment of activities classified for accounting purposes as ''nonregulated.'' Preemptively deregulated activities and activities (other than incidental activities) never subject to regulation will be classified for accounting purposes as ''nonregulated.'' Activities that qualify for incidental treatment under the policies of this Commission will be classified for accounting purposes as regulated activities. Activities that have been deregulated by a state will be classified for accounting purposes as regulated activities. Activities that have been deregulated at the interstate level, but not preemptively deregulated, will be classified for accounting purposes as regulated activities until such time as this Commission decides otherwise. The treatment of nonregulated activities shall differ depending on the extent of the common or joint use of assets and resources in the provision of both regulated and nonregulated products and services.

(b) When a nonregulated activity does not involve the joint or common use of assets and resources in the provision of both regulated and nonregulated products and services, carriers shall account for these activities on a separate set of books consistent with instructions set forth in §§ 32.1406 and 32.7990. Transfers of assets, and sales of products and services between the regulated activity and a nonregulated activity for which a separate set of books is maintained, shall be accounted for in accordance with the rules presented in § 32.27, Transactions with Affiliates. In the separate set of books, carriers may establish whatever detail they deem appropriate beyond what is necessary to provide this Commission with the information required in §§ 32.1406 and 32.7990.

(c) When a nonregulated activity does involve the joint or common use of assets and resources in the provision of regulated and nonregulated products and services, carriers shall account for these activities within accounts prescribed in this system for telephone company operations. Assets and expenses shall be subdivided in subsidiary records among amounts solely assignable to nonregulated activities, amounts solely assignable to regulated activities, and amounts related to assets and expenses incurred jointly or in common, which will be allocated between regulated and nonregulated activities. Carriers shall submit reports identifying regulated and nonregulated amounts in the manner and at the times prescribed by this Commission. Nonregulated revenue items not qualifying for incidental treatment as provided in § 32.4999(l) of this part, shall be recorded in separate subsidiary record categories of Account 5280, Nonregulated operating revenue. Amounts assigned or allocated to regulated products or services shall be subject to part 36 of this chapter.

[52 FR 6560, Mar. 4, 1987, as amended at 53 FR 49322, Dec. 7, 1988; 59 FR 46930, Sept. 13, 1994; 64 FR 50007, Sept. 15, 1999]

§ 32.24 Compensated absences.

(a) Companies shall record a liability and charge the appropriate expense accounts for compensated absences (vacations, sick leave, etc.) in the year in which these benefits are earned by employees.

(b) With respect to the liability that exists for compensated absences which is not yet recorded on the books as of the effective date of this part, the liability shall be recorded in Account 4120, Other Accrued Liabilities, with a corresponding entry to Account 1439, Deferred Charges. This deferred charge shall be amortized on a straight line basis over a period of ten years.

(c) Records shall be maintained so as to show that no more than ten percent of the deferred charge is being amortized each year.

§ 32.25 Unusual items and contingent liabilities.

Extraordinary items, prior period adjustments, and contingent liabilities may be recorded in the company's books of account without prior Commission approval.

[65 FR 16334, Mar. 28, 2000]

§ 32.26 Materiality.

Companies shall follow this system of accounts in recording all financial and statistical data irrespective of an individual item's materiality under GAAP, unless a waiver has been granted under the provisions of § 32.18 of this subpart to do otherwise.

§ 32.27 Transactions with affiliates.

(a) Unless otherwise approved by the Chief, Common Carrier Bureau, transactions with affiliates involving asset transfers into or out of the regulated accounts shall be recorded by the carrier in its regulated accounts as provided in paragraphs (b) through (f) of this section.

(b) Assets sold or transferred between a carrier and its affiliate pursuant to a tariff, including a tariff filed with a state commission, shall be recorded in the appropriate revenue accounts at the tariffed rate. Non-tariffed assets sold or transferred between a carrier and its affiliate that qualify for prevailing price valuation, as defined in paragraph (d) of this section, shall be recorded at the prevailing price. For all other assets sold by or transferred from a carrier to its affiliate, the assets shall be recorded at the higher of fair market value and net book cost. For all other assets purchased by or transfered to a carrier from its affiliate, the assets shall be recorded at the lower of fair market value and net book cost. For purposes of this section carriers are required to make a good faith determination of fair market value.

(c) Services provided between a carrier and its affiliate pursuant to a tariff, including a tariff filed with a state commission, shall be recorded in the appropriate revenue accounts at the tariffed rate. Non-tariffed services provided between a carrier and its affiliate pursuant to publicly-filed agreements submitted to a state commission pursuant to section 252(e) of the Communications Act of 1934 or statements of generally available terms pursuant to section 252(f) shall be recorded using the charges appearing in such publicly-filed agreements or statements. Non-tariffed services provided between a carrier and its affiliate that qualify for prevailing price valuation, as defined in paragraph (d) of this section, shall be recorded at the prevailing price. For all other services provided by a carrier to its affiliate, the services shall be recorded at the higher of fair market value and fully distributed cost. For all other services received by a carrier from its affiliate, the service shall be recorded at the lower of fair market value and fully distributed cost. For purposes of this section, carriers are required to make a good faith determination of fair market value for a service when the total aggregate annual value of that service reaches or exceeds $500,000. When a carrier reaches or exceeds the $500,000 threshold for a particular service for the first time, the carrier must perform the market valuation and value the transaction in accordance with the affiliate transactions rules on a going-forward basis. All services received by a carrier from its affiliate(s) that exist solely to provide services to members of the carrier's corporate family shall be recorded at fully distributed cost.

(d) In order to qualify for prevailing price valuation in paragraphs (b) and (c) of this section, sales of a particular asset or service to third parties must encompass greater than 50 percent of the total quantity of such product or service sold by an entity. Carriers shall apply this 50 percent threshold on a asset-by-asset and service-by-service basis, rather than on a product line or service line basis. In the case of transactions for assets and services subject to section 272, a BOC may record such transactions at prevailing price regardless of whether the 50 percent threshold has been satisfied.

(e) Income taxes shall be allocated among the regulated activities of the carrier, its nonregulated divisions, and members of an affiliated group. Under circumstances in which income taxes are determined on a consolidated basis by the carrier and other members of the affiliated group, the income tax expense to be recorded by the carrier shall be the same as would result if determined for the carrier separately for all time periods, except that the tax effect of carry-back and carry-forward operating losses, investment tax credits, or other tax credits generated by operations of the carrier shall be recorded by the carrier during the period in which applied in settlement of the taxes otherwise attributable to any member, or combination of members, of the affiliated group.

(f) Companies that employ average schedules in lieu of actual costs are exempt from the provisions of this section. For other organizations, the principles set forth in this section shall apply equally to corporations, proprietorships, partnerships and other forms of business organizations.

[52 FR 6561, Mar. 4, 1987; 52 FR 39534, Oct. 22, 1987, as amended at 62 FR 2925, Jan. 21, 1997; 65 FR 16334, Mar. 28, 2000]

Subpart C—Instructions for Balance Sheet Accounts

§ 32.101 Structure of the balance sheet accounts.

The Balance Sheet accounts shall be maintained as follows:

Account 1120, Cash and Equivalents, through Account 1500, Other Jurisdictional Assets—Net, shall include assets other than regulated-fixed assets.

Account 2001, Telecommunications Plant in Service, through Account 2007, Goodwill, shall include the regulated fixed assets.

Account 3100, Accumulated Depreciation through Account 3600, Accumulated Amortization—Other, shall include the asset and deferred tax reserves.

Account 4010, Accounts Payable, through Account 4550, Retained Earnings, shall include all liabilities and stockholders equity.

§ 32.102 Nonregulated investments.

Nonregulated investments shall include the investment in nonregulated activities that are conducted through the same legal entity as the telephone company operations, but do not involve the joint or common use of assets or resources in the provision of both regulated and nonregulated products and services. See §§ 32.14 and 32.23.

[52 FR 6561, Mar. 4, 1987]

§ 32.103 Balance sheet accounts for other than regulated-fixed assets to be maintained.

BALANCE SHEET ACCOUNTS

Account title	Class A account	Class B account
Current Assets		
Cash and equivalents:		
Cash and equivalents	.....	1120
Cash	1130	.....
Special cash deposits	1140	.....
Working cash advances	1150	.....
Temporary investments	1160	.....
Receivables and allowances for doubtful accounts:		
Telecommunications accounts receivable	1180	1180
Accounts receivable allowance—telecommunications	1181	1181
Other accounts receivable	1190	1190
Accounts receivable allowance—other	1191	1191
Notes receivable	1200	1200
Notes receivable allowance	1201	1201
Interest and dividends receivable	1210	1210
Supplies:		
Material and supplies	1220	1220
Prepayments:		
Prepayments	.....	1280
Prepaid rents	1290	.....
Prepaid taxes	1300	.....
Prepaid insurance	1310	.....
Prepaid directory expenses	1320	.....
Other prepayments	1330	.....
Other current assets:		
Other current assets	1350	1350
Noncurrent Assets		
Investments:		
Investment in affiliated companies	1401	1401
Investments in nonaffiliated companies	1402	1402

BALANCE SHEET ACCOUNTS—Continued

Account title	Class A account	Class B account
Nonregulated investments	1406	1406
Unamortized debt issuance expense	1407	1407
Sinking funds	1408	1408
Other noncurrent assets	1410	1410
Deferred charges:		
Deferred tax regulatory asset	1437	1437
Deferred maintenance and retirements	1438	1438
Deferred charges	1439	1439
Other:		
Other jurisdictional assets—net	1500	1500

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 9418, Feb. 28, 1994]

§ 32.1120 Cash and equivalents.

This account shall be used by Class B companies to record assets of the type required of Class A companies in Accounts 1130 through 1160.

§ 32.1130 Cash.

(a) This account shall include the amount of current funds available for use on demand in the hands of financial officers and agents, deposited in banks or other financial institutions and also funds in transit for which agents have received credit.

(b) Working cash advances shall be included in Account 1150, Working Cash Advances.

§ 32.1140 Special cash deposits.

(a) This account shall include the amount of cash on special deposit, other than in sinking and other special funds provided for elsewhere, to pay dividends, interest, and other debts, when such payments are due one year or less from the date of deposit; the amount of cash deposited to insure the performance of contracts to be performed within one year from date of the deposit; and other cash deposits of a special nature not provided for elsewhere. This account shall include the amount of cash deposited with trustees to be held until mortgaged property sold, destroyed, or otherwise disposed of is replaced, and also cash realized from the sale of the company's securities and deposited with trustees to be held until invested in physical property of the company or for disbursement when the purposes for which the securities were sold are accomplished.

(b) Cash on deposit in special accounts where the funds are available for the current requirements of the company shall be included in Account 1130, Cash.

(c) Cash on special deposit to be held for more than one year from the date of deposit shall be included in Account 1410, Other Noncurrent Assets.

§ 32.1150 Working cash advances.

This account shall include the amount of cash advanced to officers, agents, employees, and others as petty cash or working funds from which expenditures are to be made and accounted for.

§ 32.1160 Temporary investments.

(a) This account shall include the cost of current securities acquired for the purpose of temporarily investing cash, such as time drafts receivable and time loans, bankers' acceptances, United States Treasury certificates, marketable securities, and other similar investments of a temporary character.

(b) Accumulated changes in the net unrealized losses of current marketable equity securities shall be included in the determination of net income in the period in which they occur in Account 7360, Other Nonoperating Income.

(c) Subsidiary record categories shall be maintained in order that the entity may separately report the amounts contained herein that relate to affiliates and nonaffiliates. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.1180 Telecommunications accounts receivable.

(a) This account shall include all amounts due from customers for services rendered or billed and from agents and collectors authorized to make collections from customers. This account shall also include all amounts due from customers or agents for products sold. This account shall be kept in such manner as will enable the company to make the following analysis:

(1) Amounts due from customers who are receiving telecommunications service.

(2) Amounts due from customers who are not receiving service and whose accounts are in process of collection.

(b) Collections in excess of amounts charged to this account may be credited to and carried in this account until applied against charges for services rendered or until refunded.

(c) Subsidiary record categories shall be maintained in order that the entity may separately report the amounts contained herein that relate to affiliates and nonaffiliates. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.1181 Accounts receivable allowance—telecommunications.

(a) This account shall be credited with amounts charged to Account 5301, Uncollectible Revenue—Telecommunications, to provide for uncollectible amounts included in Account 1180, Telecommunications Accounts Receivable. There shall also be credited to this account amounts collected which previously had been written off through charges to this account and credits to Account 1180. There shall be charged to this account any amounts covered thereby which have been found to be impracticable of collection.

(b) If no such allowance is maintained, uncollectible amounts shall be charged directly to Account 5301, Uncollectible Revenue—Telecommunications.

(c) Subsidiary record categories shall be maintained in order that the entity may separately report the amounts contained herein that relate to affiliates and nonaffiliates. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.1190 Other accounts receivable.

(a) This account shall include all amounts currently due, and not provided for in other accounts, such as those for traffic settlements, divisions of revenue, material and supplies, matured rents, and interest receivable under monthly settlements on short-term loans, advances, and open accounts.

(b) Subsidiary record categories shall be maintained in order that the entity may separately report the amounts contained herein that relate to affiliates and nonaffiliates. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

(c) Amounts included in this account pertaining to affiliates shall not include amounts receivable from sales of telecommunications service provided at tariffed rates. Such amounts shall be included in Account 1180, Telecommunications Accounts Receivable.

(d) If any items included in this account are not to be paid currently they shall be transferred to Account 1410, Other Noncurrent Assets, or 1401, Investments in Affiliated Companies, as appropriate.

§ 32.1191 Accounts receivable allowance—other.

(a) This account shall be credited with amounts charged to Account 5302, Uncollectible Revenue—Other to provide for uncollectible amounts included in Account 1190, Other Accounts Receivable. There shall also be credited to this account amounts collected which previously had been written off through charges to this account and credits to Account 1190. There shall be charged to this account any amounts covered thereby which have been found to be impracticable of collection.

(b) If no such allowance is maintained, uncollectible amounts shall be charged directly to Account 5302, Uncollectible Revenue—Other.

(c) Subsidiary record categories shall be maintained in order that the entity may separately report the amounts contained herein that relate to affiliates and nonaffiliates. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.1200 Notes receivable.

(a) This account shall include the cost of demand or time notes, bills and drafts receivable, or other similar evidences (except interest coupons) of money receivable on demand or within a time not exceeding one year from date of issue.

(b) Subsidiary record categories shall be maintained in order that the entity may separately report the amounts

contained herein that relate to affiliates and nonaffiliates. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.1201 Notes receivable allowance.

(a) This account shall be credited with amounts charged Account 6790, Provision for Uncollectible Notes Receivable to provide for uncollectible amounts included in Account 1200, Notes Receivable. There shall also be credited to this account amounts collected which previously had been written off through charges to this account and credits to Account 1200. There shall be charged to this account any amounts covered thereby which have been found to be impracticable of collection.

(b) If no such allowance is maintained, uncollectible amounts shall be charged directly to Account 6790, Provision for Uncollectible Notes Receivable.

(c) Subsidiary record categories shall be maintained in order that the entity may separately report the amounts contained herein that relate to affiliates and nonaffiliates. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.1210 Interest and dividends receivable.

(a) This account shall include the amount of interest accrued to the date of the balance sheet on bonds, notes, and other commercial paper owned, on loans made, and the amount of dividends receivable on stocks owned.

(b) This account shall not include dividends or other returns on securities issued or assumed by the company and held by or for it, whether pledged as collateral, or held in its treasury, in special deposits, or in sinking and other funds.

(c) Interest receivable under monthly settlements on short-term loans, advances, and open accounts, shall be included in Account 1180, Telecommunications Accounts Receivable or Account 1190, Other Accounts Receivable, as appropriate.

(d) Dividends received and receivable from affiliated companies accounted for on the equity method shall be included in Account 1401, Investments in Affiliated Companies, as a reduction of the carrying value of the investment.

§ 32.1220 Inventories.

(a) This account shall include the cost of materials and supplies held in stock and inventories of goods held for resale or lease. The investment in inventories shall be maintained in the following subaccounts:

1220.1 Material and supplies
1220.2 Property held for sale or lease

(b) These subaccounts shall not include items which are related to a nonregulated activity unless that activity involves joint or common use of assets and resources in the provision of regulated and nonregulated products and services.

(c) 1220.1 Material and supplies. This subaccount shall include cost of material and supplies held in stock including plant supplies, motor vehicles supplies, tools, fuel, other supplies and material and articles of the company in process of manufacture for supply stock. (Note also § 32.2000(c)(2)(iii) of this subpart.)

(d) Transportation charges and sales and use taxes, so far as practicable, shall be included as a part of the cost of the particular material to which they relate. Transportation and sales and use taxes which are not included as part of the cost of particular material shall be equitably apportioned among the detail accounts to which material is charged.

(e) So far as practicable, cash and other discount on material shall be deducted in determining cost of the particular material to which they relate or credited to the account to which the material is charged. When such deduction is not practicable, discounts shall be equitably apportioned among the detail accounts to which material is charged.

(f) Material recovered in connection with construction, maintenance or retirement of property shall be charged to this account as follows:

(1) Reusable items that, when installed or in service, were retirement units shall be included in this account at the original cost, estimated if not

known. (Note also § 32.2000(d)(3) of this subpart.)

(2) Reusable minor items that, when installed or in service, were not retirement units shall be included in this account at current prices new.

(3) The cost of repairing reusable material shall be charged to the appropriate account in the Plant Specific Operations Expense accounts.

(4) Scrap and nonusable material included in this account shall be carried at the estimated amount which will be received therefor. The difference between the amounts realized for scrap and nonusable material sold and the amounts at which it is carried in this account, so far as practicable, shall be adjusted in the accounts credited when the material was taken up in this account.

(g) Interest paid on material bills, the payments of which are delayed, shall be charged to Account 7540, Other interest deductions.

(h) Inventories of material and supplies shall be taken during each calendar year and the adjustments to this account shall be charged or credited to Account 6512, Provisioning expense.

(i) 1220.2 Property held for sale or lease. This subaccount shall include the cost of all items purchased for resale or lease. The cost shall include applicable transportation charges, sales and use taxes, and cash and other purchase discounts. Inventory shortage and overage shall be charged and credited, respectively, to Account 5280, Nonregulated operating revenue.

[52 FR 39534, Oct. 22, 1987, as amended at 53 FR 49322, Dec. 7, 1988]

§ 32.1280 Prepayments.

This account shall be used by Class B companies to record assets of the type required of Class A companies in Accounts 1290 through 1330.

§ 32.1290 Prepaid rents.

This account shall include the amounts of rents paid in advance of the period in which they are chargeable to income, except amounts chargeable to telecommunications plant under construction and minor amounts which may be charged directly to the final accounts. As the term expires for which the rents are paid, this account shall be credited monthly and the appropriate account charged.

§ 32.1300 Prepaid taxes.

This account shall include the balance of all taxes, other than amounts chargeable to telecommunication plant under construction and minor amounts which may be charged to the final accounts, paid in advance and which are chargeable to income within one year. As the term expires for which the taxes are paid, this account shall be credited monthly and the appropriate account charged.

§ 32.1310 Prepaid insurance.

This account shall include the amount of insurance premiums paid in advance of the period in which they are chargeable to income, except premiums chargeable to telecommunications plant under construction and minor amounts which may be charged directly to the final accounts. As the term expires for which the premiums are paid, this account shall be credited monthly and the appropriate account charged.

§ 32.1320 Prepaid directory expenses.

This account shall include the cost of preparing, printing, binding, and delivering directories and the cost of soliciting advertisements for directories, except minor amounts which may be charged directly to Account 6622, Number Services. Amounts in this account shall be cleared to Account 6622 by monthly charges representing that portion of the expenses applicable to each month.

§ 32.1330 Other prepayments.

This account shall include prepayments, other than those includable in Accounts 1290 through 1320, except minor amounts which may be charged directly to the final accounts. As the term expires for which the payments apply, this account shall be credited monthly and the appropriate account charged.

§ 32.1350 Other current assets.

This account shall include the amount of all current assets which are not includable in Accounts 1120 through 1330.

§ 32.1401 Investments in affiliated companies.

(a) This account shall include the acquisition cost of the company's investment in equity or other securities issued or assumed by affiliated companies, other than securities held in special funds which shall be charged to Account 1408, Sinking Funds. The carrying value of the investment (securities) accounted for on the equity method shall be adjusted to recognize the company's share of the earnings or losses and dividends received or receivable of the affiliated company from the date of acquisition. (Note also Account 1210, Interest and Dividends Receivable, and Account 7310, Dividend Income.)

(b) Declines in value of investments accounted for under the cost method shall be charged to Account 4540, Other Capital, if temporary and as a current period loss if permanent. Detail records shall be maintained to reflect unrealized losses for each investment.

(c) A subsidiary record shall be kept identifying separately common stocks, preferred stocks, advances to affiliates, and long-term debt. Further, the company's records shall identify the securities pledged as collateral for any of the company's long-term debt or short-term loans or to secure performance of contracts.

(d) This account shall also include advances represented by book accounts only with respect to which it is carried or intended that they shall be either settled by issuance of capital stock or debt; or shall not be subject to current cost settlement.

(e) Amounts due from affiliated companies which are subject to current settlement shall be included in Account 1180, Telecommunications Accounts Receivable, Account 1190, Other Accounts Receivable, or Account 1200, Notes Receivable, as appropriate.

(f) Subsidiary record categories shall be maintained in order that the entity may separately report the amounts contained herein that relate to the equity method and the cost method. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.1402 Investments in nonaffiliated companies.

(a) This account shall include the acquisition cost of the Company's investment in securities issued or assumed by nonaffiliated companies and individuals, other than securities held in special funds which shall be charged to Account 1408, Sinking Funds, and also its investment advances to such parties and special deposits of cash for more than one year from date of deposit.

(b) Declines in value of investments shall be charged to Account 4540, Other Capital, if temporary and as a current period loss if permanent. Detail records shall be maintained to reflect unrealized losses for each investment.

(c) This account shall also include advances represented by book accounts only with respect to which it is agreed or intended that they shall be either settled by issuance of capital stock or debt; or shall not be subject to current cost settlement.

(d) A subsidiary record shall be kept identifying separately common stocks, preferred stocks, long-term debt, investment advances and special deposits of cash for more than one year from the date of deposit. Further, the company's record shall identify the securities pledged as collateral for any of the company's long-term debt or short-term loans or to secure performance of contracts.

(e) Amounts due from nonaffiliated companies which are subject to current settlement shall be included in Account 1180, Telecommunications Accounts Receivable, Account 1190, Other Accounts Receivable, or Account 1200, Notes Receivable, as appropriate.

§ 32.1406 Nonregulated investments.

(a) This account shall include the carrier's investment in nonregulated activities accounted for in a separate set of books as provided in § 32.23(b).

(b) This account shall be subdivided as follows:

1406.1 Permanent investment.
1406.2 Receivable/payable.
1406.3 Current net income or loss.

[52 FR 6561, Mar. 4, 1987; 52 FR 39535, Oct. 22, 1987]

§ 32.1407 Unamortized debt issuance expense.

(a) This account shall include the total unamortized balance of debt issuance expense for all classes of outstanding long-term debt. Amounts included in this account shall be amortized monthly and charged to account 7530, Amortization of Debt Issuance Expense.

(b) Debt Issuance expense includes all expenses in connection with the issuance and sale of evidence of debt, such as fees for drafting mortgages and trust deeds; fees and taxes for issuing or recording evidences of debt; costs of engraving and printing bonds, certificates of indebtedness, and other commercial paper; fees paid trustees; specific costs of obtaining governmental authority; fees for legal services; fees and commissions paid underwriters, brokers, and salesmen; fees and expenses of listing on exchanges, and other like costs.

(c) A subsidiary record shall be kept of each issue outstanding.

§ 32.1408 Sinking funds.

(a) This account shall include the amount of cash and other assets which are held by trustees or by the company's treasurer in a distinct fund, for the purpose of redeeming outstanding obligations.

(b) Interest or other income arising from funds carried in this account shall generally be charged to this account.

(c) A subsidiary record shall be kept for each sinking fund which shall designate the obligation in support of which the fund was created.

§ 32.1410 Other noncurrent assets.

This account shall include the amount of all noncurrent assets which are not includable in Accounts 1401 through 1408.

§ 32.1437 Deferred tax regulatory asset.

(a) This account shall include amounts of probable future revenue for the recovery of future increases in taxes payable. As reversals occur, amounts recorded in this account shall be reduced with a credit entry and a debit entry to Account 4341, Net Deferred Tax Liability Adjustments.

(b) This account shall also be adjusted for the impact of prospective tax rate changes on the deferred tax liability for those temporary differences underlying its existing balance. If the cumulative effect of such adjustments reduce the account to a net credit balance, such balance shall be reclassified to Account 4361.

[59 FR 9418, Feb. 28, 1994]

§ 32.1438 Deferred maintenance and retirements.

(a) This account shall include such items as the unprovided-for loss in service value of telecommunications plant for extraordinary nonrecurring retirement not considered in depreciation and the cost of extensive replacements of plant normally chargeable to the current period Plant Specific Operations Expense accounts.

(b) Charges provided for in paragraph (a) of this section shall be included in this account only upon direction or approval from this Commission. However, the company's application to this Commission for such approval shall give full particulars concerning the property retired, the extensive replacements, the amount chargeable to operating expenses and the period over which in its judgment the amount of such charges should be distributed.

§ 32.1439 Deferred charges.

(a) This account shall include all deferred charges not provided for in Accounts 1438, Deferred Maintenance and Retirements, and 1500, Other Jurisdictional Assets—Net. Such charges include unaudited amounts and other debit balances in suspense that cannot be cleared and disposed of until additional information is received; the amount, pending determination of loss, of funds on deposit with banks which have failed; revenue, expense, and income items held in suspense; amounts paid for options pending final disposition.

(b) This account shall include the cost of preliminary surveys, plans, investigation, etc., made for construction projects under contemplation. If the projects are carried out, the preliminary costs shall be included in the cost of the plant constructed. If the projects are abandoned, the preliminary costs

shall be charged to Account 7370, Special Charges.

(c) This account shall include also the cost of evaluations, inventories, and appraisals taken in connection with the acquisition or sale of property. If the property is subsequently acquired, the preliminary costs shall be accounted for as a part of the cost of acquisition, or if it is sold, such costs shall be deducted from the sale price in accounting for the property sold. If purchases or sales are abandoned, the preliminary costs included herein (including options paid, if any) shall be charged to Account 7370.

§ 32.1500 Other jurisdictional assets—net.

This account shall include the cumulative impact on assets of jurisdictional ratemaking practices which vary from those of this Commission. All entries recorded in this account shall be recorded net of any applicable income tax effects and shall be supported by subsidiary records where necessary as provided for in § 32.13(e) of subpart B.

§ 32.2000 Instructions for telecommunications plant accounts.

(a) *Purpose of telecommunications plant accounts.* (1) The telecommunications plant accounts (2001 to 2007 inclusive) are designed to show the investment in the company's tangible and intangible telecommunications plant which ordinarily has a service life of more than one year, including such plant whether used by the company or others in providing telecommunications service.

(2) The telecommunications plant accounts shall not include the cost or other value of telecommunications plant contributed to the company. Contributions in the form of money or its equivalent toward the construction of telecommunications plant shall be credited to the accounts charged with the cost of such construction. Amounts of non-recurring reimbursements based on the cost of plant or equipment furnished in rendering service to a customer shall be credited to the accounts charged with the cost of the plant or equipment. Amounts received for construction which are ultimately to be repaid wholly or in part, shall be credited to Account 4360, Other Deferred Credits; when final determination has been made as to the amount to be returned, any unrefunded amounts shall be credited to the accounts charged with the cost of such construction. Amounts received for the construction of plant, the ownership of which rests with or will revert to others, shall be credited to the accounts charged with the cost of such construction. (Note also Account 7110, Income from Custom Work.)

(3) When telecommunications plant ordinarily having a service life of more than one year is installed for temporary use in providing telecommunications service, it shall be accounted for in the same manner as plant having a service life of more than one year. This includes temporary installations of plant (such as poles, wire and cable) installed to maintain service during the progress of highway reconstruction or during interruptions due to storms or other casualties, equipment used for the training of operators, equipment used to provide intercepting positions in central offices to handle traffic for a short period following extensive system changes and similar installations of property used to provide telecommunications service.

(4) The cost of the individual items of equipment, classifiable to Accounts 2112, Motor vehicles; 2113, Aircraft; 2114, Special purpose vehicles; 2115, Garage work equipment; 2116, Other work equipment; 2122, Furniture; 2123, Office equipment; 2124, General purpose computers, costing $2,000 or less or having a life of less than one year shall be charged to the applicable expense accounts, except for personal computers falling within Account 2124. Personal computers classifiable to Account 2124, with a total cost for all components of $500 or less, shall be charged to the applicable Plant Specific Operations Expense accounts. If the aggregate investment in the items is relatively large at the time of acquisition, such amounts shall be maintained in an applicable material and supplies account until items are used.

(b) *Telecommunications plant acquired.* (1) Property, plant and equipment acquired from an entity, whether or not

affiliated with the accounting company, shall be accounted for at original cost, except that property, plant and equipment acquired from a non-affiliated entity shall be accounted for at acquisition cost if the purchase price is less than $100,000 for Class A companies or $25,000 for Class B companies.

(2) The accounting for property, plant and equipment to be recorded at original cost shall be as follows:

(i) The amount of money paid (or current money value of any consideration other than money exchanged) for the property (together with preliminary expenses incurred in connection with the acquisition) shall be charged to Account 1439, Deferred Charges.

(ii) The original cost, estimated if not known, of telecommunications plant, governmental franchises and other similar rights acquired shall be charged to the applicable telecommunications plant accounts, Telecommunications Plant Under Construction, and Property Held For Future Telecommunications Use, as appropriate, and credited to Account 1439. When the actual original cost cannot be determined and estimates are used, the company shall be prepared to furnish the Commission with the particulars of such estimates.

(iii) Depreciation and amortization of plant acquired shall be credited to Account 3100, Accumulated Depreciation, or Account 3200, Accumulated Depreciation—Held for Future Telecommunications Use, 3400, Accumulated Amortization—Tangible, 3410, Accumulated Amortization—Capitalized Leases, 3420, Accumulated Amortization—Leasehold Improvements, 3500, Accumulated Amortization—Intangibles, and 3600, Accumulated Amortization—Other, and debited to Account 1439.

(iv) Any amount remaining in Account 1439, applicable to the plant acquired, shall, upon completion of the entries provided in paragraphs (b)(2)(i), (ii) and (iii) of this section, be debited or credited, as applicable, to Account 2007, Goodwill, or to Account 2005, Telecommunications Plant Adjustment, as appropriate.

(3) A memorandum record shall be kept showing the amount of contributions in aid of construction applicable to the property acquired as shown by the accounts of the previous owner.

(c) *Cost of construction.* (1) Telecommunications plant represents an economic resource which will be used to provide future services, the cost of which will be allocated in a rational and systematic manner to the future periods in which it provides benefits. In accounting for construction costs, the utility shall charge to the telecommunications plant accounts, where applicable, all direct and indirect costs.

(2) Direct and indirect costs shall include, but not be limited to:

(i) ''Labor'' includes the wages and expenses of employees directly engaged in or in direct charge of construction work. It includes expenses directly related to an employee's wages, such as worker's compensation insurance, payroll taxes, benefits and other similar items of expense.

(ii) ''Engineering'' includes the portion of the wages and expenses of engineers, draftsmen, inspectors, and their direct supervision applicable to construction work. It includes expenses directly related to an employee's wages, such as worker's compensation insurance, payroll taxes, benefits and other similar items of expense.

(iii) ''Material and supplies'' includes the purchase price of material used at the point of free delivery plus the costs of inspection, loading and transportation, and an equitable portion of provisioning expense. In determining the cost of material used, proper allowance shall be made for unused material, for material recovered from temporary structures used in performing the work involved, and for discounts allowed and realized in the purchase of material. This item does not include construction material that is stolen or rendered unusable due to vandalism. Such material should be charged to the applicable plant specific operations expense accounts.

(iv) ''Transportation'' includes the cost of transporting employees, material and supplies, tools and other work equipment to and from the physical construction location. It includes amounts paid therefor to other companies or individuals and the cost of

using the company's own motor vehicles or other transportation equipment.

(v) ''Contract work'' includes amounts paid for work performed under contract or other agreement by other companies, firms or individuals; engineering and supervision applicable to such work; cost incident to the award of contracts; and the inspection of such work. The cost of construction work performed by affiliated companies and other details relating thereto shall be available from the work in progress and supporting records.

(vi) ''Protection'' includes the cost of protecting the company's property from fire or other casualties and the cost of preventing damages to others or the property of others.

(vii) ''Privileges, Permits, and Rights of way'' includes such costs incurred in obtaining these privileges, permits, or rights of way in connection with construction work, such as for use of private property, streets or highways. The cost of such privileges and permits shall be included in the cost of the work for which the privileges or permits are obtained, except for costs includable in Account 2111, Land, and Account 2690, Intangibles.

(viii) ''Taxes'' includes taxes properly includable in construction costs before the facilities are completed for service, which taxes are assessed separately from taxes on operating property or under conditions that permit separate identification of the amount chargeable to construction.

(ix) ''Special machine service'' includes the cost of labor expended, materials and supplies consumed and other expenses incurred in the maintenance, operation and use of special and other labor saving machines (other than transportation equipment (such as trenching equipment, cable plows and pole setting trucks. Also included are expenditures for rental, maintenance and operation of such machines owned by others. When a construction job requires the purchase of special machines, the cost thereof, less the appraised or salvage value at the time of release from the job, shall be included in the cost of construction.

(x) Allowance for funds used during construction (''AFUDC'') provides for the cost of financing the construction of telecommunications plant. AFUDC shall be charged to Account 2003, Telecommunications Plant Under Construction, and credited to Account 7340. The rate for calculating AFUDC shall be determined as follows: If financing plans associate a specific new borrowing with an asset, the rate on that borrowing may be used for the asset; if no specific new borrowing is associated with an asset or if the average accumulated expenditures for the asset exceed the amounts of specific new borrowing associated with it, the capitalization rate to be applied to such excess shall be weighted average of the rates applicable to other borrowing of the enterprise. The amount of interest cost capitalized in an accounting period shall not exceed the total amount of interest cost incurred by the company in that period.

(xi) ''Insurance'' includes premiums paid specifically for protection against loss and damage in connection with the construction of telecommunications plant due to fire or other casualty, injury to or death of employees or others, damages to property of others, defalcations of employees and agents and the non-performance of contractual obligations of others.

(xii) ''Construction services'' include the cost of telephone, electricity, power, construction quarters, office space and equipment directly related to the construction project.

(xiii) ''Indirect construction costs'' shall include indirect costs such as general engineering, supervision and support. Such costs, in addition to direct supervision, shall include indirect plant operations and engineering supervision up to, but not including, supervision by executive officers whose pay and expenses are chargeable to Account 6711, Executive. The records supporting the entries for indirect construction costs shall be kept so as to show the nature of the expenditures, the individual jobs and accounts charged, and the bases of the distribution. The amounts charged to each plant account for indirect costs shall be readily determinable. The instructions contained herein shall not be interpreted as permitting the addition to

plant of amounts to cover indirect costs based on arbitrary allocations.

(xiv) The cost of construction shall not include any amounts classifiable as Corporate Operations Expense.

(d) *Telecommunications plant retired.* (1) Telecommunications plant accounts shall at all times disclose the original cost of all property in service. When any item of property subject to plant retirement accounting is worn out, lost, sold, destroyed, abandoned, surrendered upon lapse of title, becomes permanently unserviceable, is withdrawn or for any other reason is retired from service, the plant accounts applicable to that item shall be credited with the original cost of the plant retired whether replaced or not (except as provided for minor items in paragraph (d)(2)(ii) of this section). Normally, these retirement credits with respect to such plant as entire buildings, entire central offices, all plant abandoned and any large sections of plant withdrawn from service, shall be entered in the accounts for the month in which use of the property ceased. For any other plant withdrawn from service, the retirement credits shall be entered no later than the next succeeding month. Literal compliance with the provision for timing of entries with respect to property amounting to less than $50,000 retired under any one project is not required if an unreasonable amount of recordkeeping and estimating of quantities, original costs and salvage is necessary. The retirement entry shall refer to the continuing property record, or records supplemental thereto, from which the cost was obtained (note also paragraph (d)(3) of this section). Every company shall establish procedures which will ensure compliance with these requirements.

(2) To avoid undue refinement, depreciable telecommunications plant shall be accounted for as follows:

(i) Retirement units: This group includes major items of property, a representative list of which shall be prescribed by this Commission. In lieu of the retirement units prescribed with respect to a particular account, a company may, after obtaining specific approval by this Commission, establish and maintain its own list of retirement units for a portion or all of the plant in any such account. For items included on the retirement units list, the original cost of any such items retired shall be credited to the plant account and charged to Account 3100, Accumulated Depreciation, whether or not replaced. The original cost of retirement units installed in place of property retired shall be charged to the applicable telecommunications plant account.

(ii) Minor items: This group includes any part or element of plant which is not designated as a retirement unit. The original cost of a minor item of property when included in the specific or average cost for a retirement unit or units requires no separate credit to the telecommunications plant account when such a minor item is retired. The cost of replacement shall be charged to the account applicable for the cost of repairs of the property. However, if the replacement effects a substantial betterment (the primary aim of which is to make the property affected more useful, of greater durability, of greater capacity or more economical in operation), the excess cost of such a replacement, over the estimated cost at the then current prices of replacement without betterment of the minor items being retired, shall be charged to the applicable telecommunications plant account.

(3) The cost of property to be retired shall be the amount at which property is included in the telecommunications plant accounts. However, when it is impracticable to determine the cost of each item due to the relatively large number or small cost of such items, the average cost of all the items covered by an appropriate subdivision of the account shall be used in determining the cost to be assigned to such items when retired. The method used in determining average cost must give due regard to the quantity, vintage, size and kind of items, the area in which they were installed and their classification in other respects. Average cost may be applied in retirement of such items as poles, wire, cable, cable terminals, conduit and booths. Any company may use average cost of property installed in a year or band of years as approved by the Commission. It should be understood, however, that the use of average

costs shall not relieve the company of the requirement for maintaining its continuing property records to show, where practicable, dates of installation and removal for purposes of mortality studies. (See § 32.2000(f) of this subpart, Standard Practices for Establishing and Maintaining Continuing Property Records.)

(4) The accounting for the retirement of property, plant and equipment shall be as provided above except:

(i) Amounts included in Account 2005, Telecommunications Plant Adjustment; Account 2680, Amortizable Tangible Assets; Account 2681, Capital Leases; Account 2682, Leasehold Improvements; Account 2690, Intangibles; and any amounts associated with amortizable leaseholds, easements, and similar rights in land included in Account 2111, Land, shall be debited, as appropriate, to Account 3400, 3410, 3420, 3500, or 3600, and credited to the applicable accounts.

(ii) Amounts in Account 2111, Land, and amounts for works of art recorded in Account 2122, Furniture, shall be treated at disposition as a gain or loss and shall be credited or debited to Account 7150, Gains and Losses from Disposition of Land and Artwork, as applicable. If land or artwork is retained by the company and held for sale, the cost shall be charged to Account 2006, Nonoperating Plant.

(5) When the telecommunications plant is sold together with traffic associated therewith, the original cost of the property shall be credited to the applicable plant accounts and the estimated amounts carried with respect thereto in the accumulated depreciation and amortization accounts shall be charged to such accumulated accounts. The difference, if any, between the net amount of such debit and credit items and the consideration received (less commissions and other expenses of making the sale) for the property shall be included in Account 7350, Gains and Losses from Disposition of Certain Property. The accounting for depreciable telecommunications plant sold without the traffic associated therewith shall be in accordance with the accounting provided in § 32.3100(c) of this subpart.

(e) *Basic property records.* (1) The basic property records are that portion of the total property accounting system which preserves the following detailed information:

(i) The identity, vintage, location and original cost of units of property;

(ii) Original and ongoing transactional data (plant account activity) in terms of such units; and

(iii) Any other specific financial and cost accounting information not properly warranting separate disclosure as an account or subaccount but which is needed to support regulatory, cost, tax, management and other specific accounting information needs and requirements.

(2) The basic property records must be: (i) Subject to internal accounting controls, (ii) auditable, (iii) equal in the aggregate to the total investment reflected in the financial property control accounts as well as the total of the cost allocations supporting the determination of cost-of-service at any particular point in time, and (iv) maintained throughout the life of the property.

(3) The basic property records shall consist of (i) continuing property records and (ii) records supplemental thereto which together reveal clearly, by accounting area, the detailed and systematically summarized information necessary to meet fully the requirements of paragraphs (e)(1) and (e)(2) of this section.

(4) Companies shall establish and maintain basic property records for each class of property recorded in the several plant accounts which comprise the balance sheet Account 2001, Telecommunications Plant In Service, Account 2002, Property Held for Future Telecommunications Use, and Account 2006, Nonoperating Plant.

