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# SUBCHAPTER C—BROADCAST RADIO SERVICES

## PARTS 70–72 [RESERVED]

## PART 73—RADIO BROADCAST SERVICES

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ALPHABETICAL INDEX—PART 73

AUTHORITY: 47 U.S.C. 154, 303, 334 and 336.

## Subpart A—AM Broadcast Stations

### §73.1 Scope.

This subpart contains those rules which apply exclusively to the AM broadcast service and are in addition to those rules in Subpart H which are common to all AM, FM and TV broadcast services, commercial and noncommercial.

[47 FR 8587, Mar. 1, 1982]

### §73.14 AM broadcast definitions.

*AM broadcast band.* The band of frequencies extending from 535 to 1705 kHz.

*AM broadcast channel.* The band of frequencies occupied by the carrier and the upper and lower sidebands of an AM broadcast signal with the carrier frequency at the center. Channels are designated by their assigned carrier frequencies. The 117 carrier frequencies assigned to AM broadcast stations begin at 540 kHz and progress in 10 kHz steps to 1700 kHz. (See §73.21 for the classification of AM broadcast channels).

*AM broadcast station.* A broadcast station licensed for the dissemination of radio communications intended to be received by the public and operated on a channel in the AM broadcast band.

*Amplitude modulated stage.* The radio-frequency stage to which the modulator is coupled and in which the carrier wave is modulated in accordance with the system of amplitude modulation and the characteristics of the modulating wave.

*Amplitude modulator stage.* The last amplifier stage of the modulating wave amplitude modulates a radio-frequency stage.

*Antenna current.* The radio-frequency current in the antenna with no modulation.

*Antenna input power.* The product of the square of the antenna current and the antenna resistance at the point where the current is measured.

*Antenna resistance.* The total resistance of the transmitting antenna system at the operating frequency and at the point at which the antenna current is measured.

*Auxiliary facility.* An auxiliary facility is an AM antenna tower(s) separate

from the main facility's antenna tower(s), permanently installed at the same site or at a different location, from which an AM station may broadcast for short periods without prior Commission authorization or notice to the Commission while the main facility is not in operation (*e.g.*, where tower work necessitates turning off the main antenna or where lightning has caused damage to the main antenna or transmission system) (*See* § 73.1675).

*Blanketing.* The interference which is caused by the presence of an AM broadcast signal of one volt per meter (V/m) or greater strengths in the area adjacent to the antenna of the transmitting station. The 1 V/m contour is referred to as the blanket contour and the area within this contour is referred to as the blanket area.

*Carrier-amplitude regulation* (Carrier shift). The change in amplitude of the carrier wave in an amplitude-modulated transmitter when modulation is applied under conditions of symmetrical modulation.

*Combined audio harmonics.* The arithmetical sum of the amplitudes of all the separate harmonic components. Root sum square harmonic readings may be accepted under conditions prescribed by the FCC.

*Critical directional antenna.* An AM broadcast directional antenna that is required, by the terms of a station authorization, to be operated with the relative currents and phases within the antenna elements at closer tolerances of deviation than those permitted under § 73.62 and observed with a high precision monitor capable of measuring these parameters.

*Critical hours.* The two hour period immediately following local sunrise and the two hour period immediately preceding local sunset.

*Daytime.* The period of time between local sunrise and local sunset.

*Effective field; Effective field strength.* The root-mean-square (RMS) value of the inverse distance fields at a distance of 1 kilometer from the antenna in all directions in the horizontal plane. The term ''field strength'' is synonymous with the term ''field intensity'' as contained elsewhere in this Part.

*Equipment performance measurements.* The measurements performed to determine the overall performance characteristics of a broadcast transmission system from point of program origination at main studio to sampling of signal as radiated. (See § 73.1590)

*Experimental period.* the time between 12 midnight local time and local sunrise, used by AM stations for tests, maintenance and experimentation.

*Frequency departure.* The amount of variation of a carrier frequency or center frequency from its assigned value.

*Incidental phase modulation.* The peak phase deviation (in radians) resulting from the process of amplitude modulation.

*Input power.* Means the product of the direct voltage applied to the last radio stage and the total direct current flowing to the last radio stage, measured without modulation.

*Intermittent service area.* Means the area receiving service from the groundwave of a broadcast station but beyond the primary service area and subject to some interference and fading.

*Last radio stage.* The radio-frequency power amplifier stage which supplies power to the antenna.

*Left (or right) signal.* The electrical output of a microphone or combination of microphones placed so as to convey the intensity, time, and location of sounds originated predominately to the listener's left (or right) of the center of the performing area.

*Left (or right) stereophonic channel.* The left (or right) signal as electrically reproduced in reception of AM stereophonic broadcasts.

*Main channel.* The band of audio frequencies from 50 to 10,000 Hz which amplitude modulates the carrier.

*Maximum percentage of modulation.* The greatest percentage of modulation that may be obtained by a transmitter without producing in its output, harmonics of the modulating frequency in excess of those permitted by these regulations. (See § 73.1570)

*Maximum rated carrier power.* The maximum power at which the transmitter can be operated satisfactorily and is determined by the design of the transmitter and the type and number of vacuum tubes or other amplifier devices used in the last radio stage.

*Model I facility.* A station operating in the 1605–1705 kHz band featuring fulltime operation with stereo, competitive technical quality, 10 kW daytime power, 1 kW nighttime power, non-directional antenna (or a simple directional antenna system), and separated by 400–800 km from other co-channel stations.

*Model II facility.* A station operating in the 535–1605 kHz band featuring fulltime operation, competitive technical quality, wide area daytime coverage with nighttime coverage at least 15% of the daytime coverage.

*Nighttime.* The period of time between local sunset and local sunrise.

*Nominal power.* The antenna input power less any power loss through a dissipative network and, for directional antennas, without consideration of adjustments specified in paragraphs (b)(1) and (b)(2) of § 73.51 of the rules. However, for AM broadcast applications granted or filed before June 3, 1985, nominal power is specified in a system of classifications which include the following values: 50 kW, 25 kW, 10 kW, 5 kW, 2.5 kW, 1 kW, 0.5 kW, and 0.25 kW. The specified nominal power for any station in this group of stations will be retained until action is taken on or after June 3, 1985, which involves a change in the technical facilities of the station.

*Percentage modulation (amplitude)*

In a positive direction:

$$M = \frac{MAX - C}{c} \times 100$$

In a negative direction:

$$M = \frac{C - MIN}{c} \times 100$$

Where:

M = Modulation level in percent.
MAX = Instantaneous maximum level of the modulated radio frequency envelope.
MIN = Instantaneous minimum level of the modulated radio frequency envelope.
C = (Carrier) level of radio frequency envelope without modulation.

*Plate modulation.* The modulation produced by introduction of the modulating wave into the plate circuit of any tube in which the carrier frequency wave is present.

*Primary service area.* Means the service area of a broadcast station in which the groundwave is not subject to objectionable interference or objectionable fading.

*Proof of performance measurements or antenna proof of performance measurements.* The measurements of field strengths made to determine the radiation pattern or characteristics of an AM directional antenna system.

*Secondary service area.* Means the service area of a broadcast station served by the skywave and not subject to objectionable interference and in which the signal is subject to intermittent variations in strength.

*Stereophonic channel.* The band of audio frequencies from 50 to 10,000 Hz containing the stereophonic information which modulates the radio frequency carrier.

*Stereophonic crosstalk.* An undesired signal occurring in the main channel from modulation of the stereophonic channel or that occurring in the stereophonic channel from modulation of the main channel.

*Stereophonic pilot tone.* An audio tone of fixed or variable frequency modulating the carrier during the transmission of stereophonic programs.

*Stereophonic separation.* The ratio of the electrical signal caused in the right (or left) stereophonic channel to the electrical signal caused in the left (or right) stereophonic channel by the transmission of only a right (or left) signal.

*Sunrise and sunset.* For each particular location and during any particular month, the time of sunrise and sunset as specified in the instrument of authorization (See § 73.1209).

*White area.* The area or population which does not receive interference-free primary service from an authorized AM station or does not receive a signal strength of at least 1 mV/m from an authorized FM station.

[47 FR 8587, Mar. 1, 1982, as amended at 47 FR 13164, Mar. 29, 1982; 47 FR 13812, Apr. 1, 1982; 50 FR 18821, May 2, 1985; 50 FR 47054, Nov. 14, 1985; 56 FR 64856, Dec. 12, 1991; 62 FR 51058, Sept. 30, 1997]

### § 73.21 Classes of AM broadcast channels and stations.

(a) *Clear channel.* A clear channel is one on which stations are assigned to serve wide areas. These stations are protected from objectionable interference within their primary service areas and, depending on the class of station, their secondary service areas. Stations operating on these channels are classified as follows:

(1) *Class A station.* A Class A station is an unlimited time station that operates on a clear channel and is designed to render primary and secondary service over an extended area and at relatively long distances from its transmitter. Its primary service area is protected from objectionable interference from other stations on the same and adjacent channels, and its secondary service area is protected from interference from other stations on the same channel. (See § 73.182). The operating power shall not be less than 10 kW nor more than 50 kW. (Also see § 73.25(a)).

(2) *Class B station.* A Class B station is an unlimited time station which is designed to render service only over a primary service area. Class B stations are authorized to operate with a minimum power of 0.25 kW (or, if less than 0.25 kW, an equivalent RMS antenna field of at least 141 mV/m at 1 km) and a maximum power of 50 kW, or 10 kW for stations that are authorized to operate in the 1605–1705 kHz band.

(3) *Class D station.* A Class D station operates either daytime, limited time or unlimited time with nighttime power less than 0.25 kW and an equivalent RMS antenna field of less than 141 mV/m at one km. Class D stations shall operate with daytime powers not less than 0.25 kW nor more than 50 kW. Nighttime operations of Class D stations are not afforded protection and must protect all Class A and Class B operations during nighttime hours. New Class D stations that had not been previously licensed as Class B will not be authorized.

(b) *Regional Channel.* A regional channel is one on which Class B and Class D stations may operate and serve primarily a principal center of population and the rural area contiguous thereto.

NOTE: Until the North American Regional Broadcasting Agreement (NARBA) is terminated with respect to the Bahama Islands and the Dominican Republic, radiation toward those countries from a Class B station may not exceed the level that would be produced by an omnidirectional antenna with a transmitted power of 5 kW, or such lower level as will comply with NARBA requirements for protection of stations in the Bahama Islands and the Dominican Republic against objectionable interference.

(c) *Local channel.* A local channel is one on which stations operate unlimited time and serve primarily a community and the suburban and rural areas immediately contiguous thereto.

(1) *Class C station.* A Class C station is a station operating on a local channel and is designed to render service only over a primary service area that may be reduced as a consequence of interference in accordance with § 73.182. The power shall not be less than 0.25 kW, nor more than 1 kW. Class C stations that are licensed to operate with 0.1 kW may continue to do so.

[56 FR 64856, Dec. 12, 1991]

### § 73.23 AM broadcast station applications affected by international agreements.

(a) Except as provided in paragraph (b) of this section, no application for an AM station will be accepted for filing if authorization of the facilities requested would be inconsistent with international commitments of the United States under treaties and other international agreements, arrangements and understandings. (See list of such international instruments in § 73.1650(b)). Any such application that is inadvertently accepted for filing will be dismissed.

(b) AM applications that involve conflicts only with the North American Regional Broadcasting Agreement (NARBA), but that are in conformity with the remaining treaties and other international agreements listed in § 73.1650(b) and with the other requirements of this part 73, will be granted subject to such modifications as the FCC may subsequently find appropriate, taking international considerations into account.

(c) In the case of any application designated for hearing on issues other than those related to consistency with

international relationships and as to which no final decision has been rendered, whenever action under this section becomes appropriate because of inconsistency with international relationships, the applicant involved shall, notwithstanding the provisions §§ 73.3522 and 73.3571, be permitted to amend its application to achieve consistency with such relationships. In such cases the provisions of § 73.3605(c) will apply.

(d) In some circumstances, special international considerations may require that the FCC, in acting on applications, follow procedures different from those established for general use. In such cases, affected applicants will be informed of the procedures to be followed.

[56 FR 64856, Dec. 12, 1991]

### § 73.24 Broadcast facilities; showing required.

An authorization for a new AM broadcast station or increase in facilities of an existing station will be issued only after a satisfactory showing has been made in regard to the following, among others:

(a) That the proposed assignment will tend to effect a fair, efficient, and equitable distribution of radio service among the several states and communities.

(b) That a proposed new station (or a proposed change in the facilities of an authorized station) complies with the pertinent requirements of § 73.37 of this chapter.

(c) That the applicant is financially qualified to construct and operate the proposed station.

(d) That the applicant is legally qualified. That the applicant (or the person or persons in control of an applicant corporation or other organization) is of good character and possesses other qualifications sufficient to provide a satisfactory public service.

(e) That the technical equipment proposed, the location of the transmitter, and other technical phases of operation comply with the regulations governing the same, and the requirements of good engineering practice.

(f) That the facilities sought are subject to assignment as requested under existing international agreements and the rules and regulations of the Commission.

(g) That the population within the 1 V/m contour does not exceed 1.0 percent of the population within the 25 mV/m contour: *Provided, however,* That where the number of persons within the 1 V/m contour is 300 or less the provisions of this paragraph are not applicable.

(h) That, in the case of an application for a Class B or Class D station on a clear channel, the proposed station would radiate, during two hours following local sunrise and two hours preceding local sunset, in any direction toward the 0.1 mV/m groundwave contour of a co-channel United States Class A station, no more than the maximum value permitted under the provisions of § 73.187.

(i) That, for all stations, the daytime 5 mV/m contour encompasses the entire principal community to be served. That, for stations in the 535–1605 kHz band, 80% of the principal community is encompassed by the nighttime 5 mV/m contour or the nighttime interference-free contour, whichever value is higher. That, for stations in the 1605–1705 kHz band, 50% of the principal community is encompassed by the 5 mV/m contour or the nighttime interference-free contour, whichever value is higher. That, Class D stations with nighttime authorizations need not demonstrate such coverage during nighttime operation.

(j) That the public interest, convenience, and necessity will be served through the operation under the proposed assignment.

[28 FR 13574, Dec. 14, 1963, as amended at 38 FR 5874, Mar. 5, 1973; 49 FR 43960, Nov. 1, 1984; 50 FR 40014, Oct. 1, 1985; 52 FR 11654, Apr. 10, 1987; 53 FR 1031, Jan. 15, 1988; 56 FR 64857, Dec. 12, 1991]

### § 73.25 Clear channels; Class A, Class B and Class D stations.

The frequencies in the following tabulations are designated as clear channels and assigned for use by the Classes of stations given:

(a) On each of the following channels, one Class A station may be assigned, operating with power of 50 kW: 640, 650, 660, 670, 700, 720, 750, 760, 770, 780, 820, 830, 840, 870, 880, 890, 1020, 1030, 1040,

1100, 1120, 1160, 1180, 1200, and 1210 kHz. In Alaska, these frequencies can be used by Class A stations subject to the conditions set forth in §73.182(a)(1)(ii). On the channels listed in this paragraph, Class B and Class D stations may be assigned.

(b) To each of the following channels there may be assigned Class A, Class B and Class D stations: 680, 710, 810, 850, 940, 1000, 1060, 1070, 1080, 1090, 1110, 1130, 1140, 1170, 1190, 1500, 1510, 1520, 1530, 1540, 1550, and 1560 kHz.

NOTE: Until superseded by a new agreement, protection of the Bahama Islands shall be in accordance with NARBA. Accordingly, a Class A, Class B or Class D station on 1540 kHz shall restrict its signal to a value no greater than 5 μV/m groundwave or 25 μV/m-10% skywave at any point of land in the Bahama Islands, and such stations operating nighttime (i.e., sunset to sunrise at the location of the U.S. station) shall be located not less than 650 miles from the nearest point of land in the Bahama Islands.

(c) Class A, Class B and Class D stations may be assigned on 540, 690, 730, 740, 800, 860, 900, 990, 1010, 1050, 1220, 1540, 1570, and 1580 kHz.

[28 FR 13574, Dec. 14, 1963, as amended at 33 FR 4410, Mar. 12, 1968; 35 FR 18052, Nov. 25, 1970; 47 FR 27862, June 28, 1982; 49 FR 43960, Nov. 1, 1984; 50 FR 24520, June 11, 1985; 52 FR 47568, Dec. 15, 1987; 53 FR 1031, Jan. 15, 1988; 54 FR 39736, Sept. 28, 1989; 56 FR 64857, Dec. 12, 1991]

### §73.26 Regional channels; Class B and Class D stations.

(a) The following frequencies are designated as regional channels and are assigned for use by Class B and Class D stations: 550, 560, 570, 580, 590, 600, 610, 620, 630, 790, 910, 920, 930, 950, 960, 970, 980, 1150, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1350, 1360, 1370, 1380, 1390, 1410, 1420, 1430, 1440, 1460, 1470, 1480, 1590, 1600, 1610, 1620, 1630, 1640, 1650, 1660, 1670, 1680, 1690, and 1700 kHz.

(b) Additionally, in Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands the frequencies 1230, 1240, 1340, 1400, 1450, and 1490 kHz are designated as Regional channels, and are assigned for use by Class B stations. Stations formerly licensed to these channels in those locations as Class C stations are redesignated as Class B stations.

[56 FR 64857, Dec. 12, 1991]

### §73.27 Local channels; Class C stations.

Within the conterminous 48 states, the following frequencies are designated as local channels, and are assigned for use by Class C stations: 1230, 1240, 1340, 1400, 1450, and 1490 kHz.

[56 FR 64857, Dec. 12, 1991]

### §73.28 Assignment of stations to channels.

(a) The Commission will not make an AM station assignment that does not conform with international requirements and restrictions on spectrum use that the United States has accepted as a signatory to treaties, conventions, and other international agreements. See §73.1650 for a list of pertinent treaties, conventions and agreements, and §73.23 for procedural provisions relating to compliance with them.

(b) Engineering standards now in force domestically differ in some respects from those specified for international purposes. The engineering standards specified for international purposes (see §73.1650, International Agreements) will be used to determine:

(1) The extent to which interference might be caused by a proposed station in the United States to a station in another country; and

(2) whether the United States should register an objection to any new or changed assignment notified by another country. The domestic standards in effect in the United States will be used to determine the extent to which interference exists or would exist from a foreign station where the value of such interference enters into a calculation of:

(i) The service to be rendered by a proposed operation in the United States; or

(ii) the permissible interfering signal from one station in the United States to another United States station.

[28 FR 13574, Dec. 14, 1963, as amended at 29 FR 9499, July 11, 1964; 49 FR 32358, Aug. 14, 1984; 50 FR 18821, May 2, 1985; 54 FR 39736, Sept. 28, 1989; 56 FR 64857, Dec. 12, 1991]

### § 73.29 Class C stations on regional channels.

No license will be granted for the operation of a Class C station on a regional channel.

[ 56 FR 64857, Dec. 12, 1991]

### § 73.30 Petition for authorization of an allotment in the 1605–1705 kHz band.

(a) Any party interested in operating an AM broadcast station on one of the ten channels in the 1605–1705 kHz band must file a petition for the establishment of an allotment to its community of license. Each petition must include the following information:

(1) Name of community for which allotment is sought;

(2) Frequency and call letters of the petitioner's existing AM operation; and

(3) Statement as to whether or not AM stereo operation is proposed for the operation in the 1605–1705 kHz band.

(b) Petitions are to be filed during a filing period to be determined by the Commission. For each filing period, eligible stations will be allotted channels based on the following steps:

(1) Stations are ranked in descending order according to the calculated improvement factor.

(2) The station with the highest improvement factor is initially allotted the lowest available channel.

(3) Successively, each station with the next lowest improvement factor, is allotted an available channel taking into account the possible frequency and location combinations and relationship to previously selected allotments. If a channel is not available for the subject station, previous allotments are examined with respect to an alternate channel, the use of which would make a channel available for the subject station.

(4) When it has been determined that, in accordance with the above steps, no channel is available for the subject station, that station is no longer considered and the process continues to the station with the next lowest improvement factor.

