

## § 24.903

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

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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 time-stamped 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;
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[64 FR 51717, Sept. 24, 1999; 65 FR 18255, Apr. 7, 2000]

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AUTHORITY: 47 U.S.C. 701–744. Interprets or applies sec. 303, 47 U.S.C. 303. 47 U.S.C. sec-

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tions 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

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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 Administra-

tion (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 authority) 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) For 1.6/2.4 GHz Mobile-Satellite Service space stations, the feeder link frequencies requested for the satellite, together with the demonstration required by § 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 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]

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### § 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) 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.

(d) User transceivers in the NVNG and 1.6/2.4 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 § 25.135.

(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]

EFFECTIVE DATE NOTE: At 65 FR 54169, Sept. 7, 2000, § 25.115 was amended by adding paragraph (e), effective Oct. 10, 2000.

### § 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 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.

(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 non-substantial (*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 consummation, 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

## § 25.121

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 in Columbia, Maryland.

(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

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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]

### § 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.

(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]

#### 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 Num-

ber(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

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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 Com-

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munications 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. This 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 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) of this part (Large Networks of Small Antennas operating in the 12/14 GHz bands) and §25.115(d) of this part (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



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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]

### § 25.134 Licensing provisions of Very Small Aperture Terminal (VSAT) networks.

(a) 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).

(b) 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 re-

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sult 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]

### § 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 transmitter 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.**

In addition to the technical requirements specified in §25.213, earth stations operating in the 1.6/2.4 GHz Mobile-Satellite Service are subject to the following operating conditions:

(a) User transceiver units associated with the 1.6/2.4 Mobil-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) User 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 user transceiver is first authorized by the space station licensee or by a service vendor authorized by that licensee, 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 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 Section 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.

[59 FR 53327, Oct. 21, 1994, as amended at 61 FR 9945, Mar. 12, 1996]

**§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.

[62 FR 64172, Dec. 4, 1997, as amended at 64 FR 61792, Nov. 15, 1999; 65 FR 16327, Mar. 28, 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:

18.5-25log(θ)-10log(N) ...	dBW/40kHz	.....	for 2.0° ≤ θ ≤ 7°
- 2.63-10log(N) .....	dBW/40kHz	.....	for 7° ≤ θ ≤ 9.23°
21.5-25log(θ)-10log(N) ...	dBW/40kHz	.....	for 9.23° ≤ θ ≤ 48°
- 10.5-10log(N) .....	dBW/40kHz	.....	for 48° < θ ≤ 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:

21.5-25log(θ)-10log(N) ...	dBW/40kHz	.....	for 3.5° ≤ θ ≤ 7°
0.37-10log(N) .....	dBW/40kHz	.....	for 7° < θ ≤ 9.23°

24.5-25log( $\theta$ )-10log(N) ... dBW/40kHz ..... for  $9.23^\circ < \theta \leq 48^\circ$   
 -7.5-10log(N) ..... dBW/40kHz ..... for  $48^\circ < \theta \leq 180^\circ$

Where:

$\theta$ : 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 ex-

ceeded by 3 dB, for values of  $\theta > 10^\circ$ , provided that the total angular range over which this occurs does not exceed  $20^\circ$  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:

8.5-25log( $\theta$ )-10log(N) ..... dBW/40kHz ..... for  $2.0^\circ \leq \theta \leq 7^\circ$   
 12.63-10log(N) ..... dBW/40kHz ..... for  $7^\circ < \theta \leq 9.23^\circ$

Where:

$\theta$ : 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<sup>2</sup>/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,

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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

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the number of constructed earth stations.

[65 FR 54169, Sept. 7, 2000]

EFFECTIVE DATE NOTE: At 65 FR 54169, Sept. 7, 2000, § 25.138 was added, effective Oct. 10, 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

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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 sys-

tems 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 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.

(b) *Qualification Requirements.* (1) *General Requirements:* Each application for a space station system authorization in the 1.6/2.4 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.

(2) *Technical Qualifications:* In addition to providing the information specified in paragraph (b)(1) of this section, each applicant shall demonstrate the following:

(i) That the proposed system employs a non-geostationary constellation or constellations of satellites;

(ii) That the proposed system be capable of providing mobile satellite services to all locations as far north as 70° latitude and as far south as 55° 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° for at least 18 hours each day within the described geographic area;

(iii) That the proposed system is capable of providing mobile satellite services on a continuous basis throughout the fifty states, Puerto Rico and the U.S. Virgin Islands, U.S., *i.e.*, that at least one satellite will be visible above the horizon at an elevation angle of at least 5° at all times within the described geographic areas;

(iv) That operations will not cause unacceptable interference to other authorized users of the spectrum. In particular, each application 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 systems shall, on June 30 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 May 31st 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; 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.