(5) The company shall notify the Commission of a plan for the basic property record as follows:

(i) Not later than June 30 of the year following that in which it becomes subject to this system of accounts, the company shall file with the Commission two (2) copies of a complete plan of the method to be used in the compilation of a basic property record with respect to each class of property. The

plan shall include a list of proposed accounting areas accompanied by description of the boundaries of each area as defined in accordance with the requirements of § 32.2000(f)(1) (i) and (ii) of this subpart. The plan shall also include a list of property record units proposed for use under each regulated plant account. These property record units shall be selected such that the requirements of § 32.2000(f)(2) (i), (ii) and (iii) of this subpart can be satisfied.

(ii) The company shall submit to the Commission one copy of any major proposed changes in its basic property record plan at least 30 days before the effective date of the proposed changes.

(6) The company shall prepare and maintain the basic property record as follows:

(i) Not later than June 30 of the year following that in which the company becomes subject to this system of accounts, begin the preparation of a basic property record.

(ii) Complete within two years of the prescribed beginning date, basic property records for all property as of the end of the preceding calendar year.

(iii) Promptly process in the basic property records all property changes affecting periods subsequent to initial establishment of the basic property record.

(7) The basic property record components (see paragraph (c) of this section) shall be arranged in conformity with the regulated plant accounts prescribed in this section of accounts as follows:

(i) The continuing property records shall be compiled on the basis of original cost (or other book cost consistent with this system of accounts). The continuing property records shall be maintained as prescribed in § 32.2000(f)(2)(iii) of this subpart in such manner as will meet the following basic objectives:

(A) Provide for the verification of property record units by physical examination.

(B) Provide for accurate accounting for retirements.

(C) Provide data for use in connection with depreciation studies.

(ii) The records supplemental to the continuing property records shall disclose such service designations, usage measurement criteria, apportionment factors, or other data as may be prescribed by the Commission in this part or other parts of its Rules and Regulations. Such data are subject to the same general controls and standards for auditability and support as are all other elements of the basic property records.

(f) *Standard practices for establishing and maintaining continuing property records*—(1) *Accounting area.* (i) The continuing property record, as related to each primary plant account, shall be established and maintained by subaccounts for each accounting area. An accounting area is the smallest territory of the company for which accounting records of investment are maintained for all plant accounts within the area. Areas already established for administrative, accounting, valuation, or other purposes may be adopted for this purpose when appropriate. In no case shall the boundaries of accounting areas cross either State lines or boundaries prescribed by the Commission.

(ii) In determining the limit of each area, consideration shall be given to the quantities of property, construction conditions, operating districts, county and township lines, taxing district boundaries, city limits, and other political or geographical limits, in order that the area adopted may have maximum adaptability, within the confines of practicability, for both the company's purpose and those of Federal, State, and municipal authorities.

(2) *Property record units.* (i) In each of the established accounting areas, the ''property record units'' which are to be maintained in the continuing property record shall be set forth separately, classified by size and type with the amount of original cost (or other appropriate book cost) associated with such units. When a list of property record units has been accepted by the Commission, they shall become the units referred to in this statement of standard practices. Such units shall apply to only the regulated portion of this system of accounts.

(ii) When it is found necessary to revise this list because of the addition of units used in providing new types of service, or new units resulting from improvements in technology, or because of the grouping or elimination of units which no longer merit separate

recognition as property record units, one copy of such changes shall be submitted to the Commission. Upon appropriate showing by the company, the Commission may specifically exempt the company from these filing requirements.

(iii) The continuing property record shall reveal the description, location, date of placement, the essential details of construction, and the original cost (note also § 32.2000(f)(3) of this subpart) of the property record units. The continuing property record and other underlying records of construction costs shall be so maintained that, upon retirement of one or more retirement units or of minor items without replacement when not included in the costs of retirement units, the actual cost or a reasonably accurate estimate of the cost of the plant retired can be determined.

(3) *Methods of determining original cost of property record units.* The original cost of the property record units shall be determined by analyses of the construction costs incurred as shown by completion reports and other data, accumulated in the respective construction work orders or authorizations. Costs shall be allocated to and associated with the property record units to facilitate accounting for retirements. The original cost of property record units shall be determined by unit identification or averaging as described in paragraphs (f)(3) (i) and (ii) of this section.

(i) *Unit identification.* Cost shall be identified and maintained by specific location for property record units contained within certain regulated plant accounts or account groupings such as Land, Buildings, Central Office Assets, Motor Vehicles, Garage Work Equipment, and Furniture. In addition, units involved in any unusual or special type of construction shall be recorded by their specific location costs (note also § 32.2000(f)(3)(ii)(B) of this subpart.

(ii) *Averaging.* (A) Average costs may be developed for plant consisting of a large number of similar units such as terminal equipment, poles, wire, cable, cable terminals, conduit, furniture, and work equipment. Units of similar size and type within each specified accounting area and regulated plant account may be grouped. Each such average cost shall be set forth in the continuing property record of the units with which it is associated.

(B) The averaging of costs permitted under the provisions of the foregoing paragraph is restricted to plant installed in a particular vintage or band of years incurred within an accounting area. This paragraph does not permit the inclusion of the cost of units involved in any unusual or special type of construction. The units involved in such unusual or special type of construction shall be recorded at cost by location.

(4) *Estimates.* In cases where the actual original cost of property cannot be ascertained, such as pricing an inventory for the initial entry of a continuing property record or the pricing of an acquisition for which a continuing property record has not been maintained, the original cost may be estimated. Any estimated original cost shall be consistent with the accounting practices in effect at the time the property was constructed.

(5) *Identification of property record units.* There shall be shown in the continuing property record or in record supplements thereof, a complete description of the property records units in such detail as to identify such units. The description shall include the identification of the work order under which constructed, the year of installation (unless not determinable per § 32.2000(f)(4) of this subpart, specific location of the property within each accounting area in such manner that it can be readily spot-checked for proof of physical existence, the accounting company's number or designation, and any other description used in connection with the determination of the original cost. Descriptions of units of similar size and type shall follow prescribed groupings.

(6) *Reinstalled units.* When units to which average costs are not applied, i.e., specific and fixed location units, are removed or retired and subsequently reinstalled, the date when the unit was first charged to the appropriate plant account shall, when required for adequate service life studies

and reasonably accurate retirement accounting, be shown in addition to the date of reinstallation.

(7) *Age and service life of property*. The continuing property record shall disclose the age of existing property and the supporting records shall disclose the service life of property retired. Exceptions from this requirement for any property record unit shall be submitted to the Commission for approval.

(8) *Reference to sources of information*. There shall be shown by appropriate reference the source of all entries. All drawings, computations, and other detailed records which support quantities and costs or estimated costs shall be retained as a part of or in support of the continuing property record.

(9) *Jointly owned property*. (i) With respect to jointly owned property, there shall be shown in the continuing property record or records supplemental thereto:

(A) The identity of all joint owners.

(B) The percentage owned by the accounting company.

(ii) When regulated plant is constructed under arrangements for joint ownership, the amount received by the constructing company from the other joint owner or owners shall be credited as a reduction of the gross cost of the plant in place.

(iii) When a sale of a part interest in regulated plant is made, the fractional interest sold shall be treated as a retirement and the amount received shall be treated as salvage. The continuing property record or records supplemental thereto shall be so maintained as to identify separately retirements of this nature from physical retirements of jointly owned plant.

(iv) If jointly owned regulated property is substantial in relation to the total of the same kind of regulated property owned wholly by the company, such jointly owned regulated property shall be appropriately segregated in the continuing property record.

(g) *Depreciation accounting*—(1) *Computation of depreciation rates*. (i) Unless otherwise provided by the Commission, either through prior approval or upon prescription by the Commission, depreciation percentage rates shall be computed in conformity with a group plan of accounting for depreciation and shall be such that the loss in service value of the property, except for losses excluded under the definition of depreciation, may be distributed under the straight-line method during the service life of the property.

(ii) In the event any composite percentage rate becomes no longer applicable, revised composite percentage rates shall be computed in accordance with paragraph (g)(1)(i) of this section.

(iii) The company shall keep such records of property and property retirements as will allow the determination of the service life of property which has been retired, or facilitate the determination of service life indications by mortality, turnover, or other appropriate methods. Such records will also allow the determination of the percentage of salvage value and cost of removal for property retired from each class of depreciable plant.

(2) *Depreciation charges*. (i) A separate annual percentage rate for each depreciation category of telecommunications plant shall be used in computing depreciation charges.

(ii) Companies, upon receiving prior approval from this Commission, or, upon prescription by this Commission, shall apply such depreciation rate, except where provisions of paragraph (g)(2)(iv) of this section apply, as will ratably distribute on a straight line basis the difference between the net book cost of a class or subclass of plant and its estimated net salvage during the known or estimated remaining service life of the plant.

(iii) Charges for currently accruing depreciation shall be made monthly to the appropriate depreciation accounts, and corresponding credits shall be made to the appropriate depreciation reserve accounts. Current monthly charges shall normally be computed by the application of one-twelfth of the annual depreciation rate to the monthly average balance of the associated category of plant. The average monthly balance shall be computed using the balance as of the first and last days of the current month.

(iv) In certain circumstances and upon prior approval of this Commission, monthly charges may be determined in total or in part through the

use of other methods whereby selected plant balances or portions thereof are ratably distributed over periods prescribed by this Commission. Such circumstances could include but not be limited to factors such as the existence of reserve deficiencies or surpluses, types of plant that will be completely retired in the near future, and changes in the accounting for plant. Where alternative methods have been used in accordance with this subparagraph, such amounts shall be applied separately or in combination with rates determined in accordance with paragraph (g)(2)(ii) of this section.

(3) *Acquired depreciable plant.* When acquired depreciable plant carried in Account 1439, Deferred Charges, is distributed to the appropriate plant accounts, adjusting entries shall be made covering the depreciation charges applicable to such plant for the period during which it was carried in Account 1439.

(4) Plant Retired for Nonrecurring Factors not Recognized in Depreciation Rates.

(i) A retirement will be considered as nonrecurring (extraordinary) only if the following criteria are met:

(A) The impending retirement was not adequately considered in setting past depreciation rates.

(B) The charging of the retirement against the reserve will unduly deplete that reserve.

(C) The retirement is unusual such that similar retirements are not likely to recur in the future.

(5) Upon direction or approval from this Commission, the company shall credit Account 3100, Accumulated Depreciation, and charge Account 1438, Deferred Maintenance and Retirements, with the unprovided-for loss in service value. Such amounts shall be distributed from Account 1438 to Account 6561, Depreciation Expense—Telecommunications Plant in Service, or Account 6562, Depreciation Expense—Property Held for Future Telecommunications Use, over such period as this Commission may direct or approve.

(h) *Amortization accounting.* (1) Unless otherwise provided by this Commission, either through approval, or upon prescription by this Commission, amortization shall be computed on the straight-line method, i.e., equal annual amounts shall be applied. The cost of each type asset shall be amortized on the basis the estimated life of that asset and shall not be written off in the accounting period in which the asset is acquired. A reasonable estimate of the useful life may be based on the upper or lower limits even though a fixed existence is not determinable. However, the period of amortization shall not exceed forty years.

(2) In the event any estimated useful life becomes no longer applicable, a revised estimated useful life shall be determined in accordance with paragraph (h)(1) of this section.

(3) Amortization charges shall be made monthly to the appropriate amortization expense accounts and corresponding credits shall be made to the appropriate amortization reserve accounts. Monthly charges shall be computed by the application of one-twelfth to the annual amortization amount.

(4) The company shall keep such records as will allow the determination of the useful life of the asset.

(i) *Accounting for software.* The original cost of initial operating system software for computers shall be classified to the same account as the associated hardware whether acquired separately or in conjunction with the associated hardware.

(j) Plant Accounts to be Maintained by Class A and Class B telephone companies as indicated:

Account title	Class A account	Class B account
REGULATED PLANT		
Property, plant and equipment:		
Telecommunications plant in service	[1] 2001	[1] 2001
Property held for future telecommunications use	2002	2002
Telecommunications plant under construction—short term	2003	2003
Telecommunications plant under construction—long term	2004	2004
Telecommunications plant adjustment	2005	2005
Nonoperating plant	2006	2006
Goodwill	2007	2007
TELECOMMUNICATIONS PLANT IN SERVICE (TPIS)		
TPIS—General support assets:		
Land and support assets	.....	2110
Land	2111	.....
Motor vehicles	2112	.....
Aircraft	2113	.....

Account title	Class A account	Class B account
Tools and other work equipment	2114	.....
Buildings	2121	.....
Furniture	2122	.....
Office equipment	2123	.....
General purpose computers	2124	.....
TPIS—Central Office assets:		
Central Office—Switching	.....	2210
Analog electronic switching	2211	.....
Digital electronic switching	2212	.....
Electro-mechanical switching	2215	.....
Operator systems	2220	2220
Central Office—Transmission	.....	2230
Radio systems	2231	.....
Circuit equipment	2232	.....
TPIS—Information origination/termination assets:		
Information origination/termination	.....	2310
Station apparatus	2311	.....
Customer premises wiring	2321	.....
Large private branch exchanges	2341	.....
Public telephone terminal equipment	2351	.....
Other terminal equipment	2362	.....
TPIS—Cable and wire facilities assets:		
Cable and wire facilities	.....	2410
Poles	2411	.....
Aerial cable	2421	.....
Underground cable	2422	.....
Buried cable	2423	.....
Submarine cable	2424	.....
Deep Sea cable	2425	.....
Intrabuilding network cable	2426	.....
Aerial wire	2431	.....
Conduit systems	2441	.....
TPIS—Amortizable assets:		
Amortizable tangible assets	.....	2680
Capital leases	2681	.....
Leasehold improvements	2682	.....
Intangibles	2690	2690

[1] Balance sheet summary account only.

[51 FR 43499, Dec. 2, 1986, as amended at 52 FR 7580, Mar. 12, 1987; 53 FR 30059, Aug. 10, 1988; 59 FR 46930, Sept. 13, 1994; 60 FR 12138, Mar. 6, 1995; 62 FR 39451, July 23, 1997; 64 FR 50007, Sept. 15, 1999]

EFFECTIVE DATE NOTE: At 64 FR 50007, Sept. 15, 1999, § 32.2000 was amended by removing paragraph (b)(4). This section contains information collection requirements and will not become effective until approved by the Office of Management and Budget.

§ 32.2001 Telecommunications plant in service.

This account shall include the original cost of the investment included in Accounts 2110 through 2690.

§ 32.2002 Property held for future telecommunications use.

(a) This account shall include the original cost of property owned and held for no longer than two years under a definite plan for use in telecommunications service. If at the end of two years the property is not in service, the original cost of the property may remain in this account so long as the carrier excludes the original cost and associated depreciation from its ratebase and ratemaking considerations and report those amounts in reports filed with the Commission pursuant to 43.21(e)(1) and 43.21(e)(2) of this chapter.

(b) Subsidiary records shall be maintained to show the character of the amounts carried in this account.

[65 FR 16334, Mar. 28, 2000]

§ 32.2003 Telecommunications plant under construction.

(a) This account shall include the original cost of construction projects (note also § 32.2000(c)) of this part and the cost of software development projects that are not yet ready for their intended use.

(b) There may be charged directly to the appropriate plant accounts the cost of any construction project which is estimated to be completed and ready for service within two months from the date on which the project was begun. There may also be charged directly to the plant accounts the cost of any construction project for which the gross additions to plant are estimated to amount to less than $100,000.

(c) If a construction project has been suspended for six months or more, the cost of the project included in this account may remain in this account so long as the carrier excludes the original cost and associated depreciation from its ratebase and ratemaking considerations and reports those amounts in reports filed with the Commission pursuant to 43.21(e)(1) and 43.21(e)(2) of this chapter. If a project is abandoned, the cost included in this account shall be charged to Account 7370, Special Charges.

(d) When any telecommunications plant, the cost of which has been included in this account, is completed ready for service, the cost thereof shall be credited to this account and charged to the appropriate telecommunications plant or other accounts.

[51 FR 43499, Dec. 2, 1986, as amended at 60 FR 12138, Mar. 6, 1995; 64 FR 50007, Sept. 15, 1999; 65 FR 16335, Mar. 28, 2000]

§ 32.2005 Telecommunications plant adjustment.

(a) This account shall include amounts determined in accordance with § 32.2000(b) of this subpart representing the difference between (1) the fair market value of the telecommunications plant acquired, plus preliminary expenses incurred in connection with the acquisition; and (2) the original cost of such plant, governmental franchises and similar rights acquired, less the amounts of reserve requirements for depreciation and amortization of the property acquired. If the actual original cost is not known, the entries in this account shall be based upon an estimate of such costs.

(b) The amounts recorded in this account with respect to each property acquisition (except land and artworks) shall be disposed of, written off, or provision shall be made for the amortization thereof, as follows:

(1) Debit amounts may be charged to Account 7370, Special Charges, in whole or in part, or amortized over a reasonable period through charges to Account 7360, Other Nonoperating Income, without further direction or approval by this Commission. When specifically approved by this Commission, or when the provisions of paragraph (b)(3) of this section apply, debit amounts shall be amortized to Account 6565, Amortization Expense—Other.

(2) Credit amounts shall be disposed of in such manner as this Commission may approve or direct, except for credit amounts referred to in paragraph (b)(3) of this section.

(3) Within one year from the date of inclusion in this account of a debit or credit amount with respect to a current acquisition, the company may dispose of the total amount from an acquisition of telephone plant by a lump-sum charge or credit, as appropriate, to Account 6565 without further approval of this Commission, provided that such amount does not exceed $100,000 and that the plant was not acquired from an affiliated company.

§ 32.2006 Nonoperating plant.

(a) This account shall include the company's investment in regulated property which is not includable in the plant accounts as operating telecommunications plant. It shall include the company's investment in telecommunications property held for sale. (Note also Account 1406, Nonregulated Investments.)

(b) Subsidiary records shall be maintained to show the character of the amounts carried in this account.

§ 32.2007 Goodwill.

(a) This account shall include any portion of the plant purchase price that cannot be assigned to specifically identifiable property acquired and such amount should be identified as ''goodwill''. Such amounts included in this account shall be amortized to Account 7360, Other Nonoperating Income, on a straight line basis over the remaining life of the acquired plant, not to exceed 40 years.

(b) The amounts included in this account shall be maintained to show the nature of each amount.

§ 32.2110 Land and support assets.

This account shall be used by Class B companies to record the original cost of land and support assets of the type and character required of Class A companies in Accounts 2111 through 2124.

§ 32.2111 Land.

(a) This account shall include the original cost of all land held in fee and of easements, and similar rights in land having a term of more than one year used for purposes other than the location of outside plant (see Accounts 2411 through 2441) or externally mounted central office equipment (see Accounts 2211 and 2212). It shall also include special assessments upon land for the construction of public improvements.

(b) When land, together with buildings thereon, is acquired, the original cost shall be fairly apportioned between the land and the buildings and accounted for accordingly. If the plan of acquisition contemplates the removal of buildings, the total cost of the land and buildings shall be accounted for as the cost of the land, and the salvage value of the buildings when disposed of shall be deducted from the cost of the land so determined.

(c) Annual or more frequent payments for use of land shall be recorded

in the rent subsidiary record category for Account 6121, Land and Building Expense.

(d) When land is acquired for which there is not a definite plan for its use in telecommunications service, its costs shall be included in Account 2006, Nonoperating Plant.

(e) When land is acquired in excess of that required for telecommunications purposes, the cost of such excess land shall be included in Account 2006.

(f) Installments of assessments for public improvement, including interest, if any, which are deferred without option to the company shall be included in this account only as they become due and payable. Interest on assessments which are not paid when due shall be included in Account 7540, Other Interest Deductions.

(g) When land is purchased for immediate use in a construction project, its cost shall be included in Account 2003, Telecommunications Plant Under Construction—Short Term, or Account 2004, Telecommunications Plant Under Construction—Long Term, as appropriate, until such time as the project involved is completed and ready for service.

(h) The original cost of leaseholds, easements, rights of way, and similar rights in land having a term of more than one year and not includable in Account 2111 shall be included in the accounts for outside plant or externally mounted central office equipment in connection with which the rights were acquired.

§ 32.2112 Motor vehicles.

This account shall include the original cost of motor vehicles of the type which are designed and routinely licensed to operate on public streets and highways.

§ 32.2113 Aircraft.

This account shall include the original cost of aircraft and any associated equipment and furnishings installed as an integral part of the aircraft.

§ 32.2114 Tools and other work equipment.

This account shall include the original cost of special purpose vehicles and the original cost of tools and equipment used to maintain special purpose vehicles and items included in Accounts 2112 and 2113. This account shall also include the original cost of power-operated equipment, general purpose tools, and other items of work equipment.

[64 FR 50007, Sept. 15, 1999]

§ 32.2121 Buildings.

(a) This account shall include the original cost of buildings, and the cost of all permanent fixtures, machinery, appurtenances and appliances installed as a part thereof. It shall include costs incident to the construction or purchase of a building and to securing possession and title.

(b) When land, together with the buildings thereon, is acquired, the original cost shall be fairly apportioned between the land and buildings, and the amount applicable to the buildings shall be included in this account. The amount applicable to the land shall be included in Account 2111, Land.

(c) This account shall not include the cost of any telephone equipment or wiring apparatus for generating or controlling electricity for operating the telephone system.

§ 32.2122 Furniture.

This account shall include the original cost of furniture in offices, storerooms, shops, and all other quarters. This account shall also include the cost of objects which possess aesthetic value, are of original or limited edition, and do not have a determinable useful life. The cost of any furniture attached to and constituting a part of a building shall be charged to account 2121, Buildings.

§ 32.2123 Office equipment.

(a) This account shall include the original cost of office equipment in offices, shops and all other quarters. The cost of any equipment attached to and constituting a part of a building shall be charged to Account 2121, Buildings.

(b) Office Equipment shall be maintained by the following subaccounts:

2123.1 Office Support Equipment
2123.2 Company Communications Equipment

§ 32.2124 General purpose computers.

(a) This account shall include the original cost of computers and peripheral devices which are designed to perform general administrative information processing activities.

(b) Administrative information processing includes but is not limited to activities such as the preparation of financial, statistical, or other business analytical reports; preparation of payroll, customer bills, and cash management reports, and other records and reports not specifically designed for testing, diagnosis, maintenance or control of the telecommunications network facilities.

(c) [Reserved]

(d) This account does not include the cost of computers and their associated peripheral devices associated with switching, network signaling, network operations, or other specific telecommunications plant. Such computers and peripherals shall be classified to the appropriate switching, network signaling, network expense, or other plant account.

[51 FR 43499, Dec. 2, 1986, as amended at 64 FR 50007, Sept. 15, 1999]

§ 32.2210 Central office—switching.

This account shall be used by Class B companies to record the original cost of switching assets of the type and character required of Class A companies in Accounts 2211 through 2215.

§ 32.2211 Analog electronic switching.

(a) This account shall include the original cost of stored program control analog circuit-switching and associated equipment. This account shall also include the cost of remote analog electronic circuit switches.

(b) Switching plant excludes switchboards which perform an operator assistance function and equipment which is an integral part thereof. It does not exclude equipment used solely for the recording of calling telephone numbers in connection with customer dialed charged traffic, dial tandem switchboards and special service switchboards used in conjunction with private line service; such equipment shall be classified to the particular switch that if serves.

§ 32.2212 Digital electronic switching.

(a) This account shall include the original cost of stored program control digital switches and their associated equipment. Included in this account are digital switches which utilize either dedicated or non-dedicated circuits. This account shall also include the cost of remote digital electronic switches.

(b) Switching plant excludes switchboards which perform an operator assistance function and equipment which is an integral part thereof. It does not exclude equipment used solely for the recording of calling telephone numbers in connection with customer dialed charged traffic, dial tandem switchboards and special service switchboards used in conjunction with private line service; such equipment shall be classified to the particular switch that it serves.

§ 32.2215 Electro-mechanical switching.

(a) This account shall include the original cost of non-electronic circuit-switching equipment. The investment in electro-mechanical switching equipment shall be maintained in the following subaccounts:

2215.1 Step-by-Step Switching
2215.2 Crossbar Switching
2215.3 Other Electro-Mechanical Switching

(b)*2215.1 Step-by-step switching*. This subaccount shall include the original cost of step-by-step and associated circuit-switching equipment.

(c) *2215.2 Crossbar switching*. This subaccount shall include the original cost of crossbar and associated circuit-switching equipment. Also included in this account is the cost of electronic translator system equipment used in switching.

(d) *2215.3 Other Electro-mechanical switching*. This subaccount shall include the original cost of all other types of non-electronic circuit-switching equipment such as panel systems and their associated circuit-switching equipment.

(e) Switching plant excludes switchboards which perform an operator assistance function and equipment which is an integral part thereof. It does not exclude equipment used solely for the

recording of calling telephone numbers in connection with customer dialed charged traffic, dial tandem switchboards and special service switchboards used in conjunction with private line service; such equipment shall be classified to the particular switch that it serves.

§ 32.2220 Operator systems.

(a) This account shall include the original cost of those items of equipment used to assist subscribers in utilizing the network and equipment used in the provision of directory assistance, call intercept, and other operator assisted call completion activities.

(b) This account does not include equipment used solely for the recording of calling telephone numbers in connection with customer dialed charged traffic, dial tandem switchboards and special service switchboards used in conjunction with private line service; such equipment shall be classfied to the particular switch that it serves.

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 46930, Sept. 13, 1994]

§ 32.2230 Central office—transmission.

This account shall be used by Class B companies to record the original cost of radio systems and circuit equipment of the type and character required of Class A companies in Accounts 2231 and 2232.

§ 32.2231 Radio systems.

(a) This account shall include the original cost of ownership of radio transmitters and receivers. The investment in radio systems shall be maintained in the following subaccounts:

2231.1 Satellite and Earth Station Facilities
2231.2 Other Radio Facilities

(b) *2231.1 Satellite and earth station facilities*. This subaccount shall include the original cost of ownership interest in satellities (including land-side spares), other spare parts, material and supplies. It shall include launch insurance and other satellite launch costs. This subaccount shall also include the original cost of earth stations and spare parts, material or supplies therefor.

(c) *2231.2 Other radio facilities*. (1) This subaccount shall include the original cost of radio equipment used to provide radio communication channels. Radio equipment is that equipment which is used for the generation, amplification, propagation, reception, modulation, and demodulation of radio waves in free space over which communication channels can be provided. This subaccount shall also include the associated carrier and auxiliary equipment and patch bay equipment which is an integral part of the radio equipment. Such equipment may be located in central office buildings, terminal rooms, or repeater stations or may be mounted on towers, masts or other supports.

(2) This subaccount shall be maintained in order that the company may separately report the amounts contained herein that relate to cellular radio facilities, non-cellular radio facilities, and terrestrial microwave radio facilities. Such subsidiary record categories shall be reported as required by Part 43 of this Commission's Rules and Regulations.

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 46930, Sept. 13, 1994]

§ 32.2232 Circuit equipment.

(a) This account shall include the original cost of equipment which is used to reduce the number of physical pairs otherwise required to serve a given number of subscribers by utilizing carrier systems, concentration stages or combinations of both. It shall include equipment that provides for simultaneous use of a number of interoffice channels on a single transmission path. This account shall also include equipment which is used for the amplification, modulation, regeneration, circuit patching, balancing or control of signals transmitted over interoffice communications transmission channels. This account shall include equipment which utilizes the message path to carry signaling information or which utilizes separate channels between switching offices to transmit signaling information independent of the subscribers' communication paths or transmission channels. This account shall also include the original cost of associated material used in the construction of such plant. Circuit equipment may be located in central

offices, in manholes, on poles, in cabinets or huts or at other company locations.

(b) This account excludes carrier and auxiliary equipment and patch bays which are includable in Account 2231.2, Other Radio Facilities. This account also excludes such equipment which is an integral component of a major unit which is classifiable to other accounts.

(c) Subsidiary record categories shall be maintained in order that the company may separately report the amounts contained herein that relate to digital and analog. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.2310 Information origination/termination.

This account shall be used by Class B companies to record the original cost of information origination/termination equipment of the type and character required of Class A companies in Accounts 2311 through 2362.

§ 32.2311 Station apparatus.

(a) This account shall include the original cost of station apparatus, including teletypewriter equipment, telephone and miscellaneous equipment, small private branch exchanges and radio equipment (excluding mobile), installed for customer's use. Items included in this account shall remain herein until finally disposed of or until used in such manner as to warrant inclusion in other accounts.

(b) Each company shall prepare a list of station apparatus which shall be used as its list of disposition units for this account, the cost of which when finally disposed of shall be credited to this account and charged to Account 3100, Accumulated Depreciation.

(c) The cost of cross-connection boxes, distributing frames or other distribution points which are installed to terminate intrabuilding network cable shall be charged to Account 2426, Intrabuilding Network Cable.

(d) Operator head sets and transmitters in central offices and at private branch exchanges, and test sets such as those used by wire chiefs, outside plant technicians, and others, shall be included in Account 2114, Tools and other work equipment, Account 2220, Operator systems, or Account 2341, Large Private Branch Exchanges, as appropriate.

(e) Station apparatus for company official use shall be included in Account 2123, Office Equipment.

(f) An annual inventory shall be taken of all station apparatus in stock that are included in this account. The number of such station apparatus items as determined by this inventory, together with the number of all other station apparatus items included in this account, shall be compared with the corresponding number of station apparatus items as shown by the respective control records. The original cost of any unreconciled differences thereby disclosed shall be adjusted through Account 3100, Accumulated Depreciation. Appropriate verifications shall be made at suitable intervals and necessary adjustments between this account and Account 3100 shall be made for all station apparatus included in this account.

(g) Items of station apparatus in stock for which no further use in the ordinary conduct of the business is contemplated, but which as a precautionary measure are held for possible future contingencies instead of being discarded shall be excluded from this account and included in Account 1220, Inventories.

(h) Embedded CPE is that equipment or inventory which was tariffed or otherwise subject to the jurisdictional separations process as of January 1, 1983.

[51 FR 43499, Dec. 2, 1986, as amended at 52 FR 6561, Mar. 4, 1987; 52 FR 39535, Oct. 22, 1987; 59 FR 46930, Sept. 13, 1994; 64 FR 50007, Sept. 15, 1999]

§ 32.2321 Customer premises wiring.

(a) This account shall include all amounts transferred from the former Account 232, Station Connections, inside wiring subclass.

(b) Embedded Customer Premises Wiring is that investment in customer premises wiring equipment or inventory which was capitalized prior to October 1, 1984.

[51 FR 43499, Dec. 2, 1986, as amended at 52 FR 6561, Mar. 4, 1987]

§ 32.2341 Large private branch exchanges.

(a) This account shall include the original cost, including the cost of installation, of multiple manual private branch exchanges and of dial system private branch exchanges of types designed to accommodate 100 or more lines or which can normally be expanded to 100 or more lines, installed for customers' use. This account shall also include the original cost of other large installations of station equipment: (1) Which do not constitute stations, (2) which require special or individualized treatment because of their complexity, special design, or other distinctive characteristics, and (3) for which individual or other specialized cost records are appropriate. (Note also Account 2311, Station Apparatus.)

(b) The cost of intrabuilding network cables including their associated cross-connection boxes, terminals, distributing frames, etc., is chargeable to Account 2426, Intrabuilding Network Cable.

(c) The cost of outside plant, whether or not on private property, used with intrabuilding, network cable shall be charged to the appropriate outside plant accounts.

(d)–(e) [Reserved]

(f) Private branch exchanges for company official use shall be included in Account 2123, Office Equipment.

(g) Embedded CPE is that equipment or inventory which is tariffed or otherwise subject to the jurisdictional separations process as of January 1, 1983. Inventories of large private branch exchanges equipment are included in Account 1220, Inventories.

[51 FR 43499, Dec. 2, 1986, as amended at 52 FR 6562, Mar. 4, 1987; 52 FR 39535, Oct. 22, 1987; 59 FR 46930, Sept. 13, 1994]

§ 32.2351 Public telephone terminal equipment.

(a) This account shall include the original cost of coinless, coin-operated (including public and semi-public), credit card and pay telephone installed for use by the public.

(b) This account shall also include the original cost of operating spares that are required to provide a continuity of service for public telephones. The operating spares shall not exceed six months supply in terms of turnover and be available to installers from locations in reasonable proximity to the location of the installed equipment.

(c) The original cost of installing public telephone equipment shall not include the labor and minor materials costs of installing the public telephone equipment or premises wiring. These costs as well as the cost of replacing a public telephone shall be charged to Account 6351 Public Telephone Terminal Equipment Expense. The labor and minor materials costs of removal of public telephones will also be charged to Account 6351.

[51 FR 43499, Dec. 2, 1986, as amended at 52 FR 29019, Aug. 5, 1987]

§ 32.2362 Other terminal equipment.

(a) This account shall include the original cost of other Non-CPE terminal equipment not specifically provided for elsewhere and items such as specialized communications equipment provided to meet the needs of the disabled, over-voltage protection equipment, multiplexing equipment to deliver multiple channels to customers, etc.

(b) Each company shall prepare a list of other terminal equipment which shall be used as its list of retirement units for this account, the cost of which when finally disposed of shall be credited to this account and charged to Account 3100, Accumulated Depreciation.

§ 32.2410 Cable and wire facilities.

This account shall be used by Class B companies to record the original cost of cable and wire facilities of the type and character required of Class A companies in Accounts 2411 through 2441.

§ 32.2411 Poles.

This account shall include the original cost of poles, crossarms, guys and other material used in the construction of pole lines and shall include the cost of towers when not associated with buildings. This account shall also include the cost of clearing pole line routes and of tree trimming but shall exclude the cost of maintaining previously cleared routes.

§ 32.2421 Aerial cable.

(a) This account shall include the original cost of aerial cable and of drop and block wires served by such cable or aerial wire as well as the cost of other material used in construction of such plant. Subsidiary record categories, as defined below, are to be maintained for nonmetallic aerial cable and metallic aerial cable.

(1) *Nonmetallic cable.* This subsidiary record category shall include the original cost of optical fiber cable and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(2) *Metallic cable.* This subsidiary record category shall include the original cost of single or paired conductor cable, wire and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(b) The cost of permits and privileges for the construction of cable and wire facilities shall be included in the account chargeable with such construction.

§ 32.2422 Underground cable.

(a) This account shall include the original cost of underground cable installed in conduit and of other material used in the construction of such plant. Subsidiary record categories, as defined below, are to be maintained for nonmetallic underground cable and metallic underground cable.

(1) *Nonmetallic cable.* This subsidiary record category shall include the original cost of optical fiber cable and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(2) *Metallic cable.* This subsidiary record category shall include the original cost of single or paired conductor cable, wire and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(b) The cost of pumping water out of manholes and of cleaning manholes and ducts in connection with construction work and the cost of permits and privileges for the construction of cable and wire facilities shall be included in the account chargeable with such construction.

(c) The cost of drop and block wires served by underground cable shall be included in Account 2423, Buried Cable.

(d) The cost of cables leading from the main distributing frame or equivalent to central office equipment shall be included in the appropriate switching, transmission or other operations asset account.

§ 32.2423 Buried cable.

(a) This account shall include the original cost of buried cable as well as the cost of other material used in the construction of such plant. This account shall also include the cost of trenching for and burying cable run in conduit not classifiable to Account 2441, Conduit Systems. Subsidiary record categories, as defined below, are to be maintained for nonmetallic buried cable and metallic buried cable.

(1) *Nonmetallic cable.* This subsidiary record category shall include the original cost of optical fiber cable and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(2) *Metallic cable.* This subsidiary record category shall include the original cost of single or paired conductor cable, wire and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(b) The cost of pumping water out of manholes and of cleaning manholes and ducts in connection with construction work and the cost of permits and privileges for the construction of cable and wire facilities shall be included in the account chargeable with such construction.

§ 32.2424 Submarine cable.

(a) This account shall include the original cost of submarine cable and other material used in the construction of such plant. Subsidiary record categories, as defined below, are to be maintained for nonmetallic submarine cable and metallic submarine cable.

(1) *Nonmetallic cable.* This subsidiary record category shall include the original cost of optical fiber cable and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(2) *Metallic cable.* This subsidiary record category shall include the original cost of single or paired conductor cable, wire and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(b) The cost of permits and privileges for the constructon of cable and wire facilities shall be included in the account chargeable with such construction.

§ 32.2425 Deep sea cable.

(a) This account includes the original cost of deep sea cable and other material used in the construction of such plant. Subsidiary record categories, as defined below, are to be maintained for nonmetallic deep sea cable and metallic deep sea cable.

(1) *Nonmetallic cable.* This subsidiary record category shall include the original cost of optical fiber cable and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(2) *Metallic cable.* This subisidary record category shall include the original cost of single or paired conductor cable, wire and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(b) The cost of permits and privileges for the construction of cable and wire facilities shall be included in the account chargeable with such construction.

§ 32.2426 Intrabuilding network cable.

(a) This account shall include the original cost of cables and wires located on the company's side of the demarcation point or standard network interface inside subscribers' buildings or between buildings on one customer's same premises. Intrabuilding network cables are used to distribute network access facilities to equipment rooms, cross-connection or other distribution points at which connection is made with customer premises wiring. Subsidiary record categories, as defined below, are to be maintained for nonmetallic intrabuilding network cable and metallic intrabuilding network cable.

(1) *Nonmetallic cable.* This subsidiary record category shall include the original cost of optical fiber cable and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(2) *Metallic cable.* This subsidiary record category shall include the original cost of single or paired conductor cable, wire and other associated material used in constructing a physical path for the transmission of telecommunications signals.

(b) The cost of pumping water out of manholes and of cleaning manholes and ducts in connection with construction work and the cost of permits and privileges for the construction of cable and wire facilities shall be included in the account chargeable with such construction.

(c) Intrabuilding network cable does not include the cost of cables or wires which are classifiable as network terminating wire, nor the cables or wires from the demarcation point or standard network interface to subscribers' stations.

§ 32.2431 Aerial wire.

(a) This account shall include the original cost of bare line wire and other material used in the construction of such plant.

(b) The cost of permits and privileges for the construction of cable and wire facilities shall be included in the account chargeable with such construction.

(c) The cost of drop and block wires served by aerial wire shall be included in Account 2421, Aerial Cable.

§ 32.2441 Conduit systems.

(a) This account shall include the original cost of conduit, whether underground, in tunnels or on bridges, which is reusable in place. It shall also include the cost of opening trenches and of any repaving necessary in the construction of conduit plant.

(b) The cost of pumping water out of manholes and of cleaning manholes and ducts in connection with construction work and the cost of permits and privileges for the construction of cable and wire facilities shall be included in the account chargeable with such construction.

(c) The cost of protective covering for buried cable shall be charged to Account 2423, Buried Cable, as appropriate, unless such protective covering is reusable in place. The amounts thus charged shall be included in the nonmetallic buried cable or metallic buried cable subsidiary record category, as appropriate.

(d) The cost of pipes or other protective covering for underground drop and block wires shall be included in Account 2421, Aerial Cable, or Account 2423, Buried Cable, as appropriate. The amounts thus charged shall be included in the nonmetallic or metallic subsidiary record category, as appropriate.

§ 32.2680 Amortizable tangible assets.

This account shall be used by Class B carriers to record amounts for property acquired under capital leases and the original cost of leasehold improvements of the type of character required of Class A companies in Accounts 2681 and 2682.

§ 32.2681 Capital leases.

(a) This account shall include all property acquired under a capital lease. A lease qualifies as a capital lease when one or more of the following criteria is met:

(1) By the end of the lease term, ownership of the leased property is transferred to the leasee.

(2) The lease contains a bargain purchase option.

(3) The lease term is substantially (75% or more) equal to the estimated useful life of the leased property. However, if the beginning of the lease term falls within the last 25% of the total estimated economic life of the leased property, including earlier years of use, this criterion shall not be used for purposes of classifying the lease.

(4) At the inception of the lease, the present value of the minimum lease payments, excluding that portion of the payments representing executory costs to be paid by the lessor, including any profit thereon, equals or exceeds 90% or more of the fair value of the leased property. However, if the beginning of the lease term falls within the last 25% of the total estimated economic life of the leased property, including earlier years of use, this criterion shall not be used for purposes of classifying the lease.

(b) All other leases are operating leases.

(c) The amounts recorded in this account at the inception of a capital lease shall be equal to the original cost, if known, or to the present value not to exceed fair value, at the beginning of the lease term, of minimum lease payments during the lease term, excluding that portion of the payments representing executory costs to be paid by the lessor, together with any profit thereon.

§ 32.2682 Leasehold improvements.

(a) This account shall include the original cost of leasehold improvements made to telecommunications plant held under a capital or operating lease, which are subject to amortization treatment. This account shall also include those improvements which will revert to the lessor.

(b) Improvements to leased telecommunications plant which are of a relatively minor cost or short life or for which the period of the lease is one year or less shall be charged to the account chargeable with the cost of repairs to such plant.

(c) Amounts contained in this account shall be amortized over the term of the related lease.