(c) If awarded an allotment, a petitioner will have sixty (60) days from the date of public notice of selection to file an application for construction permit on FCC Form 301. (See §§ 73.24 and 73.37(e) for filing requirements). Unless instructed by the Commission to do otherwise, the application shall specify Model I facilities. (See § 73.14). Upon grant of the application and subsequent construction of the authorized facility, the applicant must file a license application on FCC Form 302.

NOTE 1: Until further notice by the Commission, the filing of these petitions is limited to licensees of existing AM stations (excluding Class C stations) operating in the 535–1605 kHz band. First priority will be assigned to Class D stations located within the primary service contours of U.S. Class A stations that are licensed to serve communities of 100,000 or more for which there exists no local fulltime aural service.

NOTE 2: Selection among competing petitions will be based on interference reduction. Notwithstanding the exception contained in Note 5 of this section, within each operational category, the station demonstrating the highest value of improvement factor will be afforded the highest priority for an allotment, with the next priority assigned to the station with next lowest value, and so on, until available allotments are filled.

NOTE 3: The Commission will periodically evaluate the progress of the movement of stations from the 535–1605 kHz band to the 1605–1705 kHz band to determine whether the 1605–1705 kHz band should continue to be administered on an allotment basis or modified to an assignment method. If appropriate, the Commission will later develop further procedures for use of the 1605–1705 kHz band by existing station licensees and others.

NOTE 4: Other than the exception specified in note 1 of this section, existing fulltime stations are considered first for selection as described in note 2 of this section. In the event that an allotment availability exists for which no fulltime station has filed a relevant petition, such allotment may be awarded to a licensed Class D station. If more than one Class D station applies for this migration opportunity, the following priorities will be used in the selection process: First priority—a Class D station located within the 0.5 mV/m–50% contour of a U.S. Class A station and licensed to serve a community of 100,000 or more, for which there exists no local fulltime aural service; Second priority—Class D stations ranked in order of improvement factor, from highest to lowest, considering only those stations with improvement factors greater than zero.

NOTE 5: The preference for AM stereo in the expanded band will be administered as follows: when an allotment under consideration (candidate allotment) conflicts with one or more previously selected allotments

(established allotments) and cannot be accommodated in the expanded band, the candidate allotment will be substituted for the previously established allotment provided that: the petitioner for the candidate allotment has made a written commitment to the use of AM stereo and the petitioner for the established allotment has not; the difference between the ranking factors associated with the candidate and established allotments does not exceed 10% of the ranking factor of the candidate allotment; the substitution will not require the displacement of more than one established allotment; and both the candidate allotment and the established allotment are within the same priority group.

[58 FR 27949, May 12, 1993]

### § 73.31 Rounding of nominal power specified on applications.

(a) An application filed with the FCC for a new station or for an increase in power of an existing station shall specify nominal power rounded to two significant figures as follows:

| Nominal power (kW) | Rounded down to nearest figure (kW) |
|---|---|
| Below 0.25 | 0.001 |
| 0.25 to 0.99 | 0.01 |
| 1 to 9.9 | 0.1 |
| 10 to 50 | 1 |

(b) In rounding the nominal power in accordance with paragraph (a) of this section the RMS shall be adjusted accordingly. If rounding upward to the nearest figure would result in objectionable interference, the nominal power specified on the application is to be rounded downward to the next nearest figure and the RMS adjusted accordingly.

[50 FR 18821, May 2, 1985, as amended at 53 FR 1031, Jan. 15, 1988]

### 73.33 Antenna systems; showing required.

(a) An application for authority to install a broadcast antenna shall specify a definite site and include full details of the antenna design and expected performance.

(b) All data necessary to show compliance with the terms and conditions of the construction permit must be filed with the license application. If the station is using a directional antenna, a proof of performance must also be filed.

[28 FR 13574, Dec. 14, 1963, as amended at 37 FR 25840, Dec. 5, 1972]

### §73.35 Calculation of improvement factors.

A petition for an allotment (See §73.30) in the 1605–1705 kHz band filed by an existing fulltime AM station licensed in the 535–1605 kHz band will be ranked according to the station's calculated improvement factor. (See §73.30). Improvement factors relate to both nighttime and daytime interference conditions and are based on two distinct considerations: (a) Service area lost by other stations due to interference caused by the subject station, and (b) service area of the subject station. These considerations are represented by a ratio. The ratio consists, where applicable, of two separate additive components, one for nighttime and one for daytime. For the nighttime component, to determine the numerator of the ratio (first consideration), calculate the RSS and associated service area of the stations (co- and adjacent channel) to which the subject station causes nighttime interference. Next, repeat the RSS and service area calculations excluding the subject station. The cumulative gain in the above service area is the numerator of the ratio. The denominator (second consideration) is the subject station's interference-free service area. For the daytime component, the composite amount of service lost by co-channel and adjacent channel stations, each taken individually, that are affected by the subject station, excluding the effects of other assignments during each study, will be used as the numerator of the daytime improvement factor. The denominator will consist of the actual daytime service area (0.5 mV/m contour) less any area lost tointerference from other assignments. The value of this combined ratio will constitute the petitioner's improvement factor. Notwithstanding the requirements of §73.153, for uniform comparisons and simplicity, measurement data will not be used for determining improvement

factors and FCC figure M-3 ground conductivity values are to be used exclusively in accordance with the pertinent provisions of §73.183(c)(1).

[56 FR 64858, Dec. 12, 1991]

### §73.37 Applications for broadcast facilities, showing required.

(a) No application will be accepted for a new station if the proposed operation would involve overlap of signal strength contours with any other station as set forth below in this paragraph; and no application will be accepted for a change of the facilities of an existing station if the proposed change would involve such overlap where there is not already such overlap between the stations involved:

| Frequency separation (kHz) | Contour of proposed station (classes B, C and D) (mV/m) | Contour of any other station (mV/m) |
|---|---|---|
| 0 | 0.005 | 0.100 (Class A). |
| | 0.025 | 0.500(Other classes). |
| | 0.500 | 0.025 (All classes). |
| 10 | 0.250 | 0.500(All classes). |
| | 0.500 | 0.250 (All classes). |
| 20 | 5 | 5 (All classes). |
| | 5 | 5 (All classes). |
| 30 | 25 | 25 (All classes). |

(b) In determining overlap received, an application for a new Class C station with daytime power of 250 watts, or greater, shall be considered on the assumption that both the proposed operation and all existing Class C stations operate with 250 watts and utilize non-directional antennas.

(c) If otherwise consistent with the public interest, an application requesting an increase in the daytime power of an existing Class C station on a local channel from 250 watts to a maximum of 1kW, or from 100 watts to a maximum of 500 watts, may be granted notwithstanding overlap prohibited by paragraph (a) of this section. In the case of a 100 watt Class C station increasing daytime power, the provisions of this paragraph shall not be construed to permit an increase in power to more than 500 watts, if prohibited overlap would be involved, even if successive applications should be tendered.

(d) In addition to demonstrating compliance with paragraphs (a), and, as appropriate, (b), and (c) of this section, an application for a new AM broadcast station, or for a major change (see §73.3571(a)(1)) in an authorized AM broadcast station, as a condition for its acceptance, shall make a satisfactory showing, if new or modified nighttime operation by a Class B station is proposed, that objectionable interference will not result to an authorized station, as determined pursuant to §73.182(1).

(e) An application for an authorization in the 1605–1705 kHz band which has been selected through the petition process (See §73.30) is not required to demonstrate compliance with paragraph (a), (b), (c), or (d) of this section. Instead, the applicant need only comply with the terms of the allotment authorization issued by the Commission in response to the earlier petition for establishment of a station in the 1605–1705 kHz band. Within the allotment authorization, the Commission will specify the assigned frequency and the applicable technical requirements.

(f) Stations on 1580, 1590 and 1600 kHz. In addition to the rules governing the authorization of facilities in the 535–1605 kHz band, stations on these frequencies seeking facilities modifications must protect assignments in the 1610–1700 kHz band. Such protection shall be afforded in a manner which considers the spacings that occur or exist between the subject station and a station within the range 1605–1700 kHz. The spacings are the same as those specified for stations in the frequency band 1610–1700 kHz or the current separation distance, whichever is greater. Modifications that would result in a spacing or spacings that fails to meet any of the separations must include a showing that appropriate adjustment has been made to the radiated signal which effectively results in a site-to-site radiation that is equivalent to the radiation of a station with standard Model I facilities (10 kW–D, 1 kW–N, non-DA, 90 degree antenna ht. & ground system) operating in compliance with all of the above separation distances. In those cases where that radiation equivalence value is already exceeded, a station may continue to maintain, but not increase beyond that level.

NOTE 1: In the case of applications for changes in the facilities of AM broadcast stations covered by this section, an application will be accepted even though overlap of field strength contours as mentioned in this section would occur with another station in an area where such overlap does not already exist, if:

(1) The total area of overlap with that station would not be increased;

(2) There would be no net increase in the area of overlap with any other station; and

(3) There would be created no area of overlap with any station with which overlap does not now exist.

NOTE 2: The provisions of this section concerning prohibited overlap of field strength contours will not apply where:

(1) The area of overlap lies entirely over sea water: or

(2) The only overlap involved would be that caused to a foreign station, in which case the provisions of the applicable international agreement, as identified in §73.1650, will apply. When overlap would be received from a foreign station, the provisions of this section will apply, except where there would be overlap with a foreign station with a frequency separation of 20 kHz, in which case the provisions of the international agreement will apply in lieu of this section.

NOTE 3: In determining the number of ''authorized'' aural transmission facilities in a given community, applications for that community in hearing or otherwise having protected status under specified ''cut-off'' procedures shall be considered as existing stations. In the event that there are two or more mutually exclusive protected applications seeking authorization for the proposed community it will be assumed that only one is ''authorized.''

NOTE 4: A ''transmission facility'' for a community is a station licensed to the community. Such a station provides a ''transmission service'' for that community.

[56 FR 64858, Dec. 12, 1991; 57 FR 43290, Sept. 18, 1992]

### § 73.44 AM transmission system emission limitations.

(a) The emissions of stations in the AM service shall be attenuated in accordance with the requirements specified in paragraph (b) of this section. Emissions shall be measured using a properly operated and suitable swept-frequency RF spectrum analyzer using a peak hold duration of 10 minutes, no video filtering, and a 300 Hz resolution bandwidth, except that a wider resolution bandwidth may be employed above 11.5 kHz to detect transient emissions. Alternatively, other specialized receivers or monitors with appropriate characteristics may be used to determine compliance with the provisions of this section, provided that any disputes over measurement accuracy are resolved in favor of measurements obtained by using a calibrated spectrum analyzer adjusted as set forth above.

(b) Emissions 10.2 kHz to 20 kHz removed from the carrier must be attenuated at least 25 dB below the unmodulated carrier level, emissions 20 kHz to 30 kHz removed from the carrier must be attenuated at least 35 dB below the unmodulated carrier level, emissions 30 kHz to 60 kHz removed from the carrier must be attenuated at least [5 + 1 dB/kHz] below the unmodulated carrier level, and emissions between 60 kHz and 75 kHz of the carrier frequency must be attenuated at least 65 dB below the unmodulated carrier level. Emissions removed by more than 75 kHz must be attenuated at least 43 + 10 Log (Power in watts) or 80 dB below the unmodulated carrier level, whichever is the lesser attenuation, except for transmitters having power less than 158 watts, where the attenuation must be at least 65 dB below carrier level.

(c) Should harmful interference be caused to the reception of other broadcast or non-broadcast stations by out of band emissions, the licensee may be directed to achieve a greater degree of attentuation than specified in paragraphs (a) and (b) of this section.

(d) Measurements to determine compliance with this section for transmitter type acceptance are to be made using signals sampled at the output terminals of the transmitter when operating into an artificial antenna of substantially zero reactance. Measurements made of the emissions of an operating station are to be made at ground level approximately 1 kilometer from the center of the antenna system. When a directional antenna is used, the carrier frequency reference field strength to be used in order of preference shall be:

(1) The measure non-directional field strength.

(2) The RMS field strength determined from the measured directional radiation pattern.

(3) The calculated expected field strength that would be radiated by a non-directional antenna at the station authorized power.

(e) Licensees of stations complying with the ANSI/EIA–549–1988, NRSC–1 AM Preemphasis/Deemphasis and Broadcast Transmission Bandwidth Specifications (NRSC–1), prior to June 30, 1990 or from the original commencement of operation will, until June 30, 1994, be considered to comply with paragraphs (a) and (b) of this section, absent any reason for the Commission to believe otherwise. Such stations are waived from having to make the periodic measurements required in §73.1590(a)(6) until June 30, 1994. However, licensees must make measurements to determine compliance with paragraphs (a) and (b) of this section upon receipt of an Official Notice of Violation or a Notice of Apparent Liability alleging noncompliance with those provisions, or upon specific request by the Commission.

[47 FR 8588, Mar. 1, 1982, as amended at 49 FR 3999, Feb. 1, 1984]

### §73.45 AM antenna systems.

(a) All applicants for new, additional, or different AM station facilities and all licensees requesting authority to change the transmitting system site of an existing station must specify an antenna system, the efficiency of which complies with the requirements for the class and power of station. (See §§73.186 and 73.189.)

(1) An application for authority to install an AM broadcast antenna must specify a definite site and include full details of the antenna system design and expected performance.

(2) All data necessary to show compliance with the terms and conditions of the construction permit must be filed with the application for the station license to cover the construction. If the station has constructed a directional antenna, a directional proof of performance must be filed. See §§73.150 through 73.157.

(b) The simultaneous use of a common antenna or antenna structure by more than one AM station or by a station of any other type or service may be authorized provided:

(1) Engineering data are submitted showing that satisfactory operation of each station will be obtained without adversely affecting the operation of the other station(s).

(2) The minimum field strength for each AM station complies with §73.189(b).

(c) Should any changes be made or otherwise occur which would possibly alter the resistance of the antenna system, the licensee must commence the determination of the operating power by a method described in §73.51(a)(1) or (d). (If the changes are due to the construction of FM or TV transmitting facilities, see §§73.316, 73.685, and 73.1692.) Upon completion of any necessary repairs or adjustments, or upon completion of authorized construction or modifications, the licensee must make a new determination of the antenna resistance using the procedures described in §73.54. Operating power should then be determined by a direct method as described in §73.51. Notification of the value of resistance of the antenna system must be filed with the FCC in Washington, DC as follows:

(1) Whenever the measurements show that the antenna or common point resistance differs from that shown on the station authorization by more than 2%, FCC Form 302 must be filed with the information and measurement data specified in §73.54(d).

(2) Whenever AM stations use direct reading power meters pursuant to §73.51, a letter notification to the FCC in Washington, DC, Attention: Audio Services Division, Mass Media Bureau, must be filed in accordance with §73.54(e).

[43 FR 53735, Nov. 17, 1978, as amended at 45 FR 28141, Apr. 28, 1980; 47 FR 8589, Mar. 1, 1982; 50 FR 32416, Aug. 12, 1985; 51 FR 2707; Jan. 21, 1986; 51 FR 26250, July 22, 1986; 63 FR 33875, June 22, 1998]

### §73.49 AM transmission system fencing requirements.

Antenna towers having radio frequency potential at the base (series fed, folded unipole, and insulated base antennas) must be enclosed within effective locked fences or other enclosures. Ready access must be provided to each antenna tower base for meter reading and maintenance purposes at

all times. However, individual tower fences need not be installed if the towers are contained within a protective property fence.

[51 FR 2707, Jan. 21, 1986]

### § 73.51 Determining operating power.

(a) Except in those circumstances described in paragraph (d) of this section, the operating power shall be determined by the direct method. The direct method consists of either:

(1) using a suitable instrument for determining the antenna's input power directly from the RF voltage, RF current, and phase angle; or

(2) calculating the product of the licensed antenna or common point resistance at the operating frequency (see § 73.54), and the square of the indicated unmodulated antenna current at that frequency, measured at the point where the resistance has been determined.

(b) The authorized antenna input power for each station shall be equal to the nominal power for such station, with the following exceptions:

(1) For stations with nominal powers of 5 kW, or less, the authorized antenna input power to directional antennas shall exceed the nominal power by 8 percent.

(2) For stations with nominal powers in excess of 5 kW, the authorized antenna input power to directional antennas shall exceed the nominal power by 5.3 percent.

(3) In specific cases, it may be necessary to limit the radiated field to a level below that which would result if normal power were delivered to the antenna. In such cases, excess power may be dissipated in the antenna feed circuit, the transmitter may be operated with power output at a level which is less than the rated carrier power, or a combination of the two methods may be used, subject to the conditions given in paragraph (c) of this section.

(i) Where a dissipative network is employed, the authorized antenna current and resistance, and the authorized antenna input power shall be determined at the input terminals of the dissipative network.

(ii) Where the authorized antenna input power is less than the nominal power, subject to the conditions set forth in paragraph (c) of this section, the transmitter may be operated at the reduced power level necessary to supply the authorized antenna input power.

(c) Applications for authority to operate with antenna input power which is less than nominal power and/or to employ a dissipative network in the antenna system shall be made on FCC Form 302. The technical information supplied on section II–A of this form shall be that applying to the proposed conditions of operation. In addition, the following information shall be furnished, as pertinent:

(1) Full details of any network employed for the purpose of dissipating radio frequency energy otherwise delivered to the antenna (see § 73.54).

(2) A showing that the transmitter has been type accepted or notified for operation at the proposed power output level, or, in lieu thereof:

(i) A full description of the means by which transmitter output power will be reduced.

(ii) Where the proposed transmitter power output level(s) is less than 90% of the rated power of the transmitter, equipment performance measurements must be made to confirm that the station transmissions conform to the emission limitation specified in § 73.44, under all conditions of program operation.

(iii) A showing that, at the proposed power output level, means are provided for varying the transmitter output within a tolerance of ±10 percent, to compensate for variations in line voltage or other factors which may affect the power output level.

(d) When it is not possible or appropriate to use the direct method of power determination due to technical reasons, the indirect method of determining operating power (see paragraphs (e) and (f) of this section) may be used on a temporary basis. A notation must be made in the station log indicating the dates of commencement and termination of measurement using the indirect method of power determination.

(e) The antenna input power is determined indirectly by applying an appropriate factor to the input power to the last radio-frequency power amplifier

stage of the transmitter, using the following formula:
Where:

Antenna input power=Ep×Ip×*F*

Ep=DC input voltage of final radio stage.
Ip=Total DC input current of final radio stage.
*F*= Efficiency factor.

(1) If the above formula is not appropriate for the design of the transmitter final amplifier, use a formula specified by the transmitter manufacturer with other appropriate operating parameters.

(2) The value of *F* applicable to each mode of operation must be determined and a record kept thereof with a notation as to its derivation. This factor is to be established by one of the methods described in paragraph (f) of this section and retained in the station records.

(f) The value of *F* is to be determined by one of the following procedures listed in order of preference:

(1) If the station had previously been authorized and operating by determining the antenna input power by the direct method, the factor *F* is the ratio of the antenna input power (determined by the direct method) to the corresponding final radio frequency power amplifier input power.

(2) If a station has not been previously in regular operation with the power authorized for the period of indirect power determination, if a new transmitter has been installed, or if, for any other reason, the determination of the factor *F* by the method described in paragraph (f)(1) of this section is impracticable:

(i) The factor *F* as shown in the transmitter manufacturer's test report, if such a test report specifies a unique value of *F* for the power level and frequently used; or

(ii) The value determined by reference to the following table:

| Factor(F) | Method of modulation | Maximum rated carrier power | Class of amplifier |
|---|---|---|---|
| 0.70 | Plate | 1 kW or less | |
| .80 | Plate | 2.5 kW and over | |
| .35 | Low level | 0.25 kW and over | B. |
| .65 | Low level | 0.25 kW and over | BC[1]. |
| .35 | Grid | 0.25 kW and over | |

[1]All linear amplifier operation where efficiency approaches that of class C operation.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, as amended, 1068, 1082, as amended; 47 U.S.C. 154, 155, 303. Interpret or apply secs. 301, 303, 307, 48 Stat. 1081, 1082, as amended, 47 U.S.C. 301, 303, 307)

[37 FR 7516, Apr. 15, 1972, as amended at 42 FR 36827, July 18, 1977; 42 FR 61863, Dec. 7, 1977; 44 FR 36036, June 20, 1979; 47 FR 28387, June 30, 1982; 48 FR 38477, Aug. 24, 1983; 48 FR 44805, Sept. 30, 1983; 49 FR 3999, Feb. 1, 1984; 49 FR 4210, Feb. 3, 1984; 49 FR 49850, Dec. 24, 1984; 50 FR 24521, June 11, 1985; 52 FR 10570, Apr. 2, 1987]

### § 73.53 Requirements for authorization of antenna monitors.

(a) Antenna monitors shall be verified for compliance with the technical requirements in this section. The procedure for verification is specified in subpart J of part 2 of the FCC's rules.