(f) *Safety and distress communications.* (1) Stations operating in the 1.6/2.4 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 licensee's 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 facili-

ties 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]

**§ 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 licenses 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.

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(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 sta-

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tions 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]

EFFECTIVE DATE NOTE: At 65 FR 54171, Sept. 7, 2000, §25.145 was amended by redesignating paragraphs (g) introductory text, (g)(1), (g)(2), and (g)(3) as paragraphs (g)(1) introductory text, (g)(1)(i), (g)(1)(ii), and (g)(1)(iii), respectively, and by adding paragraphs (g)(2), (h), and (i), effective Oct. 10, 2000.

### 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;

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(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 deliv-

ered 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 of 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;



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(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.

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**§ 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.

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(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 band-

width 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.

*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.

*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)

*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.

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*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]

§ 25.202 Frequencies, frequency tolerance and emission limitations.

(a)(1) *Frequency bands.* 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.

Space-to-earth	Earth-to-space
3.7–4.2 <sup>1</sup>	<sup>1</sup> 5.925–6.425
10.95–11.2 <sup>1</sup>	<sup>4</sup> 13.75–14.0
11.45–11.7 <sup>2</sup>	<sup>5</sup> 14.0–14.2
11.7–12.2 <sup>3</sup>	14.2–14.5
18.3–18.58 <sup>1 10</sup>	<sup>9</sup> 17.3–17.8
18.58–18.8 <sup>6 10 11</sup>	
18.8–19.3 <sup>7 10</sup>	
19.3–19.7 <sup>8 10</sup>	<sup>1</sup> 27.5–29.5
19.7–20.2 <sup>10</sup>	29.5–30.0

<sup>1</sup>This band is shared coequally with terrestrial radiocommunication services.

<sup>2</sup>Use of this band by the fixed-satellite service is limited to international systems, i.e., other than domestic systems.

<sup>3</sup>Use of this band by the fixed-satellite service in Region 2 is limited to national and subregional systems. Fixed-satellite transponders may be used additionally for transmissions in the broadcasting-satellite service.

<sup>4</sup>This band is shared on an equal basis with the Government radiolocation service, grandfathered space stations in the Tracking and Data Relay Satellite System, and until January 1, 2000, spaceborne sensors.

<sup>5</sup>In this band, stations in the radionavigation service shall operate on a secondary basis to the fixed-satellite service.

<sup>6</sup>The band 18.58–18.8 GHz is shared co-equally with existing terrestrial radiocommunications systems until June 8, 2010.

<sup>7</sup>The band 18.8–19.3 GHz is shared co-equally with terrestrial radiocommunications services, until June 8, 2010. After this date, the sub-band 19.26–19.3 GHz is shared co-equally with existing terrestrial radiocommunications systems.

<sup>8</sup>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.

<sup>9</sup>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.

<sup>10</sup>This band is shared co-equally with the Federal Government Fixed-Satellite Service.

<sup>11</sup>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.

(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) 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

(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]

EFFECTIVE DATE NOTE: At 65 FR 54171, Sept. 7, 2000, §24.202 was amended by revising paragraph (a)(1), effective Oct. 10, 2000. For the convenience of the user, the superseded text is set forth as follows:

**§25.202 Frequencies, frequency tolerance and emission limitations.**

(a)(1) *Frequency bands.* 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.

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Space-to-earth	Earth-to-space
3.7–4.2 <sup>1</sup>	<sup>1</sup> 5.925–6.425
10.95–11.2 <sup>1</sup>	<sup>4</sup> 13.75–14.0
11.45–11.7 <sup>2</sup>	<sup>5</sup> 14.0–14.2
11.7–12.2 <sup>3</sup>	14.2–14.5
17.7–19.7 <sup>1</sup>	<sup>1</sup> 27.5–29.5
19.7–20.2	29.5–30.0
37.6–38.6	48.2–50.2
40.0–41.0	

<sup>1</sup>This band is shared coequally with terrestrial radiocommunication services.

<sup>2</sup>Use of this band by the fixed-satellite service is limited to international systems, i.e., other than domestic systems.

<sup>3</sup>Use of this band by the fixed-satellite service in Region 2 is limited to national and subregional systems. Fixed-satellite transponders may be used additionally for transmissions in the broadcasting-satellite service.

<sup>4</sup>This band is shared on an equal basis with the Government radiolocation service, grandfathered space stations in the Tracking and Data Relay Satellite System, and until January 1, 2000, spaceborne sensors.