§ 32.2690 Intangibles.

(a) This account shall include the cost of organizing and incorporating the company, the original cost of government franchises, the original cost of patent rights, and other intangible property having a life of more than one year and used in connection with the company's telecommunications operations.

(b) Subsidiary records for this account shall include a description of each class of intangible property.

(c) The cost of other intangible assets, not including software, having a life of one year or less shall be charged directly to Account 6564, Amortization Expense—Intangible. Such intangibles acquired at small cost may also be charged to Account 6564, irrespective of their term of life. The cost of software having a life of one year or less shall be

charged directly to the applicable expense account with which the software is associated.

(d) This account shall not include any discounts on securities issued, nor shall it include costs incident to negotiating loans, selling bonds or other evidences of debt, or expenses in connection with the authorization, issuance, sale or resale of capital stock.

(e) When charges are made to this account for expenses incurred in mergers, consolidations, or reorganizations, amounts previously included in this account on the books of the various companies concerned shall not be carried over.

(f) Franchise taxes payable annually or more frequently shall be charged to Account 7240, Operating Other Taxes.

(g) This account shall not include the cost of plant, material and supplies, or equipment furnished to municipalities or other governmental authorities when given other than as initial consideration for franchises or similar rights. (Note also Account 6728, Other General & Administative.).

(h) This account shall not include the original cost of easements, rights of way, and similar rights in land having a term of more than one year. Such amounts shall be recorded in Account 2111, Land, or in the appropriate outside plant account (see Accounts 2411 through 2441), or in the appropriate central office account (see Accounts 2211 through 2232).

[51 FR 43499, Dec. 2, 1986, as amended at 64 FR 50007, Sept. 15, 1999]

§ 32.3000 Instructions for balance sheet accounts—Depreciation and amortization.

(a) Depreciation and Amortization Subsidiary Records:

(1) Subsidiary record categories shall be maintained for each class of depreciable telecommunications plant in Account 3100 for which there is a prescribed depreciation rate. (See also § 32.2000(g)(1)(iii) of this subpart.)

(2) Subsidiary records shall be maintained for Accounts 3400, 3410, 3420, 3500 and 3600 in accordance with § 32.2000(h)(4) of this subpart.

(b) Depreciation and Amortization Accounts to be Maintained by Class A and Class B telephone companies, as indicated:

Account title	Class A account	Class B account
Depreciation and amortization:		
Accumulated depreciation	3100	3100
Accumulated depreciation—Held for future telecommunications use	3200	3200
Accumulated depreciation—Nonoperating	3300	3300
Accumulated amortization—Tangible	.....	3400
Accumulated amortization—Capitalized leases	3410	.....
Accumulated amortization—Leasehold improvements	3420	.....
Accumulated amortization—Intangible	3500	3500
Accumulated amorization—Other	3600	3600

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 46930, Sept. 13, 1994]

§ 32.3100 Accumulated depreciation.

(a) This account shall include the accumulated depreciation associated with the investment contained in Account 2001, Telecommunications Plant in Service.

(b) This account shall be credited with depreciation amounts concurrently charged to Account 6561, Depreciation Expense—Telecommunications Plant in Service. (Note also Account 3300, Accumulated Depreciation—Nonoperating.)

(c) At the time of retirement of depreciable operating telecommunications plant, this account shall be charged with the original cost of the property retired plus the cost of removal and credited with the salvage value and any insurance proceeds recovered.

(d) This account shall be credited with amounts charged to Account 1438, Deferred Maintenance and Retirements, as provided in § 32.2000(g)(4) of this subpart. This account shall be credited with amounts charged to Account 6561 with respect to other than relatively minor losses in service values suffered through terminations of service when charges for such terminations are made to recover the losses.

§ 32.3200 Accumulated depreciation—held for future telecommunications use.

(a) This account shall include the accumulated depreciation associated

with the investment contained in Account 2002, Property Held for Future Telecommunications Use.

(b) This account shall be credited with amounts concurrently charged to Account 6562, Depreciation Expense—Property Held for Future Telecommunications Use.

§ 32.3300 Accumulated depreciation—nonoperating.

(a) This account shall include the accumulated amortization and depreciation associated with the investment contained in Account 2006, Nonoperating Plant.

(b) This account shall be credited with amortization and depreciation amounts concurrently charged to Account 7360, Other Nonoperating Income.

(c) When nonoperating plant not previously used in telecommunications service is disposed of, this account shall be charged with the amount previously credited hereto with respect to such property and the book cost of the property so retired less the amount chargeable to this account and less the value of the salvage recovered or the proceeds from the sale of the property shall be included in Account 7350, Gains or Losses on Disposition of Certain Property. In case the property had been used in telecommunications service previous to its inclusion in Account 2006, Nonoperating Plant, the amount accrued for depreciation thereon after its retirement from telecommunications service shall be charged to this account and credited to Account 3100, Accumulated Depreciation, and the accounting for its retirement from Account 2006 shall be in accordance with that applicable to telecommunications plant retired.

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 46930, Sept. 13, 1994]

§ 32.3400 Accumulated amortization—tangible.

This account shall be used by Class B companies to record accumulated amortization of the type and character required of Class A companies in Accounts 3410 and 3420.

§ 32.3410 Accumulated amortization—capitalized leases.

(a) This account shall include the accumulated amortization associated with the investment contained in Account 2681, Capital Leases.

(b) This account shall be credited with amounts for the amortization of capital leases concurrently charged to Account 6563, Amortization Expense—Tangible. (Note also Account 3300, Accumulated Depreciation—Nonoperating.)

(c) When any item carried in Account 2681 is sold, is relinquished, or is otherwise retired from service, this account shall be charged with the cost of the retired item. Remaining amounts associated with the item shall be debited to Account 7160, Other Operating Gains and Losses, or Account 7360, Other Nonoperating Income, as appropriate.

§ 32.3420 Accumulated amortization—leasehold improvements.

(a) This account shall include the accumulated amortization associated with the investment contained in Account 2682, Leasehold Improvements.

(b) This account shall be credited with amounts for the amortization of leasehold improvements concurrently charged to Account 6563, Amortization Expense—Tangible. (Note also Account 3300, Accumulated Depreciation—Nonoperating.)

(c) When any item carried in Account 2682 is sold, is relinquished, or is otherwise retired from service, this account shall be charged with the cost of the retired item. Remaining amounts associated with the item shall be debited to Account 7360, Other Nonoperating Income.

§ 32.3500 Accumulated amortization—intangible.

(a) This account shall include the accumulated amortization associated with the investment contained in Account 2690, Intangibles.

(b) This account shall be credited with amortization amounts concurrently charged to Account 6564, Amortization Expense—Intangible. (Note also Account 3300, Accumulated Depreciation—Nonoperating.)

(c) When any item carried in Account 2690, other than software, is sold, relinquished, or otherwise retired from service, this account shall be charged with the cost of the retired item. Remaining amounts associated with the item shall be debited to Account 7360, Other Nonoperating Income.

(d) When software that is classified to Account 2690 is sold, relinquished, or otherwise retired from service, this account shall be credited, and Account 6564, Amortization expense—intangible, shall be charged with the unamortized cost of the existing software.

[51 FR 43499, Dec. 2, 1986, as amended at 64 FR 50007, Sept. 15, 1999]

§ 32.3600 Accumulated amortization—other.

(a) This account shall include the accumulated amortization associated with the investment contained in Account 2005, Telecommunications Plant Adjustment.

(b) This account shall be credited with amortization amounts concurrently charged to Account 6565, Amortization Expense—Other. (Note also Account 3300, Accumulated Depreciation—Nonoperating.)

(c) When any item carried in Account 2005 is sold, relinquished, or otherwise retired from service, this account shall be charged with the cost of the retired item. Remaining amounts associated with the item shall be debited Account 7360, Other Nonoperating Income.

§ 32.4000 Instructions for balance sheet accounts—liabilities and stockholders' equity.

Liabilities and Stockholders' Equity Accounts to be Maintained by Class A and Class B telephone companies:

Account title	Class A account	Class B account
Current liabilities:		
Accounts payable	4010	4010
Notes payable	4020	4020
Advance billing and payments	4030	4030
Customer's deposits	4040	4040
Current maturities—long-term debt	4050	4050
Current maturities—capital leases	4060	4060
Income taxes—accrued	4070	4070
Other taxes—accrued	4080	4080
Net Current Deferred Operating Income Taxes	4100	4100
Net Current Deferred Nonoperating Income Taxes	4110	4110
Other accrued liabilities	4120	4120
Other current liabilities	4130	4130
Long-term debt:		
Funded debt	4210	4210
Premium on long-term debt	4220	4220
Discount on long-term debt	4230	4230
Reacquired debt	4240	4240
Obligations under capital leases	4250	4250
Advances from affiliated companies	4260	4260
Other long-term debt	4270	4270
Other liabilities and deferred credits:		
Other long-term liabilities	4310	4310
Unamortized operating investment tax credits—net	4320	4320
Unamortized nonoperating investment tax credits—net	4330	4330
Net noncurrent deferred operating income taxes	4340	4340
Net deferred tax liability adjustments	4341	4341
Net noncurrent deferred nonoperating income taxes	4350	4350
Other deferred credits	4360	4360
Deferred tax regulatory liability	4361	4361
Other jurisdictional liabilities and deferred credits—net	4370	4370
Stockholders' equity:		
Capital stock	4510	4510
Additional paid-in capital	4520	4520
Treasury stock	4530	4530
Other capital	4540	4540
Retained earnings	4550	4550

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 9418, Feb. 28, 1994]

§ 32.4010 Account payable.

(a) This account shall include all amounts currently due to others for recurring trade obligations, and not provided for in other accounts, such as those for traffic settlements, material and supplies, repairs to telecommunications plant, matured rents, and interest payable under monthly settlements on short-term loans, advances, and open accounts. It shall also include amounts of taxes payable that have been withheld from employees' salaries.

(b) Subsidiary record categories shall be maintained for this account in order that the company may separately report the amounts contained herein that relate to nonaffiliates and affiliates. Such subsidiary record categories shall be reported as required by Part 43 of this Commission's Rules and Regulations.

(c) There shall be included herein accounts payable arising from sharing of revenues.

§ 32.4020 Notes payable.

(a) This account shall include the face amount of notes, drafts, and other evidences of indebtedness issued or assumed by the company (except interest coupons) which are payable on demand or not more than one year or less from date of issue.

(b) Subsidiary record categories shall be maintained for this account in order that the company may separately report the amounts contained herein that relate to nonaffiliates and affiliates. Such subsidiary record categories shall be reported as required by Part 43 of this Commission's Rules and Regulations.

(c) If any part of an obligation, otherwise includable in this account matures more than one year from date of issue, it shall be included in Account 4210, Funded Debt, 4260, Advances from Affiliated Companies, or other appropriate account.

(d) The records supporting the entries to this account shall be kept so that the company can furnish complete details as to each note, when it is issued, the consideration received, and when it is payable.

§ 32.4030 Advance billing and payments.

This account shall include the amount of advance billing creditable to revenue accounts in future months; also advance payments made by prospective customers prior to the establishment of service. Amounts included in this account shall be credited to the appropriate revenue accounts in the months in which the service is rendered or cleared from this account as refunds are made.

§ 32.4040 Customers' deposits.

(a) This account shall include the amount of cash deposited with the company by customers as security for the payment for telecommunications service.

(b) Advance payments made by prospective customers prior to the establishment of service shall be credited to Account 4030, Advance Billing and Payments.

§ 32.4050 Current maturities—long-term debt.

This account shall include the amount (including any obligations for premiums) of long-term debt matured and unpaid without any specific agreement for extension of maturity, including unpresented bonds drawn for redemption through the operation of sinking and redemption fund agreements.

§ 32.4060 Current maturities—capital leases.

This account shall include the current portion of obligations applicable to property obtained under capital leases.

§ 32.4070 Income taxes—accrued.

(a) This account shall be credited or charged and the following accounts shall be charged or credited with the offsetting amount of current year income taxes (Federal, state and local) accrued during the period or adjustments to prior accruals:

7220 Operating Federal Income Taxes
7230 Operating State and Local Income Taxes
7420 Nonoperating Federal Income Taxes
7430 Nonoperating State and Local Income Taxes
7630 Current Income Tax Effect of Extraordinary Items—Net

(b) If significant, current year income taxes paid in advance shall be reclassified to Account 1300, Prepaid Taxes.

§ 32.4080 Other taxes—accrued.

(a) This account shall be credited or charged and Account 7240, Operating Other Taxes, or 7440, Nonoperating Other Taxes, or, for payroll related costs, the appropriate expense accounts shall be charged or credited for all taxes, other than Federal, State and local income taxes, accrued or adjusted for previous accruals during the period. Among the taxes includable in this account are property, gross receipts, franchise, capital stock, social security and unemployment taxes.

(b) Taxes paid in advance of the period in which they are chargeable to income shall be included in the prepaid

taxes Account 1300, Prepaid Taxes, or 1410, Other Noncurrent Assets, as appropriate.

§ 32.4100 Net current deferred operating income taxes.

(a) This account shall include the balance of income tax expense related to current items from regulated operations which have been deferred to later periods as a result of the normalized method of accounting for tax differentials authorized by this Commission and not provided for elsewhere.

(b) As regulated assets or liabilities which generated the deferred income tax are reclassified from long-term or noncurrent status to current, the appropriate deferred income tax shall be reclassified from Account 4340, Net Noncurrent Deferred Operating Income Taxes, to this account.

(c) This account shall be debited or credited with the amount being debited or credited to Account 7250, Provision For Deferred Operating Income Taxes—Net, in accordance with that account's description and § 32.22 of subpart B.

(d) The classification of deferred income taxes as current or noncurrent shall follow the classification of the asset or liability that gave rise to the deferred income tax. If there is no related asset or liability, classification shall be based on the expected turnaround of the temporary differences.

(e) Subsidiary record categories shall be maintained in order that the company may separately report the amounts contained herein that are property related and those that are nonproperty related. Such subsidiary record categories shall be reported as required by Part 43 of this Commission's Rules and Regulations.

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 9419, Feb. 28, 1994]

§ 32.4110 Net current deferred nonoperating income taxes.

(a) This account shall include the balance of income tax expense resulting from comprehensive interpreted tax allocation which has been deferred to later periods.

(b) As other assets or liabilities which generated the deferred income tax are reclassified from long-term or noncurrent status to current, the appropriate deferred income tax shall be reclassified from Account 4350, Net Noncurrent Deferred Nonoperating Income Taxes, to this account.

(c) This account shall be debited or credited with the amount being credited or debited to Account 7450, Provision For Deferred Nonoperating Income Taxes—Net, in accordance with that account's description and § 32.22 of Subpart B.

(d) This account shall also include the balance of the income taxes (Federal, state and local) related to current extraordinary items which have been deferred to later periods resulting from comprehensive interperiod tax allocation.

(e) As the extraordinary item which generated the deferred income tax becomes current, the appropriate deferred income tax shall be reclassified from Account 4350, Net Noncurrent Deferred Nonoperating Income Taxes, to this account.

(f) This account shall be debited or credited with the amount being credited and debited to Account 7640, Provision for Deferred Income Tax Effect of Extraordinary Items—Net.

(g) The classification of deferred income taxes as current or noncurrent shall follow the classification of the asset or liability that gave rise to deferred income tax. If there is no related asset or liability, classification shall be based on the expected turnaround of the temporary differences.

(h) Subsidiary record categories shall be maintained in order that the company may separately report the amounts contained herein that are property related and those that are nonproperty related. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 9419, Feb. 28, 1994]

§ 32.4120 Other accrued liabilities.

(a) This account shall include the amount of wages, compensated absences, interest on indebtedness of the company, dividends on capital stock, and rents accrued to the date for which the balance sheet is made, but not payable until after that date.

(b) This account shall be maintained so as to show separately the amount and nature of the items accrued to the date of the balance sheet.

(c) Matured rents, dividends and interest shall be included in Account 4010, Accounts Payable.

(d) Interest payable under monthly settlements on short-term loans, advances, and open accounts shall be included in Account 4010.

§ 32.4130 Other current liabilities.

This account shall include liabilities of current character which are not includable in Accounts 4010 through 4120.

§ 32.4210 Funded debt.

(a) This account shall include the total face amount of unmatured debt, maturing more than one year from date of issue, issued by the company and not retired, and the total face amount of similar unmatured debt of other companies, the payment of which has been assumed by the company, including funded debt the maturity of which has been extended by specific agreement.

(b) This account shall include such items as mortgage bonds, collateral trust bonds, income bonds, convertible debt, debt securities with detachable warrants and other similar obligations maturing more than one year from date of issue.

(c) In the case of debt securities with detachable warrants this account shall include only the face amount of the security at the time of issuance. The value of detachable warrants shall be charged to either Account 4220, Premium on Long-Term Debt, or Account 4230, Discount on Long-Term Debt, as appropriate, and credited to Account 4520, Additional Paid-in Capital, in the case of capital stock warrants or retained in this account as a separately identifiable amount in the case of detachable long-term debt warrants. No similar allocation shall be made for the issuance of either convertible debt or debt securities with non-detachable warrants.

(d) Subsidiary records shall be maintained for each issue.

(e) Securities maturing in one year or less, including securities maturing serially, shall be included in Account 4050, Current Maturities—Long-Term Debt.

(f) Investment advances, including those represented by notes, shall be included in Account 4270, Other Long-Term Debt.

§ 32.4220 Premium on long-term debt.

(a) This account shall include the premium associated with all classes of long-term debt. Premium, as applied to securities issued or assumed by the company, means the excess of the current money value received at their sale over the sum of their book or face amount and interest or dividends accrued at the date of the sale.

(b) Amounts included in this account shall be amortized monthly by the interest method and credited to Account 7510, Interest on Funded Debt. (Note also § 32.4210(c) of this subpart.)

(c) Subsidiary records shall be maintained to identify the premium attributable to each issue.

§ 32.4230 Discount on long-term debt.

(a) This account shall include the discount associated with all classes of long-term debt. Discount, as applied to securities issued or assumed by the company, means the excess of the book or face amount of the securities plus interest or dividends accrued at the date of the sale over the current money value of the consideration received at their sale.

(b) Amounts included in this account shall be amortized monthly by the interest method and charged to Account 7510, Interest On Funded Debt. (Note also § 32.4210(c) of this subpart.)

(c) Subsidiary records shall be maintained to identify the discount attributable to each issue.

§ 32.4240 Reacquired debt.

This account shall include the face amount of debt reacquired prior to maturity that has not been retired. Gain or loss shall be recognized at the time of reacquisition by credits or charges to Account 7360, Other Nonoperating Income, except that material gains or losses shall be treated as extraordinary. (See Accounts 7610, Extraordinary Income Credits, and 7620, Extraordinary Income Charges.)

§ 32.4250 Obligations under capital leases.

(a) This account shall include the noncurrent portion of obligations applicable to property obtained under capital leases.

(b) Amounts subject to current settlement shall be included in Account 4060, Current Maturities—Capital Leases.

§ 32.4260 Advances from affiliated companies.

(a) This account shall include the amount of advance from affiliated companies.

(b) Amounts due affiliated companies which are subject to current settlement shall be included in Account 4010 or 4020, as appropriate.

§ 32.4270 Other long-term debt.

This account shall include long-term debt not provided for elsewhere.

§ 32.4310 Other long-term liabilities.

(a) This account shall include amounts accrued to provide for such items as unfunded pensions (if actuarially determined), death benefits, deferred compensation costs and other long-term liabilities not provided for elsewhere.

(b) Subsidiary records shall be maintained to identify the nature of the items included herein.

§ 32.4320 Unamortized operating investment tax credits—net.

(a) This account shall be credited and Account 7210, Operating Investment Tax Credits—Net, should be debited with investment tax credits generated from qualified expenditures related to regulated operations which the company defers rather than recognizes currently in income.

(b) This account shall be debited and Account 7210 credited with a proportionate amount determined in relation to the period of time used for computing book depreciation on the property to which the tax credit relates.

§ 32.4330 Unamortized nonoperating investment tax credits—net.

(a) This account shall be credited and Account 7410, Nonoperating Investment Tax Credits—Net, shall be debited with investment tax credits generated from qualified expenditures related to other operations which the company has elected to defer rather than recognize currently in income.

(b) This account shall be debited and Account 7410 credited with a proportionate amount determined in relation to the useful book life of the property to which the tax credit relates.

§ 32.4340 Net noncurrent deferred operating income taxes.

(a) This account shall include the balance of income tax expense related to noncurrent items from regulated operations which have been deferred to later periods as a result of comprehensive interperiod tax allocation related to temporary differences that arise from regulated operations.

(b) This account shall be credited or debited, as appropriate, and Account 7250, Provision for Deferred Operating Income Taxes—Net, shall reflect the offset for the tax effect of revenues and expenses from regulated operations which have been included in the determination of taxable income, but which will not be included in the determination of book income or for the tax effect of revenues and expenses from regulated operations which have been included in the determination of book income prior to the inclusion in the determination of taxable income.

(c) As regulated assets or liabilities which generated the prepaid income tax or deferred income tax are reclassified from long-term or noncurrent status to current status, the appropriate deferred income tax shall be reclassified from this account to Account 4100, Net Current Deferred Operating Income Taxes.

(d) The classification of deferred income taxes as current or noncurrent shall follow the classification of the asset or liability that gave rise to the deferred income tax. If there is no related asset or liability, classification shall be based on the expected turnaround of the temporary difference.

(e) Subsidiary record categories shall be maintained in order that the company may separately report the amounts contained herein that are property related and those that are nonproperty related. Such subsidiary

record categories shall be reported as required by Part 43 of this Commission's Rules and Regulations.

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 9419, Feb. 28, 1994]

§ 32.4341 Net deferred tax liability adjustments.

(a) This account shall include the portion of deferred income tax charges and credits pertaining to Accounts 32.1437, Deferred Tax Regulatory Asset, and 32.4361, Deferred Tax Regulatory Liability.

(b) This account shall be used to record adjustments to the accumulated deferred tax liabilities recorded in Accounts 4100 and 4340 for:

(1) Tax effects of temporary differences accounted for under the flow-through method or treated as permanent differences.

(2) Reclassification attributable to changes in tax rates (Federal, state and local). As tax rates increase or decrease, the offsetting debit or credit will be recorded in Account 1437 and/or 4361 as required by paragraph (a) of this section.

(3) The tax effects of carryforward net operating losses and carryforward investment tax credits expected to reduce future taxes payable that are reported in published financial statements.

(4) Reversals of the tax effects of carryforward net operating losses and carryforward investment tax credits previously recorded in this account at the time they become recognized as reductions in current taxable income and current taxes payable on tax returns.

(c) This account shall be exempt from the vintage year detail record requirements of § 32.22(e)(2).

[59 FR 9419, Feb. 28, 1994]

§ 32.4350 Net noncurrent deferred nonoperating income taxes.

(a) This account shall include the balance of income tax expense (Federal, state, and local) that has been deferred to later periods as a result of comprehensive interperiod allocation related to nonoperating differences.

(b) This account shall be credited or debited, as appropriate, and Account 7450, Provision for Deferred Nonoperating Income Taxes—Net, shall reflect the offset for the tax effect of revenues from other operations and extraordinary items and nonoperating expenses which have been included in the determination of taxable income, but which will not be included in the determination of book income or for the tax effect of nonoperating expenses and extraordinary items and nonoperating income which have been included in the determination of book income prior to the inclusion in the determination of taxable income.

(c) As other assets or liabilities which generated the prepaid income tax or deferred income tax are reclassified from long-term or non-current status to current status, the appropriate deferred income tax shall be reclassified from this account to account 4110, Net Current Deferred Nonoperating Income Taxes.

(d) This account shall also include the balance of the income tax effect (Federal, State and local) related to noncurrent extraordinary items which have been included in the determination of taxable income in a period different from when it is included in the determination of book income, that is, more than one year.

(e) This account shall be charged or credited with the contra amount recorded to Account 7640, Provision for Deferred Income Tax Effect of Extraordinary Items—Net, in accordance with § 32.22 of subpart B.

(f) As the extraordinary item which generated the deferred income tax becomes current, the appropriate deferred income tax shall be reclassified from this account to Account 4110, Net Current Deferred Nonoperating Income Taxes.

(g) The classificaiton of deferred income taxes as current or noncurrent shall follow the classification of the asset or liability that gave rise to the deferred income tax. If there is no related asset or liability, classification shall be based on the expected turnaround of the temporary difference.

(h) Subsidiary record categories shall be maintained in order that the company may separately report the amounts contained herein that are property related and those that are nonproperty related. Such subsidiary

record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 9419, Feb. 28, 1994]

§ 32.4360 Other deferred credits.

This account shall include the amount of all deferred credits not provided for elsewhere, such as amounts awaiting adjustment between accounts; and revenue, expense, and income items in suspense.

§ 32.4361 Deferred tax regulatory liability.

(a) This account shall include amounts of probable future revenue reductions attributable to future decreases in taxes payable. As reductions occur, amounts recorded in this amount shall be reduced with a debit entry and a credit entry to Account 4341, Net Deferred Tax Liability Adjustments.

(b) This account shall also be adjusted for the impact of prospective tax rate changes on the deferred tax liability for those temporary differences underlying its existing balance. If the cumulative effect on such adjustments reduces the account to a net debit balance, such balance shall be reclassified to Account 1437.

[59 FR 9419, Feb. 28, 1994]

§ 32.4370 Other jurisdictional liabilities and deferred credits—net.

This account shall include the cumulative impact on liabilities and deferred credits of the jurisdictional ratemaking practices which vary from those of this Commission. All entries recorded in this account shall be recorded net of any applicable income tax effects and shall be supported by appropriate subsidiary records where necessary as provided for in § 32.13 of subpart B.

§ 32.4510 Capital stock.

(a) This account shall include the par value, stated amount, or in the case of no-par stock, the amount received for capital stock issued and outstanding.

(b) Subsidiary records shall be maintained so as to show separately each class of stock.

(c) This account shall be charged with the book amount of any stock retired.

§ 32.4520 Additional paid-in capital.

(a) This account shall include the difference between the net proceeds (including discount, premium and stock issuance expense) received from the issuance of capital stock and the amount includable in Account 4510, Capital Stock, unless such difference results in a debit balance for that class of stock, in which case the amount shall be charged to Account 4550, Retained Earnings.

(b) This account shall also include gains arising from the retirement and cancellation of capital stock. Losses from the retirement and cancellation of capital stock shall be charged to this account to the extent that there exist credits in this account for the same class of stock; otherwise to Account 4550.

§ 32.4530 Treasury stock.

This account shall include the cost of the company's own capital stock which has been issued and subsequently reacquired but not retired or resold.

§ 32.4540 Other capital.

This account shall include amounts which are credits arising from the donation by stockholders of the company's capital stock, capital recorded upon the reogranization or recapitalization of the company and temporary declines in the value of marketable securities held for investment purposes. (See also Account 1401 Investment in Affiliated Companies.)

§ 32.4550 Retained earnings.

(a) This account shall include the undistributed balance of retained earnings derived from the operations of the company and from all other transactions not includable in the other accounts appropriate for inclusion of stockholders' equity.

(b) Subsidiary records shall be maintained wherein are recorded all entries to retained earnings during the year such that the detail of the entries may be disclosed to the Commission.

Subpart D—Instructions For Revenue Accounts

§ 32.4999 General.

(a) *Purpose of revenue accounts.* The revenue accounts are intended to include the actual cash inflows (or equivalents) that have or will occur as a result of the company's ongoing major or central operations during the period. They will include the revenues which arise from furnishing regulated telecommunications services to others, from directory advertising, rentals of telecommunications assets and from providing other services which are directly associated with the provision of regulated telecommunications services.

(b) *Deductions from revenue.* Corrections of overcharges, authorized refunds of overcollections previously credited to revenue, authorized refunds and adjustments on account of failure in service, and other corrections shall be charged to the revenue account previously credited with the amounts involved.

(c) *Commissions.* Commissions paid to others or employees in place of compensation or salaries for services rendered, such as public telephone commissions, shall be charged to Account 6623, Customer Services, and not to the revenue accounts. Other commissions shall be charged to the appropriate expense accounts.

(d) *Revenue recognition.* Credits shall be made to the appropriate revenue accounts when such revenue is actually earned. When the billing cycle encompasses more than one accounting period, adjustments are necessary to properly recognize the revenue applicable to the current accounting period under report. Revenues recorded under the terms of two-tier contracts or other variable payment plans should be deferred, if necessary, and recognized ratably with expenses over the terms of the related contract. Any amounts deferred shall be credited to Account 4360, Other Deferred Credits.

(e) *Contractual arrangements.* Charges and credits resulting from activities associated with the provisions of regulated telecommunications services shall be recorded in a manner consistent with the nature of the underlying contractual arrangements. The charges and credits resulting from expense sharing or apportionment arrangements associated with the provision of regulated telecommunications services shall be recorded in the detailed regulated accounts. Charges and credits resulting from revenue settlement agreements or other revenue pooling arrangements associated with the provision of regulated telecommunications services shall be included in the appropriate revenue accounts. Those charges and credits resulting from contractual revenue pooling and/or sharing agreements shall be recorded in each prescribed revenue account and prescribed subsidiary record categories thereof to the extent that each is separately identifiable in the settlement process. It is not intended that settlement amounts be allocated or generally spread to the individual revenue accounts where they are not separately identifiable in the settlement process. When the settlement amounts are not identifiable by a revenue account they shall be recorded in Account 5069, Other Local Exchange Revenue Settlements, 5129, Other Long Distance Private Network Revenue Settlements, 5169, Other Long Distance Revenue Settlements, or 5269, Other Revenue Settlements, as appropriate.

(f) *Subsidiary records—jurisdictional subdivisions.* (1) Subsidiary record categories shall be maintained in order that the company may separately report revenues derived from charges imposed under intrastate, interstate and international tariff filings. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

(2) This jurisdictional subsidary record requirement applies to all accounts except the Network Access Services Group where separate accounts have been established for Federal and state access revenues.

(g) *Structure of revenue accounts.* (1) The revenue section of the system of accounts shall be organized by revenue group summary account, account and subsidiary record category (if required).

(2) The revenue section of this system of accounts shall be comprised of five major groups—Local Network

Services Revenues, Network Access Services Revenues, Long Distance Network Services Revenues, Miscellaneous Revenues, and Uncollectible Revenues, which shall be considered as a revenue group for the purposes of the construction of the system.

(3) Summary accounts within revenue groups shall be used to describe aggregations of two or more accounts having a certain commonality. Summary accounts are assigned numbers so that they may be used by Class A telephone companies to aggregate accounts for reporting purposes; and, as specifically directed, so that they may be used as accounts by Class B telephone companies.

(4) Accounts shall be maintained as prescribed in this Section subject to the conditions described in section 32.13 of subpart B. In certain instances, subsidiary record categories may be required below the account level by this system of accounts or by Commission order.

(h) *Local Network Services revenues.* Local Network Services revenues (Accounts 5000–5069) shall include revenues derived from the provision of service and equipment entirely within the basic service area. That area is defined as the normal boundaries for local calling plus Extended Area Service (EAS) boundaries as they apply to that service. It includes revenues derived from both local private network service and local public network services as well as from customer premises facilities services. Local revenues include associated charges such as one-time service connection or termination charges and secondary features such as call waiting.

(i) *Network Access revenues.* (1) Network Access revenues (Accounts 5080–5084) shall include revenues derived from the provision of exchange access services to an interexchange carrier or to an end user of telecommunications services beyond the exchange carrier's network.

(2) Billing and collections service provided under exchange access tariffs shall be included in the Miscellaneous Revenues Group.

(j) *Long Distance Network Service revenues.* Long Distance Network Service revenues shall include revenues derived from the provision of services beyond the basic service area, whether message or flat-rate and including public network switching as well as private.

(k) *Miscellaneous revenues.* Miscellaneous revenues are those revenues derived from the provision of regulated products and services provided under tariff or contract but not contained elsewhere. They shall also include operating revenue derived from activities performed incident to the company's tariffed telecommunications operations which, though non-tariffed, are included in the regulatory process.

(l) *Nonregulated revenues.* The nonregulated revenue account shall be used for nonregulated operating revenues when a nonregulated activity involves the common or joint use of assets or resources in the provision of regulated and nonregulated products or services as required in § 32.23(c) of this subpart. Revenues from nontariffed activities offered incidental to tariffed services may be accounted for as regulated revenues, provided the activities are outgrowths of regulated operations and the revenues do not exceed, in the aggregate, one percent of total revenues for three consecutive years. Such activities must be listed in the Commission-approved Cost Allocation Manual for any company required to file a Cost Allocation Manual.

(m) *Uncollectible revenues.* Uncollectible revenues shall include amounts originally credited to the revenue accounts which have proved impracticable of collection.

(n) *Revenue accounts to be maintained.*

Account title	Class A account	Class B account
Local Network Services Revenues:		
Basic local service revenue	[1] 5000	5000
Basic area revenue	5001	.....
Optional extended area revenue	5002	.....
Cellular mobile revenue	5003	.....
Other mobile services revenue	5004	.....
Local private line revenue	5040	.....
Customer premises revenue	5050	.....
Other local exchange revenue	5060	.....
Other local exchange revenue settlements	5069	.....
Network Access Services Revenues:		
Network access revenue	[1] 5080	5080
End user revenue	5081	5081
Switched access revenue	5082	5082
Special access revenue	5083	5083
State access revenue	5084	5084
Long Distance Network Services Revenues:		
Long distance message revenue	5100	5100

Account title	Class A account	Class B account
Unidirectional long distance revenue	[1] 5110	
Long distance inward-only revenue	5111	
Long distance outward-only revenue	5112	
Long distance private network revenue	[1] 5120	
Subvoice grade long distance private network revenue	5121	
Voice grade long distance private network revenue	5122	
Audio program grade long distance private network revenue	5123	
Video program grade long distance private network revenue	5124	
Digital transmission long distance private network revenue	5125	
Long distance private network switching revenue	5126	
Other long distance private network revenue	5128	
Other long distance private network revenue settlements	5129	
Other long distance revenue	5160	
Other long distance revenue settlements	5169	
Miscellaneous Revenues:		
Miscellaneous revenue		5200
Directory revenue	5230	
Rent revenue	5240	
Corporate operations revenue	5250	
Miscellaneous revenue	[1] 5260	
Special billing arrangements revenue	5261	
Customer operations revenue	5262	
Plant operations revenue	5263	
Other incidental regulated revenue	5264	
Other revenue settlements	5269	
Carrier billing and collection revenue	5270	
Nonregulated Revenues:		
Nonregulated operating revenue	5280	5280
Uncollectible Revenues:		
Uncollectible revenue	[1] 5300	5300
Uncollectible revenue—Telecommunications	5301	
Uncollectible revenue—Other	5302	

[1] To be used by Class A telephone companies to summarize accounts for reporting purposes.

[51 FR 43499, Dec. 2, 1986, as amended at 53 FR 49322, Dec. 7, 1988; 59 FR 46930, Sept. 13, 1994; 64 FR 50008, Sept. 15, 1999]

§ 32.5000 Basic local service revenue.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 5001 through 5004. Class B telephone companies shall use this account for revenues of the type and character required of Class A companies in Accounts 5001 through 5069.

§ 32.5001 Basic area revenue.

(a) This account shall include revenue derived from the provision of basic area message services such as flat rate services and measured services. Included is revenue derived from non-optional extended area services. Also included is revenue derived from the billed or guaranteed portion of semi-public services.

(b) Revenue derived from charges for nonpublished number or additional and boldfaced listings in the alphabetical section of the company's telephone directories shall be included in Account 5230, Directory Revenue.

§ 32.5002 Optional extended area revenue.

This account shall include total revenue derived from the provision of optional extended area service.

§ 32.5003 Cellular mobile revenue.

This account shall include message revenue derived from cellular mobile telecommunications systems connected to the public switched network placed between mobile units and other stations within the mobile service area.

§ 32.5004 Other mobile services revenue.

(a) This account shall include message revenue derived from general radio telecommunications systems connected to the public switched network placed between mobile units and other stations within the mobile service area, as well as revenue from mobile radio paging, mobile dispatching, and signaling services.

(b) Revenue from private mobile telephone services which do not have access to the public switched network shall be included in Account 5264, Other Incidental Regulated Revenue.

§ 32.5040 Local private line revenue.

This account shall include revenue derived from local services that involve dedicated circuits, private switching arrangements, and/or predefined transmission paths, whether virtual or physical, which provide communications between specific locations (e.g., point-to-point communications. It includes revenue from subvoice grade, voice

grade, audio and video program grade, digital transmission and local private network switching as well as the revenue from administrative and operational support services associated with private network services and facilities, e.g., charges for company-directed testing, expedited installation, and service restoration priority.

§ 32.5050 Customer premises revenue.

This account shall include revenue derived from tariffed information origination/termination plant. Included is revenue derived from the provision under leasing arrangements of tariffed customer premises equipment (CPE), terminal equipment, station apparatus and large private branch exchanges as well as tariffed nonrecurring charges related solely to station apparatus. Also included are all tariffed charges for customer premises activities and facilities not related solely to station apparatus.

§ 32.5060 Other local exchange revenue.

This account shall include revenue from the provision of secondary features which are integrated with the telecommunications network such as call forwarding, call waiting and touch-tone line service. Also included is revenue derived from the provision of public announcement and other record message services, directory assistance and other call completion services (excluding operator assisted basic long distance calls), as well as revenue derived from central office related service connection and termination charges, and other non-premise customer specific charges associated with public network services. This account shall also include local revenue not provided for in other accounts.

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 46930, Sept. 13, 1994]

§ 32.5069 Other local exchange revenue settlements.

This account shall include the charges and credits resulting from contractual revenue pooling and/or sharing agreements for tariffed local network services only when they are not separately identifiable by local network services revenue accounts in the settlement process. (See also § 32.4999(e) of this subpart.) To the extent that the charges and credits resulting from a settlement process can be identified by Local Network Services Revenue account they shall be recorded in the applicable account.

§ 32.5080 Network access revenue.

(a) This account number shall be used by Class A and Class B telephone companies to summarize for reporting purposes the contents of Accounts 5081 through 5084. It shall include revenue derived from the provision of exchange access services to an interexchange carrier or to an end user of telecommunications services beyond the exchange carrier's network.

(b) Accounts 5081 through 5083 are for federally tariffed access charges while Account 5084 is to be used for state tariffed access charges.

§ 32.5081 End user revenue.

This account shall contain the federally tariffed monthly flat rate charge assessed upon end users.

§ 32.5082 Switched access revenue.

(a) This account shall consist of federally tariffed charges assessed to interexchange carriers for access to local exchange facilities.

(b) Subsidiary record categories shall be maintained in order that the company may separately report the amounts contained herein that relate to limited pay telephone, carrier common line, line termination, local switching, intercept, information, common transport and dedicated transport. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.5083 Special access revenue.

(a) This account shall include all federally tariffed charges assessed for other than end user or switched access charges referred to in Account 5081, End User Revenue, and Account 5082, Switched Access Revenue.

(b) Subsidiary record categories shall be maintained in order that the company may separately report the amounts contained herein that relate to recurring charges, nonrecurring

charges and surcharges. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.5084 State access revenue.

(a) This account shall include all state tariffed charges assessed by local exchange carriers upon interexchange carriers and end users for access to the local exchange network for intrastate telecommunications.

(b) Billing and collections services provided under exchange access tariffs shall be included in Account 5270, Carrier Billing and Collection Revenue.

§ 32.5100 Long distance message revenue.

(a) This account shall be used by Class A telephone companies for revenue derived from message services that terminate beyond the basic service area of the originating wire center and are individually prices. This includes those message services which utilize the public long distance switching network and the basic subscriber access line. (See also Account 5111, Long Distance Inward-Only Revenue, and Account 5112, Long Distance-Outward Only Revenue.) It also includes those long distance calls placed from mobile and public telephones, as well as any charges for operator assistance or special billing directly related to the completion of a specific call. This account shall also include revenue derived from individually priced message services offered under calling plans (discounted long distance) which do not utilize dedicated access lines, as well as those priced at the basic long distance rates where a discounted toll charge is on a per message basis. Any revenue derived from monthly or one-time charges for obtaining calling plan services shall be included in this account.

(b) Class B telephone companies shall use this account for revenues of the type and character required of Class A companies in Accounts 5100 through 5169.

§ 32.5110 Unidirectional long distance revenue.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 5111 and 5112. It shall include revenue derived from long distance services which permit unidirectional calls to a subscriber from specified service areas or which permit the subscriber to place telephone calls from one location to other specified services areas. It shall also include revenue derived from toll calling plans which embody flat-rate or measured time toll service. (See also Account 5100, Long Distance Message Revenue.)

§ 32.5111 Long distance inward-only revenue.

This account shall include the revenue derived from long distance services which permit unidirectional calls to a subscriber from specified services areas (multipoint-to-point service). These calls require the use of dedicated access lines connecting a subscriber's premises and a designated central office. These dedicated access lines are generally separate from those required for the subscriber to place outward calls. The call is billed to the subscriber even though it is generally initiated by the subscriber's customer or correspondent.