(b) An antenna monitor shall meet the following specifications:

(1) The monitor shall be designed to operate in the 535–1705 kHz band.

(2) The monitor shall be capable of indicating any phase difference between two RF voltages of the same frequency over a range of from 0 to 360°.

(3) The monitor shall be capable of indicating the relative amplitude of two RF voltages.

(4) The device used to indicate phase differences shall indicate in degrees, and shall be graduated in increments of 2°, or less. If a digital indicator is provided, the smallest increment shall be 0.5°, or less.

(5) The device used to indicate relative amplitudes shall be graudated in increments which are 1 percent, or less, of the full scale value. If a digital indicator is provided, the smallest increment shall be 0.1 percent, or less, of the full scale value.

(6) The monitor shall be equipped with means, if necessary, to resolve ambiguities in indication.

(7) If the monitor is provided with more than one RF input terminal in addition to a reference input terminal, appropriate switching shall be provided in the monitor so that the signal at each of these RF inputs may be selected separately for comparison with the reference input signal.

(8) Each RF input of the monitor shall provide a termination of such characteristics that, when connected to a sampling line of an impedance

specified by the manufacturer the voltage reflection coefficient shall be 3 percent or less.

(9) The monitor, if intended for use by stations operating directional antenna systems by remote control, shall be designed so that the switching functions required by paragraph (b)(7) of this section may be performed from a point external to the monitor, and phase and amplitude indications be provided by external meters. The indications of external meters furnished by the manufacturer shall meet the specifications for accuracy and repeatability of the monitor itself, and the connection of these meters to the monitor, or of other indicating instruments with electrical characteristics meeting the specifications of the monitor manufacturer shall not affect adversely the performance of the monitor in any respect.

(10) Complete and correct schematic diagrams and operating instructions shall be retained by the party responsible for verification of the equipment and submitted to the FCC upon request. For the purpose of equipment authorization, these diagrams and instructions shall be considered as part of the monitor.

(11) When an RF signal of an amplitude within a range specified by the manufacturer is applied to the reference RF input terminal of the monitor, and another RF signal of the same frequency and of equal or lower amplitude is applied to any other selected RF input terminal, indications shall be provided meeting the following specifications.

(i) The accuracy with which any difference in the phases of the applied signals is indicated shall be ±1°, or better, for signal amplitude ratios of from 2:1 to 1:1, and ±2°, or better, for signal amplitude ratios in excess of 2:1 and up to 5:1.

(ii) The repeatability of indication of any difference in the phases of the applied signals shall be ±1°, or better.

(iii) The accuracy with which the relative amplitudes of the applied signals is indicated, over a range in which the ratio of these amplitudes is between 2:1 and 1:1, shall be ±2 percent of the amplitude ratio, or better, and for amplitude ratios in excess of 2:1 and up to 5:1, ±5 percent of the ratio, or better.

(iv) The repeatability of indication of the relative amplitudes of the applied signals, over a range where the ratio of these amplitudes is between 5:1 and 1:1, shall be ±2 percent of the amplitude ratio, or better.

(v) The modulation of the RF signals by a sinusoidal wave of any frequency between 100 and 10,000 Hz, at any amplitude up to 90 percent shall cause no deviation in an indicated phase difference from its value, as determined without modulation, greater than ±0.5°.

(12) The performance specifications set forth in paragraph (c)(13) of this section, shall be met when the monitor is operated and tested under the following conditions.

(i) After continuous operation for 1 hour, the monitor shall be calibrated and adjusted in accordance with the manufacturer's instructions.

(ii) The monitor shall be subjected to variations in ambient temperature between the limits of 10 and 40°C; external meters furnished by the manufacturer will be subjected to variations between 15 and 30°C.

(iii) Powerline supply voltage shall be varied over a range of from 10 percent below to 10 percent above the rated supply voltage.

(iv) The amplitude of the reference signal shall be varied over the operating range specified by the manufacturer, and in any case over a range of maximum to minimum values of 3 to 1.

(v) The amplitude of the comparison signal shall be varied from a value which is 0.2 of the amplitude of the reference signal to a value which is equal in amplitude to the reference signal.

(vi) Accuracy shall be determined for the most adverse combination of conditions set forth above.

(vii) Repeatability shall be determined as that which may be achieved under the specified test conditions over a period of 7 days, during which no calibration or adjustment of the instrument, subsequent to the initial calibration, shall be made.

(viii) The effects of modulation of the RF signal shall be separately determined, and shall not be included in establishing values for accuracy and repeatability.

(c) A station determined to have a critical directional antenna must use an antenna monitor having high tolerance characteristics determined on an individual basis, and specified on the station authorization. Such monitors are not subject to the authorization of paragraph (a), however they may be used only at the station for which they were specified.

NOTE: In paragraph (b)(1) of this section, the requirement that monitors be capable of operation in the 535–1705 kHz band shall apply only to equipment manufactured after July 1, 1992. Use of a monitor in the 1605–1705 kHz band which is not approved for such operation will be permitted pending the general availability of 535–1705 kHz band monitors if a manufacturer can demonstrate, in the interim, that its monitor performs in accordance with the standards in this section on these 10 channels.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[38 FR 1917, Jan. 19, 1973, as amended at 49 FR 3999, Feb. 1, 1984; 49 FR 29069, July 18, 1984; 50 FR 32416, Aug. 12, 1985; 50 FR 47054, Nov. 14, 1985; 51 FR 2707, Jan. 21, 1986; 56 FR 64859, Dec. 12, 1991; 57 FR 43290, Sept. 18, 1992; 60 FR 55480, Nov. 1, 1995; 63 FR 36604, July 7, 1998]

EFFECTIVE DATE NOTE: At 63 FR 36604, July 7, 1998, § 73.53 was amended by revising paragraphs (a), (b) introductory text, and (b)(10), effective Oct. 5, 1998. For the convenience of the user, the superseded text is set forth as follows:

**§ 73.53 Requirements for authorization of antenna monitors.**

(a) *General requirements.* (1) Antenna monitors shall be type approved or notifed by the FCC. Effective March 5, 1984, only grants of notification will be issued for antenna monitors.

(2) Notification can be obtained by following the procedures specified in subpart J of part 2 of the FCC's Rules.

(b) An antenna monitor eligible for authorization by the FCC shall meet the following specifications:

* * * * *

(10) The monitor must be accompanied by complete and correct schematic diagrams and operating instructions when submitted for type approval. When approved under notification, these materials shall be retained by the applicant and not submitted unless otherwise requested by the FCC. For the purpose of the equipment authorization, these diagrams and instructions shall be considered as part of the monitor.

* * * * *

**§ 73.54 Antenna resistance and reactance measurements.**

(a) The resistance of an omnidirectional series fed antenna is measured at either the base of the antenna without intervening coupling or tuning networks, or at the point the transmission line connects to the output terminals of the transmitter. The resistance of a shunt excited antenna may be measured at the point the radio frequency energy is transferred to the feed wire circuit or at the output terminals of the transmitter.

(b) The resistance and reactance of a directional antenna shall be measured at the point of common radiofrequency input to the directional antenna system. The following conditions shall obtain:

(1) The antenna shall be finally adjusted for the required radiation pattern.

(2) The reactance at the operating frequency and at the point of measurement shall be adjusted to zero, or as near thereto as practicable.

(c)(1) The resistance of an antenna shall be determined by the following procedure: A series of discrete measurements shall be made over a band of frequencies extending from approximately 25 kHz below the operating frequency to approximately 25 kHz above that frequency, at intervals of approximately 5 kHz. The measured values shall be plotted on a linear graph, with frequency as the abscissa and resistance as the ordinate. A smooth curve shall be drawn through the plotted values. The resistance value corresponding to the point of intersection of the curve and the ordinate representing the operating frequency of the station shall be the resistance of the antenna.

(2) For a directional antenna, the reactance of the antenna shall be determined by a procedure similar to that described in paragraph (c)(1) of this section.

(d) A letter of notification must be filed with the FCC in Washington, DC, Attention: Audio Services Division, Mass Media Bureau, when determining

power by the direct method pursuant to § 73.51 and must specify the antenna or common point resistance at the operating frequency. The following information must also be kept on file at the station:

(1) A full description of the method used to make measurements.

(2) A schematic diagram showing clearly all components of coupling circuits, the point of resistance measurement, the location of the antenna ammeter, connections to and characteristics of all tower lighting isolation circuits, static drains, and any other fixtures connected to and supported by the antenna, including other antennas and associated networks. Any network or circuit component used to dissipate radio frequency power shall be specifically identified, and the impedances of all components which control the level of power dissipation, and the effective input resistance of the network must be indicated.

(e) AM stations using direct reading power meters in accordance with § 73.51, can either submit the information required by paragraph (d) of this section or submit a statement indicating that such a meter is being used. Subsequent station licenses will indicate the use of a direct reading power meter in lieu of the antenna resistance value in such a situation.

[34 FR 18305, Nov. 15, 1969, as amended at 37 FR 7517, Apr. 15, 1972; 45 FR 26062, Apr. 17, 1980; 49 FR 49850, Dec. 24, 1984; 50 FR 32416, Aug. 12, 1985; 51 FR 2707, Jan. 21, 1986; 51 FR 26250, July 22, 1986; 63 FR 33876, June 22, 1998]

### § 73.57 Remote reading antenna and common point ammeters.

Remote reading antenna and common point ammeters may be used without further authority according to the following conditions:

(a) Remote reading antenna or common point ammeters may be provided by:

(1) Inserting second radio frequency current sensing device directly in the antenna circuit with remote leads to the indicating instruments.

(2) Inductive coupling to radio frequency current sensing device for providing direct current to indicating instrument.

(3) Capacity coupling to radio frequency current sensing device for providing direct current to indicating instrument.

(4) Current transformer connected to radio frequency current sensing device for providing direct current to indicating instrument.

(5) Using transmission line current meter at transmitter as remote reading ammeter. See paragraph (c) of this section.

(6) Using the indications of the antenna (phase) monitor, provided that when the monitor is used to obtain remote reading indication of non-directional antenna base current, the monitor calibration can be independently made and maintained for each mode of operation.

(b) Devices used for obtaining remote reading antenna or common point current indications, except antenna monitor coupling elements, shall be located at the same point as, but below (transmitter side) the associated main ammeter.

(c) In the case of shunt-excited antennas, the transmission line current meter at the transmitter may be considered as the remote antenna ammeter provided the transmission line is terminated directly into the excitation circuit feed line, which shall employ series tuning only (no shunt circuits of any type shall be employed) and insofar as practicable, the type and scale of the transmission line meter should be the same as those of the excitation circuit feed line meter (meter in slant wire feed line or equivalent).

(d) Each remote reading ammeter shall be accurate to within 2 percent of the value read on its corresponding regular ammeter.

(e) All remote reading ammeters shall conform with the specifications for regular antenna ammeters.

(f) Meters with arbitrary scale divisions may be used provided that calibration charts or curves are provided at the transmitter control point showing the relationship between the arbitrary scales and the reading of the main meters.

(g) If a malfunction affects the remote reading indicators of the antenna or common point ammeter, the operating power may be determined by a

method using alternative procedures as described in §73.51.

[41 FR 36817, Sept. 1, 1976, as amended at 48 FR 38477, Aug. 24, 1983; 49 FR 49850, Dec. 24, 1984; 50 FR 32416, Aug. 12, 1985; 60 FR 55480, Nov. 1, 1995]

### §73.58 Indicating instruments.

(a) Each AM broadcast station must be equipped with indicating instruments which conform with the specifications described in §73.1215 for determining power by the direct and indirect methods, and with such other instruments as are necessary for the proper adjustment, operation, and maintenance of the transmitting system. However, auxiliary transmitters with a nominal power rating of 100 watts or less are not required to be equipped with instruments to determine power by the indirect method provided that the licensee can determine the antenna input power at all times.

(b) A thermocouple type ammeter or other device capable of providing an indication of radio frequency current, meeting the requirements of §73.1215, shall be installed at the base of each antenna element. A suitable jack and plug arrangement may be used to permit removal of the meter from the antenna circuit thereby protecting it from damage by lighting.

(c) Since it is usually impractical to measure the actual antenna current of a shunt excited antenna system, the current measured at the input of the excitation circuit feed line is accepted as the antenna current.

(d) The function of each instrument shall be clearly and permanently shown on the instrument itself or on the panel immediately adjacent thereto.

(e) In the event that any one of these indicating instruments becomes defective when no substitute which conforms with the required specifications is available, the station may be operated without the defective instrument pending its repair or replacement for a period not in excess of 60 days without further authority of the Commission: *Provided,* That:

(1) If the defective instrument is an antenna base current ammeter of a directional antenna system, the indications may be obtained from the antenna monitor pending the return to service of the regular meter, provided other parameters are maintained at their normal values.

(2) If the defective instrument is the antenna current meter of a non-directional station which does not employ a remote antenna ammeter, or if the defective instrument is the common point meter of a station which employs a directional antenna and does not employ a remote common point meter, the operating power shall be determined by a method described in §73.51(a)(1) or (d) during the entire time the station is operated without the antenna current meter or common point meter. However, if a remote meter is employed and the antenna current ammeter or common point meter becomes defective, the remote meter can be used to determine operating power pending the return to service of the regular meter.

(f) If conditions beyond the control of the licensee prevent the restoration of the meter to service within the above allowed period, information requested in accordance with §73.3549 may be filed by letter with the FCC in Washington, DC, Attention: Audio Services Division, Mass Media Bureau, to request additional time as may be required to complete repairs of the defective instrument.

[41 FR 36817, Sept. 1, 1976, as amended at 48 FR 38477, Aug. 24, 1983; 49 FR 49850, Dec. 24, 1984; 50 FR 32416, Aug. 12, 1985; 51 FR 2707, Jan. 21, 1986; 53 FR 2498, Jan. 28, 1988; 63 FR 33876, June 22, 1998]

### §73.61 AM directional antenna field strength measurements.

(a) Each AM station using a directional antenna must make field strength measurements at the monitoring point locations specified in the instrument of authorization, as often as necessary to ensure that the field at those points does not exceed the values specified in the station authorization. Additionally, stations not having an approved sampling system must make the measurements once each calendar quarter at intervals not exceeding 120 days. The provision of this paragraph supersedes any schedule specified on a station license issued prior to January

1, 1986. The results of the measurements are to be entered into the station log pursuant to the provisions of § 73.1820.

(b) Partial proof of performance measurements using the procedures described in § 73.154 must be made whenever the licensee has reason to believe that the radiated field may be exceeding the limits for which the station was most recently authorized to operate.

(c) A station may be directed to make a partial proof of performance by the FCC whenever there is an indication that the antenna is not operating as authorized.

[50 FR 47054, Nov. 14, 1985]

### § 73.62 Directional antenna system tolerances.

(a) Each AM station operating a directional antenna must maintain the indicated relative amplitudes of the antenna base currents and antenna monitor currents within 5% of the values specified therein. Directional antenna relativephase currents must be maintained to within ±3° of the values specified on the instrument of authorization, unless other tolerances are specified therein.

(b) Whenever the operating parameters of a directional antenna cannot be maintained within the tolerances specified in paragraph (a) of this section, the following procedures will apply:

(1) The licensee shall measure and log every monitoring point at least once for each mode of directional operation. Subsequent variations in operating parameters will require the remeasuring and logging of every monitoring point to assure that the authorized monitoring point limits are not being exceeded.

(2) Provided each monitoring point is within its specified limit, operation may continue for a period up to 30 days before a request for Special Temporary Authority (STA) must be filed, pursuant to paragraph (b)(4) of this section, to operate with parameters at variance from the provisions of paragraph (a) of this section.

(3) If any monitoring point exceeds its specified limit, the licensee must either terminate operation within 3 hours or reduce power in accordance with the applicable provisions of § 73.1350(d), in order to eliminate any possibility of interference or excessive radiation in any direction.

(4) If operation pursuant to paragraph (b)(3) of this section is necessary, or before the 30 day period specified in paragraph (b)(2) of this section expires, the licensee must request a Special Temporary Authority (STA) in accordance with § 73.1635 to continue operation with parameters at variance and/or with reduced power along with a statement certifying that all monitoring points will be continuously maintained within their specified limits.

(5) The licensee will be permitted 24 hours to accomplish the actions specified in paragraph (b)(1) of this section; *provided that,* the date and time of the failure to maintain proper operating parameters has been recorded in the station log.

(c) In any other situation in which it might reasonably be anticipated that the operating parameters might vary out of tolerance (such as planned array repairs or adjustment and proofing procedures), the licensee shall, *before such activity is undertaken,* obtain an STA in accordance with § 73.1635 in order to operate with parameters at variance and/or with reduced power as required to maintain all monitoring points within their specified limits.

[50 FR 30946, July 31, 1985, as amended at 60 FR 55480, Nov. 1, 1995]

### § 73.68 Sampling systems for antenna monitors.

(a) Each AM station permittee authorized to construct a new directional antenna system, must install the sampling system in accordance with the following specifications:

(1) Devices used to extract or sample the current and the transmission line connecting the sampling elements to the antenna monitor must provide accurate and stable signals to the monitor (e.g., rigidly mounted and non-rotatable loops and all system components protected from physical and environmental disturbances).

(2) Sampling lines for critical directional antennas (see § 73.14) must be of uniform length. Sampling lines for non-critical directional antennas may be of different lengths provided the

phase difference of signals at the monitor are less than 0.5° between the shortest and longest cable lengths due to temperature variations to which the system is exposed.

(3) Other configurations of sampling systems may be used upon demonstration of stable operation to the FCC.

(b) A station having an antenna sampling system constructed according to the specifications given in paragraph (a) of this section may obtain approval of that system by submitting an informal letter request to the FCC in Washington, DC, Attention: Audio Services Division, Mass Media Bureau. The request for approval, signed by the licensee or authorized representative, must contain sufficient information to show that the sampling system is in compliance with all requirements of paragraph (a) of this section.

NOTE TO PARAGRAPH (B): A public notice dated December 9, 1985 giving additional information on approval of antenna sampling systems is available through the Internet at http://www.fcc.gov/mmb/asd/decdoc/letter/1985–12–09—sample.html.

(c) In the event that the antenna monitor sampling system is temporarily out of service for repair or replacement, the station may be operated, pending completion of repairs or replacement, for a period not exceeding 120 days without further authority from the FCC if all other operating parameters and the field monitoring point values are within the limits specified on the station authorization.

(d) If the antenna sampling system is modified or components of the sampling system are replaced, the following procedure shall be followed:

(1) Special Temporary Authority (*see* §73.1635) shall be requested and obtained from the Commission's Audio Services Division, Mass Media Bureau in Washington to operate with parameters at variance with licensed values pending issuance of a modified license specifying parameters subsequent to modification or replacement of components.

(2) Immediately prior to modification or replacement of components of the sampling system not on the towers, and after a verification that all monitoring point values, base current ratios and operating parameters are within the limits or tolerances specified in the instrument of authorization or the pertinent rules, the following indications must be read for each radiation pattern: Final plate current and plate voltage, common point current, base currents and their ratios, antenna monitor phase and current indications, and the field strength at each monitoring point. Subsequent to these modifications or changes the above procedure must be repeated.