<sup>5</sup>In this band, stations in the radionavigation service shall operate on a secondary basis to the fixed-satellite service.

\* \* \* \* \*

**§ 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 through 25.253 and the rain scatter coordination distance contour(s) for the proposed station in accordance with the procedures set forth in § 25.254. 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 might be useful 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 his 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 § 25.255 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),

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- (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 satellites at which antenna may be pointed,
- (vi) Horizon elevation plot,
- (vii) Antenna horizon gain plot(s) determined in accordance with §25.253(b) for satellite longitude range specified in paragraph (c)(2)(v) of this section, taking into account the provisions of §25.253(a)(2) for earth stations operating with non-geostationary satellites.
- (viii) Minimum elevation angle,
- (ix) Maximum effective isotropically radiated power (EIRP) in any 4 kHz band in the main beam, (dBW/4 kHz),
- (x) Maximum available RF transmit power 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 §25.252 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 §§25.253 and 25.254.

(3) The coordination procedure specified in §101.103(d) of this chapter 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

§§251.251 through 25.256, 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 table 1 of §25.252 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 <sup>1</sup> (dBW/m <sup>2</sup> )
Below 540 kHz .....	10	-65.8
540 to 1600 kHz .....	20	-59.8
1.6 to 470 MHz .....	10	<sup>2</sup> -65.8
470 to 890 MHz .....	30	<sup>2</sup> -56.2
Above 890 MHz .....	1	<sup>2</sup> -85.8

<sup>1</sup>Equivalent values of power flux density are calculated assuming free space characteristic impedance of 376.7=120π ohms.



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<sup>2</sup> 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<sup>2</sup> 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<sup>2</sup>) 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](mailto:prcz@naic.edu)

(1) The notification to the Interference Office, Arecibo Observatory

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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

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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]

### § 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  $\theta < 0^\circ$   
+40+3  $\theta$  dBW in any 4 KHz band for  $0^\circ < \theta \leq 05^\circ$

where  $\theta$  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  $\theta < 0^\circ$   
+64+3  $\theta$  dBW in any 1 MHz band for  $0^\circ < \alpha < 5^\circ$

where  $\theta$  is as defined in paragraph (a) of this section.

(c) For angles of elevation of the horizon greater than  $5^\circ$  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) The e.i.r.p. of any emission from an earth station operating in the frequency band 13.75-14.0 GHz shall be at least 68 dBW and shall not exceed 85 dBW, with a minimum antenna diameter of 4.5 meters; except in the frequency band 13.772-13.778 GHz, where the e.i.r.p. shall be at least 68 dBW and shall not exceed 71 dBW per 6 MHz, with a minimum antenna diameter of 4.5 meters. Automatic power control may be used to increase the e.i.r.p. density above 71 dBW per 6 MHz to compensate for rain attenuation to the extent that the power flux density at the fixed-satellite space station does not exceed the value resulting from use of 71 dBW per 6 MHz e.i.r.p. 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]

#### § 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<sup>2</sup>) 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<sup>2</sup>) in any 4 kHz band for angles of arrival  $\delta$  (in degrees) between 5 and 25 degrees above the horizontal plane; and
- 142 dB(W/m<sup>2</sup>) 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

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assumed free-space propagation conditions.

(b) In the bands 10.95–11.2 and 11.45–11.7 GHz, 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:

- 150 dB(W/m<sup>2</sup>) in any 4 kHz band for angles of arrival between 0 and 5 degrees above the horizontal plane;
- 150+(δ–5)/2 dB(W/m<sup>2</sup>) 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<sup>2</sup>) 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.

(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/m<sup>2</sup>) 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/m<sup>2</sup>) in any 1 MHz band for angles of arrival d (in degrees) between 5 and 25 degrees above the horizontal plane.

- 115 – X dB(W/m<sup>2</sup>+MHz) ..... for 0° ≤ δ < 5°
- 115 – X+((10+X)/20)(δ – 5)dB(W/m<sup>2</sup>+MHz) ..... for 5° ≤ δ < 25°
- 105 dB(W/m<sup>2</sup>+MHz) ..... for 25° ≤ δ < 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 ≤ 50 ..... X = 0 (dB)
- for 50 < n ≤ 288 X = (5/119) (n – 50) (dB)
- for n > 288 ..... X = (1/69) (n + 402) (dB)

[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]

EFFECTIVE DATE NOTE: At 65 FR 54171, Sept. 7, 2000, §25.208 was amended by revising paragraph (c) and adding paragraphs (d), (e) and (f), effective Oct. 10, 2000. For the con-

(3) –105 dB (W/m<sup>2</sup>) 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/m<sup>2</sup>) 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/m<sup>2</sup>) 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/m<sup>2</sup>) 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/m<sup>2</sup>) 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:

venience of the user, the superseded text is set forth as follows:

**§ 25.208 Power flux-density limits.**

\* \* \* \* \*

(c) In the 17.7–19.7 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/m<sup>2</sup>) in any 1 MHz band for angles of arrival between 0 and 5 degrees above the horizontal plane.