§ 32.5112 Long distance outward-only revenue.

This account shall include revenue derived from long distance services which permit the subscriber to place telephone calls from one location to other specified service areas (point-to-multipoint service). These calls are completed without operator assistance and require the use of a dedicated access line. The dedicated access line is generally separate from those required for inward message services and cannot be used to place calls within the basic service area or calls outside the selected service areas. Outward calls are screened and blocked to determine whether the calls are within an authorized service area.

§ 32.5120 Long distance private network revenue.

(a) This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 5121 through 5129.

It shall include revenue derived from services extending beyond the basic service area that involve dedicated circuits, private switching arrangements, and/or predefined transmission paths, whether virtual or physical, which provide communications between specific locations (e.g., point-to-point communications).

(b) Service connection charges, termination charges, rearrangements and changes, etc., shall be included in each account to which they apply. Revenue derived from associated administrative and operational support services shall be included in Account 5128, Other Long Distance Private Network Revenue.

§ 32.5121 Subvoice grade long distance private network revenue.

This account which consists of revenue from narrow-band analog private network circuits and facilities furnished exclusively for record forms of communications, such as teletypewriter, teletypesetter, telewriter, ticker, Morse, signaling, remote metering, and supervisory services.

§ 32.5122 Voice grade long distance private network revenue.

This account consists of revenue from private network circuits and facilities (including multipurpose wideband) which provide voice grade services for the transmission of analog signals. It includes revenue from services such as voice, data and telephoto communication, as well as remote metering, supervisory control, miscellaneous signaling and channels furnished for the purpose of extending customer—provided communications systems. It includes revenue from the provision of facilities between customer premises and (a) a serving office, (b) a carrier distribution point or (c) an extension distribution channel, except when furnished as a subscriber access line under an unidirectional long distance service (in which case the revenue should be included in Account 5111, Long Distance Inward-Only Revenue, or Account 5112, Long Distance Outward-Only Revenue.)

§ 32.5123 Audio program grade long distance private network revenue.

(a) This account consists of revenue from private network circuits and facilities furnished for audio program transmission purposes, such as radio broadcasting, sound recording (wired music) and loud speaker services. It includes revenue from the provision of facilities for the transmission of analog signals between customer premises and (1) a serving office, (2) a carrier distribution point or (3) an extension distribution channel furnished in connection with such services. It also includes revenue from facilities furnished to carry the audio portion of a television program if furnished under separate audio rates.

(b) If the rate for television program services includes both the picture and sound portion of the transmission, the revenue shall be included in Account 5124, Video Program Grade Long Distance Private Network Revenue.

§ 32.5124 Video program grade long distance private network revenue.

This account consists of revenue from private network circuits and facilities furnished for television program transmission purposes, such as commercial broadcast and educational or private television services. It includes revenue from the provision of facilities for the transmission of analog signals between customer premises and (a) a serving office, (b) a carrier distribution point or (c) an extension distribution channel furnished in connection with such services. It also includes revenue from both the picture and sound portions of transmission for television program service when provided under a combined rate schedule.

§ 32.5125 Digital transmission long distance private network revenue.

This account consists of revenue from the provision of circuits and facilities for the transmission of digital signals only.

§ 32.5126 Long distance private network switching revenue.

This account consists of revenue derived from the provision of common

user channels and switching capabilities used for the transmission of telecommunication signals between three (3) or more points in the network. Also included is revenue derived from the provision of basic switching and transfer arrangements used to connect private line channels.

§ 32.5128 Other long distance private network revenue.

This account consists of revenue from administrative and operation support services associated with private network services and facilities, e.g., charges for company-directed testing, expedited installation, and service restoration priority. Also included is other private network services revenue not provided for in other accounts.

§ 32.5129 Other long distance private network revenue settlements.

This account shall include the charges and credits resulting from contractual revenue pooling and/or sharing agreements for tariffed long distance private network services only when they are not identifiable by private network services revenue account in the settlement process. (See also § 32.4999(e) of this subpart.) To the extent that the charges and credits resulting from a settlement process can be identified by private network services revenue account, they shall be recorded in the applicable account.

§ 32.5160 Other long distance revenue.

This account shall include long distance revenues not provided for elsewhere.

§ 32.5169 Other long distance revenue settlements.

This account shall include the charges and credits resulting from contractual revenue pooling and/or sharing agreements for tariffed long distances public network services only when they are not identifiable by long distance public network services revenue accounts in the settlement process. (See also § 32.4999(e) of this subpart.) To the extent that the charges and credits resulting from a settlement process can be identified by long distance public network services revenue account they shall be recorded in the applicable account.

§ 32.5200 Miscellaneous revenue.

Class B telephone companies shall use this account for revenues of the type and character required of Class A companies in Accounts 5230 through 5270.

§ 32.5230 Directory revenue.

This account shall include revenue derived from alphabetical and classified sections of directories and shall also include fees paid by other entities for the right to publish the company's directories. Items to be included are:

(a) All revenue derived from the classified section of the directories;

(b) Revenue from the sale of new telephone directories whether they are the company's own directories or directories purchased from others. This shall also include revenue from the sale of specially bound telephone directories and special telephone directory covers;

(c) Amounts charged for additional and boldface listings, marginal displays, inserts, and other advertisements in the alphabetical of the company's telephone directories; and

(d) Changes for unlisted and non-published telephone numbers.

§ 32.5240 Rent revenue.

(a) This account shall include revenues (including taxes when borne by the lessee) derived from the rental or subrental to others of telecommunications plant furnished apart from telecommunications services rendered by the company. It includes revenue from the rent of such items as space in conduit, pole line space for attachments, and any allowance for return on property used in joint operations and shared facilities agreements.

(b) The expense of maintaining and operating the rented property, including depreciation and insurance, shall be included in the appropriate operating expense accounts. Taxes applicable to the rented property shall be included by the owner of the rented property in appropriate tax accounts.

(c) When land or buildings are rented on an incidental basis for non-telecommunications use the rental and expenses are included in Account 7360, Other Nonoperating Income.

§ 32.5250 Corporate operations revenue.

This account shall include revenue derived from services rendered to other companies under a license agreement, general services contract, or other arrangement providing for the furnishing of general accounting, financial, legal, patent, and other general services associated with the provision of regulated telecommunications services. (See also Accounts 5230 and 5270.)

§ 32.5260 Miscellaneous revenue.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 5261 through 5269.

§ 32.5261 Special billing arrangements revenue.

This account shall include revenue derived from the provision, either under tariff or through contractual arrangements, of special billing information to customers in the form of magnetic tapes, cards or statements. Special billing information provides detail in a format and/or at a level of detail not normally provided in the standard billing rendered for the regulated telephone services utilized by the customer.

§ 32.5262 Customer operations revenue.

This account shall include revenue derived from the performance of customer operations services for others incident to the company's regulated telecommunications operations which are not provided for elsewhere. (See also §§ 32.14(e) and 32.4999(e) of this part.)

§ 32.5263 Plant operations revenue.

(a) This account shall include revenue derived from contract services (plant maintenance) performed for others incident to the company's regulated telecommunications operations. This includes revenue from the incidental performance of nontariffed operating and maintenance activities for others which are similar in nature to those activities which are performed by the company in operating and maintaining its own telecommunications plant facilities.

(b) The records supporting the entries in this account shall be maintained with sufficient particularity to identify the revenue and associated Plant Specific Operations Expenses related to each undertaking.

(c) This account does not include revenue related to the performance of operation or maintenance activities under a joint operating agreement. (See also Account 5240.)

§ 32.5264 Other incidental regulated revenue.

(a) This account shall include the other incidental regulated revenue not provided for in other Revenues accounts. Such revenues to be included are:

(1) Collection overages (collection shortages shall be charged to Account 6623, Customer services.)

(2) Unclaimed refunds for telecommunications services when not subject to escheats;

(3) Charges (penalties) imposed by the company for customer checks returned for non-payment;

(4) Discounts allowed customers for prompt payment;

(5) Late-payment charges;

(6) Revenue from private mobile telephone services which do not have access to the public switched network; and

(7) Other incidental revenue not provided for elsewhere in other Revenue accounts.

(b) Any definitely known amounts of losses of revenue collections due to fire or theft, (1) at customers' coin-box stations, (2) at public or semipublic telephone stations, (3) in the possession of collectors en route to collection offices, (4) on hand at collection offices, and (5) between collection offices and banks shall be charged to Account 6728, Other General and Administrative.

§ 32.5269 Other revenue settlements.

This account shall include the charges and credits resulting from contractual revenue pooling and/or sharing agreements for activities included in

the miscellaneous revenue accounts only when they are not identifiable by miscellaneous revenue account in the settlement process. (See also § 32.4999(e) of this subpart.) The extent that the charges and credits resulting from a settlement process can be identified by miscellaneous revenue accounts they shall be recorded in the applicable account.

§ 32.5270 Carrier billing and collection revenue.

This account shall include revenue derived from the provision of billing and collection services to other telecommunications companies. This includes amounts charged for services such as message recording, billing, collection, billing analysis, and billing information services, whether rendered under tariff or contractual arrangements.

§ 32.5280 Nonregulated operating revenue.

(a) This account shall include revenues derived from a nonregulated activity involving the common or joint use of assets or resources in the provision of regulated and nonregulated products or services.

(b) This account shall be debited and regulated revenue accounts shall be credited at tariffed rates when tariffed services are provided to nonregulated activities that are accounted for as prescribed in § 32.23(c) of this subpart.

(c) Separate subsidiary record categories shall be maintained for each nonregulated revenue item recorded in this account.

[53 FR 49322, Dec. 7, 1988, as amended at 64 FR 50008, Sept. 15, 1999]

§ 32.5300 Uncollectible revenue.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 5301 and 5302. Class B telephone companies shall use this account for revenues of the type and character required of Class A companies in Accounts 5301 and 5302.

§ 32.5301 Uncollectible revenue—telecommunications.

This account shall be charged with amounts concurrently credited to Account 1181, Accounts Receivable Allowances—Telecommunications.

§ 32.5302 Uncollectible revenue—other.

This account shall be charged with amounts concurrently credited to Account 1190, Other Accounts Receivable, or to Account 1191, Accounts Receivable Allowance—Other, when such allowance is maintained.

Subpart E—Instructions for Expense Accounts

§ 32.5999 General.

(a) *Structure of the expense accounts.* (1) The expense section of the system of accounts shall be organized by expense group summary account, and subsidiary record category (if required).

(2) The expense section of this system of accounts shall be comprised of four major expense groups—Plant Specific Operations, Plant Nonspecific Operations, Customer Operations and Corporate Operations. Expenses to be recorded in Plant Specific and Plant Nonspecific Operations Expense Groups generally reflect cost associated with the various kinds of equipment identified in the plant asset accounts. Expenses to be recorded in the Customer Operations and Corporate Operations accounts reflect the costs of, or are associated with, functions performed by people, irrespective of the organization in which any particular function is performed.

(3) Summary accounts within expense groups shall be used to describe aggregations of two or more accounts having a certain commonality. Summary accounts are assigned numbers so that they may be used by Class A telephone companies to aggregate accounts for reporting purposes; and as specifically directed, so that they may be used as accounts by Class B telephone companies.

(4) Accounts shall be maintained as prescribed in this section subject to the conditions described in § 32.13 in subpart B. Subsidiary record categories may be required below the account level by this system of accounts or by Commission order.

(b) *Plant Specific Operations Expense.* (1) The Plant Specific Operations Expense Accounts, 6110 through 6441, are

used to record costs related to specific kinds of telecommunications plant.

(2) The Plant Specific Operations Expense accounts predominantly mirror the telecommunications plant in service detail accounts and are numbered consistently with them; the first digit of the expense account being six (6) and the remaining digits being the same as the last three numbers of the related plant account. In classifying Plant Specific Operations expenses, the text of the corresponding plant account should be consulted to ensure appropriateness.

(3) The Plant Specific Operations Expense accounts shall include the costs of inspecting, testing (except as specified in Account 6533, Testing Expense) and reporting on the condition of telecommunications plant to determine the need for repairs, replacements, rearrangements and changes; performing routine work to prevent trouble (except as specified in Account 6533), replacing items of plant other than retirement units; rearranging and changing the location of plant not retired; repairing material for reuse; restoring the condition of plant damaged by storms, floods, fire or other casualties (other than the cost of replacing retirement units); inspecting after repairs have been made; and receiving training to perform these kinds of work. Also included are the costs of direct supervision (immediate of first-level) and office support of this work.

(4) In addition to the activities specified in paragraph (b)(3) of this section, the appropriate Plant Specific Operations Expense accounts shall include the cost of personnel whose principal job is the operation of plant equipment, such as general purpose computer operators, aircraft pilots, chauffeurs and shuttle bus drivers. However, when the operation of equipment is performed as part of other identifiable functions (such as the use of office equipment, capital tools or motor vehicles) the operators' cost shall be charged to accounts appropriate for those functions. (For costs of operator services personnel, see Accounts 6621, Call Completion Services, and 6622, Number Services, and for costs of test board personnel see Account 6533.)

(c) *Plant Nonspecific Operations Expense*. The Plant Nonspecific Operations Expense accounts shall include expenses related to property held for future telecommunications use, provisioning expenses, network operations expenses, and depreciation and amortization expenses. Accounts in this group (except for Account 6540, Access Expense, and Accounts 6560 through 6565) shall include the costs of performing activities described in narratives for individual accounts. These costs shall also include the costs of supervision and office support of these activities.

(d) *Customer Operations Expense*. The Customer Operations Expense accounts shall include the cost of performing customer related marketing and services activities described in narratives for individual accounts. These costs shall also include the costs of supervision, office support and training for these activities.

(e) *Corporate Operations Expense*. The Corporate Operations Expense accounts shall include the costs of performing executive and planning activities and general and administrative activities described in narratives for individual accounts. These costs shall also include the costs of supervision, office support and training for these activities.

(f) *Reimbursements*. Reimbursements of actual costs incurred in connection with joint operations or projects repairing plant due to damages by others, and obligations to make changes in telecommunications plant (such as highway relocations), shall be credited to the accounts originally charged.

(g) *Expense accounts to be maintained*.

Account title	Class A account	Class B account
Income Statement Accounts		
Plant specific operations expense:		
Network support expense	[1] [2] 6110	6110
Motor vehicle expense	[1] 6112	.....
Aircraft expense	[1] 6113	.....
Tools and other work equipment expense	[1] 6114	.....
General support expenses	[1] [2] 6120	6120
Land and building expenses	[1] 6121	.....
Furniture and artworks expense	[1] 6122	.....
Office equipment expense	[1] 6123	.....
General purpose computers expense	[1] 6124	.....
Central office switching expense	[1] [2] 6210	6210
Analog electronic expense	[1] 6211	.....
Digital electronic expense	[1] 6212	.....
Electro-mechanical expense	[1] 6215	.....
Operators system expense	[1] 6220	6220

Account title	Class A account	Class B account
Central office transmission expenses	[1] [2] 6230	6230
Radio systems expense	[1] 6231	.....
Circuit equipment expense	[1] 6232	.....
Information origination/termination expense	[1] [2] 6310	6310
Station apparatus expense	[1] 6311	.....
Large private branch exchange expense	[1] 6341	.....
Public telephone terminal equipment expense	[1] 6351	.....
Other terminal equipment expense	[1] 6362	.....
Cable and wire facilities expenses	[1] [2] 6410	6410
Poles expense	[1] 6411	.....
Aerial cable expense	[1] 6421	.....
Underground cable expense	[1] 6422	.....
Buried cable expense	[1] 6423	.....
Submarine cable expense	[1] 6424	.....
Deep sea cable expense	[1] 6425	.....
Intrabuilding network cable expense	[1] 6426	.....
Aerial wire expense	[1] 6431	.....
Conduit systems expense	[1] 6441	.....
Plant nonspecific operations expense:		
Other property plant and equipment expenses	[1] [2] 6510	6510
Property held for future	.....	.....
Telecommunications use expense	[1] 6511	.....
Provisioning expense	[1] 6512	.....
Network operations expenses	[1] [2] 6530	6530
Power expense	[1] 6531	.....
Network administration expense	[1] 6532	.....
Testing expense	[1] 6533	.....
Plant operations administration expense	[1] 6534	.....
Engineering expense	[1] 6535	.....
Access expense	[1] 6540	6540
Depreciation and amortization expenses	[2] 6560	6560
Depreciation expense—telecommunications plant in service	6561	.....
Depreciation expense—property held for future telecommunications use	6562	.....
Amortization expense—tangible	6563	.....
Amortization expense—intangible	6564	.....
Amortization expense—other	6565	.....
Customer operations expense:		
Marketing	[1] [2] 6610	6610
Product management	[1] 6611	.....
Sales	[1] 6612	.....
Product advertising	[1] 6613	.....
Services	[1] [2] 6620	6620
Call completion services	[1] 6621	.....
Number services	[1] 6622	.....
Customer services	[1] 6623	.....
Corporate operations expense:		
Executive and planning	[1] [2] 6710	6710
Executive	[1] 6711	.....
Planning	[1] 6712	.....
General and administrative	[1] [2] 6720	6720
Accounting and finance	[1] 6721	.....
External relations	[1] 6722	.....
Human resources	[1] 6723	.....
Information management	[1] 6724	.....
Legal	[1] 6725	.....
Procurement	[1] 6726	.....
Research and development	[1] 6727	.....
Other general and administrative	[1] 6728	.....
Provision for uncollectible notes receivable	6790	6790

[1] Subsidiary record categories required in accordance with § 32.5999(f) of this subpart.

[2] To be used by Class A telephone companies to summarize accounts for reporting purposes.

[51 FR 43499, Dec. 2, 1986, as amended at 52 FR 7580, Mar. 12, 1987; 64 FR 50008, Sept. 15, 1999; 65 FR 16335, Mar. 28, 2000]

§ 32.6110 Network support expenses.

(a) This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6112 through 6114. Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6112 through 6114.

(b) Credits shall be made to this account by Class B companies for amounts transferred to Construction and/or other Plant Specific Operations Expense accounts. These amounts shall be computed on the basis of direct labor hours. (See also § 32.5999(f)(5) of this subpart.)

[51 FR 43499, Dec. 2, 1986, as amended at 64 FR 50008, Sept. 15, 1999]

§ 32.6112 Motor vehicle expense.

(a) This account shall include costs of fuel, lubrications, license and inspection fees, washing, repainting, and minor accessories. Also included are the costs of personnel whose principal job is operating motor vehicles, such as chauffeurs and shuttle bus drivers. The costs of users of motor vehicles whose principal job is not the operation of motor vehicles shall be charged to accounts appropriate for the activities performed.

(b) Credits shall be made to this account for amounts transferred to Construction and/or to other Plant Specific Operations Expense accounts. These amounts shall be computed on the basis of direct labor hours. (See also § 32.5999(f)(5) of this subpart.)

§ 32.6113 Aircraft expense.

(a) This account shall include such costs as aircraft fuel, flight crews, mechanics and ground crews, licenses and inspection fees, washing, repainting, and minor accessories.

(b) Credits shall be made to this account for amounts transferred to Construction and/or to other Plant Specific Operations Expense accounts. These amounts shall be computed on the basis of direct labor hours. (See also § 32.5999(f)(5) of this subpart.)

§ 32.6114 Tools and other work equipment expense.

(a) This account shall include costs incurred in connection with special purpose vehicles, garage work equipment and other work equipment included in Account 2114, Tools and other work equipment. This account shall be charged with costs incurred in connection with the work equipment itself. This account shall also include such costs as fuel, licenses and inspection fees, washing, repainting and minor accessories. The costs of using garage work equipment to maintain motor vehicles shall be charged to Account 6112, Motor vehicles expense. This account shall not be charged with the costs of operators of special purpose vehicles and other work equipment. The costs of operators of this equipment shall be charged to accounts appropriate for the activities performed.

(b) Credits shall be made to this account for amounts related to special purpose vehicles and other work equipment transferred to Construction and/or to other Plant Specific Operations Expense accounts. These amounts shall be computed on the basis of direct labor hours. (See also § 32.5999(f)(5).

[64 FR 50008, Sept. 15, 1999]

§ 32.6120 General support expenses.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6121 through 6124. Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6121 through 6124.

§ 32.6121 Land and building expense.

(a) This account shall include expenses associated with land and buildings (excluding amortization of leasehold improvements). This account shall also include janitorial service, cleaning supplies, water, sewage, fuel and guard service, and electrical power.

(b) The cost of electrical power used to operate the telecommunications network shall be charged to Account 6531, Power Expense, and the cost of separately metered electricity used for operating specific types of equipment, such as computers, shall be charged to the expense account appropriate for such use.

§ 32.6122 Furniture and artworks expense.

This account shall include expenses associated with furniture and artworks.

§ 32.6123 Office equipment expense.

This account shall be charged only with costs incurred in connection with the office equipment itself. The costs of operators of this equipment shall be charged to accounts appropriate for the activities performed.

§ 32.6124 General purpose computers expense.

This account shall include the costs of personnel whose principal job is the physical operation of general purpose computers and the maintenance of operating systems. This excludes the cost of preparation of input data or the use of outputs which are chargeable to the accounts appropriate for the activities being performed. Also excluded are costs incurred in planning and maintaining application systems and databases for general purpose computers. (See also § 32.6724, Information management.) Separately metered electricity for general purpose computers shall also be included in this account.

[64 FR 50008, Sept. 15, 1999]

§ 32.6210 Central office switching expenses.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6211 through 6215.

Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6211 through 6215.

§ 32.6211 Analog electronic expense.

This account shall include expenses associated with analog electronic switching.

§ 32.6212 Digital electronic expense.

This account shall include expenses associated with digital electronic switching.

§ 32.6215 Electro-mechanical expense.

(a) This account shall include expenses associated with electro-mechanical switching.

(b) Subsidiary record categories shall be maintained as provided in § 32.2215(a) of subpart C.

§ 32.6220 Operator systems expense.

This account shall include expenses associated with operator systems equipment.

§ 32.6230 Central office transmission expense.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6231 and 6232. Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6231 and 6232.

§ 32.6231 Radio systems expense.

(a) This account shall include expenses associated with radio systems.

(b) Subsidiary record categories shall be maintained as provided in § 32.2231(a) of subpart C.

§ 32.6232 Circuit equipment expense.

This account shall include expenses associated with circuit equipment.

§ 32.6310 Information origination/termination expenses.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6311 through 6362. Class B telephone companies shall use this account for expenses of the type and character required of Class A telephone companies in Accounts 6311 through 6362.

§ 32.6311 Station apparatus expense.

This account shall include expenses associated with station apparatus. Expenses associated with company internal use communication equipment shall be recorded in Account 6123, Office Equipment Expense.

§ 32.6341 Large private branch exchange expense.

This account shall include expenses associated with large private branch exchanges. Expenses associated with company internal use communication equipment shall be recorded in Account 6123, Office Equipment Expense.

§ 32.6351 Public telephone terminal equipment expense.

This account shall include expenses associated with public telephone terminal equipment.

§ 32.6362 Other terminal equipment expense.

This account shall include expenses associated with other terminal equipment.

§ 32.6410 Cable and wire facilities expenses.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6411 through 6441. Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6411 through 6441.

[51 FR 43499, Dec. 2, 1986, as amended at 59 FR 46930, Sept. 13, 1994]

§ 32.6411 Poles expense.

This account shall include expenses associated with poles.

§ 32.6421 Aerial cable expense.

(a) This account shall include expenses associated with aerial cable.

(b) Subsidiary record categories shall be maintained as provided in §32.2421(a) of subpart C.

§ 32.6422 Underground cable expense.

(a) This account shall include expenses associated with underground cable.

(b) Subsidiary record categories shall be maintained as provided in § 32.2422(a) of subpart C.

§ 32.6423 Buried cable expense.

(a) This account shall include expenses associated with buried cable.

(b) Subsidiary record categories shall be maintained as provided in § 32.2423(a) of subpart C.

§ 32.6424 Submarine cable expense.

(a) This account shall include expenses associated with submarine cable.

(b) Subsidiary record categories shall be maintained as provided in § 32.2424(a) of subpart C.

§ 32.6425 Deep sea cable expense.

(a) This account shall include expenses associated with deep sea cable.

(b) Subsidiary record categories shall be maintained as provided in § 32.2425(a) of subpart C.

§ 32.6426 Intrabuilding network cable expense.

(a) This account shall include expenses associated with intrabuilding network cable.

(b) Subsidiary record categories shall be maintained as provided in § 32.2426(a) of subpart C.

§ 32.6431 Aerial wire expense.

This account shall include expenses associated with aerial wire.

§ 32.6441 Conduit systems expense.

This account shall include expenses associated with conduit systems.

§ 32.6510 Other property, plant and equipment expenses.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6511 and 6512. Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6511 and 6512.

§ 32.6511 Property held for future telecommunications use expense.

This account shall include expenses associated with property held for future telecommunications use.

§ 32.6512 Provisioning expense.

(a) This account shall include costs incurred in provisioning material and supplies, including office supplies. This includes receiving and stocking, filling requisitions from stock, monitoring and replenishing stock levels, delivery of material, storage, loading or unloading and administering the reuse or refurbishment of material. Also included are adjustments resulting from the annual or more frequent inventory of material and supplies.

(b) Credits shall be made to this account for amounts transferred to construction and/or to plant specific operations expense. These costs are to be cleared by adding to the cost of material and supplies a suitable loading charge. (See also § 32.5999(f)(5) of this subpart.)

§ 32.6530 Network operations expenses.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6531 through 6535. Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6531 through 6535.

§ 32.6531 Power expense.

This account shall include the cost of electrical power used to operate the telecommunications network.

§ 32.6532 Network administration expense.

This account shall include costs incurred in network administration. This includes such activities as controlling traffic flow, administering traffic measuring and monitoring devices, assigning equipment and load balancing, collecting and summarizing traffic data, administering trunking, and assigning interoffice facilities and circuit layout work.

§ 32.6533 Testing expense.

This account shall include costs incurred in testing telecommunications facilities from a testing facility (test desk or other testing system) to determine the condition of plant on either a routine basis or prior to assignment of the facilities; receiving, recording and analyzing trouble reports; testing to determine the nature and location of reported trouble condition; and dispatching repair persons or otherwise initiating corrective action. (Note also § 32.5999(b)(3) of this subpart.)

§ 32.6534 Plant operations administration expense.

(a) This account shall include costs incurred in the general administration of plant operations. This includes supervising plant operations (except as specified in § 32.5999(a)(3) of this subpart; planning, coordinating and monitoring plant operations; and performing staff work such as developing methods and procedures, preparing and conducting training (except on-the-job training) and coordinating safety programs.

(b) Credits shall be made to this account for amounts transferred to construction accounts. These amounts shall be computed on the basis of direct labor hours. (See § 32.2000(c)(2)(ii) of subpart C.)

§ 32.6535 Engineering expense.

(a) This account shall include costs incurred in the general engineering of the telecommunications plant which are not directly chargeable to an undertaking or project. This includes developing input to the fundamental planning process, performing preliminary work or advance planning in connection with potential undertakings, and performing special studies of an engineering nature.

(b) Credits shall be made to this account for amounts transferred to construction accounts. These amounts shall be computed on the basis of direct labor hours. (See § 32.2000(c)(2)(ii) of subpart C.)

§ 32.6540 Access expense.

(a) This account shall include amounts paid by interexchange carriers or other exchange carriers to another exchange carrier for the provision of carrier's carrier access.

(b) Subsidiary record categories shall be maintained in order that the entity may separately report interstate and intrastate carrier's carrier expense. Such subsidiary record categories shall be reported as required by Part 43 of this Commission's Rules and Regulations.

[52 FR 43917, Nov. 17, 1987]

§ 32.6560 Depreciation and amortization expenses.

This account shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6561 through 6565. Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6561 through 6565.

§ 32.6561 Depreciation expense—telecommunications plant in service.

This account shall include the depreciation expense of capitalized costs in Accounts 2112 through 2441, inclusive.

§ 32.6562 Depreciation expense—property held for future telecommunications.

This account shall include the depreciation expense of capitalized costs included in Account 2002, Property Held for Future Telecommunications Use.

§ 32.6563 Amortization expense—tangible.

This account shall include only the amortization of costs included in Accounts 2681, Capital Leases, and 2682, Leasehold Improvements.

§ 32.6564 Amortization expense—intangible.

This account shall include the amortization of costs included in Account 2690, Intangibles.

§ 32.6565 Amortization expense—other.

(a) This account shall include only the amortization of costs included in Account 2005, Telecommunications Plant Adjustment.

(b) This account shall also include lump-sum write offs of amounts of plant acquisition adjustment as provided for in § 32.2005(b)(3) of Subpart C.

(c) Subsidiary records shall be maintained so as to show that character of the amounts contained in this account.

§ 32.6610 Marketing.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6611 through 6613. Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6611 through 6613.

§ 32.6611 Product management.

This account shall include costs incurred in performing administrative activities related to marketing products and services. This includes competitive analysis, product and service identification and specification, test market planning, demand forecasting, product life cycle analysis, pricing analysis, and identification and establishment of distribution channels.

§ 32.6612 Sales.

This account shall include costs incurred in selling products and services. This includes determination of individual customer needs, development and presentation of customer proposals, sales order preparation and handling, and preparation of sales records.

§ 32.6613 Product advertising.

This account shall include costs incurred in developing and implementing promotional strategies to stimulate the purchase of products and services. This excludes nonproduct-related advertising, such as corporate image, stock and bond issue and employment advertisements, which shall be included in the appropriate functional accounts.

§ 32.6620 Services.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6621 through 6623. Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6621 through 6623.

§ 32.6621 Call completion services.

This account shall include costs incurred in helping customers place and complete calls, except directory assistance. This includes handling and recording; intercept; quoting rates, time and charges; and all other activities involved in the manual handling of calls.

§ 32.6622 Number services.

This account shall include costs incurred in providing customer number and classified listings. This includes preparing or purchasing, compiling, and disseminating those listings through directory assistance or other means.

§ 32.6623 Customer services.

(a) This account shall include costs incurred in establishing and servicing customer accounts. This includes:

(1) Initiating customer service orders and records;

(2) Maintaining and billing customer accounts;

(3) Collecting and investigating customer accounts, including collecting revenues, reporting receipts, administering collection treatment, and handling contacts with customers regarding adjustments of bills;

(4) Collecting and reporting pay station receipts; and

(5) Instructing customers in the use of products and services.

(b) This account shall also include amounts paid by interexchange carriers or other exchange carriers to another exchange carrier for billing and collection services. Subsidiary record categories shall be maintained in order that the entity may separately report interstate and intrastate amounts. Such subsidiary record categories shall be reported as required by Part 43 of this Commission's Rules and Regulations.

[52 FR 43917, Nov. 17, 1987]

§ 32.6710 Executive and planning.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6711 and 6712. Class B telephone companies shall use this account for expenses of the type and

character required of Class A companies in Accounts 6711 and 6712.

§ 32.6711 Executive.

This account shall include costs incurred in formulating corporate policy and in providing overall administration and management. Included are the pay, fees and expenses of boards of directors or similar policy boards and all board-designated officers of the company and their office staffs, e.g., secretaries and staff assistants.

§ 32.6712 Planning.

This account shall include costs incurred in developing and evaluating long-term courses of action for the future operations of the company. This includes performing corporate organization and integrated long-range planning, including management studies, options and contingency plans, and economic strategic analysis.

§ 32.6720 General and administrative.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 6721 through 6728. Class B telephone companies shall use this account for expenses of the type and character required of Class A companies in Accounts 6721 through 6728.

§ 32.6721 Accounting and finance.

This account shall include costs incurred in providing accounting and financial services. Accounting services include payroll and disbursements, property accounting, capital recovery, regulatory accounting (revenue requirements, separations, settlements and corollary cost accounting), non-customer billing, tax accounting, internal and external auditing, capital and operating budget analysis and control, and general accounting (accounting principles and procedures and journals, ledgers, and financial reports). Financial services include banking operations, cash management, benefit investment fund management (including actuarial services), securities management, debt trust administration, corporate financial planning and analysis, and internal cashier services.

§ 32.6722 External relations.

This account shall include costs incurred in maintaining relations with government, regulators, other companies and the general public. This includes:

(a) Reviewing existing or pending legislation (See also account 7370, Special Charges, for lobbying expenses.);

(b) Preparing and presenting information for regulatory purposes, including tariff and service cost filings, and obtaining radio licenses and construction permits;

(c) Performing public relations and non-product-related corporate image advertising activities;

(d) Administering relations, including negotiating contracts (See also Account 6725, Legal.), with telecommunications companies and other utilities, businesses, and industries. This excludes sales contracts (See also Account 6612, Sales.); and

(e) Administering investor relations.

§ 32.6723 Human resources.

This account shall include costs incurred in performing personnel administration activities. This includes:

(a) Equal Employment Opportunity and Affirmative Action Programs;

(b) Employee data for forecasting, planning and reporting;

(c) General employment services;

(d) Occupational medical services;

(e) Job analysis and salary programs;

(f) Labor relations activities;

(g) Personnel development and staffing services, including counseling, career planning, promotion and transfer programs;

(h) Personnel policy development;

(i) Employee communications;

(j) Benefit administration;

(k) Employee activity programs;

(l) Employee safety programs; and

(m) Nontechnical training course development and presentation.

§ 32.6724 Information management.

This account shall include costs incurred in planning and maintaining application systems and databases for general purpose computers.

[64 FR 50008, Sept. 15, 1999]

§ 32.6725 Legal.

This account shall include costs incurred in providing legal services. This includes conducting and coordinating litigation, providing guidance on regulatory and labor matters, preparing, reviewing and filing patents and contracts and interpreting legislation. Also included are court costs, filing fees, and the costs of outside counsel, depositions, transcripts and witnesses.

§ 32.6726 Procurement.

This account shall include costs incurred in procuring material and supplies, including office supplies. This includes analyzing and evaluating suppliers' products, selecting appropriate suppliers, negotiating supply contracts, placing purchase orders, expediting and controlling orders placed for material, developing standards for material purchased and administering vendor or user claims.

§ 32.6727 Research and development.

(a) This account shall include costs incurred in making planned search or critical investigation aimed at discovery of new knowledge. It also includes translating research findings into a plan or design for a new product or process or for a significant improvement to an existing product or process, whether intended for sale or use.

(b) This excludes making routine alterations to existing products, processes, and other ongoing operations even though those alterations may represent improvements.

§ 32.6728 Other general and administrative.

This account shall include costs incurred in performing general administrative activities not directly charged to the user, and not provided for in other accounts. This includes providing general reference libraries, food services (e.g., cafeterias, lunch rooms and vending facilities), archives, general security investigation services, operating official private branch exchanges in the conduct of the business, and telecommunications and mail services. Also included are payments in settlement of accident and damage claims, insurance premiums for protection against losses and damages, direct benefit payments to or on behalf of retired and separated employees, accident and sickness disability payments, supplemental payments to employees while in governmental service, death payments, and other miscellaneous costs of a corporate nature. This account excludes the cost of office services, which are to be included in the accounts appropriate for the activities supported.

§ 32.6790 Provision for uncollectible notes receivable.

This account shall be charged with amounts concurrently credited to Account 1200, Notes Receivable, or to Account 1201, Notes Receivable Allowance, when such allowance is maintained.

Subpart F—Instructions For Other Income Accounts

§ 32.6999 General.

(a) *Structure of the Other Income Accounts.* The Other Income Accounts are designed to reflect both operating and nonoperating income items including taxes, extraordinary items and other income and expense items not properly included elsewhere.

(b) *Other Income Accounts Listing.*

Account title	Class A account	Class B account
Other operating income and expense:		
Other operating income and expense	[1] 7100	7100
Income from custom work	7110	.....
Return from nonregulated use of regulated facilities	7130	.....
Gains and losses from foreign exchange	7140	.....
Gains or losses from disposition of land and artwork	7150	.....
Other operating gains and losses	7160	.....
Operating taxes:		
Operating taxes	[1] 7200	7200
Operating investment tax credits—net	7210	.....
Operating Federal income taxes	7220	.....
Operating State and local income taxes	7230	.....
Operating other taxes	7240	.....
Provision for deferred operating income taxes—net	7250	.....
Nonoperating income and expense:		
Nonoperating income and expense	[1] 7300	7300
Dividend income	7310	.....
Interest income	7320	.....
Income from sinking and other funds	7330	.....

Account title	Class A account	Class B account
Allowance for funds used during construction	7340	.....
Gains or losses from the disposition of certain property	7350	.....
Other nonoperating income	7360	.....
Special charges	7370	.....
Nonoperating taxes:		
Nonoperating taxes	[1] 7400	7400
Nonoperating investment tax credits—net	7410	.....
Nonoperating Federal income taxes	7420	.....
Nonoperating State and local income taxes	7430	.....
Nonoperating other taxes	7440	.....
Provision for deferred nonoperating income taxes—net	7450	.....
Interest and related items:		
Interest and related items	[1] 7500	7500
Interest on funded debt	7510	.....
Interest expense—capital Leases	7520	.....
Amortization of debt issuance expense	7530	.....
Other interest deductions	7540	.....
Extraordinary items:		
Extraordinary items	[1] 7600	7600
Extraordinary income credits	7610	.....
Extraordinary income charges	7620	.....
Current income tax effect of extraordinary items—net	7630	.....
Provision for deferred income tax effect of extraordinary items—net	7640	.....
Jurisdictional Differences and nonregulated income items:		
Income effect of jurisdictional ratemaking difference—net	7910	7910
Nonregulated net income	7990	7990

[1] To be used by Class A companies to summarize accounts for reporting purposes.

[51 FR 43499, Dec. 2, 1986, as amended at 52 FR 6562, Mar. 4, 1987; 53 FR 49322, Dec. 7, 1988]

§ 32.7099 Content of accounts.

Other Operating Income and Expense accounts are intended to record the results of transactions, events or circumstances during the periods which are incidental or peripheral to the major or central operations of the company. They shall include all items of an operating nature as incidental work performed for others not provided for elsewhere. Whenever practicable the inflows and outflows associated with a transaction, event or circumstances shall be matched and the result shown as a net gain or loss.

§ 32.7100 Other operating income and expenses.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 7110 through 7160. Class B companies shall use this account for other operating income and expense items of the type and character required of Class A companies in Accounts 7110 through 7160.

§ 32.7110 Income from custom work.

(a) This account shall include profits realized from custom work (plant construction) performed for others incident to the company's regulated telecommunications operations. This includes profits from the incidental performance of nontariffed construction activities (including associated engineering and design) for others which are similar in nature to those activities which are performed by the company in constructing its own telecommunications plant facilities.

(b) The records supporting the entries in this account shall be maintained with sufficient particularity to identify separately the revenue and costs associated with each undertaking.

§ 32.7130 Return from nonregulated use of regulated facilities.

This account shall include a return on investment for the use of regulated property plant and equipment to provide nonregulated products and services.

§ 32.7140 Gains and losses from foreign exchange.

This account shall include all gains and losses resulting from the exchange of foreign currency. Transaction (realized) gains or losses shall be measured based on the exchange rate in effect on the transaction date. Unrealized gains or losses shall be measured based on the exchange rate in effect at the balance sheet date.

§ 32.7150 Gains and losses from the disposition of land and artworks.

This account shall include gains or losses resulting from the disposition of land or artworks.

§ 32.7160 Other operating gains and losses.

This account shall be charged or credited, as appropriate, to record the

results of transactions, events or circumstances which are of an operational nature, but occur irregularly or are peripheral to the major or central operations of the company and not provided for elsewhere.

§ 32.7199 Content of accounts.

The Operating Tax accounts shall include the taxes arising from the central operations of the company.

§ 32.7200 Operating taxes.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 7210 through 7250. Class B telephone companies shall use this account for operating taxes of the type and character required of Class A companies in Accounts 7210 through 7250.

§ 32.7210 Operating investment tax credits—net.

(a) This account shall be charged and Account 4320, Unamortized Operating Investment Tax Credits—Net, shall be credited with investment tax credits generated from qualified expenditures related to regulated operations which the company defers rather than recognizes currently in income.

(b) This account shall be credited and Account 4320 shall be charged ratably with the amortization of each year's investment tax credits included in Account 4320 for investment services for ratemaking purposes. (See also Account 7410, Nonoperating Investment Tax Credits—Net.) Such amortization shall be determined in relation to the period of time used for computing book depreciation on the property with respect to which the tax credits relate.

§ 32.7220 Operating Federal income taxes.

(a) This account shall be charged and Account 4070, Income Taxes-Accrued, shall be credited for the amount of Federal Income Taxes for the current period. This account shall also reflect subsequent adjustments to amounts previously charged.

(b) Taxes should be accrued each month on an estimated basis and adjustments made as later data becomes available.

(c) Tax credits, other than investment tax credits, if normalized, shall be recorded consistent with the accounting for investment tax credits and shall be amortized to income as directed by this Commission.

(d) No entries shall be made to this account to reflect interperiod tax allocations.

§ 32.7230 Operating state and local income taxes.