(3) If that portion of the sampling system above the base of the towers is modified or components replaced, a partial proof of performance shall be executed in accordance with §73.154 subsequent to these changes. The partial proof of performance shall be accompanied by common point impedance measurements made in accordance with §73.54.

(4) Request for modification of license shall be submitted to the FCC in Washington, DC, within 30 days of the date of sampling system modification or replacement. Such request shall specify the transmitter plate voltage and plate current, common point current, base currents and their ratios, antenna monitor phase and current indications, and all other data obtained pursuant to this paragraph.

(e) If an existing sampling system is found to be patently of marginal construction, or where the performance of a directional antenna is found to be unsatisfactory, and this deficiency reasonably may be attributed, in whole or in part, to inadequacies in the antenna monitoring system, the FCC may require the reconstruction of the sampling system in accordance with requirements specified above.

[41 FR 7405, Feb. 18, 1976, as amended at 42 FR 24056, May 12, 1977; 44 FR 58731, Oct. 11, 1979; 46 FR 35462, July 8, 1981; 48 FR 38478, Aug. 24, 1983; 48 FR 44805, Sept. 30, 1983; 49 FR 32358, Aug. 14, 1984; 50 FR 47054, Nov. 14, 1985; 51 FR 9965, Mar. 24, 1986; 51 FR 40435, Nov. 7, 1986; 56 FR 64859, Dec. 12, 1991; 63 FR 33876, June 22, 1998]

### §73.69 Antenna monitors.

(a) Each station using a directional antenna must have in operation at the transmitter site an FCC authorized antenna monitor. However, if the station authorization sets specific tolerances

within which the phase and amplitude relationships must be maintained, or requires the use of a monitor of specified repeatability, resolution or accuracy, the antenna monitor used will be authorized on an individual basis.

(1) Normally, the antenna monitor is to be installed immediately adjacent to the transmitter and antenna phasing equipment. However, the monitor may be located elsewhere provided that its environment is maintained at all times within those limits under which the monitor was type-approved.

(2) The antenna monitor installed at a station operating a directional antenna by remote control or when the monitor is installed in the antenna field at a distance from the transmitter, must be designed and authorized for such use in accordance with the provisions of § 73.53(b)(9).

(b) In the event that the antenna monitor sampling system is temporarily out of service for repair or replacement, the station may be operated, pending completion of repairs or replacement, for a period not exceeding 120 days without further authority from the FCC if all other operating parameters, and the field monitoring point values are within the limits specified on the station authorization.

(c) If conditions beyond the control of the licensee prevent the restoration of the monitor to service within the allowed period, an informal letter request in accordance with § 73.3549 of the Commission's rules must be filed with the FCC, Attention: Audio Services Division, Mass Media Bureau in Washington, DC for such additional time as may be required to complete repairs of the defective instrument.

(d) If an authorized antenna monitor is replaced by another antenna monitor, the following procedure shall be followed:

(1) Temporary authority shall be requested and obtained from the Commission in Washington to operate with parameters at variance with licensed values, pending issuance of a modified license specifying new parameters.

(2) Immediately prior to the replacement of the antenna monitor, after a verification that all monitoring point values and base current ratios are within the limits or tolerances specified in the instrument of authorization or the pertinent rules, the following indications must be read for each radiation pattern: Final plate current and plate voltage, common point current, base currents, antenna monitor phase and current indications, and the field strength at each monitoring point.

(3) With the new monitor substituted for the old, all indications specified in paragraph (d)(2) of this section, again must be read. If no change has occurred in the indication for any parameter other than the indications of the antenna monitor, the new antenna monitor indications must be deemed to be those reflecting correct array adjustments.

(4) If it cannot be established by the observations required in paragraph (d)(2) of this section that base current ratios and monitoring point values are within the tolerances or limits prescribed by the rules and the instrument of authorization, or if the substitution of the new antenna monitor for the old results in changes in these parameters, a partial proof of performance shall be executed and analyzed in accordance with § 73.154.

(5) An informal letter request for modification of license shall be submitted to the FCC, Attention: Audio Services Division, Mass Media Bureau in Washington, DC within 30 days of the date of monitor replacement. Such request shall specify the make, type, and serial number of the replacement monitor, phase and sample current indications, and other data obtained pursuant to paragraph (d) of this section.

(e) The antenna monitor must be calibrated according to the manufacturer's instructions as often as necessary to ensure its proper operation.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, as amended, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply secs. 301, 303, 307, 48 Stat. 1081, 1082, as amended, 1083, as amended, 47 U.S.C. 301, 303, 307)

[38 FR 1918, Jan. 19, 1973, as amended at 40 FR 15884, Apr. 8, 1975; 40 FR 25459, June 16, 1975; 40 FR 27939, July 2, 1975; 41 FR 22942, June 8, 1976; 41 FR 32892, Aug. 6, 1976; 43 FR 4022, Jan. 31, 1978; 45 FR 26062, Apr. 17, 1980; 48 FR 38478, Aug. 24, 1983; 49 FR 3999, Feb. 1, 1984; 50 FR 47054, Nov. 14, 1985; 51 FR 9965, Mar. 24, 1986; 56 FR 64859, Dec. 12, 1991; 60 FR 55480, Nov. 1, 1995; 63 FR 33876, June 22, 1998]

### § 73.72 Operating during the experimental period.

(a) An AM station may operate during the experimental period (the time between midnight and sunrise, local time) on its assigned frequency and with its authorized power for the routine testing and maintenance of its transmitting system, and for conducting experimentation under an experimental authorization, provided no interference is caused to other stations maintaining a regular operating schedule within such period.

(b) No station licensed for ''daytime'' or ''specified hours'' of operation may broadcast any regular or scheduled program during this period.

(c) The licensee of an AM station shall operate or refrain from operating its station during the experimental period as directed by the FCC to facilitate frequency measurements or for the determination of interference.

[43 FR 32780, July 28, 1978, as amended at 56 FR 64859, Dec. 12, 1991]

### § 73.88 Blanketing interference.

The licensee of each broadcast station is required to satisfy all reasonable complaints of blanketing interference within the 1 V/m contour.

NOTE: For more detailed instructions concerning operational responsibilities of licensees and permittees under this section, see § 73.318 (b), (c) and (d).

[28 FR 13574, Dec. 14, 1963, as amended at 56 FR 64859, Dec. 12, 1991]

### § 73.99 Presunrise service authorization (PSRA) and postsunset service authorization (PSSA).

(a) To provide maximum uniformity in early morning operation compatible with interference considerations, and to provide for additional service during early evening hours for Class D stations, provisions are made for presunrise service and postsunset service. The permissible power for presunrise or postsunset service authorizations shall not exceed 500 watts, or the authorized daytime or critical hours power (whichever is less). Calculation of the permissible power shall consider only co-channel stations for interference protection purposes.

(b) Presunrise service authorizations (PSRA) permit:

(1) Class D stations operating on Mexican, Bahamian, and Canadian priority Class A clear channels to commence PSRA operation at 6 a.m. local time and to continue such operation until the sunrise times specified in their basic instruments of authorization.

(2) Class D stations situated outside 0.5 mV/m-50% skywave contours of co-channel U.S. Class A stations to commence PSRA operation at 6 a.m. local time and to continue such operation until sunrise times specified in their basic instruments of authorization.

(3) Class D stations located within co-channel 0.5 mV/m-50% skywave contours of U.S. Class A stations, to commence PSRA operation either at 6 a.m. local time, or at sunrise at the nearest Class A station located east of the Class D station (whichever is later), and to continue such operation until the sunrise times specified in their basic instruments of authorization.

(4) Class B and Class D stations on regional channels to commence PSRA operation at 6 a.m. local time and to continue such operation until local sunrise times specified in their basic instruments of authorization.

(c) Extended Daylight Saving Time Pre-Sunrise Authorizations:

(1) Between the first Sunday in April and the end of the month of April, Class D stations will be permitted to conduct pre-sunrise operation beginning at 6 a.m. local time with a maximum power of 500 watts (not to exceed the station's regular daytime or critical hours power), reduced as necessary to comply with the following requirements:

(i) Full protection is to be provided as specified in applicable international agreements.

(ii) Protection is to be provided to the 0.5 mV/m groundwave signals of co-channel U.S. Class A stations; protection to the 0.5 mV/m-50% skywave contours of these stations is not required.

(iii) In determining the protection to be provided, the effect of each interfering signal will be evaluated separately. The presence of interference from other stations will not reduce or eliminate the required protection.

(iv) Notwithstanding the requirements of paragraph (c)(1) (ii) and (iii) of this section, the stations will be permitted to operate with a minimum power of 10 watts unless a lower power is required by international agreement.

(2) The Commission will issue appropriate authorizations to Class D stations not previously eligible to operate during this period. Class D stations authorized to operate during this presunrise period may continue to operate under their current authorization.

(d) Postsunset service authorizations (PSSA) permit:

(1) Class D stations located on Mexican, Bahamian, and Canadian priority Class A clear channels to commence PSSA operation at sunset times specified in their basic instruments of authorization and to continue for two hours after such specified times.

(2) Class D stations situated outside 0.5 mV/m-50% skywave contours of co-channel U.S. Class A stations to commence PSSA operations at sunset times specified in their basic instruments of authorization and to continue for two hours after such specified times.

(3) Class D stations located within co-channel 0.5 mV/m-50% skywave contours of U.S. Class A stations to commence PSSA operation at sunset times specified in their basic instruments of authorization and to continue such operation until two hours past such specified times, or until sunset at the nearest Class A station located west of the Class D station, whichever is earlier. Class D stations located west of the Class A station do not qualify for PSSA operation.

(4) Class D stations on regional channels to commence PSSA operation at sunset times specified on their basic instruments of authorization and to continue such operation until two hours past such specified times.

(e) Procedural Matters. (1) Applications for PSRA and PSSA operation are not required. Instead, the FCC will calculate the periods of such operation and the power to be used pursuant to the provisions of this section and the protection requirements contained in applicable international agreements. Licensees will be notified of permissible power and times of operation. Presunrise and Postsunset service authority permits operation on a secondary basis and does not confer license rights. No request for such authority need be filed. However, stations intending to operate PSRA or PSSA shall submit by letter, signed as specified in § 73.3513, the following information:

(i) Licensee name, station call letters and station location,

(ii) Indication as to whether PSRA operation, PSSA operation, or both, is intended by the station,

(iii) A description of the method whereby any necessary power reduction will be achieved.

(2) Upon submission of the required information, such operation may begin without further authority.

(f) Technical criteria. Calculations to determine whether there is objectionable interference will be determined in accordance with the AM Broadcast Technical Standards, §§ 73.182 through 73.190, and applicable international agreements. Calculations will be performed using daytime antenna systems, or critical hours antenna systems when specified on the license. In performing calculations to determine assigned power and times for commencement of PSRA and PSSA operation, the following standards and criteria will be used:

(1) Class D stations operating in accordance with paragraphs (b)(1), (b)(2), (d)(1), and (d)(2) of this section are required to protect the nighttime 0.5 mV/m-50% skywave contours of co-channel Class A stations. Where a 0.5 mV/m-50% skywave signal from the Class A station is not produced, the 0.5 mV/m groundwave contour shall be protected.

(2) Class D stations are required to fully protect foreign Class B and Class C stations when operating PSRA and PSSA; Class D stations operating PSSA are required to fully protect U.S. Class B stations. For purposes of determining protection, the nighttime RSS limit will be used in the determination of maximum permissible power.

(3) Class D stations operating in accordance with paragraphs (d)(2) and (d)(3) of this section are required to restrict maximum 10% skywave radiation at any point on the daytime 0.1 mV/m groundwave contour of a co-

channel Class A station to 25 μV/m. The location of the 0.1 mV/m contour of the Class A station will be determined by use of Figure M3, *Estimated Ground Conductivity in the United States.* When the 0.1 mV/m contour extends beyond the national boundary, the international boundary shall be considered the 0.1 mV/m contour.

(4) Class B and Class D stations on regional channels operating PSRA and PSSA (Class D only) are required to provide full protection to co-channel foreign Class B and Class C stations.

(5) Class D stations on regional channels operating PSSA beyond 6 p.m. local time are required to fully protect U.S. Class B stations.

(6) The protection that Class D stations on regional channels are required to provide when operating PSSA until 6 p.m. local time is as follows.

(i) For the first half-hour of PSSA operation, protection will be calculated at sunset plus 30 minutes at the site of the Class D station;

(ii) For the second half-hour of PSSA operation, protection will be calculated at sunset plus one hour at the site of the Class D station;

(iii) For the second hour of PSSA operation, protection will be calculated at sunset plus two hours at the site of the Class D station;

(iv) Minimum powers during the period until 6 p.m. local time shall be permitted as follows:

| Calculated power | Adjusted minimum power |
|---|---|
| From 1 to 45 watts | 50 watts. |
| Above 45 to 70 watts | 75 watts. |
| Above 70 to 100 watts | 100 watts. |

(7) For protection purposes, the nighttime 25% RSS limit will be used in the determination of maximum permissible power.

(g) Calculations made under paragraph (d) of this section may not take outstanding PSRA or PSSA operations into account, nor will the grant of a PSRA or PSSA confer any degree of interference protection on the holder thereof.

(h) Operation under a PSRA or PSSA is not mandatory, and will not be included in determining compliance with the requirements of §73.1740. To the extent actually undertaken, however, presunrise operation will be considered by the FCC in determining overall compliance with past programming representations and station policy concerning commercial matter.

(i) The PSRA or PSSA is secondary to the basic instrument of authorization with which it is to be associated. The PSRA or PSSA may be suspended, modified, or withdrawn by the FCC without prior notice or right to hearing, if necessary to resolve interference conflicts, to implement agreements with foreign governments, or in other circumstances warranting such action. Moreover, the PSRA or PSSA does not extend beyond the term of the basic authorization.

(j) The Commission will periodically recalculate maximum permissible power and times for commencing PSRA and PSSA for each Class D station operating in accordance with paragraph (c) of this section. The Commission will calculate the maximum power at which each individual station may conduct presunrise operations during extended daylight saving time and shall issue conforming authorizations. These original notifications and subsequent notifications should be associated with the station's authorization. Upon notification of new power and time of commencing operation, affected stations shall make necessary adjustments within 30 days.

(k) A PSRA and PSSA does not require compliance with §§73.45, 73.182 and 73.1560 where the operation might otherwise be considered as technically substandard. Further, the requirements of paragraphs (a)(5), (b)(2), (c)(2), and (d)(2) of §73.1215 concerning the scale ranges of transmission system indicating instruments are waived for PSRA and PSSA operation except for the radio frequency ammeters used in determining antenna input power.

(l) A station having an antenna monitor incapable of functioning at the authorized PSRA and PSSA power when using a directional antenna shall take the monitor reading using an unmodulated carrier at the authorized daytime power immediately prior to commencing PSRA or PSSA operations. Special conditions as the FCC may deem appropriate may be included for PSRA or PSSA to insure operation of the transmitter and associated

equipment in accordance with all phases of good engineering practice.

[56 FR 64860, Dec. 12, 1991; 57 FR 43290, Sept. 18, 1992, as amended at 58 FR 27950, May 12, 1993]

### § 73.127 Use of multiplex transmission.

The licensee of an AM broadcast station may use its AM carrier to transmit signals not audible on ordinary consumer receivers, for both broadcast and non-broadcast purposes subject to the following requirements:

(a) Such use does not disrupt or degrade the station's own programs or the programs of other broadcast stations.

(b) AM carrier services that are common carrier in nature are subject to common carrier regulation. Licensees operating such services are required to apply to the FCC for the appropriate authorization and to comply with all policies and rules applicable to the service. Responsibility for making the initial determinations of whether a particular activity is common carriage rests with the AM station licensee. Initial determinations by licensees are subject to FCC examination and may be reviewed at the FCC's discretion. AM carrier services that are private carrier in nature must notify the Licensing Division of the Private Radio Bureau at Gettysburg, Pennsylvania 17325, by letter, prior to initiating service certifying compliance with 47 CFR parts 90 and 94.

(c) AM carrier services are of a secondary nature under the authority of the AM station authorization, and the authority to provide such communications services may not be retained or transferred in any manner separate from the station's authorization. The grant or renewal of an AM station permit or license is not furthered or promoted by proposed or past service. The permittee or licensee must establish that the broadcast operation is in the public interest wholly apart from the subsidiary communications services provided.

(d) The station identification, delayed recording, and sponsor identification announcements required by §§ 73.1201, 73.1208, and 73.1212 are not applicable to leased communications services transmitted via services that are not of a general broadcast program nature.

(e) The licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material that it deems inappropriate or undesirable.

(f) Installation of the multiplex transmitting equipment must conform with the requirements of § 73.1690(e).

[47 FR 25345, June 11, 1982, as amended at 49 FR 34015, Aug. 28, 1984; 51 FR 41629, Nov. 18, 1986; 51 FR 44478, Dec. 10, 1986]

### § 73.128 AM stereophonic broadcasting.

(a) An Am broadcast station may, without specific authority from the FCC, transmit stereophonic programs upon installation of type accepted stereophonic transmitting equipment and the necessary measuring equipment to determine that the stereophonic transmissions conform to the modulation characteristics specified in paragraphs (b) and (c) of this section. Stations transmitting stereophonic programs prior to March 21, 1994 may continue to do so until March 21, 1995 as long as they continue to comply with the rules in effect prior to March 21, 1994.

(b) The following limitations on the transmitted wave must be met to insure compliance with the occupied bandwidth limitations, compatibility with AM receivers using envelope detectors, and any applicable international agreements to which the FCC is a party:

(1) The transmitted wave must meet the occupied bandwidth specifications of § 73.44 under all possible conditions of program modulation. Compliance with requirement shall be demonstrated either by the following specific modulation tests or other documented test procedures that are to be fully described in the application for type acceptance and the transmitting equipment instruction manual. (See § 2.983(d)(8) and (j)).

(i) Main channel (L+R) under all conditions of amplitude modulations for the stereophonic system but not exceeding amplitude modulation on negative peaks of 100%.

(ii) Stereophonic (L − R) modulated with audio tones of the same amplitude at the transmitter input terminals as in paragraph (b)(i) of this section but with the phase of either the L or R channel reversed.

(iii) Left and Right Channel only, under all conditions of modulation for the stereophonic system in use but not exceeding amplitude modulation on negative peaks of 100%.

(c) Effective on December 20, 1994, stereophonic transmissions shall conform to the following additional modulation characteristics:

(1) The audio response of the main (L+R) channel shall conform to the requirements of the ANSI/EIA–549–1988, NRSC–1 AM Preemphasis/Deemphasis and Broadcast Transmission Bandwidth Specifications (NRSC–1).

(2) The left and right channel audio signals shall conform to frequency response limitations dictated by ANSI/EIA–549–1988.

(3) The stereophonic difference (L − R) information shall be transmitted by varying the phase of the carrier in accordance with the following relationship:

$$\phi = \tan^{-1}\left(\frac{m(L(t) - R(t))}{1 + m(L(t) + R(t))}\right)$$

where:

L(t)=audio signal left channel,
R(t)=audio signal right channel,
m=modulation factor, and
$m_{peak}(L(t)+R(t))=1$ for 100% amplitude modulation,
$m_{peak}(L(t)-R(t))=1$ for 100% phase modulation.

(4) The carrier phase shall advance in a positive direction when a left channel signal causes the transmitter envelope to be modulated in a positive direction. The carrier phase shall likewise retard (negative phase change) when a right channel signal causes the transmitter envelope to be modulated in a positive direction. The phase modulation shall be symmetrical for the condition of difference (L − R) channel information sent without the presence of envelope modulation.

(5) Maximum angular modulation, which occurs on negative peaks of the left or right channel with no signal present on the opposite channel (L(t)=−0.75, R(t)=0, or R(t)=−0.75, L(t)=0) shall not exceed 1.25 radians.

(6) A peak phase modulation of +/−0.785 radians under the condition of difference (L − R) channel modulation and the absence of envelope (L+R) modulation and pilot signal shall represent 100% modulation of the difference channel.