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(2) 115+0.5 (d-5) dB (W/m<sup>2</sup>) 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/m<sup>2</sup>) in any 1 MHz band for angles of arrival between 25 and 90 degrees above the horizontal plane.

**§ 25.209 Antenna performance standards.**

(a) The gain of any antenna to be employed in transmission from an earth station in the fixed-satellite service shall lie below the envelope defined below:

(1) In the plane of the geostationary satellite orbit as it appears at the particular earth station location:

$$29-25 \log_{10} (\text{Theta}) \text{ dBi } 1^\circ \leq \text{Theta} \leq 7^\circ$$

$$+8 \text{ dBi } 7^\circ < \text{Theta} \leq 9.2^\circ$$

$$32-25 \log_{10} (\text{Theta}) \text{ dBi } 9.2^\circ < \text{Theta} \leq 48^\circ$$

$$-10 \text{ dBi } 48^\circ < \text{Theta} \leq 180^\circ$$

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:

$$32-25 \log_{10} (\text{Theta}) \text{ dBi } 1^\circ \leq \text{Theta} \leq 48^\circ$$

$$-10 \text{ dBi } 48^\circ < \text{Theta} \leq 180^\circ$$

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:

$$19-25 \log_{10} (\text{Theta}) \text{ dBi } 1.8^\circ < \text{Theta} \leq 7^\circ$$

$$-2 \text{ dBi } 7^\circ < \text{Theta} \leq 9.2^\circ$$

(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 February

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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.

[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]

### § 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 coordi-

nated 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



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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 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:

$$d \text{ (km)} = 4.1 \text{ square root of } (h)$$

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/m<sup>2</sup>/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 radio-navigation-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

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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(d) 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 28 of the International Telecommunications Union Radio Regulations and certain recommendations of the ITU Radiocommunication Sector (“ITU-R”) (available at the Reference Information Center, FCC, 445 12th Street, SW., Room CY-A257, Washington, DC 20554.).

[62 FR 5931, Feb. 10, 1997, as amended at 65 FR 54172, Sept. 7, 2000; 65 FR 58466, Sept. 29, 2000]

EFFECTIVE DATE NOTE: At 65 FR 54172, Sept. 7, 2000, §25.251 was amended by revising paragraph (a), effective Oct. 10, 2000. For the convenience of the user, the superseded text is set forth as follows:

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**§ 25.251 Special requirements for coordination.**

(a) The administrative aspects of the coordination process are set forth in §§ 21.100(d) and 21.706 (c) and (d) 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.

\* \* \* \* \*

**§§ 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 licensee 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**

**§ 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 licensee, 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.

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**§ 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 pa-

rameters 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



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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 fre-

quencies 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 Com-

mission 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 non-geostationary satellite communicating with other space stations may use frequencies in the inter-satellite service as indicated in § 2.106. 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

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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]

**§ 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 ex-

ceed 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;

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(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 re-

quire 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

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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 li-

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cence 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

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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

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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

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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]

EFFECTIVE DATE NOTE: At 65 FR 53614, Sept. 5, 2000, § 25.601 was amended by removing the phrase “part 76, subpart E” each place it appears and adding in its place the phrase “part 76, subparts E and U” effective Oct. 5, 2000.

**PART 26—GENERAL WIRELESS COMMUNICATIONS SERVICE**

**Subpart A—General Information**

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- 26.1 Basis and purpose.
  - 26.2 Other applicable rule parts.
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  - 26.4 Terms and definitions.

**Subpart B—Applications and Licenses**

- 26.11 Initial authorization.
- 26.12 Eligibility.
- 26.13 License period.
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**Subpart C—Technical Standards**

- 26.51 Equipment authorization.
- 26.52 RF safety.
- 26.53 Emission limits.
- 26.54 Frequency stability.
- 26.55 Field strength limits.
- 26.56 Antenna structures; air navigation safety.

**Subpart D—Miscellaneous**

- 26.101 Multiple ownership restrictions.
- 26.102 Service areas.
- 26.103 Frequencies.
- 26.104 Construction requirements.