(a) This account shall be charged and Account 4070, Income Taxes—Accrued, shall be credited for the amount of state and local income taxes for the current period. This account shall also reflect subsequent adjustments to amounts previously charged.

(b) Taxes should be accrued each month on an estimated basis and adjustments made as later data becomes available.

(c) No entries shall be made to this account to reflect interperiod tax allocations.

§ 32.7240 Operating other taxes.

(a) This account shall be charged and Account 4080, Other Taxes—Accrued, shall be credited for all taxes, other than Federal, state and local income taxes and payroll related taxes, related to regulated operations applicable to current periods. Among the items includable in this account are property, gross receipts, franchise and capital stock taxes; this account shall also reflect subsequent adjustments to amounts previously charged.

(b) Special assessments for street and other improvements and special benefit taxes, such as water taxes and the like, shall be included in the operating expense accounts or investment accounts, as may be appropriate.

(c) Discounts allowed for prompt payment of taxes shall be credited to the account to which the taxes are chargeable.

(d) Interest on tax assessments which are not paid when due shall be included in Account 7540, Other Interest Deductions.

(e) Taxes paid by the company under tax-free covenants on indebtedness shall be charged to Account 7360, Other Nonoperating Income.

(f) Sales and use taxes shall be accounted for, so far as practicable, as part of the cost of the items to which the taxes relate.

(g) Taxes on rented telecommunications plant which are borne by the lessee shall be credited by the owner to Account 5240, Rent Revenue, and shall be charged by the lessee to the appropriate Plant Specific Operations Expense account.

§ 32.7250 Provision for deferred operating income taxes—net.

(a) This account shall be charged or credited, as appropriate, *with contra entries* recorded to the following accounts for income tax expense that has been deferred in accordance with § 32.22 of Subpart B.

4100 Net Current Deferred Operating Income Taxes
4340 Net Noncurrent Deferred Operating Income Taxes

(b) Subsidiary record categories shall be maintained to distinguish between property and nonproperty related deferrals and so that the company may separately report that amounts contained herein that relate to Federal, state and local income taxes. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.7299 Content of accounts.

The nonoperating income and expense accounts are intended to record the results of transactions, events and circumstances affecting the company during a period and which are not operational in nature. They shall include such items as nonoperating taxes, dividend income and interest income. Whenever practicable the inflows and outflows associated with a transaction or event shall be matched and the result shown as a net gain or loss.

§ 32.7300 Nonoperating income and expense.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 7310 through 7370. Class B telephone companies shall use this account for nonoperating income and expense items of the type and character required of Class A companies in Accounts 7310 through 7370.

§ 32.7310 Dividend income.

(a) This account shall include dividends on investments in common and preferred stock, which is the property of the company, whether such stock is owned by the company and held in its treasury, or deposited in trust (except in sinking or other funds, see paragraph (c) of this section), or otherwise controlled.

(b) These accounts shall not include dividends or other returns on securities issued or assumed by the company and held by or for it, whether pledged as collateral, or held in its treasury, in special deposits, or in sinking or other funds.

(c) Dividends on stocks of other companies held in sinking or other funds shall be credited to Account 7330, Income from Sinking and Other Funds.

(d) Dividends received and receivable from affiliated companies accounted for on the equity method shall be included in Account 1401, Investments in Affiliated Companies, as a reduction of the carrying value of the investments.

§ 32.7320 Interest income.

(a) This account shall include interest on securities, including notes and other evidences of indebtedness, which are the property of the company, whether such securities are owned by the company and held in its treasury, or deposited in trust (except in sinking or other funds, see paragraph (d) to this section) or otherwise controlled. It shall also include interest on bank balances, certificates of deposits, open accounts, and other analogous items.

(b) There shall be included in this account for each month the applicable amount requisite to extinguish, during the interval between the date of acquisition and date of maturity, the difference between the purchase price and the par value of securities owned, the income from which is includable in this account. Amounts thus credited or charged shall be concurrently included in the accounts in which the securities are carried. Any such difference remaining unextinguished at the sale or upon the maturity and satisfaction of

such securities shall be cleared to Account 7360, Other Nonoperating Income.

(c) These accounts shall not include interest or other returns on securities issued or assumed by the company and held by or for it, whether pledged as collateral, or held in its treasury, in special deposits, or in sinking or other funds.

(d) Interest on cash and on securities issued by others shall be included in Account 7330, Income from Sinking and Other Funds, when such assets are held in sinking or other funds.

(e) Cash discounts on bills for material purchased shall not be included in this account.

§ 32.7330 Income from sinking and other funds.

(a) This account shall include the income accrued on cash, securities issued by other companies, and other assets (not including securities issued or assumed by the company) held in sinking and other funds.

(b) There shall be included in this account for each month the applicable amount requisite to extinguish, during the interval between the date of acquisition and the date of maturity, the difference between the purchase price and the par value of securities held in sinking or other funds. Amounts thus credited or charged shall be concurrently included in the accounts in which the securities are carried. Any such differences remaining unextinguished upon the maturity and satisfaction of such securities shall be cleared to Account 7360, Other Nonoperating Income.

§ 32.7340 Allowance for funds used during construction.

This account shall be credited with amounts charged to the telecommunications plant under construction account. (See § 32.2000(c)(2)(x).)

[60 FR 12138, Mar. 6, 1995]

§ 32.7350 Gains or losses from the disposition of certain property.

This account shall include gains or losses resulting from the disposition of the following:

(a) Gains or losses from the disposition of land or artworks;

(b) Gains or losses from the disposition of plant with traffic; and

(c) Gains or losses from the disposition of nonoperating telecommunications plant not previously used in the provision of telecommunications services.

§ 32.7360 Other nonoperating income.

(a) This account shall include all other items of income and gains or losses from activities not specifically provided for elsewhere.

(b) This account shall include representative items as follows:

(1) Fees collected in connection with the exchange of coupon bonds for registered bonds;

(2) Gains or losses realized on the sale of temporary cash investments or marketable equity securities;

(3) Uncollectible amounts previously credited to accounts 7310 through 7350, inclusive;

(4) Net unrealized losses on investments in current marketable equity securities;

(5) Write-downs or write-offs of the book costs of investment in equity securities due to permanent impairment;

(6) Gains or losses of nonoperating nature arising from foreign currency exchange or translation;

(7) Gains or losses from the extinguishment of debt made to satisfy sinking fund requirements;

(8) Amortization of Goodwill;

(9) Company's share of the earnings or losses of affiliated companies accounted for on the equity method; and

(10) The net balance of the revenue from and the expenses (including depreciation, amortization and insurance) of property, plant, and equipment, the cost of which is includable in Account 2006, Nonoperating Plant.

§ 32.7370 Special charges.

This account shall include the following costs that are typically given special regulatory scrutiny for ratemaking purposes. Unless specific justification to the contrary is given, such costs are presumed to be excluded from the costs of service in setting rates.

(a) Lobbying includes expenditures for the purpose of influencing public opinion with respect to the election or appointment of public officials,

referenda, legislation, or ordinances (either with respect to the possible adoption of new referenda, legislation or ordinances, or repeal or modification of existing referenda, legislation or ordinances) or approval, modification, or revocation of franchises, or for the purpose of influencing the decisions of public officials. This also includes advertising, gifts, honoraria, and political contributions. This does not include such expenditures which are directly related to communications with and appearances before regulatory or other governmental bodies in connection with the reporting utility's existing or proposed operations;

(b) Contributions for charitable, social or community welfare purposes;

(c) Membership fees and dues in social, service and recreational or athletic clubs and organizations;

(d) Penalties and fines paid on account of violations of statutes. This account shall also include penalties and fines paid on account of violations of U.S. antitrust statutes, including judgements and payments in settlement of civil and criminal suits alleging such violations; and

(e) Abandoned construction projects.

[51 FR 43499, Dec. 2, 1986, as amended at 54 FR 22758, May 26, 1989; 62 FR 20126, Apr. 25, 1997]

§ 32.7399 Content of accounts.

The Nonoperating Tax accounts shall include taxes arising from activities which are not a part of the central operations of the entity.

§ 32.7400 Nonoperating taxes.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 7410 through 7450. Class B telephone companies shall use this account for nonoperating taxes of the type and character required of Class A companies in Accounts 7410 through 7450.

§ 32.7410 Nonoperating investment tax credits—net.

(a) This account shall be charged and Account 4330, Unamortized Nonoperating Investment Tax Credits—Net, shall be credited with investment tax credits generated from qualified expenditures related to other operations which the company has elected to defer rather than recognize currently in income.

(b) This account shall be credited and Account 4330 shall be charged with the amortization of each year's investment tax credits included in such accounts relating to amortization of previously deferred investment tax credits of other property or regulated property, the amortization of which does not serve to reduce costs of service (but the unamortized balance does reduce rate base) for ratemaking purposes. Such amortization shall be determined with reference to the period of time used for computing book depreciation on the property with respect to which the tax credits relate.

§ 32.7420 Nonoperating Federal income taxes.

(a) This account shall be charged and Account 4070, Income Taxes—Accrued, shall be credited for the amount of nonoperating Federal income taxes for the current period. This account shall also reflect subsequent adjustments to amounts previously charged.

(b) Taxes shall be accrued each month on an estimated basis and adjustments made as later data becomes available.

(c) Companies that adopt the flow-through method of accounting for investment tax credits shall reduce the calculated provision in this account by the entire amount of the credit realized during the year. Tax credits, other than investment tax credits, if normalized, shall be recorded consistent with the accounting for investment tax credits.

(d) No entries shall be made to this account to reflect interperiod tax allocation.

§ 32.7430 Nonoperating state and local income taxes.

(a) This account shall be charged and Account 4070, Income Taxes—Accrued, should be credited for the amount of state and local income taxes for the current period. This account shall also reflect subsequent adjustments to amounts previously charged.

(b) Taxes shall be accrued each month on an estimated basis and adjustments made as later data becomes available.

(c) No entries shall be made to this account to reflect interperiod tax allocation.

§ 32.7440 Nonoperating other taxes.

This account shall be charged and Account 4080, Other Taxes—Accrued, shall be credited for all nonoperating taxes, other than Federal, state and local income taxes, and payroll related taxes for the current period. Among the items includable in this account are property, gross receipts, franchise and capital stock taxes. This account shall also reflect subsequent adjustments to amounts previously charged.

§ 32.7450 Provision for deferred nonoperating income taxes—net.

(a) This account shall be charged or credited, as appropriate, with contra enties recorded to the following accounts for nonoperating tax expenses that has been deferred in accordance with § 32.22 of subpart B:

4110 Net Current Deferred Nonoperating Income Taxes
4350 Net Noncurrent Deferred Nonoperating Income Taxes

(b) Subsidiary record categories shall be maintained to distinguish between property and nonproperty related deferrals and so that the company may separately report the amounts contained herein that relate to Federal, state and local income taxes. Such subsidiary record categories shall be reported as required by part 43 of this Commission's Rules and Regulations.

§ 32.7499 Content of accounts.

Interest and related amounts shall be included in Accounts 7510 through 7540.

§ 32.7500 Interest and related items.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 7510 through 7540. Class B telephone companies shall use this account for interest and related items of the type and character required of Class A companies in Accounts 7510 through 7540.

§ 32.7510 Interest on funded debt.

(a) This account shall include the current accruals of interest on all classes of debt the principal of which is includable in Account 4210, Funded Debt. It shall also include the interest on funded debt the maturity of which has been extended by specific agreement.

(b) This account shall be kept so that the interest on each class of funded debt may be shown separately in the annual reports to this Commission.

(c) These accounts shall not include charges for interest on funded debt issued or assumed by the company and held by or for it, whether pledged as collateral or held in its treasury, in special deposits or in sinking or other funds.

(d) Interest expressly provided for and included in the face amount of securities issued shall be charged at the time of issuance to Account 1330, Other Prepayments, and cleared to this account as the term expires to which the interest applies.

(e) This account shall also include monthly amortization of balances in Accounts 4220, Premium on Long-Term Debt, and 4230, Discount on Long-Term Debt.

§ 32.7520 Interest expense—capital leases.

This account shall include the interest portion of each capital lease payment.

§ 32.7530 Amortization of debt issuance expense.

This account shall include the monthly amortization of the balances in Account 1407, Unamortized Debt Issuance Expense.

§ 32.7540 Other interest deductions.

(a) This account shall include all interest deductions not provided for elsewhere, e.g., discount, premium, and expense on notes maturing one year of less from date of issue.

(b) A list of representative items of indebtedness, the interest on which is chargeable to this account, follows:

(1) Advances from affiliated companies;

(2) Advances from nonaffiliated companies and other liabilities

(3) Assessments for public improvements past due;

(4) Bond coupons, matured and unpaid;

(5) Claims and judgments;

(6) Customers' deposits;

(7) Funded debt mature, with respect to which a definite agreement as to extension has not been made;

(8) Notes payable on demand or maturing one year or less from date of issue;

(9) Open accounts;

(10) Tax assessments, past due; and

(11) Discount, premium, and issuance expense of notes maturing one year or less from date of issue.

(c) Interest payable on notes or other evidences of indebtedness maturing serially shall be charged to Account 7510, Interest of Funded Debt, if any portion of the obligation matures more than one year from date of issue.

§ 32.7599 Content of accounts.

These accounts are intended to segregate the effects of events or transactions that are extraordinary. Extraordinary events and transactions are distinguished by both their unusual nature and by the infrequency of their occurrence, taking into account the environment in which the company operates. These accounts shall also include the related income tax effect of the extraordinary items.

§ 32.7600 Extraordinary items.

This account number shall be used by Class A telephone companies to summarize for reporting purposes the contents of Accounts 7610 through 7640. Class B telephone companies shall use this account for transactions of the type and character required of Class A companies in Accounts 7610 through 7640.

§ 32.7610 Extraordinary income credits.

This account shall be credited with nontypical, noncustomary and infrequently recurring gains which would significantly distort the current year's income computed before such extraordinary items, if reported other than as extraordinary items. Income tax relating to the amounts recorded in this account shall be recorded in Account 7630, Current Income Tax Effect for Extraordinary Items—Net, and Account 7640, Provision for Deferred Income Tax Effect of Extraordinary Items—Net.

§ 32.7620 Extraordinary income charges.

This account shall be debited with nontypical, noncustomary and infrequently recurring losses which would significantly distort the current year's income computed before such extraordinary items, if reported other than as extraordinary items. Income tax relating to the amounts recorded in this account shall be recorded in Account 7630, Current Income Tax Effect for Extraordinary Items—Net, and Account 7640, Provision for Deferred Income Tax Effect of Extraordinary Items—Net.

[54 FR 22758, May 26, 1989]

§ 32.7630 Current income tax effect of extraordinary items—net.

This account shall be charged or credited and Account 4070, Income Taxes—Accrued, shall be credited or charged for all current income tax effects (Federal, state and local) of items included in Accounts 7610, Extraordinary Income Credits, and 7620, Extraordinary Income Charges.

§ 32.7640 Provision for deferred income tax effect of extraordinary items—net.

This account shall be charged or credited, as appropriate, with a contra amount recorded to Account 4350, Net Noncurrent Deferred Nonoperating Income Taxes or Account 4110, Net Current Deferred Nonoperating Income Taxes for the income tax effects (Federal, state and local) of items included in Accounts 7610, Extraordinary Income Credits, and 7620, Extraordinary Income Charges, that have been deferred in accordance with § 32.22 of Subpart B.

§ 32.7899 Content of accounts.

Jurisdictional differences and nonregulated income amounts shall be included in Accounts 7910 and 7990.

§ 32.7910 Income effect of jurisdictional ratemaking differences—net.

This account shall include the impact on revenues and expenses of the

jurisdictional ratemaking practices which vary from those of this Commission. All entries recorded in this account shall be recorded net of the applicable income tax effects and shall be supported by appropriate subsidiary records, where necessary, as provided for in § 32.13(e) of subpart B.

§ 32.7990 Nonregulated net income.

(a) This account shall be used by those companies who offer nonregulated activities that do not involve the joint or common use of assets or resources used in the provision of both regulated and nonregulated products and services, and which have not established a separate subsidiary for that purpose.

(b) All revenue and expenses (including taxes) incurred in these nonregulated activities shall be recorded on separate books of account for such operations. Only the net of the total revenues and total expenses shall be recorded in this account, with a contra debit or credit to account 1406.3.

[52 FR 6562, Mar. 4, 1987]

Subpart G—Glossary

§ 32.9000 Glossary of terms.

When used in this system of accounts:

Accelerated depreciation means a depreciation method or period of time, including the treatment given cost of removal and gross salvage, used in calculating depreciation deductions on income tax returns which is different from the depreciation method or period of time prescribed by this Commission for use in calculating depreciation expense recorded in a company's books of account.

Account means a specific element of a chart of accounts used to record, classify and accumulate similar financial transactions resulting from the operations of the entity. ''Accounts'' or ''these accounts'' refer to the accounts of this system of accounts.

Accounting system means the total set of interrelated principles, rules, requirements, definitions, accounts, records, procedures and mechanisms necessary to operate and evaluate the entity from a financial perspective. An accounting system generally consists of a chart of accounts, various parallel subsystems and subsidiary records. An accounting system is utilized to provide the necessary financial information to users to meet judiciary and other responsibilities.

Affiliated companies means companies that directly or indirectly through one or more intermediaries, control or are controlled by, or are under common control with, the accounting company. See also Control.

Amortization means the systematic recoveries, through ratable charges to expense, of the cost of assets.

Associated equipment means that equipment which functions with a specific type of plant or with two (2) or more types of plant, e.g., switching equipment, network power equipment, circuit equipment, common channel network signaling equipment or network operations equipment. Associated equipment shall be classified to the account appropriate for the type of equipment with which it is predominately used rather than on its own characteristics.

Illustrative examples of associated equipment are:

Alarm and signal apparatus
Auxiliary framing
Cable and cable racks
Distributing frames and equipment thereon
Frame and aisle lighting equipment (not permanently attached to the building)
Relay racks and panels

Basic service area means the minimum specified calling area for which a tariff is prescribed.

Book cost means the amount at which property is recorded in these accounts, without deduction of related allowances.

Common carrier or *carrier* means any person engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or in interstate or foreign radio transmission of energy, except where reference is made to common carriers not subject to this Act; but a person engaged in radio broadcasting shall not, insofar as such person is so engaged, be deemed a common carrier.

Company or *the company*, when not otherwise indicated in the context,

means the accounting entity. It includes such unincorporated entities which may be subject to the Communications Act of 1934, as amended.

Control (including the terms ''controlling,'' ''controlled by,'' and ''under common control with'') means the possession directly or indirectly, of the power to direct or cause the direction of the management and policies of a company, whether such power is exercised through one or more intermediary companies, or alone, or in conjunction with, or pursuant to an agreement with, one or more other companies, and whether such power is established through a majority or minority ownership or voting of securities, common directors, officers, or stockholders, voting trusts, holding trusts, affiliated companies, contract, or any other direct or indirect means.

Cost, except as applied to telecommunications plants, franchises, and patent rights, means the amount of money actually paid (or the current money value of any consideration other than money exchanged) for property or services. See also Original Cost.

Cost of removal means the cost of demolishing, dismantling, removing, tearing down, or otherwise disposing of telecommunications plant and recovering the salvage, including the cost of transportation and handling incident thereto.

Depreciation means the loss not restored by current maintenance, incurred in connection with the consumption or prospective retirement of telecommunications plant in the course of service from causes which are known to be in current operation, against which the company is not protected by insurance, and the effect of which can be forecast with a reasonable approach to accuracy. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in technology, changes in demand and requirements of public authorities.

Entity means a legal enterprise (common carrier) engaged in interstate communications within the meaning of the Communications Act of 1934, as amended.

Group plan, as applied to depreciation accounting, means the plan under which depreciation charges are accrued upon the basis of the original cost of all property included in each depreciable plant account, using the average service life thereof properly weighted, and upon the retirement of any depreciable property its cost is charged to the depreciation reserve whether or not the particular item has attained the average service life.

Indexed revenue threshold for a given year means $100 million, adjusted for inflation, as measured by the Department of Commerce Gross Domestic Product Chain-type Price Index (GDP–CPI), for the period from October 19, 1992 to the given year. The indexed revenue threshold for a given year shall be determined by multiplying $100 million by the ratio of the annual value of the GDP–CPI for the given year to the estimated seasonally adjusted GDP–CPI on October 19, 1992. The indexed revenue threshold shall be rounded to the nearest $1 million. The seasonally adjusted GDP–CPI on October 19, 1992 is determined to be 100.69.

Intangible property means assets that have no physical existence but instead have value because of the rights which ownership confers.

Intrasystems means assets consisting of:

(1) PBX and Key System Common Equipment (a switchboard or switching equipment shared by all stations);

(2) Associated CPE station equipment (usually telephone or Key Telephone Systems); and

(3) Intrasystem wiring (all cable or wiring and associated components which connect the common equipment and the station equipment, located on the customer's side of the demarcation point).

An intrasystem does not include property, plant or equipment which are not solely dedicated to its operation.

Mid-sized incumbent local exchange carrier is a carrier whose operating revenue equals or exceeds the indexed revenue threshold and whose revenue when aggregated with the revenues of any local exchange carrier that it controls, is controlled by, or with which it is under common control is less than $7 billion. Each of these local exchange

carriers would be eligible for Class B accounting, except as noted in § 32.11(b) and (d), even if the annual operating revenue of any individual local exchange carrier exceeds the indexed revenue threshold (see definition for indexed revenue threshold in this section).

Minor items, as applied to depreciable telecommunications plant, means any part or element of such plant, which when removed, (with or without replacement) does not initiate retirement accounting.

Original cost or *cost*, as applied to telecommunications plant, rights of way and other intangible property, means the actual money cost of (or the current money value of any consideration other than money exchanged for) property at the time when it was first dedicated to use by a regulated telecommunications entity, whether the accounting company or by predecessors.

For the application of this definition to property acquired from predecessors see § 32.2000(b)(1) of subpart C. Note also the definition of Cost in this section.

Plant retired means plant which has been removed, sold, abandoned, destroyed, or otherwise withdrawn from service.

Retirement units, as applied to depreciable telecommunications plant, means those items of plant which when removed (with or without replacement) cause the initiation of retirement accounting entries.

Salvage value means the amount received for property retired, if sold, or if retained for reuse, the amount at which the material recovered is chargeable to Account 1220, Material and Supplies, or other appropriate account.

Straight-line method, as applied to depreciation accounting, means the plan under which the cost of property is charged to operating expenses and credited to accumulated depreciation through equal annual charges as nearly as may be during its service life.

Subsidiary record means accumulation of detailed information which is required by this Commission to be maintained in support of entries to the accounts.

Subsidiary record categories means those segregations of certain regulated costs, expenses and revenues which must be maintained and are subject to specific reporting requirements of this Commission.

Subsystems, parallel mechanisms means processes or procedures which augment the use of a chart of accounts in the financial operation of the entity. These subsystems operate on and/or process account and subsidiary record information for specific purposes.

Telecommunications means any transmission, emission, or reception of signs, signals, writing, images or sounds or intelligence of any nature by wire, radio, visual or other electromagnetic systems. This encompasses the aggregate of several modes of conveying information, signals or messages over a distance. Included in the telecommunications industry is the transmitting, receiving, or exchanging of information among multiple locations. The minimum elements required for the telecommunications process to occur are a message source, a transmission medium and a receiver.

Time of installation means the date at which telecommunications plant is placed in service.

Time of retirement means the date at which telecommunications plant is retired from service.

Tangible property means assets characterized by physical existence, such as land, buildings, equipment, furniture, fixtures and tools.

[51 FR 43499, Dec. 2, 1986, as amended at 61 FR 50245, Sept. 25, 1996; 62 FR 39778, July 24, 1997; 62 FR 51064, Sept. 30, 1997; 64 FR 50008, Sept. 15, 1999]

PART 36—JURISDICTIONAL SEPARATIONS PROCEDURES; STANDARD PROCEDURES FOR SEPARATING TELECOMMUNICATIONS PROPERTY COSTS, REVENUES, EXPENSES, TAXES AND RESERVES FOR TELECOMMUNICATIONS COMPANIES [1]

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[1] The Commission has determined that the same jurisdictional separations used in the contiguous states are to be used for Alaska, Hawaii, Puerto Rico and the Virgin Islands. *Integration of Rates and Services*, Docket No. 21263, 87 FCC 2nd 18 (1981); *Integration of Rates and Services*, Docket No. 21264, 72 FCC 2nd 699 (1979).

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APPENDIX—GLOSSARY

AUTHORITY: 47 U.S.C. Secs. 151, 154 (i) and (j), 205, 221(c), 254, 403 and 410.

SOURCE: 52 FR 17229, May 6, 1987, unless otherwise noted.

Subpart A—General

§ 36.1 General.

(a) This part contains an outline of separations procedures for telecommunications companies on the station-to-station basis. These procedures are applicable either to property costs, revenues, expenses, taxes, and reserves as recorded on the books of the company or to estimated amounts.

(1) Where a value basis is used instead of book costs, the ''costs'' referred to are the ''values'' of the property derived from the valuation.

(b) The separations procedures set forth in this part are designed primarily for the allocation of property costs, revenues, expenses, taxes and reserves between state and interstate jurisdictions. For separations, where required, of the state portion between exchange and toll or for separations of individual exchanges or special services, further analyses and studies may be required to adapt the procedures to such additional separations.

(c) The fundamental basis on which separations are made is the use of telecommunications plant in each of the operations. The first step is the assignment of the cost of the plant to categories. The basis for making this assignment is the identification of the plant assignable to each category and the determination of the cost of the plant so identified. The second step is the apportionment of the cost of the plant in each category among the operations by direct assignment where possible, and all remaining costs are assigned by the application of appropriate use factors.

(d) In assigning book costs to categories, the costs used for certain plant classes are average unit costs which equate to all book costs of a particular account or subaccount; for other plant classes, the costs used are those which either directly approximate book cost levels or which are equated to match total book costs at a given location.

(e) The procedures outlined herein reflect ''short-cuts'' where practicable and where their application produces substantially the same separations results as would be obtained by the use of more detailed procedures, and they assume the use of records generally maintained by Telecommunications Companies.

(f) The classification to accounts of telecommunications property, revenues, expenses, etc., set forth in this manual is that prescribed by the Federal Communications Commission's Uniform System of Accounts for Telecommunications Companies.

(g) In the assignment of property costs to categories and in the apportionment of such costs among the operations, each amount so assigned and apportioned is identified as to the account classification in which the property is included. Thus, the separated results are identified by property accounts and apportionment bases are provided for those expenses which are separated on the basis of the apportionment of property costs. Similarly, amounts of revenues and expenses assigned each of the operations are identified as to account classification.

(h) The separations procedures described in this part are not to be interpreted as indicating what property,

revenues, expenses and taxes, or what items carried in the income, reserve and retained earnings accounts, should or should not be considered in any investigation or rate proceeding.

§ 36.2 Fundamental principles underlying procedures.

(a) The following general principles underlie the procedures outlined in this part:

(1) Separations are intended to apportion costs among categories or jurisdictions by actual use or by direct assignment.

(2) Separations are made on the ''actual use'' basis, which gives consideration to relative occupancy and relative time measurements.

(3) In the development of ''actual use'' measurements, measurements of use are (i) determined for telecommunications plant or for work performed by operating forces on a unit basis (e.g., conversation-minute-kilometers per message, weighted standard work seconds per call) in studies of traffic handled or work performed during a representative period for all traffic and (ii) applied to overall traffic volumes, i.e., 24-hour rather than busy-hour volumes.

(b) Underlying the procedures included in this manual for the separation of plant costs is an over-all concept which may be described as follows:

(1) Telecommunications plant, in general, is segregable into two broad classifications, namely, (i) interexchange plant, which is plant used primarily to furnish toll services, and (ii) exchange plant, which is plant used primarily to furnish local services.

(2) Within the interexchange classification, there are three broad types of plant, i.e., operator systems, switching plant, and trunk transmission equipment. Within the exchange classification there are four board types of plant, i.e., operator systems, switching plant, truck equipment and subscriber plant. Subscriber plant comprises lines to the subscriber.

(3) In general, the basis for apportioning telecommunications plant used jointly for state and interstate operations are:

(i) Operator work time expressed in weighted standard work seconds is the basis for measuring the use of operator systems.

(ii) Holding-time-minutes is the basis for measuring the use of toll switching plant.

(iii) Conversation-minute-kilometers or conversation minutes is the basis for measuring the use of interexchange circuit plant and holding-time minutes is the basis for measuring the use of exchange trunk plant. While the use of holding-time-minute-kilometers is the basic fundamental allocation factor for interexchange circuit plant and exchange trunk plant, the use of conversation-minute-kilometers or conversation-minutes for the allocation of interexchange circuit plant and holding-time minutes for the allocation of exchange trunk plant are considered practical approximations for separations between state and interstate operations when related to the broad types of plant classifications used herein.

(iv) A subscriber plant factor is the basis of apportioning the cost of message telecommunications subscriber plant and local switching plant between State and interstate operations. The subscriber plant factor is developed and used according to the procedures set forth in §§ 36.154(c) through 36.154(f).

(c) Property rented to affiliates, if not substantial in amount, is included as used property of the owning company with the associated revenues and expenses treated consistently: Also such property rented from affiliates is not included with the used property of the company making the separations; the rent paid is included in its expenses. If substantial in amount, the following treatment is applied:

(1) In the case of property rented to affiliates, the property and related expenses and rent revenues are excluded from the telephone operations of the owning company, and

(2) In the case of property rented from affiliates, the property and related expenses are included with, and the rent expenses are excluded from, the telephone operations of the company making the separation.

(d) Property rented to or from non-affiliates is usually to be included as used property of the owning company

with the associated revenues and expenses treated consistently. In the event the amount is substantial, the property involved and the revenues and expenses associated therewith may be excluded from or included in the telecommunications operations of the company. When required, the cost of property rented to or from non-affiliates is determined using procedures that are consistent with the procedures for the allocation of costs among the operations.

(e) Costs associated with services or plant billed to another company which have once been separated under procedures consistent with general principles set forth in this part, and are thus identifiable as entirely interstate or State in nature, shall be directly assigned to the appropriate operation and jurisdiction.

[52 FR 17229, May 6, 1987, as amended at 58 FR 44905, Aug. 25, 1993]

§ 36.3 Freezing of jurisdictional separations category relationships and/or allocation factors.

(a) Effective July 1, 2001, through June 30, 2006, all local exchange carriers subject to part 36 rules shall apportion costs to the jurisdictions using their study area and/or exchange specific jurisdictional allocation factors calculated during the twelve month period ending December 31, 2000, for each of the categories/sub-categories as specified herein. Direct assignment of private line service costs between jurisdictions shall be updated annually. Other direct assignment of investment, expenses, revenues or taxes between jurisdictions shall be updated annually. Local exchange carriers that invest in telecommunications plant categories during the period July 1, 2001, through June 30, 2006, for which it had no separations allocation factors for the twelve month period ending December 31, 2000, shall apportion that investment among the jurisdictions in accordance with the separations procedures in effect as of December 31, 2000 for the duration of the freeze.

(b) Effective July 1, 2001, through June 30, 2006, local exchange carriers subject to price cap regulation, pursuant to § 61.41, shall assign costs from the part 32 accounts to the separations categories/sub-categories, as specified herein, based on the percentage relationships of the categorized/sub-categorized costs to their associated part 32 accounts for the twelve month period ending December 31, 2000. If a part 32 account for separations purposes is categorized into more than one category, the percentage relationship among the categories shall be utilized as well. Local exchange carriers that invest in types of telecommunications plant during the period July 1, 2001, through June 30, 2006, for which it had no separations category investment for the twelve month period ending December 31, 2000, shall assign such investment to separations categories in accordance with the separations procedures in effect as of December 31, 2000. Local exchange carriers not subject to price cap regulation, pursuant to § 61.41 of this chapter, may elect to be subject to the provisions of § 36.3(b). Such election must be made prior to July 1, 2001. Local exchange carriers electing to become subject to § 36.3(b) shall not be eligible to withdraw from such regulation for the duration of the freeze. Local exchange carriers participating in Association tariffs, pursuant to § 69.601 of this chapter et seq., shall notify the Association prior to July 1, 2001, of such intent to be subject to the provisions of § 36.3(b). Local exchange carriers not participating in Association tariffs shall notify the Commission prior to July 1, 2001, of such intent to be subject to the provisions of § 36.3(b).

(c) Effective July 1, 2001, through June 30, 2006, any local exchange carrier that sells or otherwise transfers exchanges, or parts thereof, to another carrier's study area shall continue to utilize the factors and, if applicable, category relationships as specified in §§ 36.3(a) and (b).

(d) Effective July 1, 2001, through June 30, 2006, any local exchange carrier that buys or otherwise acquires exchanges or part thereof, shall calculate new, composite factors and, if applicable, category relationships based on a weighted average of both the seller's and purchaser's factors and category relationships calculated pursuant to §§ 36.3(a) and 36.3(b). This weighted average should be based on the number of

access lines currently being served by the acquiring carrier and the number of access lines in the acquired exchanges.

(1) To compute the composite allocation factors and, if applicable, the composite category percentage relationships of the acquiring company, the acquiring carrier shall first sum its existing (pre-purchase) access lines (A) with the total access lines acquired from selling company (B). Then, multiply its factors and category relationship percentages by (A/(A+B)) and those of the selling company by (B/(A+B)) and sum the results.

(2) For carriers subject to a freeze of category relationships, the acquiring carrier should remove all categories of investment from the selling carrier's list of frozen category relationships where no such category investment exists within the sold exchange(s). The seller's remaining category relationships must then be increased proportionately to total 100 percent. Then, the adjusted seller's category relationships must be combined with those of the acquiring carrier as specified in § 36.3(d)(1) to determine the category relationships for the acquiring carrier's post-transfer study area.

(e) Any local exchange carrier study area converting from average schedule company status, as defined in § 69.605(c) of this chapter, to cost company status during the period July 1, 2001, through June 30, 2006, shall, for the first twelve months subsequent to conversion categorize the telecommunications plant and expenses and develop separations allocation factors in accordance with the separations procedures in effect as of December 31, 2000. Effective July 1, 2001 through June 30, 2006, such companies shall utilize the separations allocation factors and account categorization subject to the requirements of §§ 36.3(a) and (b) based on the category relationships and allocation factors for the twelve months subsequent to the conversion to cost company status.

[66 FR 33204, June 21, 2001]

Subpart B—Telecommunications Property

GENERAL

§ 36.101 Section arrangement.

(a) This subpart is arranged in sections as follows:

GENERAL

Telecommunications Plant in Service—Account 2001—36.101 and 36.102.
General Support Facilities—Account 2110—36.111 and 36.112.
Central Office Equipment—Accounts 2210, 2220, 2230—36.121 thru 36.126.
Information Origination/Termination Equipment—Account 2310—36.141 and 36.142.
Cable and Wire Facilities—Account 2410—36.151 thru 36.157.
Amortization Assets—Accounts 2680 and 2690—36.161 and 36.162.
Telecommunications Plant—Other Accounts 2002 thru 2005—36.171.
Rural Telephone Bank Stock—36.172.
Material and Supplies—Accounts 1220, and Cash Working Capital—36.181 and 36.182.
Equal Access Equipment—36.191.

[60 FR 12138, Mar. 6, 1995]

§ 36.102 General.

(a) This section contains an outline of the procedures used in the assignment of Telecommunications Plant in Service—Account 2001 to categories and the apportionment of the cost assigned to each category among the operations.

(b) The treatment of rental plant is outlined in §§ 36.2(c) through 36.2(e). If the amount of such plant is substantial, the cost may be determined by using the general procedures set forth for the assignment of the various kinds of property to categories.

(c) The amount of depreciation deductible from the book cost or ''value'' is apportioned among the operations in proportion to the separation of the cost of the related plant accounts.

GENERAL SUPPORT FACILITIES

§ 36.111 General.

(a) The costs of the general support facilities are contained in Account 2110, Land and Support Assets. This account contains land, buildings, motor

vehicles, aircraft, special purpose vehicles, garage work equipment, other work equipment, furniture, office equipment and general purpose computers.

§ 36.112 Apportionment procedure.

(a) The costs of the general support facilities of Class A Companies (which are defined in part 32 of the Commission's Rules) are apportioned among the operations on the basis of the separation of the costs of the combined Big Three Expenses which include the following accounts:

PLANT SPECIFIC EXPENSES

6210 Central Office Switching Expenses
6220 Operators Systems Expenses
6230 Central Office Transmission Expenses
6310 Information Origination/Termination Expenses
6410 Cable and Wire Facilities Expenses

PLANT NON-SPECIFIC EXPENSES

6530 Network Operations Expenses

CUSTOMER OPERATIONS EXPENSES

6610 Marketing
6620 Services

(b) The costs of the general support facilities for Class B Companies (which are defined by part 32 of the Commission's Rules) are apportioned among the operations on the basis of the separation of the costs of Central Office Equipment, Information Origination/Termination Equipment, and Cable and Wire Facilities, combined.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988]

CENTRAL OFFICE EQUIPMENT

§ 36.121 General.

(a) The costs of central office equipment are carried in the following accounts:

Central Office Switching ..	Account 2210
Analog Electronic Switching.	Account 2211
Digital Electronic Switching.	Account 2212
Electro-Mechanical Switching.	Account 2215
Operator Systems	Account 2220
Central Office—Transmission.	Account 2230
Radio Systems	Account 2231
Circuit Equipment	Account 2232

(b) Records of the cost of central office equipment are usually maintained for each study area separately by accounts. However, each account frequently includes equipment having more than one use. Also, equipment in one account frequently is associated closely with equipment in the same building in another account. Therefore, the separations procedures for central office equipment have been designed to deal with categories of plant rather than with equipment in an account.

(c) In the separation of the cost of central office equipment among the operations, the first step is the assignment of the equipment in each study area to categories. The basic method of making this assignment is the identification of the equipment assignable to each category, and the determination of the cost of the identified equipment by analysis of accounting, engineering and other records.

(1) The cost of common equipment not assigned to a specific category, e.g., common power equipment, including emergency power equipment, aisle lighting and framework, including distributing frames, is distributed among the categories in proportion to the cost of equipment, (excluding power equipment not dependent upon common power equipment) directly assigned to categories.

(i) The cost of power equipment used by one category is assigned directly to that category, e.g., 130 volt power supply provided for circuit equipment. The cost of emergency power equipment protecting only power equipment used by one category is also assigned directly to that category.

(ii) Where appropriate, a weighting factor is applied to the cost of circuit equipment in distributing the power plant costs not directly assigned, in order to reflect the generally greater power use per dollar of cost of this equipment.

(d) The second step is the apportionment of the cost of the equipment in each category among the operations through the application of appropriate use factors or by direct assignment.

§ 36.122 Categories and apportionment procedures.

(a) The following categories of central office equipment and apportionment procedures therefore are set forth in §§ 36.123 through 36.126.

Operator Systems Equipment.	Category 1.
Tandem Switching Equipment.	Category 2.
Local Switching Equipment.	Category 3.
Circuit Equipment	Category 4.

§ 36.123 Operator systems equipment—Category 1.

(a) Operator systems equipment is contained in Account 2220. It includes all types of manual telephone switchboards except tandem switchboards and those used solely for recording of calling telephone numbers in connection with customer dialed charge traffic. It includes all face equipment, terminating relay circuits of trunk and toll line circuits, cord circuits, cable turning sections, subscriber line equipment, associated toll connecting trunk equipment, number checking facilities, ticket distributing systems, calculagraphs, chief operator and other desks, operator chairs, and other such equipment.

(1) Operator systems equipment is generally classified according to operating arrangements of which the following are typical:

(i) Separate toll boards
(ii) Separate local manual boards
(iii) Combined local manual and toll boards
(iv) Combined toll and DSA boards
(v) Separate DSA and DSB boards
(vi) Service observing boards
(vii) Auxiliary service boards
(viii) Traffic service positions

(2) If switchboards as set forth in § 36.123(a) are of the key pulsing type, the cost of the key pulsing senders, link and trunk finder equipment is included with the switchboards.

(3) DSB boards include the associated DSB dial equipment, such as link and sender equipment.

(4) Traffic service position systems include the common control and trunk equipment in addition to the associated groups of positions wherever located.

(5) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the average balance of Account 2220, Operator Systems, to the categories/subcategories, as specified in § 36.123(a)(1), based on the relative percentage assignment of the average balance of Account 2220 to these categories/subcategories during the twelve month period ending December 31, 2000.

(6) Effective July 1, 2001 through June 30, 2006, all study areas shall apportion the costs assigned to the categories/subcategories, as specified in § 36.123(a)(1), among the jurisdictions using the relative use measurements for the twelve month period ending December 31, 2000 for each of the categories/subcategories specified in §§ 36.123 (b) through 36.123(e).

(b) The cost of the following operator systems equipment is apportioned among the operations on the basis of the relative number of weighted standard work seconds handled at the switchboards under consideration.

(1) The following types of switchboards at toll centers are generally apportioned individually:

(i) *Separate toll boards.* These usually include outward, through and inward positions in separate lines and associated inward toll switchboard positions in line.