(7) The composite signal shall contain a pilot tone for indication of the presence of stereophonic information. The pilot tone shall consist of a 25 Hz tone, with 3% or less total harmonic distortion and a frequency tolerance of +/− 0.1 $H_2$, which modulates the carrier phase +/− 0.05 radians peak, corresponding to 5% L − R modulation when no other modulation is present. The injection level shall be 5%, with a tolerance of +1, −1%.

(8) The composite signal shall be described by the following expression:

$$E_c = A_c\left[1 + m\sum_{n=1}^{\infty} C_{sn}\cos\left(\omega_{sn}\, t + \phi_{sn}\right)\right]\cdot$$

$$\cos\left[\omega_c t + \tan^{-1}\frac{m\sum_{n=1}^{\infty} C_{dn}\cos\left(\omega_{dn} t + \phi_{dn}\right) + .05\sin 50\pi t}{1 + m\sum_{n=1}^{\infty} C_{sn}\cos\left(\omega_{sn} t + \phi_{sn}\right)}\right]$$

where:

A=the unmodulated carrier voltage
m=the modulation index
$C_{sn}$=the magnitude of the nth term of the sum signal
$C_{dn}$=the magnitude of the nth term of the difference signal
$\omega_{sn}$=the nth order angular velocity of the sum signal
$\omega_{dn}$=the nth order angular velocity of the difference signal
$\omega_c$=the angular velocity of the carrier

$$\phi_{sn} = \text{the angle of the nth order term} = \tan^{-1}\left[\frac{B_{sn}}{A_{sn}}\right]$$

$$\phi_{dn} = \text{the angle of the nth order term} = \tan^{-1}\left[\frac{B_{dn}}{A_{dn}}\right]$$

$A_{sn}$ and $B_{sn}$ are the $n^{th}$ **sine and cosine coefficients of** $C_{sn}$
$A_{dn}$ and $B_{dn}$ are the $n^{th}$ **sine and cosine coefficients of** $C_{dn}$

[58 FR 66301, Dec. 20, 1993]

### § 73.132 Territorial exclusivity.

No licensee of an AM broadcast station shall have any arrangement with a network organization which prevents or hinders another station serving substantially the same area from broadcasting the network's programs not taken by the former station, or which prevents or hinders another station serving a substantially different area from broadcasting any program of the network organization: *Provided, however,* That this section does not prohibit arrangements under which the station is granted first call within its primary service area upon the network's programs. The term ''network organization'' means any organization originating program material, with or without commercial messages, and furnishing the same to stations interconnected so as to permit simultaneous broadcast by all or some of them. However, arrangements involving only stations under common ownership, or only the rebroadcast by one station or programming from another with no compensation other than a lump-sum payment by the station rebroadcasting,

are not considered arrangements with a network organization. The term ''arrangement'' means any contract, arrangement or understanding, expressed or implied.

[42 FR 16422, Mar. 28, 1977]

### § 73.150 Directional antenna systems.

(a) For each station employing a directional antenna, all determinations of service provided and interference caused shall be based on the inverse distance fields of the standard radiation pattern for that station. (As applied to nighttime operation the term ''standard radiation pattern'' shall include the radiation pattern in the horizontal plane, and radiation patterns at angles above this plane.)

(1) Parties submitting directional antenna patterns pursuant to this section and § 73.152 (Modified standard pattern) must submit patterns which are tabulated and plotted in units of millivolts per meter at 1 kilometer.

NOTE: Applications for new stations and for changes (both minor and major) in existing stations must use a standard pattern.

(b) The following data shall be submitted with an application for authority to install a directional antenna:

(1) The standard radiation pattern for the proposed antenna in the horizontal plane, and where pertinent, tabulated values for the azimuthal radiation patterns for angles of elevation up to and including 60 degrees, with a separate section for each increment of 5 degrees.

(i) The standard radiation pattern shall be based on the theoretical radiation pattern. The theoretical radiation pattern shall be calculated in accordance with the following mathematical expression:

$$E(\phi,\theta)_{th} = \left| k \sum_{i=1}^{n} F_i f_i(\theta) / \underline{S_i \cos\theta \cos(\phi_i - \phi) + \psi_i} \right| \qquad \text{(Eq. 1)}$$

where:

$E(\phi,\theta)_{th}$ Represents the theoretical inverse distance fields at one kilometer for the given azimuth and elevation.

$k$ Represents the multiplying constant which determines the basic pattern size. It shall be chosen so that the effective field (RMS) of the theoretical pattern in the horizontal plane shall be no greater than the value computed on the assumption that nominal station power (see § 73.14) is delivered to the directional array, and that a lumped loss resistance of one ohm exists at the current loop of each element of the array, or at the base of each element of electrical height lower than 0.25 wavelength, and no less than the valuerequired by § 73.189(b)(2) of this part for a station of the class and nominal power for which the pattern is designed.

$n$ Represents the number of elements (towers) in the directional array.

$i$ Represents the $i^{th}$ *element in the array.*

$F_i$ Represents the field ratio of the $i^{th}$ *element in the array.*

$\theta$ Represents the vertical elevation angle measured fromthe horizontal plane.

$f_i(\theta)$ represents the vertical plane radiation characteristic of the $i^{th}$ antenna. This value depends on the tower height, as well as whether the tower is top-loaded or sectionalized. The various formulas for computing $f_i(\theta)$ are given in § 73.160.

$S_i$ Represents the electrical spacing of the $i^{th}$ *tower from the reference point.*

$\phi_i$ Represents the orientation (with respect to true north) of the $i^{th}$ *tower.*

$\phi$ Represents the azimuth (with respect to true north).

$\psi_i$ Represents the electrical phase angle of the current in the $i^{th}$ *tower.*

The standard radiation pattern shall be constructed in accordance with the following mathematical expression:

$$E(\phi,\theta)_{std} = 1.05\sqrt{\left[E(\phi,\theta)_{th}\right]^2 + Q^2}$$

(Eq. 2)

where:

$E(\phi,\theta)_{std}$ *represents the inverse distance fields at one kilometer which are produced by the directional antenna in the horizontal and vertical planes.* $E(\phi,\theta)_{th}$ ρεπρεσεντσ τηε τηεορετιψαλ ινωερσε δισταν ψε φιελδσ ατ ονε κιλομετερ ασ ψομπθτεδ ιν αψψορδανψε ςιτη Εφ. 1, αβοωε.

Q is the greater of the following two quantities: $0.025g(\theta)\ E_{rss}$ or $10.0g(\theta)\ \sqrt{\mathbf{P}_{kW}}$ where:

$g(\theta)$ is the vertical plane distribution factor, $f(\theta)$, for the shortest element in the array (see Eq. 2, above; also see § 73.190, Figure 5). If the shortest element has an electrical height in excess of 0.5 wavelength, $g(\theta)$ shall be computed as follows:

$$g(\theta) = \frac{\sqrt{\left\{f(\theta)\right\}^2 + 0.0625}}{1.030776}$$

$E_{rss}$ is the root sum square of the amplitudes of the inverse fields of the elements of the array in the horizontal plane, as used in the expression for $E(\phi,\theta)_{th}$ (σεε Εφ. 1, αβοωε), ανδ ισ ψομπθτεδ ασ φολλοςσ≦

$$E_{rss} = k\sqrt{\sum_{i=1}^{n} F_i^2}$$

$P_{kW}$ is the nominal station power expressed in kilowatts, see § 73.14. If the nominal power is less than one kilowatt, $P_{kW}=1$.

(ii) Where the orthogonal addition of the factor Q to $E(\phi,\theta)_{th}$ results in a standard pattern whose minimum fields are lower than those found necessary or desirable, these fields may be increased by appropriate adjustment of the parameters of $E(\phi,\theta)_{th}$.

(2) All patterns shall be computed for integral multiples of five degrees, beginning with zero degrees representing true north, and, shall be plotted to the largest scale possible on unglazed letter-size paper (main engraving approximately 7″ × 10″) using only scale divisions and subdivisions of 1,2,2.5, or 5 times $10^{nth}$. The horizontal plane pattern shall be plotted on polar coordinate paper, with the zero degree point corresponding to true north. Patterns for elevation angles above the horizontal plane may be plotted in polar or rectangular coordinates, with the pattern for each angle of elevation on a separate page. Rectangular plots shall begin and end at true north, with all azimuths labelled in increments of not less than 20 degrees. If a rectangular plot is used, the ordinate showing the scale for radiation may be logarithmic. Such patterns for elevation angles above the horizontal plane need be submitted only upon specific request by Commission staff. Minor lobe and null detail occurring between successive patterns for specific angles of elevation need not be submitted. Values of field strength on any pattern less than ten percent of the maximum field strength plotted on that pattern shall be shown on an enlarged scale. Rectangular plots with a logarithmic ordinate need not utilize an expanded scale unless necessary to show clearly the minor lobe and null detail.

(3) The effective (RMS) field strength in the horizontal plane of $E(\phi,\theta)_{std}$, $E(\phi,\theta)_{th}$ ανδ τηε ροοτ-σθμ-σφθαρε (ΡΣΣ) ωαλθε οφ τηε ινωερσε διστανψε φιελδσ οφ τηε αρραυ ελεμεντσ ατ 1 κιλομετερ, δεριωεδ φρομ τηε εφθατιον φορ $E(\phi,\theta)_{th}$. Τηεσε ωαλθεσ σηαλλ βε ταβθλατεδ ον τηε παγε ον ςηιψη τηε ηοριζονταλ πλανε παττερν ισ πλοττεδ, ςηιψη σηαλλ βε σπεψιφιψαλλυ λαβελλεδ ασ τηε Στανδαρδ Ηοριζονταλ Πλανε Παττερν.

(4) Physical description of the array, showing:

(i) Number of elements.

(ii) Type of each element (i.e., guyed or self-supporting, uniform cross section or tapered (specifying base dimensions), grounded or insulated, etc.)

(iii) Details of top loading, or sectionalizing, if any.

(iv) Height of radiating portion of each element in feet (height above base insulator, or base, if grounded).

(v) Overall height of each element above ground.

(vi) Sketch of antenna site, indicating its dimensions, the location of the antenna elements, thereon, their spacing from each other, and their orientation with respect to each other and to true north, the number and length of the radials in the ground system about each element, the dimensions of ground screens, if any, and bonding between towers and between radial systems.

(5) Electrical description of the array, showing:

(i) Relative amplitudes of the fields of the array elements.

(ii) Relative time phasing of the fields of the array elements in degrees leading [+] or lagging [−].

(iii) Space phasing between elements in degrees.

(iv) Where waiver of the content of this section is requested or upon request of the Commission staff, all assumptions made and the basis therefor, particularly with respect to the electrical height of the elements, current distribution along elements, efficiency of each element, and ground conductivity.

(v) Where waiver of the content of this section is requested, or upon request of the Commission staff, those formulas used for computing $E(\phi,\theta)_{th}$ *and* $E(\phi,\theta)_{std}$. Ψομπλετε ταβθλατιον οφ φιναλ ψομπθτεδ δατα θσεδ ιν πλοττινγ παττερνσ, ινψλθδινγ δατα φορ τηε δετερμινατιον οφ τηε ΡΜΣ ωαλθε οφ τηε παττερν, ανδ τηε ΡΣΣ φιελδ οφ τηε αρραυ.

(6) The values used in specifying the parameters which describe the array must be specified to no greater precision than can be achieved with available monitoring equipment. Use of greater precision raises a rebuttable presumption of instability of the array. Following are acceptable values of precision; greater precision may be used only upon showing that the monitoring equipment to be installed gives accurate readings with the specified precision.

(i) Field Ratio: 3 significant figures.

(ii) Phasing: to the nearest 0.1 degree.

(iii) Orientation (with respect to a common point in the array, or with respect to another tower): to the nearest 0.1 degree.

(iv) Spacing (with respect to a common point in the array, or with respect to another tower): to the nearest 0.1 degree.

(v) Electrical Height (for all parameters listed in Section 73.160): to the nearest 0.1 degree.

(vi) Theoretical RMS (to determine pattern size): 4 significant figures.

(vii) Additional requirements relating to modified standard patterns appear in § 73.152(c)(3) and (c)(4).

(7) Any additional information required by the application form.

(c) Sample calculations for the theoretical and standard radiation follow. Assume a five kilowatt (nominal power) station with a theoretical RMS of 685 mV/m at one kilometer. Assume that it is an in-line array consisting of three towers. Assume the following parameters for the towers:

| Tower | Field ratio | Relative phasing | Relative spacing | Relative orientation |
|---|---|---|---|---|
| 1 | 1.0 | −128.5 | 0.0 | 0.0 |
| 2 | 1.89 | 0.0 | 110.0 | 285.0 |
| 3 | 1.0 | 128.5 | 220.0 | 285.0 |

Assume that tower 1 is a typical tower with an electrical height of 120 degrees. Assume that tower 2 is top-loaded in accordance with the method described in § 73.160(b)(2) where A is 120 electrical degrees and B is 20 electrical degrees. Assume that tower 3 is sectionalized in accordance with the method described in § 73.160(b)(3) where A is 120 electrical degrees, B is 20 electrical degrees, C is 220 electrical degrees, and D is 15 electrical degrees.

The multiplying constant will be 323.6.

Following is a tabulation of part of the theoretical pattern:

| Azimuth | 0 | 30 | 60 | Vertical angle |
|---|---|---|---|---|
| 0 | 15.98 | 62.49 | 68.20 | |
| 105 | 1225.30 | 819.79 | 234.54 | |
| 235 | 0.43 | 18.46 | 34.56 | |
| 247 | 82.62 | 51.52 | 26.38 | |

If we further assume that the station has a standard pattern, we find that Q, for θ=0, is 22.36.

Following is a tabulation of part of the standard pattern:

| Azimuth | 0 | 30 | 60 | Vertical angle |
|---|---|---|---|---|
| 0 | 28.86 | 68.05 | 72.06 | |
| 105 | 1286.78 | 860.97 | 246.41 | |
| 235 | 23.48 | 26.50 | 37.18 | |
| 247 | 89.87 | 57.03 | 28.87 | |

The RMS of the standard pattern in the horizontal plane is 719.63 mV/m at one kilometer.

[36 FR 919, Jan. 20, 1971, as amended at 37 FR 529, Jan. 13, 1972; 41 FR 24134, June 15, 1976; 46 FR 11991, Feb. 12, 1981; 48 FR 24384, June 1, 1983; 51 FR 2707, Jan. 21, 1986; 52 FR 36877, Oct. 1, 1987; 56 FR 64861, Dec. 12, 1991; 57 FR 43290, Sept. 18, 1992]

### § 73.151 Field strength measurements to establish performance of directional antennas.

(a) In addition to the information required by the license application form,

the following showing must be submitted to establish, for each mode of directional operation, that the effective measured field strength (RMS) at 1 kilometer (km) is not less than 85 percent of the effective measured field strength (RMS) specified for the standard radiation pattern, or less than that specified in §73.189(b) for the class of station involved, whichever is the higher value, and that the measured field strength at 1 km in any direction does not exceed the field shown in that direction on the standard radiation pattern for that mode of directional operation:

(1) A tabulation of inverse field strengths in the horizontal plane at 1 km, as determined from field strength measurements taken and analyzed in accordance with §73.186, and a statement of the effective measured field strength (RMS). Measurements shall be made in at least the following directions:

(i) Those specified in the instrument of authorization.

(ii) In major lobes. Generally at least three radials are necessary to establish a major lobe; however, additional radials may be required.

(iii) Along sufficient number of other radials to establish the effective field. In the case of a relatively simple directional antenna pattern, approximately five radials in addition to those in paragraphs (a)(1) (i) and (ii) of this section are sufficient. However, when more complicated patterns are involved, that is, patterns having several or sharp lobes or nulls, measurements shall be taken along as many radials as may be necessary, to definitely establish the pattern(s).

(2) A tabulation of:

(i) The phase difference of the current in each other element with respect to the reference element, and whether the current leads (+) or lags (−) the current in the reference element, as indicated by the station's antenna monitor.

(ii) The ratio of the amplitude of the radio frequency current in each other element to the current in the reference element, as indicated on the station's antenna monitor.

(iii) The value of the radio frequency current at the base of each element, and the ratio of the current in each other element to the base current in the reference element. If there are substantial differences between the ratios established in paragraph (a)(2)(ii) of this section and the ratios computed in this paragraphs (a)(2)(iii) and/or if there are substantial differences between the parameters established in paragraphs (a)(2) (i) and (ii) of this section and this paragraph (a)(2)(iii), and those used in the design of the standard radiation pattern, a full explanation of the reasons for these differences shall be given.

(3) The actual field strength measured at each monitoring point established in the various directions for which a limiting field was specified in the instrument of authorization together with accurate and detailed description of each monitoring point together with ordinary snapshots, clear and sharp, taken with the field strength meter in its measuring position and with the camera so located that its field of view takes in as many pertinent landmarks as possible. In addition, the directions for proceeding to each monitoring point together with a rough sketch or map upon which has been indicated the most accessible approaches to the monitoring points should be submitted.

(b) For stations authorized to operate with simple directional antenna systems (*e.g.,* two towers) in the 1605–1705 kHz band, the measurements to support pattern RMS compliance referred to in paragraphs (a)(1)(ii) and (a)(1)(iii) of this section are not required. In such cases, measured radials are required only in the direction of short-spaced allotments, or in directions specifically identified by the Commission.

[36 FR 919, Jan. 20, 1971, as amended at 42 FR 36828, July 18, 1977; 49 FR 23348, June 6, 1984; 50 FR 32416, Aug. 12, 1985; 56 FR 64862, Dec. 12, 1991; 63 FR 33876, June 22, 1998]

### §73.152 Modification of directional antenna data.

(a) If, after construction and final adjustment of a directional antenna, a measured inverse distance field in any direction exceeds the field shown on the standard radiation pattern for the pertinent mode of directional operation, an application shall be filed,

specifying a modified standard radiation pattern and/or such changes as may be required in operating parameters so that all measured effective fields will be contained within the modified standard radiation pattern.

(b) Normally, a modified standard pattern is not acceptable at the initial construction permit stage, before a proof-of-performance has been completed. However, in certain cases, where it can be shown that modification is necessary, a modified standard pattern will be acceptable at the initial construction permit stage. Following is a non-inclusive list of items to be considered in determining whether a modification is acceptable at the initial construction permit stage:

(1) When the proposed pattern is essentially the same as an existing pattern at the same antenna site. (e.g., A DA–D station proposing to become a DA–1 station.)

(2) Excessive reradiating structures, which should be shown on a plat of the antenna site and surrounding area.

(3) Other environmental factors; they should be fully described.

(4) Judgment and experience of the engineer preparing the engineering portion of the application. This must be supported with a full discussion of the pertinent factors.

(c) The following general principles shall govern the situations in paragraphs (a) and (b) in this section:

(1) Where a measured field in any direction will exceed the authorized standard pattern, the license application may specify the level at which the input power to the antenna shall be limited to maintain the measured field at a value not in excess of that shown on the standard pattern, and shall specify the common point current corresponding to this power level. This value of common point current will be specified on the license for that station.

(2) Where any excessive measured field does not result in objectionable interference to another station, a modification of construction permit application may be submitted with a modified standard pattern encompassing all measured fields. The modified standard pattern shall supersede the previously submitted standard radiation pattern for that station in the pertinent mode of directional operation. Following are the possible methods of creating a modified standard pattern:

(i) The modified pattern may be computed by making the entire pattern larger than the original pattern (i.e., have a higher RMS value) if the measured fields systematically exceed the confines of the original pattern. The larger pattern shall be computed by using a larger multiplying constant, k, in the theoretical pattern equation (Eq. 1) in § 73.150(b)(1).

(ii) Where the measured field exceeds the pattern in discrete directions, but objectionable interference does not result, the pattern may be expanded over sectors including these directions. When this ''augmentation'' is desired, it shall be achieved by application of the following equation:

$$E(\phi,\theta)_{aug} = \sqrt{\{ E(\phi,\theta)_{std} \}^2 + A\{g(\theta) \psi o \sigma (180 \Delta_A/\Sigma \}^2}$$

where:

$E(\phi,\theta)_{std}$ is the standard pattern field at some particular azimuth and elevation angle, before augmentation, computed pursuant to Eq. 2, § 73.150(b)(1)(i).