(ii) Switchboards handling both local and toll, either combined or having segregated local and toll positions in the same line.

(iii) Switchboards handling both toll and DSA, either combined or having segregated toll and DSA positions in the same line.

(iv) Traffic service positions, including separately located groups of these positions when associated with a common basic control unit.

(2) The following types of switchboards at toll centers are apportioned individually, or by groups of comparable types of boards for each exchange:

(i) *Separate local manual boards.* This includes the local positions of manual boards where inward toll positions are in the same line.

(ii) Separate DSA boards.

(iii) Separate DSB boards.

(3) Tributary boards may be treated individually if warranted or they may be treated on a group basis.

(c) Auxiliary service boards generally handle rate and route, information, and intercept service at individual or joint positions. The cost of these boards is apportioned as follows:

(1) The cost of separate directory assistance boards is apportioned among the operations on the basis of the relative number of weighted standard work seconds handled at the boards under consideration. Directory assistance weighted standard work seconds are apportioned among the operations on the basis of the classification of these weighted standard work seconds as follows:

(i) Directory assistance weighted standard work seconds first are classified between calls received over toll directory assistance trunks from operators or customers and all other directory assistance calls.

(ii) The directory assistance weighted standard work seconds of each type further are classified separately among the operations on the basis of an analysis of a representative sample of directory assistance calls of each type with reference to the locations of the calling and called stations for each call.

(2) The cost of separate intercept boards and automated intercept systems in the study area is appportioned among the operations on the basis of the relative number of subscriber line minutes of use.

(3) The cost of separate rate and route boards is generally included with the cost of the toll boards served and is apportioned with those boards.

(4) Where more than one auxiliary service is handled at an auxiliary board, the cost of the board is apportioned among the auxiliary services on the basis of the relative number of weighted standard work seconds for each service. The cost of that part of the board allocated to each auxiliary service is apportioned among the operations in the same manner as for a separate auxiliary board.

(d) The cost of joint exchange and toll service observing boards is first apportioned between exchange and toll use on the basis of the relative number of exchange and toll service observing units at these boards. The cost of separate toll service observing boards and the toll portion of joint service observing boards is apportioned between state and interstate operations on the basis of the relative number of toll minutes of use associated with the toll messages originating in the offices observed.

(e) Traffic Service Position System (TSPS) investments are apportioned as follows:

(1) Operator position investments are apportioned on the basis of the relative weighted standard work seconds for the entire TSPS complex.

(2) Remote trunk arrangement (RTA) investments are apportioned on the basis of the relative processor real time (i.e., actual seconds) required to process TSPS traffic originating from the end offices served by each RTA.

(3) The remaining investments at the central control location, such as the stored program control and memory, is apportioned on the basis of the relative processor real time (i.e., actual seconds) for the entire TSPS complex.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33205, June 21, 2001]

§ 36.124 Tandem switching equipment—Category 2.

(a) Tandem switching equipment is contained in Accounts 2210, 2211, 2212 and 2215. It includes all switching equipment in a tandem central office, including any associated tandem switchboard positions and any intertoll switching equipment. Intertoll switching equipment includes switching equipment used for the interconnection of message toll telephone circuits with each other or with local or tandem telephone central office trucks, intertoll dial selector equipment, or intertoll trunk equipment in No. 5 type electronic offices. Equipment, including switchboards used for recording of calling telephone numbers and other billing information in connection with customer dialed charge traffic is included with Local Switching Equipment—Category 3.

(1) At toll center toll offices, intertoll switching equipment comprises equipment in the toll office used in the interconnection of: Toll center

to toll center circuits; toll center to tributary circuits; tributary to tributary circuits; toll center to tandem circuits or in the interconnection of the aforementioned types of circuits with trunks to local offices in the toll center city, i.e., interconnection with toll switching trunks, operator trunks, information trunks, testing trunks, etc. Equipment associated with the local office end of such trunks is included with local switching equipment or switchboard categories as appropriate.

(2) At tributary offices, this category includes intertoll switching equipment similar to that at toll center toll offices if it is used in the interconnection of: Tributary to tributary circuits; tributary to subtributary circuits; subtributary to subtributary circuits; toll center to subtributary circuits; or if it is used jointly in the interconnection of any of the aforementioned types of circuits and in the interconnection of such toll circuits with trunk circuits for the handling of traffic terminating in the tributary office. Where comparable equipment has no joint use but is used only for the handling of traffic terminating in the tributary office, it is included in the local switching equipment category.

(3) At all switching entities, this category includes intertoll switching equipment similar to that at toll center toll offices if it is used in the interconnection of switched private line trunks or TWX switching plant trunks when these functions are in addition to the message telephone switching function. Switching entities wholly dedicated to switching of special services are assigned to Category 3—Local Switching Equipment.

(b) The costs of central office equipment items assigned this category are to be directly assigned when possible. When direct assignment is not possible the costs shall be apportioned among the operations on the basis of the relative number of study area minutes of use of this equipment.

(c) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the average balances of Accounts 2210, 2211, 2212 and 2215, to the Category 2, Tandem Switching Equipment based on the relative percentage assignment of the average balances of Account 2210, 2211, 2212 and 2215 to Category 2, Tandem Switching Equipment during the twelve month period ending December 31, 2000.

(d) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion costs in Category 2, Tandem Switching Equipment, among the jurisdictions using the relative number of study area minutes of use, as specified in § 36.124(b), for the twelve month period ending December 31, 2000. Direct assignment of any subcategory of Category 2 Tandem Switching Equipment between jurisdictions shall be updated annually.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33205, June 21, 2001]

§ 36.125 Local switching equipment—Category 3.

(a) Local switching equipment is included in accounts 2210, 2211, 2212 and 2215. It comprises all central office switching equipment not assigned other categories. Examples of local switching equipment are basic switching train, toll connecting trunk equipment, interlocal trunks, tandem trunks, terminating senders used for toll completion, toll completing train, call reverting equipment, weather and time of day service equipment, and switching equipment at electronic analog or digital remote line locations. Equipment used for the identification, recording and timing of customer dialed charge traffic, or switched private line traffic (e.g. transmitters, recorders, call identity indexers, perforators, ticketers, detectors, mastertimes) switchboards used solely for recording of calling telephone numbers in connection with customer dialed charge traffic, or switched private line traffic (or both) is included in this local switching category. Equipment provided and used primarily for operator dialed toll or customer dialed charge traffic except such equipment included in Category 2 Tandem Switching Equipment is also included in this local switching category. This includes such items as directors translators, sender registers, out trunk selectors and facilites for toll intercepting and digit absorption. Special services

switching equipment which primarily performs the switching function for special services (e.g. switching equipment, TWX concentrators and switchboards) is also included in this local switching category.

(1) Local office, as used in § 36.125, comprises one or more local switching entities of the same equipment type (e.g., step-by-step, No. 5 Crossbar) in an individual location. A local switching entity comprises that local central office equipment of the same type which has a common intermediate distributing frame, market group or other separately identifiable switching unit serving one or more prefixes (NNX codes).

(2) A host/remote local switching complex is composed of an electronic analog or digital host office and all of its remote locations. A host/remote local switching complex is treated as one local office. The current jurisdictional definition of an exchange will apply.

(3) Dial equipment minutes of use (DEM) is defined as the minutes of holding time of the originating and terminating local switching equipment. Holding time is defined in the Glossary.

(4) The interstate allocation factor is the percentage of local switching investment apportioned to the interstate jurisdiction.

(5) The interstate DEM factor is the ratio of the interstate DEM to the total DEM. A weighted interstate DEM factor is the product of multiplying a weighting factor, as defined in paragraph (f) of this section, to the interstate DEM factor. The state DEM factor is the ratio of the state DEM to the total DEM.

(b) Beginning January 1, 1993, Category 3 investment for study areas with 50,000 or more access lines is apportioned to the interstate jurisdiction on the basis of the interstate DEM factor. Category 3 investment for study areas with 50,000 or more access lines is apportioned to the state jurisdiction on the basis of the state DEM factor.

(c)–(e) [Reserved]

(f) Beginning January 1, 1993 and ending December 31, 1997, for study areas with fewer than 50,000 access lines, Category 3 investment is apportioned to the interstate jurisdiction by the application of an interstate allocation factor that is the lesser of either .85 or the product of the interstate DEM factor specified in paragraph (a)(5) of this section multiplied by a weighting factor, as determined by the table below. Beginning January 1, 1998, for study areas with fewer than 50,000 access lines, Category 3 investment is apportioned to the interstate jurisdiction by the application of an interstate allocation factor that is the lesser of either .85 or the sum of the interstate DEM factor specified in paragraph (a)(5) of this section and the difference between the 1996 weighted interstated DEM factor and the 1996 interstate DEM factor. The Category 3 investment that is not assigned to the interstate jurisdiction pursuant to this paragraph is assigned to the state jurisdiction.

No. of access lines in service in study area	Weighting factor
0–10,000	3.0
10,001–20,000	2.5
20,001–50,000	2.0
50,001–or above	1.0

(g) For purposes of this section, an access line is a line that does not include WATS access lines, special access lines or private lines.

(h) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the average balances of Accounts 2210, 2211, 2212, and 2215 to Category 3, Local Switching Equipment, based on the relative percentage assignment of the average balances of Account 2210, 2211, 2212 and 2215 to Category 3, during the twelve month period ending December 31, 2000.

(i) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion costs in Category 3, Local Switching Equipment, among the jurisdictions using relative dial equipment minutes of use for the twelve month period ending December 31, 2000.

(j) If during the period from January 1, 1997, through June 30, 2006, the number of a study area's access lines increased or will increase such that, under § 36.125(f) the weighting factor would be reduced, that lower weighting factor shall be applied to the study

area's 1996 unweighted interstate DEM factor to derive a new local switching support factor. The study area will restate its Category 3, Local Switching Equipment factor under § 36.125(f) and use that factor for the duration of the freeze period.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33011, 33012, Aug. 29, 1988; 62 FR 32946, June 17, 1997; 63 FR 2124, Jan. 13, 1998; 66 FR 33205, June 21, 2001]

§ 36.126 Circuit equipment—Category 4.

(a) For the purpose of this section, the term ''Circuit Equipment'' encompasses the Radio Systems and Circuit Equipment contained in Accounts 2230 through 2232 respectively. It includes central office equipment, other than switching equipment and automatic message recording equipment, which is used to derive communications transmission channels or which is used for the amplification, modulation, regeneration, testing, balancing or control of signals transmitted over communications transmission channels. Examples of circuit equipment in general use include:

(1) Carrier telephone and telegraph system terminals.

(2) Telephone and telegraph repeaters, termination sets, impedance compensators, pulse link repeaters, echo suppressors and other intermediate transmission amplification and balancing equipment except that included in switchboards.

(3) Radio transmitters, receivers, repeaters and other radio central office equipment except message switching equipment associated with radio systems.

(4) Composite ringers, line signaling and switching pad circuits.

(5) Concentration equipment.

(6) Composite sets and repeating coils.

(7) Program transmission amplifiers, monitoring devices and volume indicators.

(8) Testboards, test desks, repair desks and patch bays, including those provided for test and control, and for telegraph and transmission testing.

(b) For apportionment among the operations, the cost of circuit equiment is assigned to the following subsidiary categories:

(1) *Exchange Circuit Equipment—Category 4.1.*

(i) Wideband Exchange Line Circuit Equipment—Category 4.11.

(ii) Exchange Trunk Circuit Equipment (Wideband and Non-Wideband)—Category 4.12.

(iii) Exchange Line Circuit Equipment Excluding Wideband—Category 4.13.

(2) *Interexchange Circuit Equipment—Category 4.2.*

(i) Interexchange Circuit Equipment Furnished to Another Company for Interstate Use—Category 4.21.

(ii) Interexchange Circuit Equipment Used for Wideband Services including Satellite and Earth Station Equipment used for Wideband Service—Category 4.22.

(iii) All Other Interexchange Circuit Equipment—Category 4.23.

(3) *Host/Remote Message Circuit Equipment—Category 4.3.*

(4) In addition, for the purpose of identifying and separating property associated with special services, circuit equipment included in Categories 4.12 (other than wideband equipment) 4.13 and 4.23 is identified as either basic circuit equipment, i.e., equipment that performs functions necessary to provide and operate channels suitable for voice transmission (telephone grade channels), or special circuit equipment, i.e., equipment that is peculiar to special service circuits. Carrier telephone terminals and carrier telephone repeaters are examples of basic circuit equipment is general use, while audio program transmission amplifiers, bridges, monitoring devices and volume indicators, telegraph carrier terminals and telegraph repeaters are examples of special circuit equipment in general use. Cost of exchange circuit equipment included in Categories 4.12 and 4.13 and the interexchange circuit equipment in Categories 4.21, 4.22 and 4.23 are segregated between basic circuit equipment and special circuit equipment only at those locations where amounts of interexchange and exchange special circuit equipment are significant. Where such segregation is

not made, the total costs in these categories are classified as basic circuit equipment.

(5) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41, shall assign the average balances of Accounts 2230 through 2232 to the categories/subcategories as specified in §§ 36.126(b)(1) through (b)(4) based on the relative percentage assignment of the average balances of Accounts 2230 through 2232 costs to these categories/subcategories during the twelve month period ending December 31, 2000.

(c) Apportionment of Exchange Circuit Equipment Among the Operations:

(1) Wideband Exchange Line Circuit Equipment—Category 4.11—The cost of exchange circuit equipment in this category is determined separately for each wideband facility. The respective costs are allocated to the appropriate operation in the same manner as the related exchange line cable and wire facilities described in § 36.155.

(2) Exchange Trunk Circuit Equipment (Wideband and Non-Wideband)—Category 4.12—The cost of exchange circuit equipment associated with this category for the study area is allocated to the appropriate operation in the same manner as the related exchange trunk cable and wire facilities as described in § 36.155.

(3) Exchange Line Circuit Equipment Excluding Wideband—Category 4.13—The cost of Circuit Equipment associated with exchange line plant excluding wideband for the study area is assigned to subcategories and is allocated to the appropriate operation in the same manner as the related exchange line cable and wire facilities for non-wideband service as described in § 36.154.

(4) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion costs in the categories/subcategories, as specified in §§ 36.126(b)(1) through (b)(4), among the jurisdictions using the relative use measurements or factors, as specified in §§ 36.126(c)(1) through (c)(3) for the twelve month period ending December 31, 2000. Direct assignment of any subcategory of Category 4.1 Exchange Circuit Equipment to the jurisdictions shall be updated annually.

(d) Apportionment of Interexchange Circuit Equipment among the Operations: Procedures to be Used by Interexchange Carriers.

(1) Interexchange Circuit Equipment Furnished to Another Company for Interstate Use—Category 4.21—This category comprises that circuit equipment provided for the use of another company as an integral part of its interexchange circuit facilities used wholly for interstate services. This category includes such circuit equipment as telephone carrier, terminals telegraph carrier terminals, and microwave systems used wholly for interstate services. The total cost of the circuit equipment in this category for the study area is assigned to the interstate operation.

(2) Interexchange Circuit Equipment Used for Wideband Service—Category 4.22—This category includes the circuit equipment portion of interexchange channels used for wideband services. The cost of interexchange circuit equipment in this category is determined separately for each wideband channel and is segregated between message and private line services on the basis of the use of the channels provided. The respective costs are allocated to the appropriate operation in the same manner as the related interexchange cable and wire facilities as described in § 36.156.

(3) All Other Interexchange Circuit Equipment—Category 4.23—This category includes the cost of all interexchange circuit equipment not assigned to Categories 4.21 and 4.22. Interexchange carriers shall freeze the allocation factors for Category 4.23 investment at levels reached on December 31, 1985, derived by using the procedures in effect at that time. On January 1, 1988, and thereafter, that frozen allocation factor shall be applied to each interexchange carrier's Category 4.23 investment to derive the interstate allocation. On January 1, 1988, and thereafter, the amount of investment allocated to the interstate jurisdiction will vary but the relative proportion of the total investment that is allocated to the interstate jurisdiction will remain frozen at 1985 levels.

(e) Apportionment of Interexchange Circuit Equipment among the Operations: Procedures To Be Used by Exchange Carriers.

(1) Interexchange Circuit Equipment Furnished to Another Company for Interstate Use—Category 4.21—This category comprises that circuit equipment provided for the use of another company as an integral part of its interexchange circuit facilities used wholly for interstate services. This category includes such circuit equipment as telephone carrier terminals telegraph carrier terminals, and microwave systems used wholly for interstate services. The total cost of the circuit equipment in this category for the study area is assigned to the interstate operation.

(2) Interexchange Circuit Equipment Used for Wideband Service—Category 4.22—This category includes the circuit equipment portion of interexchange channels used for wideband services. The cost of interexchange circuit equipment in this category is determined separately for each wideband channel and is segregated between message and private line services on the basis of the use of the channels provided. The respective costs are allocated to the appropriate operation in the same manner as the related interexchange cable and wire facilities described in § 36.156.

(3) All Other Interexchange Circuit Equipment—Category 4.23—This category includes the cost of all interexchange circuit equipment not assigned to Categories 4.21 and 4.22. The cost of interexchange basic circuit equipment used for the following classes of circuits is included in this category: Jointly used message circuits, i.e., message switching plant circuits carrying messages from the state and interstate operations; circuits used exclusively for TWX service; circuits uses for interstate private line service; and circuits used for state private line services.

(i) An average interexchange circuit equipment cost per equivalent interexchange telephone termination for all circuits is determined and applied to the equivalent interexchange telephone termination counts of each of the following classes of circuits: Interstate Private Line, State Private Line, Message, and TWX. The cost of interstate private line circuits is assigned directly to the interstate operation. The cost of state private line circuits is assigned directly to the state operation. The cost of message circuits is apportioned between the state and interstate operations on the basis of the relative number of study area conversation-minutes applicable to such facilities.

(ii) The cost on interexchange circuit equipment assigned TWX circuits is apportioned between state and interstate toll in accordance with § 36.126(e)(3)(i) and pursuant to the following procedures. The cost of circuit equipment associated with the TWX intertoll circuits used jointly for state and interstate operations is apportioned between the operations on the basis of the relative number of study area TWX connection-minutes applicable to such facilities. The cost of circuit equipment associated with the interexchange portion of the TWX remote access lines is apportioned between state and interstate operation on the basis of the relative number of study area TWX connection-minutes applicable to those facilities.

(iii) The cost of special circuit equipment is segregated among TWX service, telegraph grade private line services and other private line services based on an analysis of the use of the equipment and in accordance with § 36.126(b)(4). The cost of TWX special circuit equipment is apportioned on the same basis as that used for intertoll TWX circuits. The special circuit equipment cost assigned to telegraph grade and other private line services is directly assigned to the appropriate operation.

(4) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion costs in the categories/subcategories specified in §§ 36.126(e)(1) through (e)(3) among the jurisdictions using relative use measurements or factors, as specified in §§ 36.126(e)(1) through (e)(3) for the twelve month period ending December 31, 2000. Direct assignment of any subcategory of Category 4.2 Interexchange Circuit Equipment to the jurisdictions shall be updated annually.

(f) Apportionment of Host/Remote Message Circuit Equipment Among the Operations.

(1) Host/Remote Message Circuit Equipment—Category 4.3. This category includes message host/remote location circuit equipment for which a message circuit switching function is performed at the host central office associated with cable and wire facilities as described in § 36.152(c).

(i) The category 4.3 cost of host/remote circuit equipment assigned to message services for the study area is apportioned among the exchange, intrastate toll, and interstate toll operations on the basis of the assignment of host/remote message cable and wire facilities as described in § 36.157.

(ii) [Reserved]

(2) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion costs in the subcategory specified in § 36.126(f)(1) among the jurisdictions using the allocation factor, as specified in § 36.126(f)(1)(i), for this subcategory for the twelve month period ending December 31, 2000. Direct assignment of any Category 4.3 Host/Remote Message Circuit Equipment to the jurisdictions shall be updated annually.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33012 Aug. 29, 1988; 66 FR 33205, June 21, 2001]

INFORMATION ORIGINATION/TERMINATION (IOT) EQUIPMENT

§ 36.141 General.

(a) Information Origination/Termination Equipment is maintained in Account 2310 and includes station apparatus, embedded customer premises wiring, large private branch exchanges, public telephone terminal equipment, and other terminal equipment.

(b) The costs in Account 2310 shall be segregated between Other Information Origination/Termination Equipment—Category 1, and New Customer Premises Equipment—Category 2 by an analysis of accounting, engineering and other records.

(c) Effective July 1, 2001, through June 30, 2006, local exchange carriers subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the average balance of Account 2310 to the categories, as specified in § 36.141(b), based on the relative percentage assignment of the average balance of Account 2310 to these categories during the twelve month period ending December 31, 2000.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33206, June 21, 2001]

§ 36.142 Categories and apportionment procedures.

(a) *Other Information Origination/Termination Equipment—Category 1.* This category includes the cost of other information origination/termination equipment not assigned to Category 2. The costs of other information origination/termination equipment are allocated pursuant to the factor that is used to allocate subcategory 1.3 Exchange Line C&WF. If amounts of coinless pay telephone equipment are substantial, the cost of such equipment should be separately identified and allocated on the basis of relative toll minutes-of-use for interexchange carriers and minutes-of-use for exchange carriers.

(b) *Customer Premises Equipment—Category 2.* This category includes the cost of Customer Premises Equipment that was detariffed pursuant to the Second Computer Inquiry decision. It shall be assigned to the state operations.

(c) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion costs in the categories, as specified in § 36.141(b), among the jurisdictions using the relative use measurements or factors, as specified in § 36.142(a), for the twelve month period ending December 31, 2000. Direct assignment of any category of Information Origination/Termination Equipment to the jurisdictions shall be updated annually.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33206, June 21, 2001]

CABLE AND WIRE FACILITIES

§ 36.151 General.

(a) Cable and Wire Facilities, Account 2410, includes the following types of communications plant in service: Poles and antenna supporting structures, aerial cable, underground cable, buried cable, submarine cable, deep sea

cable, intrabuilding network cable, aerial wire and conduit systems.

(b) For separations purposes, it is necessary to analyze the cable and wire facilities classified in subordinate records in order to determine their assignment to the categories listed in the following paragraphs.

(c) In the separation of the cost of cable and wire facilities among the operations, the first step is the assignment of the facilities to certain categories. The basic method of making this assignment is the identification of the facilities assignable to each category and the determination of the cost of the facilities so identified. Because of variations among companies in the character of the facilities and operating conditions, and in the accounting and engineering records maintained, the detailed methods followed, of necessity, will vary among the companies. The general principles to be followed, however, will be the same for all companies.

(d) The second step is the apportionment of the cost of the facilities in each category among the operations through the application of appropriate factors or by direct assignment.

§ 36.152 Categories of Cable and Wire Facilities (C&WF).

(a) C&WF are basically divided between exchange and interexchange. Exchange C&WF consists of the following categories:

(1) Exchange Line C&WF *Excluding Wideband*—Category 1—This category includes C&W facilities between local central offices and subscriber premises used for message telephone, TWX subscriber lines, private line, local channels, and for circuits between control terminals and radio stations providing very high frequency maritime service or urban or highway mobile service.

(2) *Wideband and* Exchange Trunk C&WF—Category 2—This category includes all wideband, including Exchange Line Wideband and C&WF between local central offices and Wideband facilities. It also includes C&WF between central offices or other switching points used by any common carrier for interlocal trunks wholly within an exchange or metropolitan service area, interlocal trunks with one or both terminals outside a metropolitan service area carrying some exchange traffic, toll connecting trunks, tandem trunks principally carrying exchange traffic, the exchange trunk portion of TWX and WATS access lines the exchange trunk portion of private line local channels, and the exchange trunk portion of circuits between control terminals and radio stations providing very high frequency maritime service or urban or highway mobile service.

(3) The procedures for apportioning the cost of exchange cable and wire facilites among the operations are set forth in §§ 36.154 and 36.155.

(b) Interexchange C&WF—Category 3—This category includes the C&WF used for message toll and toll private line services. It includes cable and wire facilities carrying intertoll circuits, tributary circuits, the interexchange channel portion of special service circuits, circuits between control terminals and radio stations used for overseas or coastal harbor service, interlocal trunks between offices in the different exchange or metropolitan service areas carrying only message toll traffic and certain tandem trunks which carry principally message toll traffic.

(1) The procedures for apportioning the cost of interexchange cable and wire facilities among the operations are set forth in § 36.156.

(c) Host/Remote Message C&WF—Category 4—This category includes the cost of message host/remote location C&WF for which a message circuit switching function is performed at the host central office. It applies to C&WF between host offices and all remote locations. The procedures for apportioning the cost of these facilities among the operations are set forth in § 36.157.

(d) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41, shall assign the average balance of Account 2410 to the categories/subcategories, as specified in §§ 36.152(a)

through (c), based on the relative percentage assignment of the average balance of Account 2410 to these categories/subcategories during the twelve month period ending December 31, 2000.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33206, June 21, 2001]

§ 36.153 Assignment of Cable and Wire Facilities (C&WF) to categories.

(a) Cable consists of: Aerial cable, underground cable, buried cable, submarine cable, deep sea cable and intrabuilding network cable. Where an entire cable or aerial wire is assignable to one category, its cost and quantity are, where practicable, directly assigned.

(1) *Cable*. (i) There are two basic methods for assigning the cost of cable to the various categories. Both of them are on the basis of conductor cross section. The methods are as follows:

(A) By section of cable, uniform as to makeup and relative use by categories. From an analysis of cable engineering and assignment records, determine in terms of equivalent gauge the number of pairs in use or reserved, for each category. The corresponding percentages of use, or reservation, are applied to the cost of the section of cable, i.e., sheath meters times unit cost per meter, to obtain the cost assignable to each category.

(B) By using equivalent pair kilometers, i.e., pair kilometers expressed in terms of equivalent gauge. From an analysis of cable engineering and assignment records, determine the equivalent pair kilometers in use for each category by type of facility, e.g., quadded, paired. The equivalent pair kilometers are then divided by a cable fill factor to obtain the equivalent pair kilometers in plant. The total equivalent pair kilometers in plant assigned to each category is summarized by type of facility, e.g., quadded and paired, and priced at appropriate average unit costs per equivalent pair kilometer in plant. If desired, this study may be made in terms of circuit kilometers rather than physical pair kilometers, with average cost and fill data consistent with the basis of the facilities kilometer count.

(ii) In the assignment of the cost of cable under the two basic methods described in § 36.153(a)(1)(i) consideration is given to the following:

(A) Method (A) described in § 36.153(a)(1)(i)(A) will probably be found more desirable where there is a relatively small amount of cable of variable make-up and use by categories. Conversely, method (B) described in § 36.153(a)(1)(i)(B) will probably be more desirable where there is a large amount of cable of variable make-up and use by categories. However, in some cases a combination of both methods may be desirable.

(B) It will be desirable in some cases to determine the amount assignable to a particular category by deducting from the total the sum of the amounts assigned to all other categories.

(C) For use in the assignment of poles to categories, the equivalent sheath kilometers of aerial cable assigned to each category are determined. For convenience, these quantities are determined in connection with assignment of cable costs.

(D) Where an entire cable is assignable to one category, its costs and quantity are, where practicable, directly assigned.

(iii) For cables especially arranged for high-frequency transmission such as shielded, disc-insulated and coaxial, recognition is given to the additional costs which are charged to the high-frequency complement.

(2) *Cable Loading*. (i) Methods for assigning the cost of loading coils, cases, etc., to categories are comparable with those used in assigning the associated cable to categories. Loading associated with cable which is directly assigned to a given category is also directly assigned. The remaining loading is assigned to categories in either of the following bases:

(A) By an analysis of the use made of the loading facilities where a loading coil case includes coils assignable to more than one category, e.g., in the case of a single gauge uniformly loaded section, the percentage used in the related cable assignment are applicable, or

(B) By pricing out each category by determining the pair meters of loaded pairs assigned to each category and multiplying by the unit cost per pair meter of loading by type.

(3) *Other Cable Plant*. (i) In view of the small amounts involved, the cost of all protected terminals and gas pressure contactor terminals in the toll cable subaccounts is assigned to the appropriate Interexchange Cable & Wire Facilities categories. The cost of all other terminals in the exchange and toll cable subaccounts is assigned to Exchange Cable and Wire Facilities.

(b) *Aerial Wire*. (1) The cost of wire accounted for as exchange is assigned to the appropriate Exchange Cable & Wire Facilities categories. The cost of wire accounted for as toll, which is used for exchange, is also assigned to the appropriate Exchange Cable & Wire Facilities categories. The cost of the remaining wire accounted for as toll is assigned to the appropriate Interexchange Cable & Wire Facilities categories as described in § 36.156. For companies not maintaining exchange and toll subaccounts, it is necessary to review the plant records and identify wire plant by use. The cost of wire used for providing circuits directly assignable to a category is assigned to that category. The cost of wire used for providing circuit facilities jointly used for exchange and interexchange lines is assigned to categories on the basis of the relative number of circuit kilometers involved.

(c) *Poles and Antenna Supporting Structures*. (1) In the assignment of these costs, anchors, guys, crossarms, antenna supporting structure, and right-of-way are included with the poles.

(2) Poles. (i) The cost of poles is assigned to categories based on the ratio of the cost of poles to the total cost of aerial wire and aerial cable.

(d) *Conduit Systems*. (1) The cost of conduit systems is assigned to categories on the basis of the assignment of the cost of underground cable.

[53 FR 17229, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988; 58 FR 44905, Aug. 25, 1993]

§ 36.154 Exchange Line Cable and Wire Facilities (C&WF)—Category 1—apportionment procedures.

(a) *Exchange Line C&WF—Category 1*. The first step in apportioning the cost of exchange line cable and wire facilities among the operations is the determination of an average cost per working loop. This average cost per working loop is determined by dividing the total cost of exchange line cable and wire Category 1 in the study area by the sum of the working loops described in subcategories listed below. The subcategories are:

Subcategory 1.1—State private lines and state WATS lines. This subcategory shall include all private lines and WATS lines carring exclusively state traffic as well as private lines and WATS lines carrying exclusively interstate traffic as well as private lines and WATS lines carrying both state and interstate traffic if the interstate traffic on the line involved constitutes ten percent or less of the total traffic on the line.

Subcategory 1.2—Interstate private lines and interstate WATS lines. This subcategory shall include all private lines and WATS lines that carry exclusively interstate traffic as well as private lines and WATS lines carrying both state and interstate traffic if the interstate traffic on the line involved constitutes more than ten percent of the total traffic on the line.

Subcategory 1.3—Subscriber or common lines that are jointly used for local exchange service and exchange access for state and interstate interexchange services.

(b) The costs assigned to subcategories 1.1 and 1.2 shall be directly assigned to the appropriate jurisdication.

(c) Except as provided in § 36.154 (d) through (f), effective January 1, 1986, 25 percent of the costs assigned to subcategory 1.3 shall be allocated to the interstate jurisdiction.

(d) Except as provided in § 36.154(f), the interstate allocation of subcategory 1.3 costs for the years 1988, 1989, 1990, 1991 and 1992 will be as follows:

(1) 1988—The § 36.154(e) allocation factor multiplied by .625 plus .09375.

(2) 1989—The § 36.154(e) allocation factor multiplied by .5 plus .125.

(3) 1990—The § 36.154(e) allocation factor multiplied by .375 plus .15625.

(4) 1991—The § 36.154(e) allocation factor multiplied by .25 plus .1875.

(5) 1992—The § 36.154(e) allocation factor multiplied by .125 plus .21875.

(e) For purposes of the transitional allocations described in § 36.154 (d) and (f) an allocation factor known as the subscriber plant factor or SPF that is the sum of the following shall be computed:

(1) Annual average interstate subscriber line use (SLU), for the calendar year 1981.[2] representing the interstate use of the subscriber plant as measured by the ratio of interstate holding time minutes of use to total holding time minutes of use applicable to traffic originating and terminating in the study area, multiplied by .85, the nationwide ratio of subscriber plant costs assignable to the exchange operation per minute of exchange use to total subscriber plant cost per total minute of use of subscriber plant, plus

(2) Twice the annual average interstate subscriber line use ratio for the study area for the calendar year 1981, multiplied by the annual average composite station rate ratio used for the calendar year 1981 (ratio of the nationwide, industry-wide average interstate initial 3-minute station charge at the study area average interstate length of haul to the nationwide, industry-wide average total toll initial 3-minute station charge at the nationwide average length of haul for all toll traffic for the total telephone industry).

(f) *Limit on Change in Interstate Allocation.* (1) No study area's percentage interstate allocation for Subcategory 1.3 Exchange Line C&WF and COE, Exchange Line Circuit Equipment Excluding Wideband—Category 4.13 investment as well as associated maintenance and depreciation shall decrease by a total of more than five percentage points from one calendar year to the next as a result of the combined operations of §§ 36.154(d) and 36.641 (a) and (b).

(2) The determination of whether the decrease in the interstate allocation for a given study area resulting from the operation of §§ 36.154(d) and 36.641(a) through 36.641(b) exceeds five percentage points shall be made by calculating a percentage interstate allocation for both of the years involved. This shall be done by dividing the interstate allocation of subcategory 1.3 Exchange Line C&WF and COE exchange Line circuit Equipment Excluding Wideband Category 4.13 and associated expenses for each year as calculated pursuant to § 36.154(f)(4) by the total unseparated investment in Exchange Line C&WF subcategory 1.3 and COE Category 4.13 and associated expenses for the corresponding year as calculated pursuant to § 36.154(f)(5).

(3) If the resulting percentage for the more recent of the two years is more than five percentage points less than the percentage for the earlier year, the decrease in the interstate allocations shall be reduced pro rata for plant investment, maintenance and depreciation so that the difference between the two percentages does not equal more than five percentage points.

(4) The sum of the following:

(i) The net interstate allocation of Exchange Line C&WF—subcategory 1.3 investment calculated pursuant to §36.154(d) and (e) multiplied by the authorized interstate rate of return.

(ii) The net interstate allocation of COE Exchange Line Circuit Equipment—Category 4.13 investment calculated purusant to § 36.154 (d) and (e) multiplied by the authorized interstate rate of return.

(iii) The interstate allocation of maintenance and depreciation attributable to Exchange Line C&WF subcategory 1.3 customer premises wire and COE Exhange Line Circuit Equipment—Category 4.13 calculated pursuant to § 36.154 (d) and (e).

(iv) The amount of the additional interstate expense allocation calculated pursuant to § 36.641.

(5) The sum of the following:

(i) The net unseparated Exchange Line C&WF subcategory 1.3 investment multiplied by the authorized interstate rate of return.

(ii) The net unseparated COE Exchange Line Circuit—Category 4.13 investment multiplied by the authorized interstate rate of return.

[2] In the case of a company that cannot calculate the average interstate subscriber line usage (SLU) ratio for the calendar year 1981, the average interstate SLU for the customarily used 12-month study period ending in 1981 may be utilized. In the case of a company for which no such 1981 annual average SLU exists, the annual average interstate SLU for the initial study period will be utilized.

(iii) The unseparated maintenance and depreciation attributable to Exchange Line C&WF subcategory 1.3 investment, customer premises wiring investment and COE Exhange Line Circuit Equipment—Category 4.13 investment.

(g) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion Subcategory 1.3 Exchange Line C&WF among the jurisdictions as specified in § 36.154(c). Direct assignment of subcategory Categories 1.1 and 1.2 Exchange Line C&WF to the jurisdictions shall be updated annually as specified in § 36.154(b).

[52 FR 17229, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988; 54 FR 31033, July 26, 1989; 66 FR 33206, June 21, 2001]

§ 36.155 Wideband and exchange trunk (C&WF)—Category 2—apportionment procedures.

(a) The cost of C&WF applicable to this category shall be directly assigned where feasible. If direct assignment is not feasible, cost shall be apportioned between the state and interstate jurisdictions on the basis of the relative number of minutes of use.

(b) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion Category 2 Wideband and exchange trunk C&WF among the jurisdictions using the relative number of minutes of use, as specified in § 36.155(a), for the twelve-month period ending December 31, 2000. Direct assignment of any Category 2 equipment to the jurisdictions shall be updated annually.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33206, June 21, 2001]

§ 36.156 Interexchange Cable and Wire Facilities (C&WF)—Category 3—apportionment procedures.

(a) An average interexchange cable and wire facilities cost per equivalent interexchange telephone circuit kilometer for all circuits in Category 3 is determined and applied to the equivalent interexchange telephone circuit kilometer counts of each of the classes of circuits.

(b) The cost of C&WF applicable to this category shall be directly assigned were feasible. If direct assignment is not feasible, cost shall be apportioned between the state and interstate jurisdiction on the basis of conversation-minute kilometers as applied to toll message circuits, TWX circuits, etc.

(c) Effective July 1, 2001, through June 30, 2006, all study areas shall directly assign Category 3 Interexchange Cable and Wire Facilities C&WF where feasible. All study areas shall apportion the non-directly assigned costs in Category 3 equipment to the jurisdictions using the relative use measurements, as specified in § 36.156 (b), during the twelve-month period ending December 31, 2000.

[58 FR 44905, Aug. 25, 1993, as amended at 66 FR 33206, June 21, 2001]

§ 36.157 Host/remote message Cable and Wire Facilities (C&WF)—Category 4—apportionment procedures.

(a) *Host/Remote Message C&WF—Category 4.* The cost of host/remote C&WF used for message circuits, i.e., circuits carrying only message traffic, is included in this category.

(1) The cost of host/remote message C&WF excluding WATS closed end access lines for the study area is apportioned on the basis of the relative number of study area minutes-of-use kilometers applicable to such facilities.

(2) The cost of host/remote message C&WF used for WATS closed end access for the study area is directly assigned to the appropriate jurisdiction.

(b) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion Category 4 Host/Remote message Cable and Wire Facilities C&WF among the jurisdictions using the relative number of study area minutes-of-use kilometers applicable to such facilities, as specified in § 36.157(a)(1), for the twelve month period ending December 31, 2000. Direct assignment of any Category 4 equipment to the jurisdictions shall be updated annually.

[52 FR 17229, May 6, 1987, as amended at 58 FR 44905, Aug. 25, 1993; 66 FR 33206, June 21, 2001]

AMORTIZABLE ASSETS

§ 36.161 Tangible assets—Account 2680.

(a) Tangible Assets, Account 2680 includes the costs of property acquired

under capital leases and the original cost of leasehold improvements.

(b) The costs of capital leases are apportioned among the operations based on similar plant owned or by analysis.

(c) The cost of leasehold improvements are apportioned among the operations in direct proportion to the costs of the related primary account.

§ 36.162 Intangible assets—Account 2690.

(a) Intangible Assets, Account 2690 includes the costs of organizing and incorporating the company, franchises, patent rights, and other intangible property having a life of more than one year.

(b) The amount included in this account is apportioned among the operations on the basis of the separation of the cost of Telecommunications Plant In Service, Account 2001, excluding the Intangible Assets, Account 2690.

TELECOMMUNICATIONS PLANT—OTHER

§ 36.171 Property held for future telecommunications use—Account 2002; Telecommunications plant under construction—Account 2003; and Telecommunications plant adjustment—Account 2005.

The amounts carried in Accounts 2002, 2003, and 2005 are apportioned among the operations on the basis of the apportionment of Account 2001, Telecommunications Plant in Service.

[60 FR 12138, Mar. 6, 1995]

RURAL TELEPHONE BANK STOCK

§ 36.172 Investment in nonaffiliated companies—Account 1402.

(a) The amounts carried in this account shall be separated into subsidiary record categories:

(1) Class B RTB Stock and

(2) All other.

(b) The amounts contained in category (2) all other of § 36.172(a)(2), shall be excluded from part 36 jurisdictional separations.

(c) The amounts contained in category (1) Class B RTB stock of § 36.172(a)(1), shall be allocated based on the relative separations of Account 2001, Telephone Plant in Service.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988]

MATERIAL AND SUPPLIES AND CASH WORKING CAPITAL

§ 36.181 Material and supplies—Account 1220.

(a) The amount included in Account 1220 is apportioned among the operations on the basis of the apportionment of the cost of cable and wire facilities in service. Any amounts included in Account 1220 associated with the Customer Premises portion of Account 2310 equipment, shall be excluded from the amounts which are allocated to the interstate operation.

§ 36.182 Cash working capital.

(a) The amount for cash working capital, if not determined directly for a particular operation, is apportioned among the operations on the basis of total expenses less non-cash expense items.

EQUAL ACCESS EQUIPMENT

§ 36.191 Equal access equipment.

(a) Equal access investment includes only initial incremental expenditures for hardware and other equipment related directly to the provision of equal access which would not be required to upgrade the capabilities of the office involved absent the provision of equal access. Equal access investment is limited to such expenditures for converting central offices which serve competitive interexchange carriers or where there has been a bona fide request for conversion to equal access.

(b) Equal access investment is first segregated from all other amounts in the primary accounts.

(c) The equal access investment determined in this manner is allocated between the jurisdictions on the basis of relative state and interstate equal access traffic including interstate interLATA equal access traffic, intrastate interLATA equal access traffic, and BOC interstate corridor toll traffic as well as AT&T and OCC intraLATA equal access usage. Local exchange traffic and BOC intraLATA toll traffic

is excluded. In the case of independent telephone companies, intrastate toll service provided by the independent local exchange company is excluded in determining intrastate usage, but intrastate toll service provided by long distance carriers affiliated with the local exchange company is included.

(d) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion Equal Access Equipment, as specified in § 36.191(a), among the jurisdictions using the relative state and interstate equal access traffic, as specified in § 36.191(c), for the twelve month period ending December 31, 2000.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988; 66 FR 33206, June 21, 2001]

Subpart C—Operating Revenues and Certain Income Accounts

GENERAL

§ 36.201 Section arrangement.

(a) This subpart is arranged in sections as follows:

General	36.202
Operating Revenues:	36.211
Basic Local Service Revenue—Account 5000.	36.212
Network Access Services Revenues—Accounts 5080 thru 5084.	36.213
Long Distance Message Revenue—Account 5100.	36.214
Miscellanous Revenue—Account 5200.	36.215
Uncollectible Revenue—Account 5300.	36.216
Certain Income Accounts:	
Other Operating Income and Expenses—Account 7100.	36.221
Nonoperating Income and Expenses—Account 7300.	36.222
Interest and Related Items—Account 7500.	36.223
Extraordinary Items—Account 7600.	36.224
Income Effect of Jurisdictional Ratemaking Differences—Accounts 7910.	36.225

[52 FR 17299, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988]

§ 36.202 General.

(a) This section sets forth procedures for the apportionment among the operations of operating revenues and certain income and expense accounts.

(b) Except for the Network Access Services Revenues, subsidiary record categories are maintained for all revenue accounts in accordance with the requirements of part 32. These subsidiary records identify services for the appropriate jurisdiction and will be used in conjunction with apportionment procedures stated in this manual.

OPERATING REVENUES

§ 36.211 General.

(a) Operating revenues are included in the following accounts:

Account Title	Account No.
Basic Local Service Revenue	5000
Network Access Service Revenues:	
Network Access Revenue	5080
End User Revenue	5081
Switched Access Revenue	5082
Special Access Revenue	5083
State Access Revenue	5084
Long Distance Message Revenue	5100
Miscellaneous Revenue	5200
Uncollectible Revenue	5300

§ 36.212 Basic local services revenue—Account 5000.

(a) Local private line revenues from broadcast program transmission audio services and broadcast program transmission video services are assigned to the interstate operation.

(b) Revenues that are attributable to the origination or termination of interstate FX or CCSA like services shall be assigned to the interstate jurisdiction.

(c) Wideband Message Service and TWX revenues from monthly and miscellaneous charges, service connections, move and change charges, are apportioned between state and interstate operations on the basis of the relative number of TWX minutes-of-use in the study area. Effective July 1, 2001, through June 30, 2006, all study areas shall apportion Wideband Message Service and TWX revenues among the jurisdictions using the relative number of TWX minutes of use for the twelve-month period ending December 31, 2000.

(d) All other revenues in this account are assigned to the exchange operation based on their subsidiary record categories or on the basis of analysis and studies.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33206, June 21, 2001]

§ 36.213 Network access services revenues.

(a) *Network Access Revenue—Account 5080.* (1) This account shall be used by Class A and Class B telecommunications companies to summarize the contents of accounts 5081 through 5084.

(b) *End User Revenue—Account 5081.* (1) Revenues in this account are assigned to the interstate operation.

(c) *Switched Access Revenue—Account 5082.* (1) Revenues in this account are assigned to the interstate operation.

(d) *Special Access Revenue—Account 5083.* (1) Revenues in this account are assigned to the interstate operation.

(e) *State Access Revenue—Account 5084.* (1) Revenues in this account are assigned to the state operation.

§ 36.214 Long distance message revenue—Account 5100.

(a) Wideband message service and TWX revenues from monthly and miscellaneous charges, service connections, move and change charges, are apportioned between state and interstate operations on the basis of the relative number of minutes-of-use in the study area. Effective July 1, 2001 through June 30, 2006, all study areas shall apportion Wideband Message Service and TWX revenues among the jurisdictions using the relative number of TWX minutes of use for the twelve-month period ending December 31, 2000.

(b) Long Distance private line service revenues from broadcast program transmission audio services and broadcast program transmission video services are assigned to the interstate operation.

(c) All other revenues in this account are directly assigned based on their subsidiary record categories or on the basis of analysis and studies.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33206, June 21, 2001]

§ 36.215 Miscellaneous revenue—Account 5200.

(a) Directory revenues are assigned to the exchange operation.

(b) Billing and collection revenues are assigned on the basis of services being provided.

(c) All other revenues are apportioned on the basis of analysis.

§ 36.216 Uncollectible revenue—Account 5300.

(a) The amounts in this account are apportioned among the operations on the basis of analysis of Account 1181-Accounts Receivable Allowance—Telecommunication, during a representative period.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988]

CERTAIN INCOME ACCOUNTS

§ 36.221 Other operating income and expenses—Account 7100.

(a) Amounts relating to translation in foreign exchange differentials are assigned to the interstate operations.

(b) All other amounts are apportioned based on Telecommunications Plant in Service, Account 2001, if plant related, or on the nature of the item reflected in the account, if not plant related.

§ 36.222 Nonoperating income and expenses—Account 7300.

(a) Only allowance for funds used during construction, and charitable, social and community welfare contributions are considered in this account for separations purposes.

(b) Subsidiary record categories should be maintained for this account that include identification of amounts made to the account for (1) credits representing allowance for funds used during construction and (2) contributions for charitable, social or community welfare purposes, employee activities, membership dues and fees in service clubs, community welfare association and similar organizations.

(c) The portion reflecting allowance for funds used during construction is apportioned on the basis of the cost of Telecommunications Plant Under Construction—Account 2003. The portion reflecting costs for social and community welfare contributions and fees is apportioned on the basis of the apportionment of corporate operations expenses.

[52 FR 17229, May 6, 1987, as amended at 60 FR 12138, Mar. 6, 1995]

§ 36.223 Interest and related items—Account 7500.

(a) Only interest paid relating to capital leases is considered in this account for separations purposes. Subsidiary Record Categories should be maintained for this account that include details relating to interest expense on capital leases. Such interest expense is apportioned on a basis consistent with the associated capital leases in Account 2680.

§ 36.224 Extraordinary items—Account 7600.

(a) Amounts in this account of an operating nature are apportioned on a basis consistent with the nature of these items.

§ 36.225 Income effect of jurisdictional ratemaking differences—Account 7910.

(a) Amounts in this account are directly assigned to the appropriate jurisdiction.

Subpart D—Operating Expenses and Taxes

GENERAL

§ 36.301 Section arrangement.

(a) This subpart is arranged in sections as follows:

General	36.301 and 36.302.
Plant Specific Operations Expenses:	
General	36.310.
Network Support/General Support Expenses—Accounts 6110 and 6120.	36.311.
Central Office Expenses—Account 6210, 6220, 6230.	36.321.
Information Origination/Termination Expenses—Account 6310.	36.331.
Cable and Wire Facilities Expenses—Account 6410.	36.341.
Plant Nonspecific Operations Expenses:	
General	36.351.
Other Property Plant and Equipment Expenses—Account 6510.	36.352.
Network Operations Expenses—Account 6530.	36.353.
Access Expenses—Account 6540.	36.354.
Depreciation and Amortization Expenses—Account 6560.	36.361.
Customer Operations Expenses:	
General	36.371.
Marketing—Account 6610	36.372.
Services—Account 6620	36.373.
Telephone Operator Services	36.374.
Published Director Listing	36.375.
All Other	36.376.
Category 1—Local Bus. Office Expense.	36.377.
Category 2—Customer Services (Revenue Accounting).	36.378.
Message Processing Expense	36.379.
Other Billing and Collecting Expense.	36.380.
Carrier Access Charge Billing and Collecting Expense.	36.381.
Category 3—All other Customer Service Expense.	36.382.
Corporate Operations Expenses:	
General	36.391.
Executive and Planning Expenses—Account 6710 and General and Administrative Expenses—Account 6720.	36.392.
Operating Taxes—Account 7200	36.411 and 36.412.
Equal Access Expenses	36.421.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988]

§ 36.302 General.

(a) This section sets forth procedures for the apportionment among the operations of operating expenses and operating taxes.

(b) As covered in § 36.2 (c) and (d), the treatment of expenses relating to plant furnished to and obtained from others under rental arrangements is consistent with the treatment of such plant.

(c) In accordance with requirements in part 32 § 32.5999 (f) expenses recorded in the expense accounts are segregated in the accounting process among the following subsidiary record categories as appropriate to each account:

Salaries and Wages
Benefits
Rents
Other Expenses
Clearances

(1) Subsidiary Record Categories (SRC) for Salaries and Wages, Benefits and Other Expenses are applicable to all of the expense accounts except for:

Access Expense contained in Account 6540

Depreciation and Amortization Expenses—Account 6560

(i) SRC for access expenses are maintained to identify interstate and state access expense and billing and collection expense for carrier's carrier.

(ii) Depreciation and Amortization Expense SRCs identify the character of the items contained in the account.

(2) SRCs for Rents and Clearance are only applicable to the Plant Specific Operating Expense accounts 6110 thru 6410.

PLANT SPECIFIC OPERATIONS EXPENSES

§ 36.310 General.

(a) Plant specific operations expenses include the following accounts:

Network Support Expenses	Account 6110
General Support Expenses ..	Account 6120
Central Office Switching Expenses.	Account 6210
Operators System Expenses	Account 6220
Central Office Transmission Expenses.	Account 6230
Information Origination/ Termination Expenses.	Account 6310
Cable and Wire Facilities Expenses.	Account 6410

(b) These accounts are used to record costs related to specific kinds of telecommunications plant and predominantly mirror the telecommunications plant in service detail accounts. Accordingly, these expense accounts will generally be apportioned in the same manner as the related plant accounts.

(c) Except where property obtained from or furnished to other companies is treated as owned property by the company making the separation, and the related operating rents are excluded from the separation studies as set forth in § 36.2 (c) and (d), amounts are apportioned among the operations on bases generally consistent with the treatment prescribed for similar plant costs and consistent with the relative magnitude of the items involved.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988]

NETWORK SUPPORT/GENERAL SUPPORT EXPENSES

§ 36.311 Network support expenses—Account 6110 and general support expenses—Account 6120.

(a) Network Support Expenses are expenses associated with motor vehicles, aircraft, special purpose vehicles, garage work equipment, and other work equipment. General Support Expenses are expenses associated with land and buildings, furniture and artworks, office equipment, and general purpose computers.

(b) The expenses in these account are apportioned among the operations on the basis of the separation of account 2110, Land and Support Assets.

CENTRAL OFFICE EXPENSES

§ 36.321 Central office expenses—Accounts 6210, 6220, and 6230.

(a) The expenses related to central office equipment are summarized in the following accounts:

Central Office Switching Expense.	Account 6210@@Q02
Operator Systems Expense	Account 6220@@Q02
Central Office Transmission Expense.	Account 6230

(b) The expense in these accounts are apportioned among the operations on the basis of the separation of the investments in central office equipment. Accounts 2210, 2220 and 2230, combined.

INFORMATION ORIGINATION/TERMINATION EXPENSES

§ 36.331 Information origination/termination expenses—Account 6310.

(a) The expenses in this account are classified as follows:

(1) Other Information Origination/ Termination Equipment Expenses; Customer Premises Equipment Expenses

(2) For some companies, these classifications are available from accounting records; for others, they are obtained by means of analyses of plant, accounting or other records for a representative period.

(b) Other Information Origination/ Termination Equipment Expenses include all expenses not associated with Customer Premises Equipment expenses. These expenses shall be apportioned between state and interstate operations in accordance with the apportionment of the related investment as per § 36.142(a).

(c) Expenses related to Customer Premises Equipment shall be assigned to the state operations.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988]

CABLE AND WIRE FACILITIES EXPENSES

§ 36.341 Cable and wire facilities expenses—Account 6410.

(a) This account includes the expenses for poles, antenna supporting structures, aerial cable, underground cable, buried cable, submarine cable, deep sea cable, intrabuilding network cable, aerial wire, and conduit systems.

(b) The general method of separating cable and wire facilities expenses amoung the operations is to assign them on the basis of Account 2410—Cable and Wire Facilities.

PLANT NONSPECIFIC OPERATIONS EXPENSES

§ 36.351 General.

(a) Plant nonspecific operations expenses include the following accounts:

Other Property Plant and Equipment Expenses.	Account 6510
Network Operations Expenses.	Account 6530
Access Expenses	Account 6540
Depreciation and Amortization Expenses.	Account 6560

PLANT EXPENSES—OTHER

§ 36.352 Other property plant and equipment expenses—Account 6510.

(a) This account is used to record the expenses associated with (1) property held for future telecommunications use and (2) the provisioning of material and supplies.

(b) The expenses in this account are apportioned among the operations based on the separation of Account 2001—Telecommunications Plant in Service.

NETWORK OPERATIONS EXPENSES

§ 36.353 Network operations expenses—Account 6530.

(a) This account includes the expenses associated with the provisions of power, network administration, testing, plant operations administration, and engineering.

(b) The expenses in this account are apportioned among the operations based on the separations of Account 2210, Central Office Switching, Account 2220 Operator Systems, Account 2230 Central Office Transmission, Account 2310, Information Origination/Termination and Account 2410, Cable and Wire Facilities, Combined.

§ 36.354 Access expenses—Account 6540.

(a) This account includes access charges paid to exchange carriers for exchange access service. These are directly assigned to the appropriate jurisdiction based on subsidiary record categories or on analysis and study.

DEPRECIATION AND AMORTIZATION EXPENSES

§ 36.361 Depreciation and amortization expenses—Account 6560.

(a) This account includes the depreciation expenses for telecommunications plant in service and for property held for future telecommunications use. It also includes the amortization expense for tangible and intangible asserts.

(b) Expenses recorded in this account shall be separated on the basis of the separation of the associated primary Plant Accounts or related categories.

CUSTOMER OPERATIONS EXPENSES

§ 36.371 General.

(a) Customer Operations Expenses are included in the following accounts:

Marketing	Account 6610
Services	Account 6620

§ 36.372 Marketing—Account 6610.

The expenses in this account are apportioned among the operations on the basis of an analysis of current billing for a representative period, excluding current billing on behalf of others and billing in connection with intercompany setttlements. Effective July 1, 2001 through June 30, 2006, all study areas shall apportion expenses in this account among the jurisdictions using the analysis, as specified in § 36.372(a),

during the twelve-month period ending December 31, 2000.

[52 FR 32923, Sept. 1, 1987, as amended at 66 FR 33207, June 21, 2001]

§ 36.373 Services—Account 6620.

(a) For apportionment purposes, the expenses in this account are first segregated on the basis of an analysis of job functions into the following classifications: Telephone operator services: publishing directory listing; and all other.

(1) Expenses may be apportioned among the operations for groups of exchanges. A group of exchanges may include all exchanges in the study area.

§ 36.374 Telephone operator services.

(a) Expenses in this classification include costs incurred for operators in call completion service and number services. This includes intercept, quoting rates, directory information, time charges, and all other operator functions performed in the central office, private branch exchange, teletypewriter exchange, and at public telephone stations.

(b) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620–Services to the Telephone operator expense classification based on the relative percentage assignment of the balance of Account 6620 to this classification during the twelve month period ending December 31, 2000.

(c) Expenses in this classification are apportioned among the operations on the basis of the relative number of weighted standard work seconds as determined by analysis and study for a representative period.

(d) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion Telephone operator expenses among the jurisdictions using the relative number of weighted standard work seconds, as specified in § 36.374(c), during the twelve-month period ending December 31, 2000.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33207, June 21, 2001]

§ 36.375 Published directory listing.

(a) This classification includes expenses for preparing or purchasing, compiling and disseminating directory listings.

(b) Published directory expense is assigned as follows:

(1) Classified directory expense and all expense of soliciting advertising is assigned to the exchange operation.

(2) TWX directory expense is assigned to State toll and interstate toll operations, respectively, on the basis of the relative number of TWX minutes-of-use.

(3) The expense of alphabetical and street address directories and traffic information records is apportioned among the operations on the basis of the relative number of study area subscriber line minutes-of-use applicable to each operation.

(4) The expense associated with directories and traffic information records prepared for one locality and used in another locality is known as ''foreign directories expense.'' Such expense is assigned to the appropriate operation on the basis of the location of the point where used with respect to the locality for which the directories and records were prepared.

(5) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41, shall assign the balance of Account 6620-Services to the classifications, as specified in §§ 36.375(b)(1) through 36.375(b)(4), based on the relative percentage assignment of the balance of Account 6620 to these classifications during the twelve month period ending December 31, 2000.

(6) Effective July 1, 2001 through June 30, 2006, all study areas shall apportion Published directory listing expenses using the underlying relative use measurements, as specified in §§ 36.375(b)(1) through 36.375(b)(4), during the twelve-month period ending December 31, 2000. Direct assignment of any Publishing directory listing expense to the jurisdictions shall be updated annually.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33207, June 21, 2001]

§ 36.376 All other.

(a) For apportionment purposes this classification must be divided into three categories:

(1) Category 1—Local Business Office Expense.

(2) Category 2—Customer Services Expense.

(3) Category 3—All Other Customer Services Expense.

§ 36.377 Category 1— Local business office expense.

(a) The expense in this category for the area under study is first segregated on the basis of an analysis of job functions into the following subcategories: End user service order processing; end user payment and collection; end user billing inquiry; interexchange carrier service order processing; interexchange carrier payment and collection; interexchange carrier billing inquiry; and coin collection and administration. Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620–Services to the subcategories, as specified in § 36.377(a), based on the relative percentage assignment of the balance of Account 6620 to these categories/subcategories during the twelve month period ending December 31, 2000.

(1) End-user service order processing includes expenses related to the receipt and processing of end users' orders for service and inquiries concerning service. This subcategory does not include any service order processing expenses for services provided to the interexchange carriers. End user service order processing expenses are first segregated into the following subcategories based on the relative number of actual contacts which are weighted, if appropriate, to reflect differences in the average work time per contact: Local service order processing; presubscription; directory advertising; State private line and special access; interstate private line and special access; other State message toll including WATS; other interstate message toll including WATS; and TWX.

(i) Local service order processing expense (primarily local telephone service orders) is assigned to the State jurisdiction.

(ii) Presubscription service order processing expense is assigned to the interstate jurisdiction.

(iii) Directory advertising service order processing expense is assigned to the State jurisdiction.

(iv) State private line and special access service order processing expense is assigned to the State jurisdiction.

(v) Interstate private line and special access service order processing expense is assigned to the interstate jurisdiction.

(vi) Other State message toll including WATS service order processing expense is assigned to the State jurisdiction.

(vii) Other Interstate message toll including WATS service order processing expense is assigned to the interstate jurisdiction.

(viii) TWX service order processing expense is allocated between the jurisdictions based on relative State and interstate billed TWX revenues.

(ix) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620-Services to the categories/subcategories, as specified in §§ 36.377(a)(1)(i) through 36.77(a)(1)(viii), based on the relative percentage assignment of the balance of Account 6620 to these categories/subcategories during the twelve month period ending December 31, 2000. Effective July 1, 2001 through June 30, 2006, all study areas shall apportion TWX service order processing expense, as specified in § 36.377(a)(1)(viii) among the jurisdictions using relative billed TWX revenues for the twelve-month period ending December 31, 2000. All other subcategories of End-user service order processing expense, as specified in §§ 36.377(a)(1)(i) through 36.377(a)(1)(viii), shall be directly assigned.

(2) End User payment and collection includes expenses incurred in relation to the payment and collection of amounts billed to end users. It also includes commissions paid to payment agencies (which receive payment on customer accounts) and collection

agencies. This category does not include any payment or collection expenses for services provided to interexchange carriers. End user payment and collection expenses are first segregated into the following subcategories based on relative total state and interstate billed revenues (excluding revenues billed to interexchange carriers and/or revenues deposited in coin boxes) for services for which end user payment and collection is provided: State private line and special access; interstate private line and special access; State message toll including WATS; interstate message toll including WATS, and interstate subscriber line charge; local, including directory advertising; and TWX.

(i) State private line and special access payment and collection expense is assigned to the State jurisdiction.

(ii) Interstate private line and special access payment and collection expense is assigned to the interstate jurisdiction.

(iii) State message toll including WATS payment and collection expense is assigned to the State jurisdiction.

(iv) Interstate message toll including WATS and interstate subscriber line charge payment and collection expense is assigned to the interstate jurisdiction.

(v) Local, including directory advertising payment and collection expense is assigned to the State jurisdiction.

(vi) TWX payment and collection expense is allocated between the jurisdictions based on relative State and interstate billed TWX revenues for service for which end user payment and collection is provided.

(vii) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620-Services to the subcategories, as specified in §§ 36.377(a)(2)(i) through 36.377(a)(2)(vi), based on the relative percentage assignment of the balance of Account 6620 to these categories/subcategories during the twelve month period ending December 31, 2000. Effective July 1, 2001 through June 30, 2006, all study areas shall apportion TWX payment and collection expense, as specified in § 36.377(2)(vi) among the jurisdictions using relative billed TWX revenues for the twelve-month period ending December 31, 2000. All other subcategories of End User payment and collection expense, as specified in §§ 36.377(a)(2)(i) through 36.377(a)(2)(vi), shall be directly assigned.

(3) End user billing inquiry includes expenses related to handling end users' inquiries concerning their bills. This category does not include expenses related to the inquiries of interexchange carriers concerning their bills. End user billing inquiry costs are first segregated into the following subcategories based on the relative number of actual contracts, weighted if appropriate, to reflect differences in the average work time per contact: State private line and special access; interstate private line and special access; State message toll including WATS, interstate message toll including WATS, interstate subscriber line charge; TWX; and other.

(i) State private line and special access billing inquiry expense is directly assigned to the State jurisdiction.

(ii) Interstate private line and special access billing inquiry expense is directly assigned to the interstate jurisdiction.

(iii) State message toll including WATS billing inquiry expense is directly assigned to the State jurisdiction.

(iv) Interstate message toll including WATS, and interstate subscriber line charge billing inquiry expense is directly assigned to the interstate jurisdiction.

(v) TWX billing inquiry expense is allocated between the jurisdictions based on relative State and interstate billed TWX revenues for service for which end user billing inquiry is provided.

(vi) Other billing inquiry expense (primarily related to local bills but also including directory advertising) is directly assigned to the State jurisdiction.

(vii) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620-Services to the subcategories, as specified in §§ 36.377(a)(3)(i) through 36.377(a)(3)(vi),

based on the relative percentage assignment of the balance of Account 6620 to these subcategories during the twelve month period ending December 31, 2000. Effective July 1, 2001 through June 30, 2006, all study areas shall apportion TWX billing inquiry expense, as specified in § 36.377(a)(3)(v) among the jurisdictions using relative billed TWX revenues for the twelve-month period ending December 31, 2000. All other subcategories of End user billing inquiry expense, as specified in §§ 36.377(a)(3)(i) through 36.377(a)(3)(vi), shall be directly assigned.

(4) Interexchange carrier service order processing includes expenses associated with the receipt and processing of interexchange carrier orders for service and inquiries about service. Interexchange carrier service order processing expenses are assigned to the following subcategories based on the relative number of actual contacts which are weighted, if appropriate, to reflect differences in the average work time per contact: State special access and private line; interstate special access and private line; State switched access and message toll including WATS; interstate switched access and message toll including WATS; State billing and collection; and interstate billing and collection.

(i) State special access and private line service order processing expense is directly assigned to the State jurisdiction.

(ii) Interstate special access and private line service order processing expense is directly assigned to the interstate jurisdiction.

(iii) State switched access and message toll including WATS service order processing expense is directly assigned to the State jurisdiction.

(iv) Interstate switched access and message toll including WATS service order processing expense is directly assigned to the interstate jurisdiction.

(v) State billing and collection service order processing expense is directly assigned to the state jurisdiction.

(vi) Interstate billing and collection service order processing expense is directly assigned to the interstate jurisdiction.

(vii) Effective July 1, 2001 through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620–Services to the subcategories, as specified in §§ 36.377(a)(4)(i) through 36.377(a)(4)(vi), based on the relative percentage assignment of the balance of Account 6620 to these subcategories during the twelve month period ending December 31, 2000. All subcategories of Interexchange carrier service order processing expense, as specified in §§ 36.377(a)(4)(i) through 36.377(a)(4)(vi), shall be directly assigned.

(5) Interexchange carrier payment and collection includes expenses associated with the payment and collection of interexchange carrier billings, including commissions paid to payment and collection agents. Interexchange carrier payment and collection expenses are assigned to the following subcategories based on relative total State and interstate revenues billed to the interexchange carriers: State special access and private line; interstate special access and private line; State switched access and message toll including WATS; interstate switched access and message toll including WATS; State billing and collection; and interstate billing and collection.

(i) State special access and private line payment and collection expense is directly assigned to the Interstate jurisdiction.

(ii) Interstate special access and private line payment and collection expense is directly assigned to the interstate jurisdiction.

(iii) State switched access and message toll including WATS payment and collection expense is directly assigned to the State jurisdiction.

(iv) Interstate switched access and message toll including WATS payment and collection expense is directly assigned to the interstate jurisdiction.

(v) State billing and collection payment and collection expense is directly assigned to the interstate jurisdiction.

(vi) Interstate billing and collection payment and collection expense is directly assigned to the State jurisdiction.

(vii) Effective July 1, 2001 through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41

of this chapter, shall assign the balance of Account 6620–Services to the subcategories, as specified in §§ 36.377(a)(5)(i) through 36.377(a)(5)(vi), based on the relative percentage assignment of the balance of Account 6620 to these subcategories during the twelve month period ending December 31, 2000. All subcategories of Interexchange carrier payment expense, as specified in §§ 36.377(a)(5)(i) through 36.377(a)(5)(vi), shall be directly assigned.

(6) Interexchange carrier billing inquiry includes expenses related to the handling of interexchange carrier billing inquiries. Interexchange carrier billing inquiry expenses are assigned to the following subcategories based on the relative number of actual contacts, weighted if appropriate, to reflect differences in the average work time per contact: State special access and private line; interstate special access and private line; State switched access and message toll including WATS; interstate switched access and message toll including WATS; State billing and collection; and interstate billing and collection.

(i) State special access and private line billing inquiry expenses is directly assigned to the State jurisdiction.

(ii) Interstate special access and private line billing inquiry expense is directly assigned to the interstate jurisdiction.

(iii) State switched access and message toll including WATS billing inquiry expense is directly assigned to the State jurisdiction.

(iv) Interstate switched access and message toll including WATS billing inquiry expense is directly assigned to the interstate jurisdiction.

(v) State billing and collection billing inquiry expense is directly assigned to the State jurisdiction.

(vi) Interstate Billing and Collection billing inquiry expense is directly assigned to the interstate jurisdiction.

(vii) Effective July 1, 2001 through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620–Services to the subcategories, as specified in § 36.377(a)(6)(i) through 36.377(a)(6)(vi), based on the relative percentage assignment of the balance of Account 6620 to these subcategories during the twelve month period ending December 31, 2000. All subcategories of Interchange carrier billing inquiry expense, as specified in §§ 36.377(a)(6)(i) through 36.377(a)(6)(vi), shall be directly assigned.

(7) Coin collection and administration includes expenses for the collection and counting of money deposited in public or semi-public phones. It also includes expenses incurred for required travel, coin security, checking the serviceability of public or semi-public telephones, and related functions. These expenses are apportioned between the State and interstate jurisdictions in proportion to the relative State and interstate revenues deposited in the public and semi-public telephones.

(i) Effective July 1, 2001 through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620–Services to the subcategories, as specified in § 36.377(a)(7), based on the relative percentage assignment of the balance of Account 6620 to these subcategories during the twelve month period ending December 31, 2000.

(ii) Effective July 1, 2001 through June 30, 2006, all study areas shall apportion Coin collection and administration expense among the jurisdictions using the relative state and interstate revenues deposited in the public and semi-public telephones, as specified in §§ 36.377(a)(7), for the twelve month period ending December 31, 2000. Direct assignment of any Coin collection and administration expense among the jurisdictions shall be updated annually.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33207, June 21, 2001]

§ 36.378 Category 2—Customer services (revenue accounting).

(a) The Revenue Accounting proportion of Account 6620 expenses comprise the salaries and other expenses in Account 6620 directly assignable or allocable to the billing of customers and the accounting for revenues, including the supervision of such work.

(b) Revenue Accounting expenses for the study area are separated on the basis of a Job Function analysis into three main classifications: Message processing expense, other billing and collecting expense, and carrier access charge billing and collecting expense.

(1) Effective July 1, 2001 through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620–Services to the classifications, as specified in § 36.378(b), based on the relative percentage assignment of the balance of Account 6620 to those classifications during the twelve month period ending December 31, 2000.

(2) [Reserved]

(c) The term ''ticket'' denotes either a ticket prepared manually by an operator or the mechanized equivalent of such a ticket processed by the revenue accounting office.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33208, June 21, 2001]

§ 36.379 Message processing expense.

(a) This classification includes the salary and machine expense of data processing equipment, including supervision, general accounting administrative and miscellaneous expense associated with the processing of individual toll tickets and local message tickets.

(b) The expense assigned to this classification is divided into the subcategories Toll Ticket Processing Expense and Local Message Processing Expense on the basis of the relative number of messages. Toll Ticket Processing Expense is allocated between the State and interstate jurisdiction on the basis of the relative number of toll messages. Local Message Processing Expense is assigned to the exchange operation.

(1) Effective July 1, 2001 through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620–Services to the subcategories, as specified in § 36.379(b), based on the relative percentage assignment of the balance of Account 6620 to those subcategories during the twelve month period ending December 31, 2000.

(2) Effective July 1, 2001 through June 30, 2006, all study areas shall apportion Toll Ticketing Processing Expense among the jurisdictions using the relative number of toll messages for the twelve-month period ending December 31, 2000. Local Message Process Expense is assigned to the state jurisdiction.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33208, June 21, 2001]

§ 36.380 Other billing and collecting expense.

(a) This classification includes the salary expense, including supervision, general accounting administrative, and miscellaneous expense, associated with the preparation of customer bills other than carrier access charge bills and with other revenue accounting functions not covered in § 36.379. Included in this classification are the expenses incurred in the preparation of monthly bills, initial and final bills, the application of service orders to billing records (establishing, changing, or discontinuing customers' accounts), station statistical work, controlling record work and the preparation of revenue reports.

(b) Local exchange carriers that bill or collect from end users on behalf of interexchange carriers shall allocate one third of the expenses assigned this classification to the interstate jurisdiction, and two thirds of the expenses assigned this classification to the state jurisdiction.

(c) Local exchange carriers that do not bill or collect from end users on behalf of interexchange carriers shall allocate five percent of the expenses assigned this classification to the interstate jurisdiction, and ninety-five percent of the expenses assigned this classification to the state jurisdiction.

(d) Effective July 1, 2001 through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620–Services to the Other billing and collecting expense classification based on the relative percentage assignment of the balance of Account 6620 to those subcategory during the twelve month period ending December 31, 2000.

(e) Effective July 1, 2001 through June 30, 2006, all study areas shall apportion Other billing and collecting expense among the jurisdictions using the allocation factor utilized, pursuant to §§ 36.380(b) or 36.380(c), for the twelve month period ending December 31, 2000.

[53 FR 33011, Aug. 29, 1988, as amended at 62 FR 15416, Apr. 1, 1997; 66 FR 33208, June 21, 2001]

§ 36.381 Carrier access charge billing and collecting expense.

(a) This classification includes the revenue accounting functions associated with the billing and collecting of access charges to interexchange carriers.

(b) Of access charges other than end user common line access charges are assessed for the origination or termination of intrastate services in a particular state, one-half of such expense shall be apportioned to interstate operations. If no such access charges are assessed in a particular state, all such expense shall be assigned to interstate operations.

(c) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620–Services to the Carrier access charge billing and collecting expense classification based on the relative percentage assignment of the balance of Account 6620 to that classification during the twelve month period ending December 31, 2000.

(d) Effective July 1, 2001, through June 30, 2006, all study areas shall apportion Carrier access charge billing and collecting expense among the jurisdictions using the allocation factor, pursuant to § 36.381(b), for the twelve-month period ending December 31, 2000.

[52 FR 17229, May 6, 1987, as amended at 66 FR 33208, June 21, 2001]

§ 36.382 Category 3—All other customer services expense.

(a) Effective July 1, 2001, through June 30, 2006, study areas subject to price cap regulation, pursuant to § 61.41 of this chapter, shall assign the balance of Account 6620–Services to this category based on the relative percentage assignment of the balance of Account 6620 to this category during the twelve month period ending December 31, 2000.

(b) Category 3 is apportioned on the basis of Categories 1 and 2.

[66 FR 33208, June 21, 2001]

CORPORATE OPERATIONS EXPENSE

§ 36.391 General.

(a) Corporate Operations Expenses are included in the following accounts:

Executive and Planning .....Account 6710
General and Administrative .....Account 6720

§ 36.392 Executive and planning—Account 6710, and general and administrative—Account 6720.

(a) These expenses are divided into two categories:

(1) Extended Area Services (EAS).

(2) All other.

(b) Extended Area Services (EAS) settlements are directly assigned to the exchange operation.

(c) The expenses in these accounts are apportioned among the operations on the basis of the separation of the cost of the combined Big Three Expenses which include the following accounts:

PLANT SPECIFIC EXPENSES

6210 Central Office Switching Expenses
6220 Operators Systems Expenses
6230 Central Office Transmission Expenses
6310 Information Origination/Termination Expenses
6410 Cable and Wire Facilities Expense

PLANT NON-SPECIFIC EXPENSES

6530 Network Operations Expenses

CUSTOMER OPERATIONS EXPENSES

6610 Marketing
6620 Services

OPERATING TAXES

§ 36.411 Operating taxes—Account 7200.

(a) This account includes the taxes arising from the operations of the company, i.e.,

Operating Investment Tax Credits
Operating Federal Income Taxes
Operating State and Local Income Taxes
Operating Other Taxes
Provision for Deferred Operating Income Taxes

§ 36.412 Apportionment procedures.

(a) For apportionment purposes, the expenses in this account are segregated into two groups as follows: (1) Operating Federal, State and local income taxes and (2) all other operating taxes.

(b) Operating Federal, State and local income taxes are apportioned among the operations on the basis of the approximate net taxable income (positive or negative) applicable to each of the operations. The approximate net taxable income from each of the operations is the summation of the following amounts apportioned to each operation by means of the procedures set forth in this Manual:

(1) Operating revenues,

(2) Less operating expenses,

(3) Less operating taxes except the net income tax being apportioned and except any other tax not treated as a deductible item in the determination of taxable net income for this purpose.

(4) Less operating fixed charges.

(i) The amount of fixed charges attributable to the operations is obtained by subtracting the tax component (positive or negative) attributable to other than the operating fixed charges, i.e., fixed charges on non-operating investments are that proportion of total fixed charges which non-operating net investments are of total operating and non-operating net investments.

(ii) Operating fixed charges including interest on Rural Telephone Bank Stock are apportioned among the operations on the basis of the separation of the cost of telephone plant less appropriate reserves.

(c) Other operating taxes should be directly assigned to the appropriate jurisdiction where possible, e.g., Local Gross Receipts may be directly identified as applicable to one jurisdiction. Where direct assignment is not feasible, these expenses should be apportioned among the operations on the basis of the separation of the cost of Telecommunications Plant in Service—Account 2001.

EQUAL ACCESS EXPENSES

§ 36.421 Equal access expenses.

(a) Equal access expenses include only initial incremental pre-subscription costs and other initial incremental expenditures related directly to the provision of equal access, that would not be required to upgrade the capabilities of the office involved absent the provision of equal access. Equal access expenses are limited to such expenditures for converting central offices that serve competitive interexchange carriers or where there has been a bona fide request for conversion to equal access.

(b) Equal access expenses are apportioned between the jurisdictions by first segregating them from all other expenses in the primary accounts and then allocating them on the same basis as equal access investment.

Subpart E—Reserves and Deferrals

§ 36.501 General.

(a) For separations purposes, reserves and deferrals include the following accounts:

Other Jurisdictional Assets—Net.	Account 1500
Accumulated Depreciation	Account 3100
Accumulated Depreciation—Property Held for Future Telecommunications Use.	Account 3200
Accumulated Amortization—Tangible.	Account 3400
Accumulated Amortization—Intangible.	Account 3500
Accumulated Amortization—Other.	Account 3600
Net Current Deferred Operating Income Taxes.	Account 4100
Net Noncurrent Deferred Operating Income Taxes.	Account 4340
Other Jurisdictional Liabilities and Deferred Credits—Net.	Account 4370

§ 36.502 Other jurisdictional assets—Net—Account 1500.

(a) Amounts in this account are separated based upon analysis of the specific items involved.

§ 36.503 Accumulated depreciation—Account 3100.

(a) Amounts recorded in this account shall be separated on the basis of the separation of the associated primary Plant Accounts or related categories, excluding amortizable assets.

§ 36.504 Accumulated depreciation—Property held for future telecommunications use—Account 3200.

(a) Amounts in this account are apportioned among the operations on the basis of the separation of the costs of the related items carried in Account 2002—Property Held for Future Telecommunications Use.

§ 36.505 Accumulated amortization—Tangible—Account 3400. Accumulated amortization—Intangible—Account 3500, and accumulated amortization—Other—Account 3600.

(a) Amounts in these accounts are apportioned among the operations on the basis of the separation of the related accounts.

§ 36.506 Net current deferred operating income taxes—Account 4100, Net noncurrent deferred operating income taxes—Account 4340.

(a) Amounts in these accounts are maintained by plant account and are apportioned among the operations on the basis of the separations of the related plant accounts.

§ 36.507 Other jurisdictional liabilities and deferred credits—Net—Account 4370.

(a) Amounts in this account are separated based upon an analysis of the specific items involved.

Subpart F—Universal Service Fund

GENERAL

§ 36.601 General.

(a) The term Universal Service Fund in this subpart refers only to the support for loop-related costs included in § 36.621. The term Universal Service in part 54 of this chapter refers to the comprehensive discussion of the Commission's rules implementing section 254 of the Communications Act of 1934, as amended, 47 U.S.C. 254, which addresses universal service support for rural, insular, and high cost areas, low-income consumers, schools and libraries, and heath care providers. The expense adjustment calculated pursuant to this subpart F shall be added to interstate expenses and deducted from state expenses after expenses and taxes have been apportioned pursuant to subpart D of this part. Beginning January 1, 1998, the expense adjustment calculated pursuant to this subpart will be administered and funded through the new universal service system discussed in part 54 of this chapter.

(b) The expense adjustment will be computed on the basis of data for a preceding calendar year which may be updated at the option of the carrier pursuant to § 36.612(a).

(c) Until June 30, 2001, the annual amount of the total nationwide expense adjustment shall consist of the amounts calculated pursuant to § 54.309 of this chapter and the amounts calculated pursuant to this subpart F. The annual amount of the total nationwide loop cost expense adjustment calculated pursuant to this subpart F shall not exceed the amount of the total loop cost expense adjustment for the immediately preceding calendar year, increased by a rate equal to the rate of increase in the total number of working loops during the calendar year preceding the July 31st filing. The total loop cost expense adjustment shall consist of the loop cost expense adjustments, including amounts calculated pursuant to § 36.612(a) and § 36.631. The rate of increase in total working loops shall be based upon the difference between the number of total working loops on December 31 of the calendar year preceding the July 31st filing and the number of total working loops on December 31 of the second calendar year preceding that filing, both determined by the company's submissions pursuant to § 36.611. Beginning January 1, 2000, non-rural incumbent local exchange carriers and, eligible telecommunications carriers serving lines in the service area of non-rural incumbent local exchange carriers, shall only receive support pursuant to this subpart F to the extent that they qualify pursuant to § 54.311 of this chapter for interim hold-harmless support. Support amounts calculated pursuant to this subpart F but not received due to the phase down of interim hold-harmless support or the receipt of forward-looking support pursuant to

§ 54.311 of this chapter shall not be redistributed to other carriers.

[52 FR 17229, May 6, 1987, as amended at 56 FR 27422, June 14, 1991; 58 FR 69242, Dec. 30, 1993; 61 FR 34376, July 2, 1996; 62 FR 32947, June 17, 1997; 62 FR 40748, July 30, 1997; 63 FR 2124, Jan. 13, 1998; 64 FR 30924, June 9, 1999; 64 FR 67430, Dec. 1, 1999; 65 FR 78992, Dec. 18, 2000; 66 FR 30085, June 5, 2001]

§ 36.602 Calculation of non-rural carrier portion of nationwide loop cost expense adjustment.