$E(\phi,\theta)_{aug.}$ is the field in the direction specified above, after augmentation.

$A = E(\phi, O)^2_{aug} - E(\phi, O)^2_{std}$ in which $\phi$ is the central azimuth of augmentation. $E(\phi, O)_{aug}$ and $E(\phi, O)_{std}$ are the fields in the horizontal plane at the central azimuth of augmentation.

NOTE: ''A'' must be positive, except during the process of converting non-standard patterns to standard patterns pursuant to the *Report and Order in Docket No. 21473,* and in making minor changes to stations with patterns developed during the conversion. However, even when ''A'' is negative, ''A'' cannot be so negative that $E(\phi,\alpha)_{aug}$ is less than $E(\phi,\theta)_{th}$ at any azimuth or vertical elevation angle.

$g(\theta)$ is defined in § 73.150(b)(1)(i).

S is the angular range, or ''span'', over which augmentation is applied. The span is centered on the central azimuth of augmentation. At the limits of the span, the augmented pattern merges into the unaugmented pattern. Spans may overlap.

$D_A$ is the absolute horizontal angle between the azimuth at which the augmented pattern value is being computed and the central azimuth of augmentation. ($D_A$ cannot exceed 1/2 S.)

In the case where there are spans which overlap, the above formula shall be applied repeatedly, once for each augmentation, in ascending order of central azimuth of augmentation, beginning with zero degrees representing true North. Note that, when spans overlap, there will be, in effect, an augmentation of an augmentation. And, if the span of an earlier augmentation overlaps the central azimuth of a later augmentation, the value of ''A'' for the later augmentation will be different than the value of ''A'' without the overlap of the earlier span.

(iii) A combination of paragraphs (c)(2) (i) and (ii), of this section, with (i) being applied before (ii) is applied.

(iv) Where the measured inverse distance field exceeds the value permitted by the standard pattern, and augmentation is allowable under the terms of this section, the requested amount of augmentation shall be centered upon the azimuth of the radial upon which the excessive radiation was measured and shall not exceed the following:

(A) The actual measured inverse distance field value, where the radial does not involve a required monitoring point.

(B) 120% of the actual measured inverse field value, where the radial has a monitoring point required by the instrument of authorization.

Whereas some pattern smoothing can be accommodated, the extent of the requested span(s) shall be minimized and in no case shall a requested augmentation span extend to a radial azimuth for which the analyzed measurement data does not show a need for augmentation.

(3) A Modified Standard Pattern shall be specifically labeled as such, and shall be plotted in accordance with the requirements of paragraph (b)(2) of §73.150. The effective (RMS) field strength in the horizontal plane of $E(\phi,\alpha)_{std,}$ $E(\phi,\alpha)_{th}$, and the root sum square (RSS) value of the inverse fields of the array elements (derived from the equation for $E(\phi,\alpha)_{th}$), shall be tabulated on the page on which the horizontal plane pattern is plotted. Where sector augmentation has been employed in designing the modified pattern, the direction of maximum augmentation (i.e., the central azimuth of augmentation) shall be indicated on the horizontal plane pattern for each augmented sector, and the limits of each sector shall also be shown. Field values within an augmented sector, computed prior to augmentation, shall be depicted by a broken line.

(4) There shall be submitted, for each modified standard pattern, complete tabulations of final computed data used in plotting the pattern. In addition, for each augmented sector, the central azimuth of augmentation, span, and radiation at the central azimuth of augmentation ($E(\phi,\alpha)_{aug}$) shall be tabulated.

(5) The parameters used in computing the modified standard pattern shall be specified with realistic precision. Following is a list of the maximum acceptable precision:

(i) Central Azimuth of Augmentation: to the nearest 0.1 degree.

(ii) Span: to the nearest 0.1 degree.

(iii) Radiation at Central Azimuth of Augmentation: 4 significant figures.

(d) Sample calculations for a modified standard pattern follow. First, assume the existing standard pattern in §73.150(c). Then, assume the following augmentation parameters:

| Augmentation number | Central azimuth | Span | Radiation at central azimuth |
|---|---|---|---|
| 1 | 110 | 40 | 1,300 |
| 2 | 240 | 50 | 52 |
| 3 | 250 | 10 | 130 |

Following is a tabulation of part of the modified standard pattern:

| Azimuth | 0 | 30 | 60 | Vertical angle |
|---|---|---|---|---|
| 0 | 28.86 | 68.05 | 72.06 | |
| 105 | 1,299.42 | 872.14 | 254.21 | |
| 235 | 39.00 | 35.74 | 38.71 | |
| 247 | 100.47 | 66.69 | 32.78 | |

[46 FR 11992, Feb. 12, 1981, as amended at 56 FR 64862, Dec. 12, 1991]

### §73.153 Field strength measurements in support of applications or evidence at hearings.

In the determination of interference, groundwave field strength measurements will take precedence over theoretical values, provided such measurements are properly taken and presented. When measurements of

groundwave signal strength are presented, they shall be sufficiently complete in accordance with § 73.186 to determine the field strength at 1 mile in the pertinent directions for that station. The antenna resistance measurements required by § 73.186 need not be taken or submitted.

[44 FR 36037, June 20, 1979, as amended at 56 FR 64862, Dec. 12, 1991]

### § 73.154 AM directional antenna partial proof of performance measurements.

(a) A partial proof of performance consists of at least 10 field strength measurements made on each of the radials established in the latest complete proof of performance of the directional antenna system.

(b) The measurements are to be made within 2 to 10 miles (3 to 16 kilometers) from the center of the antenna array. When a monitoring point as designated on the station authorization is on a particular radial, one of the radial measurements must be made at that point.

(c) The results of the measurements are to be analyzed in either of two methods. Either the arithmetic average or the logarithmic average of the ratios of the field strength at each measurement point along each radial to the corresponding field strength in the most recent complete proof of performance may be used to establish the inverse distance fields. (The logarithmic average for each radial is the antilogarithm of the mean of the logarithms of the ratios of field strength (new to old) for each measurement location along a given radial).

(d) The result of the most recent partial proof of performance measurements and analysis is to be retained in the station records available to the FCC upon request.

[50 FR 47054, Nov. 14, 1985]

### § 73.157 Antenna testing during daytime.

(a) The licensee of a station using a directional antenna during daytime or nighttime hours may, without further authority, operate during daytime hours with the licensed nighttime directional facilities or with a nondirectional antenna when conducting monitoring point field strength measurements or antenna proof of performance measurements.

(b) Operation pursuant to this section is subject to the following conditions:

(1) No harmful interference will be caused to any other station.

(2) The FCC may notify the licensee to modify or cease such operation to resolve interference complaints or when such action may appear to be in the public interest, convenience and necessity.

(3) Such operation shall be undertaken only for the purpose of taking monitoring point field strength measurements or antenna proof of performance measurements, and shall be restricted to the minimum time required to accomplish the measurements.

(4) Operating power in the nondirectional mode shall be adjusted to the same power as was utilized for the most recent nondirectional proof of performance covering the licensed facilities.

[50 FR 30947, July 31, 1985]

### § 73.158 Directional antenna monitoring points.

(a) When a licensee of a station using a directional antenna system finds that a field monitoring point, as specified on the station authorization, is no longer accessible for use or is unsuitable because of nearby construction or other disturbances to the measured field, an informal application to change the monitoring point location is to be promptly submitted to the FCC in Washington, DC. The application must include the following information:

(1) A partial proof of performance conducted on the radial containing the monitoring point to be changed.

(2) A written description of the routing to the new selected monitoring point.

(3) A map showing the location and routing to the new selected monitoring point.

(4) A photograph showing the new monitoring point in relation to nearby permanent landmarks that can be used in locating the point accurately at all times throughout the year. Do not use

seasonal or temporary features in either the written descriptions or photographs as landmarks for locating field points.

(b) When the descriptive routing to reach any of the monitoring points as shown on the station license is no longer correct due to road or building construction or other changes, the licensee must prepare and file with the FCC, in Washington, DC, a request for a corrected station license showing the new routing description. A copy of the description is to be posted with the existing station license. The notification is to include the information specified in paragraphs (a) (2) and (3) of this section.

[47 FR 28387, June 30, 1982]

### § 73.160 Vertical plane radiation characteristics, f(θ).

(a) The vertical plane radiation characteristics show the relative field being radiated at a given vertical angle, with respect to the horizontal plane. The vertical angle, represented as θ, is 0 degrees in the horizontal plane, and 90 degrees when perpendicular to the horizontal plane. The vertical plane radiation characteristic is referred to as f(θ). The generic formula for f(θ) is:

f(θ)=E(θ)/E(O)

where:

E(θ) is the radiation from the tower at angle θ.

E(O) is the radiation from the tower in the horizontal plane.

(b) Listed below are formulas for f(θ) for several common towers.

(1) For a typical tower, which is not top-loaded or sectionalized, the following formula shall be used:

$$f(\theta) = \frac{\cos(G \sin\theta) - \cos G}{(1 - \cos G)\cos\theta}$$

where:

G is the electrical height of the tower, not including the base insulator and pier. (In the case of a folded unipole tower, the entire radiating structure's electrical height is used.)

(2) For a top-loaded tower, the following formula shall be used:

$$f(\theta) = \frac{\cos B \cos(A \sin\theta) - \sin\theta \sin B \sin(A \sin\theta) - \cos(A + B)}{\cos\theta\,(\cos B - \cos(A + B))}$$

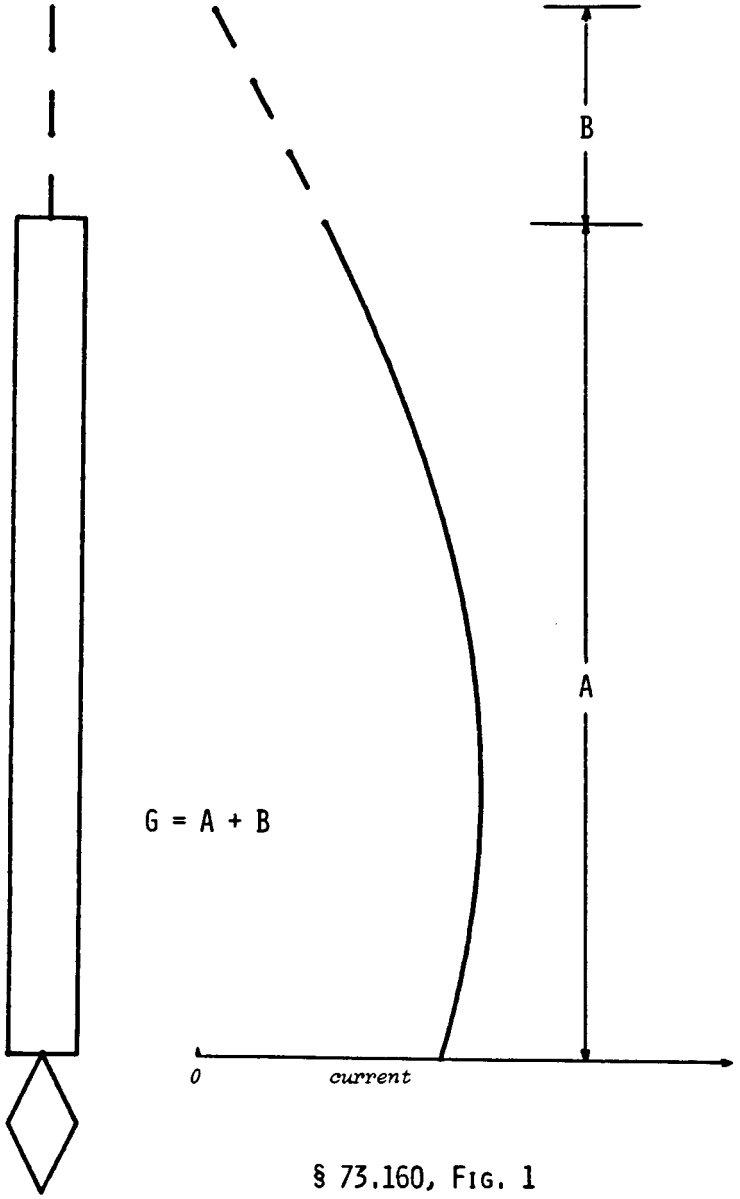
where:

A is the physical height of the tower, in electrical degrees, and

B is the difference, in electrical degrees, between the apparent electrical height (G, based on current distribution) and the actual physical height.

G is the apparent electrical height: the sum of A and B; A+B.

See Figure 1 of this section.




§ 73.160, FIG. 1

(3) For a sectionalized tower, the following formula shall be used:

$$f(\theta) = \frac{\{\sin \Delta [\cos B \cos (A \sin \theta) - \cos G] + \sin B [\cos D \cos (C \sin \theta) - \sin \theta \sin D \sin (C \sin \theta) - \cos \Delta \cos (A \sin \theta)]\}}{\cos \theta [\sin \Delta (\cos B - \cos G) + \sin B (\cos D - \cos \Delta)]}$$

where:

A is the physical height, in electrical degrees, of the lower section of the tower.

B is the difference between the apparent electrical height (based on current distribution) of the lower section of the tower and the physical height of the lower section of the tower.

C is the physical height of the entire tower, in electrical degrees.

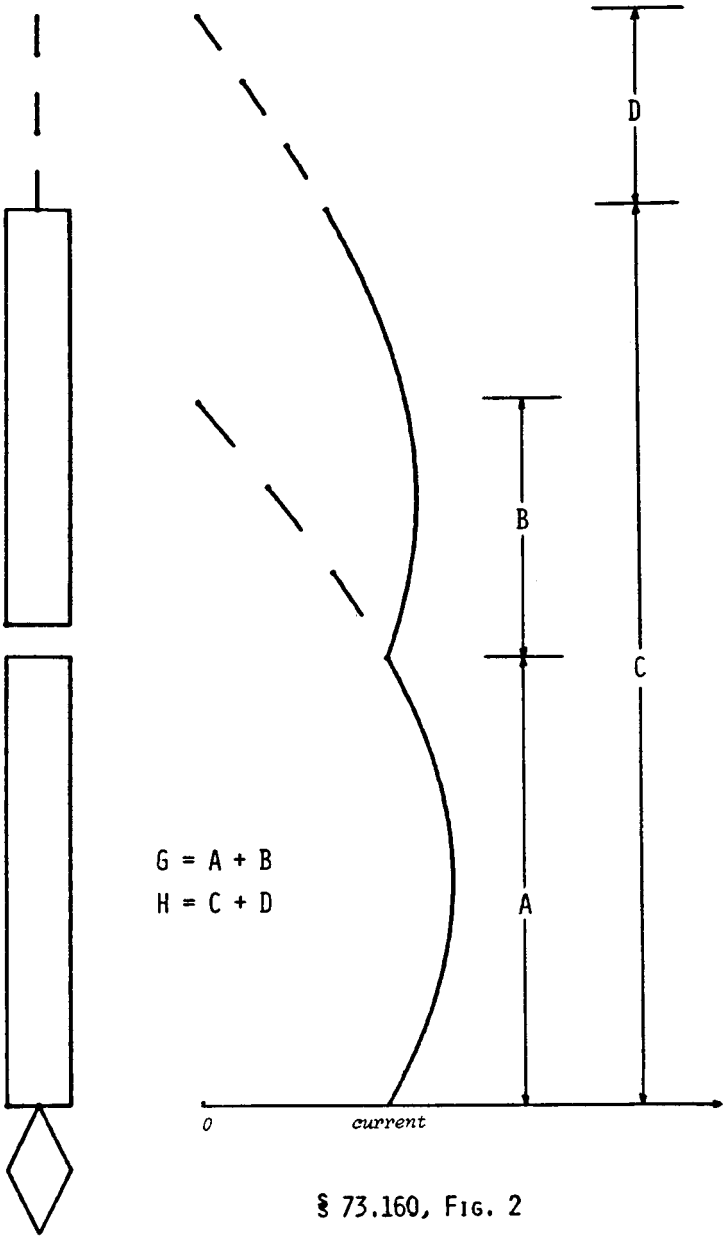
D is the difference between the apparent electrical height of the tower (based on current distribution of the upper section) and the physical height of the entire tower. D will be zero if the sectionalized tower is not top-loaded.

G is the sum of A and B; A+B.

H is the sum of C and D; C+D.

Δ is the difference between H and A; H − A.

See Figure 2 of this section.




§ 73.160, Fig. 2

(c) One of the above f(θ) formulas *must* be used in computing radiation in the vertical plane, unless the applicant submits a special formula for a particular type of antenna. If a special formula is submitted, it must be accompanied by a complete derivation and sample calculations. Submission of values for f(θ) only in a tabular or graphical format (i.e., without a formula) is not acceptable.

(d) Following are sample calculations. (The number of significant figures shown here should *not* be interpreted as a limitation on the number of significant figures used in actual calculations.)

(1) For a typical tower, as described in paragraph (b)(1) of this section, assume that G=120 electrical degrees:

| θ | f(θ) |
|---|---|
| 0 | 1.0000 |
| 30 | 0.7698 |
| 60 | 0.3458 |

(2) For a top-loaded tower, as described in paragraph (b)(2) of this section, assume A=120 electrical degrees, B=20 electrical degrees, and G=140 electrical degrees, (120+20):

| θ | f(θ) |
|---|---|
| 0 | 1.0000 |
| 30 | 0.7364 |
| 60 | 0.2960 |

(3) For a sectionalized tower, as described in paragraph (b)(3) of this section, assume A=120 electrical degrees, B=20 electrical degrees, C=220 electrical degrees, D=15 electrical degrees, G=140 electrical degrees (120+20), H=235 electrical degrees (220+15), and Δ=115 electrical degrees (235−120):

| θ | f(θ) |
|---|---|
| 0 | 1.0000 |
| 30 | 0.5930 |
| 60 | 0.1423 |

[46 FR 11993, Feb. 12, 1981]

### § 73.182 Engineering standards of allocation.

(a) Sections 73.21 to 73.37, inclusive, govern allocation of facilities in the AM broadcast band 535–1705 kHz. § 73.21 establishes three classes of channels in this band, namely, clear, regional and local. The classes and power of AM broadcast stations which will be assigned to the various channels are set forth in § 73.21. The classifications of the AM broadcast stations are as follows:

(1) Class A stations operate on clear channels with powers no less than 10kW nor greater than 50 kW. These stations are designed to render primary and secondary service over an extended area, with their primary services areas protected from objectionable interference from other stations on the same and adjacent channels. Their secondary service areas are protected from objectionable interference from co-channel stations. For purposes of protection, Class A stations may be divided into two groups, those located in any of the contiguous 48 States and those located in Alaska in accordance with § 73.25.

(i) The mainland U.S. Class A stations are those assigned to the channels allocated by § 73.25. The power of these stations shall be 50 kW. The Class A stations in this group are afforded protection as follows:

(A) Daytime. To the 0.1 mV/m groundwave contour from stations on the same channel, and to the 0.5 mV/m groundwave contour from stations on adjacent channels.

(B) Nighttime. To the 0.5 mV/m-50% skywave contour from stations on the same channels.

(ii) Class A stations in Alaska operate on the channels allocated by § 73.25 with a minimum power of 10 kW, a maximum power of 50 kW, and an antenna efficiency of 282 mV/m/kW at 1 kilometer. Stations operating on these channels in Alaska which have not been designated as Class A stations in response to licensee request will continue to be considered as Class B stations. During daytime hours a Class A station in Alaska is protected to the 100 μV/m groundwave contour from co-channel stations. During nighttime hours, a Class A station in Alaska is protected to the 100 μV/m-50 percent skywave contour from co-channel stations. The 0.5 mV/m groundwave contour is protected both daytime and nighttime from stations on adjacent channels.