Effective July 1, 2001, for purposes of determining non-rural carrier interim hold-harmless support, pursuant to § 54.311 of this chapter, the annual amount of the total nationwide loop cost expense adjustment calculated pursuant to this subpart F shall not exceed the amount of the total loop cost expense adjustment for the immediately preceding calendar year, increased by a rate equal to the rate of increase in the total number of working loops during the calendar year preceding the July 31st filing. The total loop cost expense adjustment shall consist of the loop cost expense adjustments, including amounts calculated pursuant to §§ 36.612(a) and 36.631. The rate of increase in total working loops shall be based upon the difference between the number of total working loops on December 31 of the calendar year preceding the July 31st filing and the number of total working loops on December 31 of the second calendar year preceding that filing, both determined by the company's submissions pursuant to § 36.611. Non-rural incumbent local exchange carriers and eligible telecommunications carriers serving lines in the service area of non-rural incumbent local exchange carriers shall only receive support pursuant to this subpart F to the extent that they qualify pursuant to § 54.311 of this chapter for interim hold-harmless support. Support amounts calculated pursuant to this subpart F but not received due to the phase down of interim hold-harmless support or the receipt of forward-looking support pursuant to § 54.311 of this chapter shall not be redistributed to other carriers.

[66 FR 30085, June 5, 2001]

§ 36.603 Calculation of rural incumbent local exchange carrier portion of nationwide loop cost expense adjustment.

(a) Effective July 1, 2001, the rural incumbent local exchange carrier portion of the annual nationwide loop cost expense adjustment will be recomputed by the fund administrator as if the indexed cap calculated pursuant to § 36.601(c) and the corporate operations expense limitation calculated pursuant to § 36.621 had not been in effect for the calendar year 2000. For the period July 1, 2001, to December 31, 2001, the annualized amount of the rural incumbent local exchange carrier portion of the nationwide loop cost expense adjustment calculated pursuant to this subpart F shall not exceed the non-capped amount of the total rural incumbent local exchange carrier loop cost expense adjustment for the calendar year 2000, multiplied times one plus the Rural Growth Factor calculated pursuant to § 36.604. Beginning January 1, 2002, the annual amount of the rural incumbent local exchange carrier portion of the nationwide loop cost expense adjustment calculated pursuant to this subpart F shall not exceed the amount of the total rural incumbent local exchange carrier loop cost expense adjustment for the immediately preceding calendar year, multiplied times one plus the Rural Growth Factor calculated pursuant to § 36.604.

(b) The annual rural incumbent local exchange carrier portion of the nationwide loop cost expense adjustment shall be reduced to reflect the transfer of rural incumbent local exchange carrier access lines that are eligible for expense adjustments pursuant to § 36.631. The reduction shall equal the amount of the § 36.631 expense adjustment available to the transferred access lines at the time of the transfer and shall be effective in the next calendar quarter after the access lines are transferred.

(c) Safety net additive support calculated pursuant to § 36.605, and transferred high-cost support and safety valve support calculated pursuant to § 54.305 of this chapter shall not be included in the rural incumbent local exchange carrier portion of the annual

nationwide loop cost expense adjustment.

[66 FR 30085, June 5, 2001]

§ 36.604 Calculation of the rural growth factor.

The Rural Growth Factor (RGF) is equal to the sum of the annual percentage change in the United States Department of Commerce's Gross Domestic Product—Chained Price Index (GPD–CPI) plus the percentage change in the total number of rural incumbent local exchange carrier working loops during the calendar year preceding the July 31st filing submitted pursuant to § 36.611. The percentage change in total rural incumbent local exchange carrier working loops shall be based upon the difference between the total number of rural incumbent local exchange carrier working loops on December 31 of the calendar year preceding the July 31st filing and the total number of rural incumbent local exchange carrier working loops on December 31 of the second calendar year preceding that filing, both determined by the company's submissions pursuant to § 36.611. Loops acquired by rural incumbent local exchange carriers shall not be included in the RGF calculation.

[66 FR 30085, June 5, 2001]

§ 36.605 Calculation of safety net additive.

(a) *''Safety net additive support.''* A rural incumbent local exchange carrier shall receive safety net additive support if it satisfies the conditions set forth in paragraph (c) of this section. Safety net additive support is support available to rural telephone companies, as conditioned in paragraph (c) of this section, in addition to support calculated pursuant to § 36.631. Safety net additive support shall not be available to rural telephone companies for exchange(s) that are subject to § 54.305 of this chapter.

(b) *Calculation of safety net additive support:* Safety net additive support is equal to the amount of capped support calculated pursuant to this subpart F in the qualifying year minus the amount of support in the year prior to qualifying for support subtracted from the difference between the uncapped expense adjustment for the study area in the qualifying year minus the uncapped expense adjustment in the year prior to qualifying for support as shown in the following equation: Safety net additive support = (Uncapped support in the qualifying year − Uncapped support in the base year) − (Capped support in the qualifying year − Amount of support received in the base year).

(c) *Operation of safety net additive support:* (1) In any year in which the total carrier loop cost expense adjustment is limited by the provisions of § 36.603 a rural incumbent local exchange carrier shall receive safety net additive support as calculated in paragraph (b) of this section, if in any study area, the rural incumbent local exchange carrier realizes growth in end of period Telecommunications Plant in Service (TPIS), as prescribed in § 32.2001 of this chapter, on a per loop basis, of at least 14 percent more than the study area's TPIS per loop investment at the end of the prior period.

(2) If paragraph (c)(1) of this section is met, the rural incumbent local exchange carrier must notify the Administrator; failure to properly notify the Administrator of eligibility shall result in disqualification of that study area for safety net additive, requiring the rural incumbent local exchange carrier to again meet the eligibility requirements in paragraph (c)(1) of this section for that study area in a subsequent period.

(3) Upon completion of verification by the Administrator that the study area meets the stated criterion in paragraphs (a), (b), (c) of this section, the Administrator shall:

(i) Pay to any qualifying rural telephone company, safety net additive support for the qualifying study area in accordance with the calculation set forth in paragraph (b) of this section; and

(ii) Continue to pay safety net additive support for the succeeding four years. Support in the four succeeding years shall be the lesser of:

(A) The amount of support paid in the qualifying year; or

(B) The amount of support based on recalculation of support pursuant to paragraph (b) in this section.

[66 FR 30086, June 5, 2001]

DATA COLLECTION

§ 36.611 Submission of information to the National Exchange Carrier Association (NECA).

In order to allow determination of the study areas and wire centers that are entitled to an expense adjustment pursuant to § 36.631, each incumbent local exchange carrier (LEC) must provide the National Exchange Carrier Association (NECA) (established pursuant to part 69 of this chapter) with the information listed for each study area in which such incumbent LEC operates, with the exception of the information listed in paragraph (h) of this section, which must be provided for each study area and, if applicable, for each wire center, as defined in part 54 of this chapter, and each disaggregation zone as established pursuant to § 54.315 of this chapter. This information is to be filed with NECA by July 31st of each year. The information provided pursuant to paragraph (h) of this section must be updated pursuant to § 36.612. Rural telephone companies that acquired exchanges subsequent to May 7, 1997, and incorporated those acquired exchanges into existing study areas shall separately provide the information required by paragraphs (a) through (h) of this section for both the acquired and existing exchanges.

(a) Unseparated, i.e., state and interstate, gross plant investment in Exchange Line Cable and Wire Facilities (C&WF) Subcategory 1.3 and Exchange Line Central Office (CO) Circuit Equipment Category 4.13. This amount shall be calculated as of December 31st of the calendar year preceding each July 31st filing.

(b) Unseparated accumulated depreciation and noncurrent deferred federal income taxes, attributable to Exchange Line C&WF Subcategory 1.3 investment, and Exchange Line CO Circuit Equipment Category 4.13 investment. These amounts shall be calculated as of December 31st of the calendar year preceding each July 31st filing, and shall be stated separately.

(c) Unseparated depreciation expense attributable to Exchange Line C&WF Subcategory 1.3 investment, and Exchange Line CO Circuit Equipment Category 4.13 investment. This amount shall be the actual depreciation expense for the calendar year preceding each July 31st filing.

(d) Unseparated maintenance expense attributable to Exchange Line C&WF Subcategory 1.3 investment and Exchange Line CO Circuit Equipment Category 4.113 investment. This amount shall be the actual repair expense for the calendar year preceding each July 31st filing.

(e) Unseparated corporate operations expenses, operating taxes, and the benefits and rent proportions of operating expenses. The amount for each of these categories of expense shall be the actual amount for that expense for the calendar year preceding each July 31st filing. The amount for each category of expense listed shall be stated separately.

(f) Unseparated gross telecommunications plant investment. This amount shall be calculated as of December 31st of the calendar year preceding each July 31st filing.

(g) Unseparated accumulated depreciation and noncurrent deferred federal income taxes attributable to local unseparated telecommunications plant investment. This amount shall be calculated as of December 31st of the calendar year preceding each July 31st filing.

(h) For rural telephone companies, as that term is defined in § 51.5 of this chapter, the number of working loops for each study area. For non-rural telephone companies, the number of working loops for each study area and for each wire center. For universal service support purposes, working loops are defined as the number of working Exchange Line C&WF loops used jointly for exchange and message telecommunications service, including C&WF subscriber lines associated with pay telephones in C&WF Category 1, but excluding WATS closed end access and TWX service. These figures shall be calculated as of December 31st of the

calendar year preceding each July 31st filing.

[62 FR 32947, June 17, 1997, as amended at 64 FR 67430, Dec. 1, 1999; 66 FR 30086, June 5, 2001]

§ 36.612 Updating information submitted to the National Exchange Carrier Association.

(a) Any rural telephone company, as that term is defined in § 51.5 of this chapter, may update the information submitted to the National Exchange Carrier Association (NECA) on July 31st pursuant to §§ 36.611 (a) through (h) one or more times annually on a rolling year basis according to the schedule, except that rural telephone companies in service areas where an eligible telecommunications carrier has initiated service and has reported line count data pursuant to § 54.307(c) of this chapter must update the information submitted to NECA on July 31st pursuant to § 36.611(h) according to the schedule. Every non-rural telephone company must update the information submitted to NECA on July 31st pursuant to § 36.611 (h) according to the schedule.

(1) Submit data covering the last nine months of the previous calendar year and the first three months of the existing calendar year no later than September 30th of the existing year;

(2) Submit data covering the last six months of the previous calendar year and the first six months of the existing calendar year no later than December 30th of the existing year;

(3) Submit data covering the last three months of the second previous calendar year and the first nine months of the previous calendar year no later than March 30th of the existing year.

(b) [Reserved]

[52 FR 17229, May 6, 1987, as amended at 62 FR 32947, June 17, 1997; 63 FR 2124, Jan. 13, 1998; 64 FR 67430, Dec. 1, 1999; 66 FR 30086, June 5, 2001]

§ 36.613 Submission of information by the National Exchange Carrier Association.

(a) On October 1 of each year, the National Exchange Carrier Association shall file with the Commission and Administrator the information listed below. Information filed with the Commission shall be compiled from information provided to the Association by telephone companies pursuant to § 36.611.

(1) The unseparated loop cost for each study area and a nationwide-average unseparated loop cost.

(2) The annual amount of the high cost expense adjustment for each study area, and the total nationwide amount of the expense adjustment.

(3) The dollar amount and percentage of the increase in the nationwide average unseparated loop cost, as well as the dollar amount and percentage increase for each study area, for the previous 5 years, or the number of years NECA has been receiving information under § 36.611, whichever is the shorter time period.

(b) [Reserved]

[52 FR 17229, May 6, 1997, as amended at 62 FR 32948, June 17, 1997; 63 FR 2124, Jan. 13, 1998]

CALCULATION OF LOOP COSTS FOR EXPENSE ADJUSTMENT

§ 36.621 Study area total unseparated loop cost.

(a) For the purpose of calculating the expense adjustment, the study area total unseparated loop cost equals the sum of the following:

(1) Return component for net unseparated Exchange Line C&WF subcategory 1.3 investment and Exchange Line CO Circuit Equipment Category 4.13 investment. This amount is calculated by deducting the accumulated depreciation and noncurrent deferred Federal income taxes attributable to C&WF subcategory 1.3 investment and Exchange Line Category 4.13 circuit investment reported pursuant to § 36.611(b) from the gross investment in Exchange Line C&WF subcategory 1.3 and CO Category 4.13 reported pursuant to § 36.611(a) to obtain the net unseparated C&WF subcategory 1.3 investment, and CO Category 4.13 investment. The net unseparated C&WF subcategory 1.3 investment and CO Category 4.13investment is multiplied by the study area's authorized interstate rate of return.

(2) Depreciation expense attributable to C&WF subcategory 1.3 investment,

and CO Category 4.13 investment as reported in § 36.611(c).

(3) Maintenance expense attributable to C&WF subcategory 1.3 investment, and CO Category 4.13 investment as reported in § 36.611(d).

(4) Corporate Operations Expenses, Operating Taxes and the benefits and rent portions of operating expenses, as reported in § 36.611(e) attributable to investment in C&WF Category 1.3 and COE Category 4.13. This amount is calculated by multiplying the total amount of these expenses and taxes by the ratio of the unseparated gross exchange plant investment in C&WF Category 1.3 and COE Category 4.13, as reported in § 36.611(a), to the unseparated gross telecommunications plant investment, as reported in § 36.611(f). Total Corporate Operations Expense, for purposes of calculating universal service support payments beginning July 1, 2001, shall be limited to the lesser of:

(i) The actual average monthly per-loop Corporate Operations Expense; or

(ii) A monthly per-loop amount computed according to paragraphs (a)(4)(ii)(A), (a)(4)(ii)(B), (a)(4)(ii)(C), and (a)(4)(ii)(D) of this section. To the extent that some carriers' corporate operations expenses are disallowed pursuant to these limitations, the national average unseparated cost per loop shall be adjusted accordingly.

(A) For study areas with 6,000 or fewer working loops the amount monthly per working loop shall be $33.30853 − (.00246 × the number of working loops), or, $50,000 ÷ the number of working loops, whichever is greater;

(B) For study areas with more than 6,000 but fewer than 18,006 working loops, the monthly amount per working loop shall be $3.83195 + (88,429.20 ÷ the number of working loops); and

(C) For study areas with 18,006 or more working loops, the monthly amount per working loop shall be $8.74472.

(D) Beginning January 1, 2002, the monthly per-loop amount computed according to paragraphs (a)(4)(ii)(A), (a)(4)(ii)(B), and (a)(4)(ii)(C) of this section shall be adjusted each year to reflect the annual percentage change in the United States Department of Commerce's Gross Domestic Product-Chained Price Index (GDP–CPI).

(b) [Reserved]

[52 FR 17229, May 6, 1987, as amended at 56 FR 27422, June 14, 1991; 62 FR 32948, June 17, 1997; 62 FR 40748, July 30, 1997; 63 FR 2124, Jan. 13, 1998; 66 FR 30086, June 5, 2001]

§ 36.622 National and study area average unseparated loop costs.

(a) National Average Unseparated Loop Cost per Working Loop. Except as provided in paragraph (c) of this section, this is equal to the sum of the Loop Costs for each study area in the country as calculated pursuant to § 36.621(a) divided by the sum of the working loops reported in § 36.611(h) for each study area in the country. The national average unseparated loop cost per working loop shall be calculated by the National Exchange Carrier Association. Effective July 1, 2001, the national average unseparated loop cost for purposes of calculating expense adjustments for rural incumbent local exchange carriers, as that term is defined in § 54.5 of this chapter, is frozen at $240.00.

(1) The National Average Unseparated Loop Cost per Working Loop shall be recalculated by the National Exchange Carrier Association to reflect the September, December, and March update filings.

(2) Each new nationwide average shall be used in determining the additional interstate expense allocation for companies which made filings by the most recent filing date.

(3) The calculation of a new national average to reflect the update filings shall not affect the amount of the additional interstate expense allocation for companies which did not make an update filing by the most recent filing date.

(b) Study Area Average Unseparated Loop Cost per Working Loop. This is equal to the unseparated loop costs for the study area as calculated pursuant to § 36.621(a) divided by the number of working loops reported in § 36.611(h) for the study area.

(1) If a company elects to, or is required to, update the data which it has filed with the National Exchange Carrier Association as provided in § 36.612(a), the study area average unseparated loop cost per working loop

and the amount of its additional interstate expense allocation shall be recalculated to reflect the updated data.

(2) [Reserved]

(c) The National Average Unseparated Loop Cost per Working Loop shall be the greater of:

(1) The amount calculated pursuant to the method described in paragraph (a) of this section; or

(2) An amount calculated to produce the maximum total Universal Service Fund allowable pursuant to § 36.601(c).

[52 FR 17229, May 6, 1987, as amended at 56 FR 27422, June 14, 1991; 58 FR 69242, Dec. 30, 1993; 60 FR 65012, Dec. 15, 1995; 61 FR 34377, July 2, 1996; 62 FR 32948, June 17, 1997; 63 FR 2125, Jan. 13, 1998; 64 FR 67430, Dec. 1, 1999; 66 FR 30087, June 5, 2001]

CALCULATION OF EXPENSE ADJUSTMENT—ADDITIONAL INTERSTATE EXPENSE ALLOCATION

§ 36.631 Expense adjustment.

(a) Until December 31, 1997, for study areas reporting 50,000 or fewer working loops pursuant to § 36.611(h), the expense adjustment (additional interstate expense allocation) is equal to the sum of the following:

(1) Fifty percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 115 percent of the national average for this cost but not greater than 150 percent of the national average for this cost as calculated pursuant to § 36.622(a) multiplied by the number of working loops reported in § 36.611(h) for the study area; and

(2) Seventy-five percent of the study area unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 150 percent of the national average for this cost as calculated pursuant to § 36.622(a) multiplied by the number of working loops reported in § 36.611(h) for the study area.

(b) Until December 31, 1987, for study areas reporting more than 50,000 working loops pursuant to § 36.611(h), the expense adjustment (additional interstate expense allocation) is equal to the sum of the following:

(1) Twenty-five percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 115 percent of the national average for this cost but not greater than 150 percent of the national average for this cost as calculated pursuant to § 36.622(a) multiplied by the number of working loops reported in § 36.611(h) for the study area; and

(2) The amount calculated pursuant to § 36.631(a)(2).

(c) Beginning January 1, 1998, for study areas reporting 200,000 or fewer working loops pursuant to § 36.611(h), the expense adjustment (additional interstate expense allocation) is equal to the sum of paragraphs (c)(1) through (2). After January 1, 2000, the expense adjustment (additional interstate expense allocation) for non-rural telephone companies serving study areas reporting 200,000 or fewer working loops pursuant to § 36.611(h) shall be calculated pursuant to § 54.309 of this Chapter or § 54.311 of this Chapter (which relies on this part), whichever is applicable.

(1) Sixty-five percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 115 percent of the national average for this cost but not greater than 150 percent of the national average for this cost as calculated pursuant to § 36.622(a) multiplied by the number of working loops reported in § 36.611(h) for the study area; and

(2) Seventy-five percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 150 percent of the national average for this cost as calculated pursuant to § 36.622(a) multiplied by the number of working loops reported in § 36.611(h) for the study area.

(d) Beginning January 1, 1998, for study areas reporting more than 200,000 working loops pursuant to § 36.611(h), the expense adjustment (additional interstate expense allocation) is equal to the sum of paragraphs (d) (1)–(4). After January 1, 2000, the expense adjustment (additional interstate expense allocation) shall be calculated pursuant to § 54.309 of this chapter or § 54.311 of this chapter (which relies on this part), whichever is applicable.

(1) Ten percent of the study area average unseparated loop cost per working loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 115 percent of the national average for this cost but not greater than 160 percent of the national average for this cost as calculated pursuant to § 36.622(a) multiplied by the number of working loops reported in § 36.611(h) for the study area;

(2) Thirty percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 160 percent of the national average for this cost but not greater than 200 percent of the national average for this cost as calculated pursuant to § 36.622(a) multiplied by the number of working loops reported in § 36.611(h) for the study area;

(3) Sixty percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 200 percent of the national average for this cost but not greater than 250 percent of the national average for this cost as calculated pursuant to § 36.622(a) multiplied by the number of working loops reported in § 36.611(h) for the study area; and

(4) Seventy-five percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 250 percent of the national average for this cost as calculated pursuant to § 36.622(a) multiplied by the number of working loops reported in § 36.611(h) for the study area.

(e) Beginning April 1, 1989, the expense adjustment calculated pursuant to § 36.631 (c) and (d) shall be adjusted each year to reflect changes in the size of the Universal Service Fund resulting from adjustments calculated pursuant to § 36.612(a) made during the previous year. If the resulting amount exceeds the previous year's fund size, the difference will be added to the amount calculated pursuant to § 36.631 (c) and (d) for the following year. If the adjustments made during the previous year result in a decrease in the size of the funding requirement, the difference will be subtracted from the amount calculated pursuant to § 36.631 (c) and (d) for the following year.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33011 and 33012, Aug. 29, 1988; 63 FR 2125, Jan. 13, 1998; 64 FR 67430, Dec. 1, 1999; 64 FR 73428, Dec. 30, 1999]

TRANSITIONAL EXPENSE ADJUSTMENT

§ 36.641 Transition.

(a) The expense adjustment for 1993 and subsequent years shall be the amount computed in accordance with § 36.631.

(b) The expense adjustments for 1988 through 1992 shall be as follows:

(1) Three-eighths of the amount computed in accordance with § 36.631 in 1988;

(2) One-half of the amount computed in accordance with § 36.631 in 1989;

(3) Five-eighths of the amount computed in accordance with § 36.631 in 1990;

(4) Three-quarters of the amount computed in accordance with § 36.631 in 1991; and

(5) Seven-eighths of the amount computed in accordance with § 36.631 in 1992.

Subpart G—Lifeline Connection Assistance Expense Allocation

§ 36.701 General.

(a) The Lifeline Connection Assistance Expense portion of the interstate apportionment shall consist of an expense adjustment computed in accordance with this subpart. The expense adjustment will be added to interstate expenses and deducted from state expenses for eligible study areas as defined in this subpart after all other steps required by this part have been completed.

(b) The expense adjustment will be computed as provided in § 36.741.

(c) This subpart shall be effective through December 31, 1997. On January 1, 1998, Lifeline Connection Assistance shall be provided in accordance with part 54, subpart E of this chapter.

[52 FR 17229, May 6, 1987, as amended at 62 FR 32948, June 17, 1997]

DEFINITIONS

§ 36.711 Lifeline connection assistance.

(a) For purposes of this subpart, Lifeline Connection Assistance shall describe the following lifeline telephone assistance for eligible residential subscribers as defined in § 36.711 (b) and (c):

(1) A reduction in the charges for commencing telephone service assessed for a single telephone line per household at the principal place of residence; and/or

(2) A deferred schedule for payment of the charges assessed for commencing service, for which the telephone company does not charge interest.

(b) In order to be eligible for assistance when income is verified, a residential subscriber must:

(1) Meet the requirements of a state established income test; and

(2) Not be a dependent for federal income tax purposes as defined in 26 U.S.C. Section 152 (1986) unless the subscriber is more than 60 years of age.

(c) In order to be eligible for assistance when income is not verified, a residential subscriber must meet the eligibility criteria in § 36.711 (b)(1) and (b)(2) and:

(1) Have lived at an address where there has been no telephone service for at least three months immediately prior to the date that the assistance described in § 36.711 (a)(1) and/or (a)(2) is requested from the telephone company; and

(2) Not have received assistance pursuant to § 36.711 (a)(1) and/or (a)(2) within the last two years, with receipt of such assistance to be measured from the date of initiation of the telephone service for which assistance was provided.

(d) Charges assessed for commencing service include any state tariffed charges levied for connecting a subscriber to the network. These charges do not include security deposit requirements.

[52 FR 17229, May 6, 1987, as amended at 54 FR 16111, Apr. 21, 1989]

TELEPHONE COMPANY ELIGIBILITY

§ 36.721 Telephone company eligibility for lifeline connection assistance expense allocation.

(a) In order to be entitled to the additional interstate expense adjustment described in this subpart a telephone company:

(1) Must provide Lifeline Connection Assistance as defined in § 36.711 (a)(1) and/or (a)(2) to eligible subscribers as defined in § 36.711 (b) or (c);

(2) Shall verify that subscribers meet the eligibility criteria set out in § 36.711(b) or (c) provided that:

(i) Verification of subscriber eligibility by designated State officials may be substituted for verification by the telephone company;

(ii) If the eligibility criterion in § 36.711(b)(1) is verified, then the criteria in § 36.711(c) shall not apply;

(iii) If the eligibility criterion in § 36.711(b)(1) is self-certified, then the eligibility criteria in § 36.711(c)(1) and (c)(2) shall apply and must be verified;

(iv) In all cases, the eligibility criterion in § 36.711(b)(2) may be self-certified.

(3) Shall file information with the Commission Secretary demonstrating that it is eligible for the additional interstate expense adjustment.

(4) Shall file information with the Commission Secretary demonstrating that it is eligible for the additional interstate expense adjustment.

(b) The additional interstate expense adjustment shall be effective as soon as the Commission certifies that the State or local telephone company is eligible for the additional interstate expense adjustment, the local exchange company files the data required by § 36.731 with the National Exchange Carrier Association, and the relevant tariff provisions become effective.

[52 FR 17229, May 6, 1987, as amended at 54 FR 16111, Apr. 21, 1989]

DATA COLLECTION

§ 36.731 Submission of information to the National Exchange Carrier Association.

(a) In order to allow calculation of the lifeline expense adjustment each

local telephone company wishing to receive the additional interstate expense allocation provided for in this subpart shall provide the National Exchange Carrier Association established pursuant to Part 69 of the Commission's rules with the information listed below for each of its study areas. The information for the succeeding calendar year is to be filed with the Association on June 30th of each year after certification of the plan by the Commission pursuant to §36.721(b). The information filed on June 30th of each year will be used in the jurisidictional allocations underlying the cost support data for the access tariffs to be filed the following October.

(1) An estimate of the number of eligible households which will receive the lifeline assistance described in §36.711(a)(1) pursuant to a lifeline assistance program which has received Commission certification.

(2) An estimate of the average discount on service commencement charges to be provided to each subscriber, not to exceed 50 percent of the charges for commencement of the same service applicable to non-lifeline customers or $30.00, whichever is less;

(3) An estimate of the number of eligible subscribers which will receive the lifeline assistance described in §36.711(a)(2).

(4) An estimate of the average deferred interest cost for each subscriber, *Provided* That:

(i) The deferred amount on which the cost of interest shall be calculated is not to exceed $200.00; and

(ii) Interest shall be applied only to amounts actually outstanding, at the rate for 10-year Treasury Bills on January 1 of each year, with the interest rate adjusted only with each filing.

(b) In the event that this additional interstate expense allocation is to be in effect for a given study area for less than a full calendar year, the carrier is to submit the information described in §36.731(a) (1) through (4) adjusted to reflect the number of subscribers and the relevant costs for the portion of the year during which this expense adjustment will be in effect as part of its §36.721(a)(4) submission to the Commission. These data shall be filed with NECA at the same time they are filed with the Commission.

CALCULATION OF LIFELINE CONNECTION ASSISTANCE EXPENSE ADJUSTMENT

§36.741 Expense adjustment.

(a) The additional interstate expense allocation shall be calculated by adding the following:

(1) The number of households provided pursuant to §36.731(a)(1) times the dollar amount provided pursuant to §36.731(a)(2); and

(2) The number of households provided pursuant to §36.731(a)(3) times the dollar amount provided pursuant to §36.731(a)(4).

(b) The expense adjustment calculated pursuant to §36.741(a) shall be adjusted each year to reflect the actual number of lifeline recipients and the actual dollar amount of the benefits provided to them in the previous year. If the actual benefits provided in a given calendar year exceed the estimated benefits for that year calculated pursuant to §36.741(a), this difference shall be added to the amount calculated pursuant to §36.741(a) for the following year. If the actual benefits provided in a given year are less than the estimated amount for that year calculated pursuant to §36.741(a), this difference shall be subtracted from the amount calculated pursuant to §36.741(a) for the following year.

(c) The expense adjustment calculated pursuant to §36.741 (a) and (b) shall be subtracted from total intrastate expenses and added to total interstate expenses.

[52 FR 17229, May 6, 1987, as amended at 53 FR 33012, Aug. 29, 1988]

APPENDIX—GLOSSARY

The descriptions of terms in this glossary are broad and have been prepared to assist in understanding the use of such terms in the separation procedures. Terms which are defined in the text of this part are not included in this glossary.

Access Line

A communications facility extending from a customer's premises to a serving central office comprising a subscriber line and, if necessary, a trunk facility, e.g., a WATS access line, TWX access line.

Book Cost

The cost of property as recorded on the books of a company.

Cable Fill Factor

The ratio of cable conductor or cable pair kilometers in use to total cable conductor or cable pair kilometers available in the plant, e.g., the ratio of revenue producing cable pair kilometers in use to total cable pair kilometers in plant.

Category

A grouping of items of property or expense to facilitate the apportionment of their costs among the operations and to which, ordinarily, a common measure of use is applicable.

Central Office

A switching unit, in a telephone system which provides service to the general public, having the necessary equipment and operations arrangements for terminating and interconnecting subscriber lines and trunks or trunks only. There may be more than one central office in a building.

Channel

An electrical path suitable for the transmission of communications between two or more points, ordinarily between two or more stations or between channel terminations in Telecommunication Company central offices. A channel may be furnished by wire, fiberoptics, radio or a combination thereof.

Circuit

A fully operative communications path established in the normal circuit layout and currently used for message, WATS access, TWX, or private line services.

Circuit Kilometers

The route kilometers or revenue producing circuits in service, determined by measuring the length in terms of kilometers, of the actual path followed by the transmission medium.

Common Channel Network Signaling

Channels between switching offices used to transmit signaling information independent of the subscribers' communication paths or transmission channels.

Complement (of cable)

A group of conductors of the same general type (e.g., quadded, paired) within a single cable sheath.

Complex

All groups of operator positions, wherever located, associated with the same call distribution and/or stored program control unit.

Concentrating Unit (TWX)

An arrangement of central office equipment wherein traffic over a number of TWX circuits is automatically concentrated onto a lesser number of circuits between the concentrating unit and its associated TWX switching office.

Concentration Equipment

Central office equipment whose function is to concentrate traffic from subscriber lines onto a lesser number of circuits between the remotely located concentration equipment and the serving central office concentration equipment. This concentration equipment is connected to the serving central office line equipment.

Connection—Minute

The product of (a) the number of messages and, (b) the average minutes of connection per message.

Conversation—Minute

The product of (a) the number of messages and, (b) the average minutes of conversation per message.

Conversation-Minute-Kilometers

The product of (a) the number of messages, (b) the average minutes of conversation per message and (c) the average route kilometers of circuits involved.

Cost

The cost of property owned by the Telephone Company whose property is to be apportioned among the operations. This term applies either to property costs recorded on the books of the company or property costs determined by other evaluation methods.

Current Billing

The combined amount of charges billed, excluding arrears.

Customer Dialed Charge Traffic

Traffic which is both (a) handled to completion through pulses generated by the customer and (b) for which either a message unit change, bulk charge or message toll charge is except for that traffic recorded by means of message registers.

Customer Premises Equipment

Items of telecommunications terminal equipment in Accounts 2310 referred to as CPE in § 64.702 of the Federal Communication Commission's Rules adopted in the *Second*

Computer Inquiry such as telephone instruments, data sets, dialers and other supplemental equipment, and PBX's which are provided by common carriers and located on customer premises and inventory included in these accounts to be used for such purposes. Excluded from this classification are similar items of equipment located on telephone company premises and used by the company in the normal course of business as well as over voltage protection equipment, customer premises wiring, coin operated public or pay telephones, multiplexing equipment to deliver multiple channels to the customer, mobile radio equipment and transmit earth stations.

Customer Premises Wire

The segment of wiring from the customer's side of the protector to the customer premises equipment.

DSA Board

A local dial office switchboard at which are handled assistance calls, intercepted calls and calls from miscellaneous lines and trunks. It may also be employed for handling certain toll calls.

DSB Board

A switchboard of a dial system for completing incoming calls received from manual offices.

Data Processing Equipment

Office equipment such as that using punched cards, punched tape, magnetic or other comparable storage media as an operating vehicle for recording and processing information. Includes mechines for transcribing raw data into punched cards, etc., but does not include such items as key-operated, manually or electrically driven adding, calculating, bookkeeping or billing machines, typewriters or similar equipment.

Dial Switching Equipment

Switching equipment actuated by electrical impulses generated by a dial or key pulsing arrangement.

Equal Access Costs

Include only initial incremental presubscription costs and initial incremental expenditures for hardware and software related directly to the provision of equal access which would not be required to upgrade the switching capabilities of the office involved absent the provisions of equal access.

Equivalent Gauge

A standard cross section of cable conductors for use in equating the metallic content of cable conductors of all gauge to a common base.

Equivalent Kilometers of 104 Wire

The basic units employed in the allocation of pole lines costs for determining the relative use made of poles by aerial cables and by aerial wire conductors of various sizes. This unit reflects the relative loads of such cable and wire carried on poles.

Equivalent Pair Kilometers

The product of sheath Kilometers and the number of equivalent gauge pairs of conductors in a cable.

Equivalent Sheath Kilometers

The product of (a) the length of a section of cable in kilometers (sheath kilometers) and (b) the ratio of the metallic content applicable to a particular group of conductors in the cable (e.g., conductors assigned to a category) to the metallic content of all conductors in the cable.

Exchange Transmission Plant

This is a combination of (a) exchange cable and wire facilties (b) exchange central office circuit equipment, including associated land and buildings and (c) information origination/termination equipment which forms a complete channel.

Holding Time

The time in which an item of telephone plant is in actual use either by a customer or an operator. For example, on a completed telephone call, holding time includes conversation time as well as other time in use. At local dial offices any measured minutes which result from other than customer attempts to place calls (as evidenced by the dialing of at least one digit) are not treated as holding time.

Host Central Office

An electronic analog or digital base switching unit containing the central call processing functions which service the host office and its remote locations.

Information Origination/Termination Equipment

Equipment used to input into or receive output from the telecommunications network.

Interexchange Channel

A circuit which is included in the interexchange transmission equipment.

Interexchange Transmission Equipment

The combination of (a) interexchange cable and wire facilities, (b) interexchange circuit equipment and, (c) associated land and buildings.

Interlocal Trunk

A circuit between two local central office units, either manual or dial. Interlocal trunks may be used for either exchange or toll traffic or both.

Intertoll Circuits

Circuits between toll centers and circuits between a toll center and a tandem system in a different toll center area.

Local Channel

The portion of a private line circuit which is included in the exchange transmission plant. However, common usage of this term usually excludes information origination/termination equipment.

Local Office

A central office serving primarily as a place of termination for subscriber lines and for providing telephone service to the subscribers on these lines.

Loop

A pair of wires, or its equivalent, between a customer's station and the central office from which the station is served.

Message

A completed call, i.e., a communication in which a conversation or exchange of information took place between the calling and called parties.

Message Service or Message Toll Service

Switched service furnished to the general public (as distinguished from private line service). Except as otherwise provided, this includes exchange switched services and all switched services provided by interexchange carriers and completed by a local telephone company's access services, e.g., MTS, WATS, Execunet, open-end FX and CCSA/ONALs.

Message Units

Unit of measurement used for charging for measured message telephone exchange traffic within a specified area.

Metropolitan Service Area

The area around and including a relatively large city and in which substantially all of the message telephone traffic between the city and the suburban points within the area is classified as exchange in one or both directions.

Minutes-of-Use

A unit of measurement expressed as either holding time or conversation time.

Minutes-of-Use-Kilometers

The product of (a) the number of minutes-of-use and (b) the average route kilometers of circuits involved.

Multi-Center Exchange

An exchange area in which are located two or more local central office buildings or wire centers.

Operations

The term denoting the general classifications of services rendered to the public for which separate tariffs are filed, namely exchange, state toll and interstate toll.

Operator Trunks

A general term, ordinarily applied to trunks between manually operated switchboard positions and local dial central offices in the same wire center.

Private Line Service

A service for communications between specified locations for a continuous period or for regularly recurring periods at stated hours.

Remote Access Line

An access line (e.g., for WATS or TWX service) between a subscriber's premises in one toll rate center and a serving central office located in a different toll rate center.

Remote Line Location

A remotely located subscriber line access unit which is normally dependent upon the central processor of the host office for call processing functions.

Remote Trunk Arrangement (RTA)

Arrangement that permits the extension of TSPS functions to remote locations.

Reservation

That amount or quantity of property kept or set apart for a specific use.

Reserved

Kept or set apart for a specific use.

Separations

The process by which telecommunication property costs, revenues, expenses, taxes and reserves are apportioned among the operations.

Service Observing Unit

A unit of work measurement which is used as the common denominator to express the relative time required for handling the various work functions at service observing boards.

Sheath Kilometers

The actual length of cable in route kilometers.

Special Services

All services other than message telephones, e.g., teletypewriter exchange service (TWX), private line services.

Station-to-Station Basis

The term applied to the basis of toll rate making which contemplates that the message toll service charge (telephone or TWX) covers the use made of all facilities between the originating station and the terminating station, including the stations, and the services rendered in connection therewith.

Study Area

Study area boundaries shall be frozen as they are on November 15, 1984

Subscriber Line or Exchange Line

A communication channel between a telephone station, PBX or TWX station and the central office which serves it.

Subtributary Office

A class of tributary office which does not have direct access to its toll center, but which is connected to its toll center office by means of circuits which are switched through to the toll center at another tributary office.

Tandem Area

The general areas served by the local offices having direct trunks to or from the tandem office. This area may consist of one or more communities or may include only a portion of a relatively large city.

Tandem Circuit or Trunk

A general classification of circuits or trunks between a tandem central office unit and any other central office or switchboard.

Tandem Connection

A call switched at a tandem office.

Tandem Office

A central office unit used primarily as an intermediate switching point for traffic between local central offices within the tandem area. Where qualified by a modifying expression, or other explanation, this term may be applied to an office employed for both the interconnection of local central offices within the tandem area and for the interconnection of these local offices with other central offices, e.g., long haul tandem office.

Toll Center

An office (or group of offices) within a city which generally handles the originating and incoming toll traffic for that city to or from other toll center areas and which handles through switched traffic. The toll center normally handles the inward toll traffic for its tributary exchanges and, in general, either handles the outward traffic originating at its tributaries or serves as the outlet to interexchange circuits for outward traffic ticketed and timed at its tributaries. Toll centers are listed as such in the Toll Rate and Route Guide.

Toll Center Area

The areas served by a toll center, including the toll center city and the communities served by tributaries of the toll center.

Toll Center Toll Office

A toll office (as contrasted to a local office) in a toll center city.

Toll Circuit

A general term applied to interexchange trunks used primarily for toll traffic.

Toll Connecting Trunk

A general classification of trunks carrying toll traffic and ordinarily extending between a local office and a toll office, except trunks classified as tributary circuits. Examples of toll connecting trunks include toll switching trunks, recording trunks and recording-completing trunks.

Toll Office

A central office used primarily for supervising and switching toll traffic.

Traffic Over First Routes

A term applied to the routing of traffic and denoting routing via principal route for traffic between any two points as distinguished from alternate routes for such traffic.

Operator System

A stored program electronic system associated with one or more toll switching systems which provides centralized traffic service position functions for several local offices at one location.

Tributary Circuit

A circuit between a tributary office and a toll switchboard or intertoll dialing equipment in a toll center city.

Tributary Office

A local office which is located outside the exchange in which a toll center is located, which has a different rate center from its toll center and which usually tickets and

times only a part of its originating toll traffic, but which may ticket or time all or none, of such traffic. The toll center handles all outward traffic not ticketed and timed at the tributary and normally switches all inward toll traffic from outside the tributary's toll center to the tributary. Tributary offices are indicated as such in the Toll Rate and Route Guide.

Trunks

Circuit between switchboards or other switching equipment, as distinguished from circuits which extend between central office switching equipment and information origination/termination equipment.

TSPS Complex

All groups of operator positions, wherever located, associated with the same TSPS stored program control units.

TWX

Teletypewriter Exchange Service.

TWX Connection

A completed TWX call, i.e., a call on which a TWX communication was passed between the calling and called stations.

TWX Connection-Minute-Kilometers

The product of (a) the number of TWX connections, (b) the average minutes per TWX connection and (c) the average route kilometers of circuits involved.

TWX Switching Plant Trunks

Interexchange circuits, excluding remote access lines, which handle 100 word per minute TWX traffic only.

Weighted Standard Work Second

A measurement of traffic operating work which is used to express the relative time required to handle the various kinds of calls or work functions, and which is weighted to reflect appropriate degrees of waiting to serve time.

Wide Area Telephone Service WATS

A toll service offering for customer dial type telecommunications between a given customer station and stations within specified geographic rate areas employing a single access line between the customer location and the serving central office. Each access line may be arranged for either outward (OUT–WATS) or inward (IN–WATS) service or both.

Wideband Channel

A communication channel of a bandwidth equivalent to twelve or more voice grade channels.

Working Loop

A revenue producing pair of wires, or its equivalent, between a customer's station and the central office from which the station is served.

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Parts 37–39 [Reserved]