NOTE: In the Report and Order in MM Docket No. 83–807, the Commission designated 15 stations operating on U.S. clear channels as Alaskan Class A stations. Eleven of these stations already have Alaskan Class A facilities and are to be protected accordingly. Permanent designation of the other four stations as Alaskan Class A is conditioned on their constructing minimum Alaskan Class A facilities no later than December 31, 1989. Until that date or until such facilities are obtained, these four stations shall be temporarily designated as Alaskan Class A stations, and calculations involving these stations should be based on existing facilities but with an assumed power of 10 kW. Thereafter, these stations are to beprotected based on their actual Alaskan Class A facilities. If any of these stations does not obtain Alaskan Class A facilities in the period specified, it is to be protected as a Class B station based on its actual facilities. These four stations may increase power to 10 kW without regard to the impact on co-channel Class B stations. However, power increases by these stations above 10 kW (or by existing Alaskan Class A stations beyond their current power level) are subject to applicable protection requirements for co-channel Class B stations. Other stations not on the original list but which meet applicable requirements may obtain Alaskan Class A status by seeking such designation from the Commission. If a power increase or other change in facilities by a station not on the original list is required to obtain minimum Alaskan Class A facilities, any such application shall meet the interference protection requirements applicable to an Alaskan Class A proposal on the channel.

(2) Class B stations are stations which operate on clear and regional channels with powers not less than 0.25 kW nor more than 50 kW. These stations render primary service only, the area of which depends on their geographical location, power, and frequency. It is recommended that Class B stations be located so that the interference received from other stations will not limit the service area to a groundwave contour value greater than 2.0 mV/m nighttime and to the 0.5 mV/m groundwave contour daytime, which are the values for themutual protection between this class of stations and other stations of the same class.

NOTE: See §§73.21(b)(1) and 73.26(b) concerning power restrictions and classifications relative to Class B, Class C, and Class D stations in Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands. Stations in the abovenamed places that are reclassified from Class C to Class B stations under §73.26(b) shall not be authorized to increase power to levels that would increase the nighttime interference-free limit of co-channel Class C stations in the conterminous United States.

(3) Class C stations operate on local channels, normally rendering primary service to a community and the suburban or rural areas immediately contiguous thereto, with powers not less than 0.25 kW, nor more than 1 kW, except as provided in §73.21(c)(1). Such stations are normally protected to the daytime 0.5 mV/m contour. On local channels the separation required for the daytime protection shall also determine the nighttime separation. Where directional antennas are employed daytime by Class C stations operating with more than 0.25 kW power, the separations required shall in no case be less than those necessary to afford protection, assuming nondirectional operation with 0.25 kW. In no case will 0.25 kW or greater nighttime power be authorized to a station unable to operate nondirectionally with a power of 0.25 kW during daytime hours. The actual nighttime limitation will be calculated. Fornighttime protection purposes, Class C stations in the 48 contiguous United States may assume that stations in Alaska, Hawaii, Puerto Rico, and the U.S. Virgin Islands operating on 1230, 1240, 1340, 1400, 1450, and 1490 kHz are Class C stations.

(4) Class D stations operate on clear and regional channels with daytime powers of not less than 0.25 kW (or equivalent RMS field of 141 mV/m at one kilometer if less than 0.25 kW) and not more than 50 kW. Class D stations that have previously received nighttime authority operate with powers of less than 0.25 kW (or equivalent RMS fields of less than 141 mV/m at one kilometer) are not required to provide nighttime coverage in accordance with §73.24(j) and are not protected from interference during nighttime hours. Such nighttime authority is permitted on the basis of full nighttime protection being afforded to all Class A and Class B stations.

(b) When a station is already limited by interference from other stations to

a contour value greater than that normally protected for its class, the individual received limits shall be the established standard for such station with respect to interference from each other station.

(c) The four classes of AM broadcast stations have in general three types of service areas, i.e., primary, secondary and intermittent. (See §73.14 for the definitions of primary, secondary, and intermittent service areas.) Class A stations render service to all three areas. Class B stations render service to a primary area but the secondary and intermittent service areas may be materially limited or destroyed due to interference from other stations, depending on the station assignments involved. Class C and Class D stations usually have only primary service areas. Interference from other stations may limit intermittent service areas and generally prevents any secondary service to those stations which operate at night. Complete intermittent service may still be obtained in many cases depending on the station assignments involved.

(d) The groundwave signal strength required to render primary service is 2 mV/m for communities with populations of 2,500 or more and 0.5 mV/m for communities with populations of less than 2,500. See §73.184 for curves showing distance to various groundwave field strength contours for different frequencies and ground conductivities, and also see §73.183, ''Groundwave signals.''

(e) A Class C station may be authorized to operate with a directional antenna during daytime hours providing the power is at least 0.25 kW. In computing the degrees of protection which such antenna will afford, the radiation produced by the directional antenna system will be assumed to be no less, in any direction, than that which would result from non-directional operation using a single element of the directional array, with 0.25 kW.

(f) All classes of broadcast stations have primary service areas subject to limitation by fading and noise, and interference from other stations to the contours set out for each class of station.

(g) Secondary service is provided during nighttime hours in areas where the skywave field strength, 50% or more of the time, is 0.5 mV/m or greater (0.1 mV/m in Alaska). Satisfactory secondary service to cities is not considered possible unless the field strength of the skywave signal approaches or exceeds the value of the groundwave field strength that is required for primary service. Secondary service is subject to some interference and extensive fading whereas the primary service area of a station is subject to no objectionable interference or fading. Only Class A stations are assigned on the basis of rendering secondary service.

NOTE: Standards have not been established for objectionable fading because of the relationship to receiver characteristics. Selective fading causes audio distortion and signal strength reduction below the noise level, objectionable characteristics inherent in many modern receivers. The AVC circuits in the better designed receivers generally maintain the audio output at a sufficiently constant level to permit satisfactory reception during most fading conditions.

(h) Intermittent service is rendered by the groundwave and begins at the outer boundary of the primary service area and extends to a distance where the signal strength decreases to a value that is too low to provide any service. This may be as low as a few μV/m in certain areas and as high as several millivolts per meter in other areas of high noise level, interference from other stations, or objectionable fading at night. The intermittent service area may vary widely from day to night and generally varies over shorter intervals of time. Only Class A stations are protected from interference from other stations to the intermittent service area.

(i) Broadcast stations are licensed to operate unlimited time, limited time, daytime, share time, and specified hours. (See §§73.1710, 73.1725, 73.1720, 73.1715, and 73.1730.) Applications for new stations shall specify unlimited time operation only.

(j) Section 73.24 sets out the general requirements for modifying the facilities of a licensed station and for establishing a new station. Sections 73.24(b) and 73.37 include interference related

provisions that be considered in connection with an application to modify the facilities of an existing station or to establish a new station. Section 73.30 describes the procedural steps required to receive an authorization to operate in the 1605–1705 kHz band.

(k) Objectionable nighttime interference from a broadcast station occurs when, at a specified field strength contour with respect to the desired station, the field strength of an undesired station (co-channel or first adjacent channel, after application of proper protection ratio) exceeds for 10% or more of the time the values set forth in these standards. The value derived from the root-sum-square of all interference contributions represents the extent of a station's interference-free coverage.

(1) With respect to the root-sum-square (RSS) values of interfering field strengths referred to in this section, calculation of nighttime interference-free service is accomplished by considering the signals on the three channels of concern (co- and first adjacencies) in order of decreasing magnitude, adding the squares of the values and extracting the square root of the sum, excluding those signals which are less than 50% of the RSS values of the higher signals already included.

(2) With respect to the root-sum-square values of interfering field strengths referred to in this section, calculation of nighttime interference for non-coverage purposes is accomplished by considering the signals on the three channels of concern (co- and first adjacencies) in order of decreasing magnitude, adding the squares of the values and extracting the square root of the sum, excluding those signals which are less than 25% of the RSS values of the higher signals already included.

(3) With respect to the root-sum-square values of interfering field strengths referred to in this section, calculation is accomplished by considering the signals on the three channels of concern (co- and first adjacencies) in order of decreasing magnitude, adding the squares of the values and extracting the square root of the sum. The 0% exclusion method applies only to the determination of an improvement factor value for evaluating a station's eligibility for migration to the band 1605–1705 kHz.

(4) The RSS value will not be considered to be increased when a new interfering signal is added which is less than the appropriate exclusion percentage as applied to the RSS value of the interference from existing stations, and which at the same time is not greater than the smallest signal included in the RSS value of interference from existing stations.

(5) It is recognized that application of the above ''50% exclusion'' method (or any exclusion method using a per cent value greater than zero) of calculating the RSS interference may result in some cases in anomalies wherein the addition of a new interfering signal or the increase in value of an existing interfering signal will cause the exclusion of a previously included signal and may cause a decrease in the calculated RSS value of interference. In order to provide the Commission with more realistic information regarding gains and losses in service (as a basis for determination of the relative merits of a proposed operation) the following alternate method for calculating the proposed RSS values of interference will be employed wherever applicable.

(6) In the cases where it is proposed to add a new interfering signal which is not less than 50% (or 25%, depending on which study is being performed) of the RSS value of interference from existing stations or which is greater that the smallest signal already included to obtain this RSS value, the RSS limitation after addition of the new signal shall be calculated without excluding any signal previously included. Similarly, in cases where it is proposed to increase the value of one of the existing interfering signals which has been included in the RSS value, the RSS limitation after the increase shall be calculated without excluding the interference from any source previously included.

(7) If the new or increased signal proposed in such cases is ultimately authorized, the RSS values of interference to other stations affected will thereafter be calculated by the ''50% exclusion'' (or 25% exclusion, depending on which study is being performed)

method without regard to this alternate method of calculation.

(8) Examples of RSS interference calculations:

(i) Existing interferences:

Station No. 1—1.00 mV/m.
Station No. 2—0.60 mV/m.
Station No. 3—0.59 mV/m.
Station No. 4—0.58 mV/m.

The RSS value from Nos. 1, 2 and 3 is 1.31 mV/m; therefore interference from No. 4 is excluded for it is less than 50% of 1.31 mV/m.

(ii) Station A receives interferences from:

Station No. 1—1.00 mV/m.
Station No. 2—0.60 mV/m.
Station No. 3—0.59 mV/m.

It is proposed to add a new limitation, 0.68 mV/m. This is more than 50% of 1.31 mV/m, the RSS value from Nos. 1, 2 and 3. The RSS value of Station No. 1 and of the proposed station would be 1.21 m/Vm which is more than twice as large as the limitation from Station No. 2 or No. 3. However, under the above provision the new signal and the three existing interferences are nevertheless calculated for purposes of comparative studies, resulting in an RSS value of 1.47 mV/m. However, if the proposed station is ultimately authorized, only No. 1 and the new signal are included in all subsequent calculations for the reason that Nos. 2 and 3 are less than 50% of 1.21 mV/m, the RSS value of the new signal and No. 1.

(iii) Station A receives interferences from:

Station No. 1—1.00 mV/m.
Station No. 2—0.60 mV/m.
Station No. 3—0.59 mV/m.

No. 1 proposes to increase the limitation it imposes on Station A to 1.21 mV/m. Although the limitations from stations Nos. 2 and 3 are less than 50% of the 1.21 mV/m limitation, under the above provision they are nevertheless included for comparative studies, and the RSS limitation is calculated to be 1.47 mV/m. However, if the increase proposed by Station No. 1 is authorized, the RSS value then calculated is 1.21 mV/m because Stations Nos. 2 and 3 are excluded in view of the fact that the limitations they impose are less than 50% of 1.21 mV/m.

NOTE: The principles demonstrated in the previous examples for the calculation of the 50% exclusion method also apply to calculations using the 25% exclusion method after appropriate adjustment.

(l) Objectionable nighttime interference from a station shall be considered to exist to a station when, at the field strength contour specified in paragraph (q) of this section with respect to the class to which the station belongs, the field strength of an interfering station operating on the same channel or on a first adjacent channel after signal adjustment using the proper protection ratio, exceeds for 10% or more of the time the value of the permissible interfering signal set forth opposite such class in paragraph (q) of this section.

(m) For the purpose of estimating the coverage and the interfering effects of stations in the absence of field strength measurements, use shall be made of Figure 8 of §73.190, which describes the estimated effective field (for 1 kW power input) of simple vertical omnidirectional antennas of various heights with ground systems having at least 120 quarter-wavelength radials. Certain approximations, based on the curve or other appropriate theory, may be made when other than such antennas and ground systems are employed, but in any event the effective field to be employed shall not be less than the following:

| Class of station | Effective field (at 1 km) |
|---|---|
| All Class A (except Alaskan) | 362 mV/m. |
| Class A (Alaskan), B and D | 282 mV/m. |
| Class C | 241 mV/m. |

Note (1): When a directional antenna is employed, the radiated signal of a broadcasting station will vary in strength in different directions, possibly being greater than the above values in certain directions and less in other directions depending upon the design and adjustment of the directional antenna system. To determine the interference in any direction, the measured or calculated radiated field (unattenuated field strength at 1 kilometer from the array) must be used in conjunction with the appropriate propagation curves. (See §73.185 for further discussion and solution of a typical directional antenna case.)

Note (2): For Class B stations in Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands, 241 mV/m shall be used.

(n) The existence or absence of objectionable groundwave interference from stations on the same or adjacent channels shall be determined by actual measurements made in accordance with the method described in §73.186, or in the absence of such measurements, by reference to the propagation curves of §73.184. The existence or absence of objectionable interference due to skywave propagation shall be determined by reference to Formula 2 in §73.190.

(o) Computation of Skywave Field Strength Values:

(1) Fifty Percent Skywave Field Strength Values (Clear Channel). In computing the fifty percent skywave field strength values of a Class A clear channel station, use shall be made of Formula 1 of §73.190, entitled ''Skywave Field Strength'' for 50 percent of the time.

(2) Ten Percent Skywave Field Strength Values. In computing the 10% skywave field strength for stations on a single signal or an RSS basis, Formula 2 in §73.190 shall be used.

(3) Determination of Angles of Departure. In calculating skywave field strength for stations on all channels, the pertinent vertical angle shall be determined by use of the formula in §73.190(d).

(p) The distance to any specified groundwave field strength contour for any frequency may be determined from the appropriate curves in §73.184 entitled ''Ground Wave Field Strength vs. Distance.''

(q) Normally protected service contours and permissible interference signals for broadcast stations are as follows (for Class A stations, see also paragraph (a) of this section):

| Class of station | Class of channel used | Signal strength contour of area protected from objectionable interference [1] (μV/m) | | Permissible interfering signal (μV/m) | |
|---|---|---|---|---|---|
| | | Day [2] | Night | Day [2] | Night [3] |
| A | Clear | SC 100<br>AC 500 | SC 500 50% SW<br>AC 500 GW | SC 5<br>AC 250 | SC 25<br>AC 250 |
| A (Alaskan) | .....do | SC 100<br>AC 500 | SC 100 50% SW<br>AC 500 GW | SC 5<br>AC 250 | SC 5<br>AC 250 |
| B | Clear<br>Regional | 500 | 2000 [2] | 25<br>AC 250 | 25<br>250 |
| C | Local | 500 | No presc. [4] | SC25 | Not presc. |
| D | Clear<br>Regional | 500 | Not presc | SC 25<br>AC 250 | Not presc. |

[1] When a station is already limited by interference from other stations to a contour of higher value than that normally protected for its class, this higher value contour shall be the established protection standard for such station. Changes proposed by Class A and B stations shall be required to comply with the following restrictions. Those interferers that contribute to another station's RSS using the 50% exclusion method are required to either reduce their contributions to that RSS by 10%, or to a level at which their contributions no longer enter into the 50% RSS value, whichever is the lesser amount of reduction. Those interferers that contribute to a station's RSS using the 25% exclusion method but do not contribute to that station's RSS using the 50% exclusion method may make changes not to exceed their present contribution. Interferers not included in a station's RSS using the 25% exclusion method are permitted to increase radiation as long as the 25% exclusion threshold is not equalled or exceeded. In no case will a reduction be required that would result in a contributing value that is below the pertinent value specified in the table. This note does not apply to Class C stations; or to the protection of Class A stations which are normally protected on a single signal, non-RSS basis.

[2] Groundwave.

[3] Skywave field strength for 10 percent or more of the time.

[4] During nighttime hours, Class C stations in the contiguous 48 States may treat all Class B stations assigned to 1230, 1240, 1340, 1400, 1450 and 1490 kHz in Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands as if they were Class C stations.

Note: SC=Same channel; AC=Adjacent channel; SW=Skywave; GW=Groundwave

(r) The following table of logarithmic expressions is to be used as required for determining the minimum permissible ratio of the field strength of a desired to an undesired signal. This table shall be used in conjunction with the protected contours specified in paragraph (q) of this section.

| Frequency separation of desired to undesired signals (kHz) | Desired Groundwave to: | | Desired 50% Skywave to Undesired 10% Skywave (dB) |
|---|---|---|---|
| | Undesired groundwave (dB) | Undesired 10% Skywave (dB) | |
| 0 | 26 | 26 | 26 |
| 10 | 6 | 6 | not presc. |

(s) Two stations, one with a frequency twice of the other, should not be assigned in the same groundwave service area unless special precautions are taken to avoid interference from the second harmonic of the station operating on the lower frequency. Additionally, in selecting a frequency, consideration should be given to the fact that occasionally the frequency assignment of two stations in the same area may bear such a relation to the intermediate frequency of some broadcast

receivers as to cause ''image'' interference, However, since this can usually be rectified by readjustment of the intermediate frequency of such receivers, the Commission, in general, will not take this kind of interference into consideration when authorizing stations.

(t) The groundwave service of two stations operating with synchronized carriers and broadcasting identical programs will be subject to some distortion in areas where the signals from the two stations are of comparable strength. For the purpose of estimating coverage of such stations, areas in which the signal ratio is between 1:2 and 2:1 will not be considered as receiving satisfactory service.

NOTE: Two stations are considered to be operated synchronously when the carriers are maintained within 0.2 Hz of each other and they transmit identical program s.

[56 FR 64862, Dec. 12, 1991; 57 FR 43290, Sept. 18, 1992, as amended at 58 FR 27950, May 12, 1993]

### § 73.183 Groundwave signals.

(a) Interference that may be caused by a proposed assignment or an existing assignment during daytime hours should be determined, when possible, by measurements on the frequency involved or on another frequency over the same terrain and by means for the curves in § 73.184 entitled ''Ground Wave Field Strength versus Distance.''

NOTE: Groundwave field strength measurements will not be accepted or considered for the purpose of establishing that interference to a station in a foreign country other than Canada, or that the field strength at the border thereof, would be less than indicated by the use of the ground conductivity maps and engineering standards contained in this part and applicable international agreements. Satisfactory groundwave measurements offered for the purpose of demonstrating values of conductivity other than those shown by Figure M3 in problems involving protection of Canadian stations will be considered only if, after review thereof, the appropriate agency of the Canadian government notifies the Commission that they are acceptable for such purpose.

(b)(1) In all cases where measurements taken in accordance with the requirements are not available, the groundwave strength must be determined by means of the pertinent map of ground conductivity and the groundwave curves of field strength versus distance. The conductivity of a given terrain may be determined by measurements of any broadcast signal traversing the terrain involved. Figure M3 (See Note 1) shows the conductivity throughout the United States by general areas of reasonably uniform conductivity. When it is clear that only one conductivity value is involved, Figure R3 of § 73.190, may be used. It is a replica of Figure M3, and is contained in these standards. In all other situations Figure M3 must be employed. It is recognized that in areas of limited size or over a particular path, the conductivity may vary widely from the values given; therefore, these maps are to be used only when accurate and acceptable measurements have not been made.

(2) For determinations of interference and service requiring a knowledge of ground conductivities in other countries, the ground conductivity maps comprising Appendix 1 to Annex 2 of each of the following international agreements may be used:

(i) For Canada, the U.S.-Canada AM Agreement, 1984;

(ii) For Mexico, the U.S.-Mexico AM Agreement, 1986; and

(iii) For other Western Hemisphere countries, the Regional Agreement for the Medium Frequency Broadcasting Service in Region 2.

Where different conductivities appear in the maps of two countries on opposite sides of the border, such differences are to be considered as real, even if they are not explained by geophysical cleavages.

(c) Example of determining interference by the graphs in § 73.184:

It is desired to determine whether objectionable interference exists between a proposed 5 kW Class B station on 990 kHz and an existing 1 kW Class B station on first adjacent channel, 1000 kHz. The distance between the two stations is 260 kilometers and both stations operate nondirectionally with antenna systems that produce a horizontal effective field of 282 in mV/m at one kilometer. (See § 73.185 regarding use of directional antennas.) The ground conductivity at the site of each station and along the intervening terrain is 6 mS/m. The protection to Class B stations during daytime is to the 500 μV/m

(0.5 Vm) contour using a 6 dB protection factor. The distance to the 500 μV/m groundwave contour of the 1 kW station is determined by the use of the appropriate curve in §73.184. Since the curve is plotted for 100 mV/m at a 1 kilometer, to find the distance of the 0.5 mV/m contour of the 1 kw station, it is necessary to determine the distance to the 0.1773 m/Vm contour.

(100×0.5/282=0.1773)

Using the 6 mS/m curve, the estimated radius of the 0.5 mV/m contour is 62.5 kilometers. Subtracting this distance from the distance between the two stations leaves 197.5 kilometers. Using the same propagation curve, the signal from the 5 kW station at this distance is seen to be 0.059 mV/m. Since a protection ratio of 6 dB, desired to undesired signal, applies to stations separated by 10 kHz, the undesired signal could have had a value of up to 0.25 mV/m without causing objectionable interference. For co-channel studies, adesired to undesired signal ratio of no less than 20:1 (26 dB) is required to avoid causing objectionable interference.

(d) Where a signal traverses a path over which different conductivities exist, the distance to a particular groundwave field strength contour shall be determined by the use of the equivalent distance method. Reasonably accurate results may be expected in determining field strengths at a distance from the antenna by application of the equivalent distance method when the unattenuated field of the antenna, the various ground conductivities and the location of discontinuities are known. This method considers a wave to be propagated across a given conductivity according to the curve for a homogeneous earth of that conductivity. When the wave crosses from a region of one conductivity into a region of a second conductivity, the equivalent distance of the receiving point from the transmitter changes abruptly but the field strength does not. From a point just inside the second region the transmitter appearsto be at that distance where, on the curve for a homogeneous earth of the second conductivity, the field strength equals the value that occurred just across the boundary in the first region. Thus the equivalent distance from the receiving point to the transmitter may be either greater or less than the actual distance. An imaginary transmitter is considered to exist at that equivalent distance. This technique is not intended to be used as a means ofevaluating unattenuated field or ground conductivity by the analysis of measured data. The method to be employed for such determinations is set out in §73.186.

(e) Example of the use of the equivalent distance method;

It is desired to determine the distance to the 0.5 mV/m and 0.025 mV/m contours of a station on a frequency of 1000 kHz with an inverse distance field of 100 mV/m at one kilometer being radiated over a path having a conductivity of 10 mS/m for a distance of 20 kilometers, 5 mS/m for the next 30 kilometers and 15 mS/m thereafter. Using the appropriate curve in §73.184, Graph 12, at a distance of 20 kilometers on the curve for 10 mS/m, the field strength is found to be 2.84 mV/m. On the 5mS/m curve, the equivalent distance to this field strength is 14.92 kilometers, which is 5.08 (20−14.92 kilometers nearer to the transmitter. Continuing on the propagation curve, the distance to a field strength of 0.5 mV/m is found to be 36.11 kilomteres.

The actual length of the path travelled, however, is 41.19 (36.11+5.08) kilometers. Continuing on this propagation curve to the conductivity change at 44.92 (50.00−5.08) kilometers, the field strength is found to be 0.304 mV/m. On the 15 mS/m propagation curve, the equivalent distance to this field strength is 82.94 kilometers, which changes the effective path length by 38.02(82.94−44.92) kilometers. Continuing on this propagation curve, the distance to a field strength of 0.025 mV/m is seen to be 224.4 kilometers. The actual length of the path travelled, however, is 191.46 (224.4+5.08−38.02) kilometers.

[28 FR 13574, Dec. 14, 1963, as amended at 44 FR 36037, June 20, 1979; 48 FR 9011, Mar. 3, 1983; 50 FR 18822, May 2, 1985; 50 FR 24522, June 11, 1985; 51 FR 9965, Mar. 24, 1986; 54 FR 39736, Sept. 28, 1989; 56 FR 64866, Dec. 12, 1991; 57 FR 43290, Sept. 18, 1992]

### §73.184 Groundwave field strength graphs.

(a) Graphs 1 to 20 show, for each of 20 frequencies, the computed values of groundwave field strength as a function of groundwave conductivity and distance from the source of radiation. The groundwave field strength is considered to be that part of the vertical component of the electric field which has not been reflected from the ionosphere nor from the troposphere. These 20 families of curves are plotted on log-log graph paper and each is to be used for the range of frequencies shown

thereon. Computations are based on a dielectric constant of the ground (referred to air as unity) equal to 15 for land and 80 for sea water and for the ground conductivities (expressed in mS/m) given on the curves. The curves show the variation of the groundwave field strength with distance to be expected for transmission from a vertical antenna at the surface of a uniformly conducting spherical earth with the groundwave constants shown on the curves. The curves are for an antenna power of such efficiency and current distribution that the inverse distance (unattenuated) field is 100 mV/m at 1 kilometer. The curves are valid for distances that are large compared to the dimensions of the antenna for other than short vertical antennas.

(b) The inverse distance field (100 mV/m divided by the distance in kilometers) corresponds to the groundwave field intensity to be expected from an antenna with the same radiation efficiency when it is located over a perfectly conducting earth. To determine the value of the groundwave field intensity corresponding to a value of inverse distance field other than 100 mV/m at 1 kilometer, multiply the field strength as given on these graphs by the desired value of inverse distance field at 1 kilometer divided by 100; for example, to determine the groundwave field strength for a station with an inverse distance field of 2700 mV/m at 1 kilometer, simply multiply the values given on the charts by 27. The value of the inverse distance field to be used for a particular antenna depends upon the power input to the antenna, the nature of the ground in the neighborhood of the antenna, and the geometry of the antenna. For methods of calculating the interrelations between these variables and the inverse distance field, see ''The Propagation of Radio Waves Over the Surface of the Earth and in the Upper Atmosphere,'' Part II, by Mr. K.A. Norton, Proc. I.R.E., Vol. 25, September 1937, pp. 1203–1237.

NOTE: The computed values of field strength versus distance used to plot Graphs 1 to 20 are available in tabular form. For information on obtaining copies of these tabulations call or write the Consumer Affairs Office, Federal Communications Commission, Washington, DC 20554, (202) 632–7000.

(c) Provided the value of the dielectric constant is near 15, the ground conductivity curves of Graphs 1 to 20 may be compared with actual field strength measurement data to determine the appropriate values of the ground conductivity and the inverse distance field strength at 1 kilometer. This is accomplished by plotting the measured field strengths on transparent log-log graph paper similar to that used for Graphs 1 to 20 and superimposing the plotted graph over the Graph corresponding to the frequency of the station measured. The plotted graph is then shifted vertically until the plotted measurement data is best aligned with one of the conductivity curves on the Graph; the intersection of the inverse distance line on the Graph with the 1 kilometer abscissa on the plotted graph determines the inverse distance field strength at 1 kilometer. For other values of dielectric constant, the following procedure may be used to determine the dielectric constant of the ground, the ground conductivity and the inverse distance field strength at 1 kilometer. Graph 21 gives the relative values of groundwave field strength over a plane earth as a function of the numerical distance *p* and phase angle *b*. On graph paper with coordinates similar to those of Graph 21, plot the measured values of field strength as ordinates versus the corresponding distances from the antenna in kilometers as abscissae. The data should be plotted only for distances greater than one wavelength (or, when this is greater, five times the vertical height of the antenna in the case of a nondirectional antenna or 10 times the spacing between the elements of a directional antenna) and for distances less than $80f^{1/3}$ *MHz kilometers (i.e., 80 kilometers at 1 MHz). Then, using a light box, place the plotted graph over Graph 21 and shift the plotted graph vertically and horizontally (making sure that the vertical lines on both sheets are parallel) until the best fit with the data is obtained with one of the curves on Graph 21. When the two sheets are properly lined up, the valueof the field strength corresponding to the intersection of the inverse distance line of Graph 21 with the 1 kilometer abscissa on the data sheet is*

*the inverse distance field strength at 1 kilometer, and the values of the numerical distance at 1 kilometer, $p_1$,* and of *b* are also determined. Knowing the values of *b* and $p_1$ (the numerical distanceat one kilometer), we may substitute in the following approximate values of the ground conductivity and dielectric constant.

$$x \cong \frac{\pi}{p} \cdot \left(\frac{R}{\lambda}\right)_1 \cdot \cos b \qquad \text{(Eq. 1)}$$

$(R/\lambda)_1$= Number of wavelengths in 1 kilometer,

* * * * *

$f_{MHz}$=frequency expressed in megahertz,

$$\varepsilon \cong \chi \tan b - 1 \qquad \text{(Eq. 3)}$$

ε=dielectric constant on the ground referred to air as unity.

First solve for χ by substituting the known values of $p_1$, $(P/\lambda)_1$, and ψοσ β in equation (1). Equation (2) may then be solved for δ and equation (3) for ε. At distances greater than $80/f^{1/3}$ **ΜΗζ κιλομετερσ τηε ψθρωεσ οφ Γραπη 21 δο νοτ γιωε τηε ψορρεψτ ρελατιωε ωαλθεσ οφ φιελδ στρενγτη σινψε τηε ψθρωατθρε οφ τηε εαρτη ςεακενσ τηε φιελδ μορε ραπιδλυ τηαν τηεσε πλανε εαρτη ψθρωεσ ςοθλδ ινδιψατε. Τηθσ, νο αττεμπτ σηοθλδ βε μαδε το φιτ εχπεριμενταλ δατα το τηεσε ψθρωεσ ατ τηε λαργερ δισταντψεσ.**

NOTE: For other values of dielectric constant, use can be made of the computer program which was employed by the FCC in generating the curves in Graphs 1 to 20. For information on obtaining a printout of this program, call or write the Consumer Affairs Office, Federal Communications Commission, Washington, DC 200554, (202) 632–7000.

(d) At sufficiently short distances (less than 55 kilometers at AM broadcast frequencies), such that the curvature of the earth does not introduce an additional attenuation of the waves, the curves of Graph 21 may be used to determine the groundwave field strength of transmitting and receiving antennas at the surface of the earth for any radiated power, frequency, or set of ground constants. First, trace the straight inverse distance line corresponding to the power radiated on transparent log-log graph paper similar to that of Graph 21, labelling the ordinates of the chart in terms of field strength, and the abscissae in terms of distance. Next, using the formulas given on Graph 21, calculate the value of the numerical distance, *p*, at 1 kilometer, and the value of *b*. Then superimpose the log-log graph paper over Graph 21, shifting it vertically until both inverse distance lines coincide and shifting it horizontally until the numerical distance at 1 kilometer on Graph 21 coincides with 1 kilometer on the log-log graph paper. The curve of Graph 21 corresponding to the calculated value of *b* is then traced on the log-log graph paper giving the field strength versus distance in kilometers.

(e) This paragraph consists of the following Graphs 1 to 20 and 21.

NOTE: The referenced graphs are not published in the CFR, nor will they be included in the Commission's automated rules system. For information on obtaining copies of the graphs call or write the Consumer Affairs Office, Federal Communications Commission, Washington, DC 20554, Telephone: (202) 632–7000.

[28 FR 13574, Dec. 14, 1963, as amended at 50 FR 18823, May 2, 1985; 51 FR 45891, Dec. 23, 1986; 52 FR 36878, Oct. 1, 1987; 56 FR 64866, Dec. 12, 1991; 57 FR 43290, Sept. 18, 1992]

### § 73.185 Computation of interfering signal.

(a) Measured values of radiation are not to be used in calculating overlap, interference, and coverage.

(1) In the case of an antenna which is intended to be non-directional in the horizontal plane, an ideal non-directional radiation pattern shall be used in determining interference, overlap, and coverage, even if the antenna is not actually non-directional.

(2) In the case of an antenna which is directional in the horizontal plane, the radiation which shall be used in determining interference, overlap, and coverage is that calculated pursuant to § 73.150 or § 73.152, depending on whether the station has a standard or modified standard pattern.

(3) In the case of calculation of interference or overlap to (not from) a foreign station, the notified radiation shall be used, even if the notified radiation differs from that in paragraphs (a) (1) or (2) of this section.

(b) For skywave signals from stations operating on all channels, interference shall be determined from the appropriate formulas and Figure 6a contained in § 73.190.

(c) The formulas in § 73.190(d) depicted in Figure 6a of § 73.190, entitled ''Angles of Departure versus Transmission Range'' are to be used in determining the angles in the vertical pattern of the antenna of an interfering station to be considered as pertinent to transmission by one reflection. To provide for variation in the pertinent vertical angle due to variations of ionosphere height and ionosphere scattering, the curves 2 and 3 indicate the upper and lower angles within which the radiated field is to be considered. The maximum value of field strength occurring between these angles shall be used to determine the multiplying factor to apply to the 10 percent skywave field intensity value determined from Formula 2 in § 73.190. The multiplying factor is found by dividing the maximum radiation between the pertinent angles by 100 mV/m.

(d) Example of the use of skywave curves and formulas: Assume a proposed new Class B station from which interference may be expected is located at a distance of 724 kilometers from a licensed Class B station. The proposed station specifies geographic coordinates of 40°00′00″N and 100° 00′00″W and the station to be protected is located at an azimuth of 45° true at geographic coordinates of 44°26′05″N and 93°32′54″W. The critical angles of radiation as determined from Figure 6a of § 73.190 for use with Class B stations are 9.6° and 16.6°. If the vertical pattern of the antenna of the proposed station in the direction of the existing station is such that, between the angles of 9.6° and 16.6° above the horizon the maximum radiation is 260 mV/m at one kilometer, the value of the 50% field, as derived from Formula 1 of § 73.190, is 0.06217 mV/m at the location of the existing station. To obtain the value of the 10% field, the 50% valuemust be adjusted by a factor derived from Formula 2 of § 73.190. The value in this case is 8.42 dB. Thus, the 10% field is 0.1616 mV/m. Using this in conjunction with the co-channel protection ratio of 26 dB, the resultant nighttime limit from the proposed station to the licensed station is 3.232 mV/m.

(e) In the case of an antenna which is non-directional in the horizontal plane, the vertical distribution of the relative fields should be computed pursuant to § 73.160. In the case of an antenna which is directional in the horizontal plane, the vertical pattern in the great circle direction toward the point of reception in question must first be calculated. In cases where the radiation in the vertical plane, at the pertinent azimuth, contains a large lobe at a higher angle than the pertinent angle for one reflection, the method of calculating interference will not be restricted to that just described; each such case will be considered on the basis of the best knowledge available.

(f) In performing calculations to determine permissible radiation from stations operating presunrise or postsunset in accordance with § 73.99, calculated diurnal factors will be multiplied by the values of skywave field strength for such stations obtained from Formula 1 or 2 of § 73.190.

(1) The diurnal factor is determined using the time of day at the mid-point of path between the site of the interfering station and the point at which interference is being calculated. Diurnal factors are computed using the formula $D_f = a + bF + cF^2 + dF^3$ **where:**

$D_f$ represents the diurnal factor,
F is the frequency in MHz,
a,b,c, and d are constants obtained from the tables in paragraph (k)(2)

A diurnal factor greater than one will not be used in calculations and interpolation is to be used between calculated values where necessary. For reference purposes, curves for presunrise and postsunset diurnal factors are contained in Figures 13 and 14 of § 73.190.

(2) Constants used in calculating diurnal factors for the presunrise and postsunset periods are contained in paragraphs (f)(2) (i) and (ii) of this section respectively. The columns labeled $T_{mp}$ represent the number of hours before and after sunrise and sunset at the path midpoint.

(I) PRESUNRISE CONSTANTS

| $T_{mp}$ | a | b | c | d |
|---|---|---|---|---|
| −2 | 1.3084 | .0083 | −.0155 | .0144 |
| −1.75 | 1.3165 | −.4919 | .6011 | −.1884 |
| −1.5 | 1.0079 | .0296 | .1488 | −.0452 |
| −1.25 | .7773 | .3751 | −.1911 | .0736 |
| −1 | .6230 | .1547 | .2654 | −.1006 |
| −.75 | .3718 | .1178 | .3632 | −.1172 |
| −.5 | .2151 | .0737 | .4167 | −.1413 |
| −.25 | .2027 | −.2560 | .7269 | −.2577 |
| SR | .1504 | −.2325 | .5374 | −.1729 |
| +.25 | .1057 | −.2092 | .4148 | −.1239 |
| +5. | .0642 | −.1295 | .2583 | −.0699 |
| +.75 | .0446 | −.1002 | .1754 | −.0405 |
| +1 | .0148 | .0135 | .0462 | .0010 |

(II) POSTSUNSET CONSTANTS

| $T_{mp}$ | a | b | c | d |
|---|---|---|---|---|
| 1.75 | .9495 | −.0187 | .0720 | −.0290 |
| 1.5 | .7196 | .3583 | −.2280 | .0611 |
| 1.25 | .6756 | .1518 | .0279 | −.0163 |
| 1.0 | .5486 | .1401 | .0952 | −.0288 |
| .75 | .3003 | .4050 | −.0961 | .0256 |
| .5 | .1186 | .4281 | −.0799 | .0197 |
| .25 | .0382 | .3706 | −.0673 | .0171 |
| SS | .0002 | .3024 | −.0540 | .0086 |
| −.25 | .0278 | .0458 | .1473 | −.0486 |
| −.5 | .0203 | .0132 | .1166 | −.0340 |
| −.75 | .0152 | −.0002 | .0786 | −.0185 |
| −1.0 | −.0043 | .0452 | −.0040 | .0103 |
| −1.25 | .0010 | .0135 | .0103 | .0047 |
| −1.5 | .0018 | .0052 | .0069 | .0042 |
| −1.75 | −.0012 | .0122 | −.0076 | .0076 |
| −2.0 | −.0024 | .0141 | −.0141 | .0091Q P='04'≤ |

EDITORIAL NOTE: At 56 FR 64867, Dec. 12, 1991, §73.185 was amended by redesignating paragraphs (d), (e), (h), and (k) as (c), (d), (e), and (f), resulting in two consecutive paragraph (f)'s. These paragraphs will be correctly designated by a Federal Communication Commission document published in the FEDERAL REGISTER at a later date.

(f) For stations operating on regional and local channels, interfering skywave field intensities shall be determined in accordance with the procedure specified in (d) of this section and illustrated in (e) of this section, except that Figure 2 of §73.190 is used in place of Figure 1a and 1b and the formulas of §73.190. In using Figure 2 of §73.190, one additional parameter must be considered, i.e., the variation of received field with the latitude of the path.

(g) Figure 2 of §73.190, ''10 percent Skywave Signal Range Chart,'' shows the signal as a function of the latitude of the transmission path, which is defined as the geographic latitude of the midpoint between the transmitter and receiver. When using Figure 2 of §73.190, latitude 35° should be used in case the mid-point of the path lies below 35° North and latitude 50° should be used in case the mid-point of the path lies above 50° North.

[30 FR 13783, Oct. 29, 1965, as amended at 33 FR 15420, Oct. 17, 1968; 46 FR 11995, Feb. 12, 1981; 48 FR 42958, Sept. 20, 1983; 50 FR 18843, May 2, 1985; 56 FR 64867, Dec. 12, 1991]

### §73.186 Establishment of effective field at one kilometer.

(a) Section 73.189 provides that certain minimum field strengths are acceptable in lieu of the required minimum physical heights of the antennas proper. Also, in other situations, it may be necessary to determine the effective field. The following requirements shall govern the taking and submission of data on the field strength produced:

(1) Beginning as near to the antenna as possible without including the induction field and to provide for the fact that a broadcast antenna is not a point source of radiation (not less than one wave length or 5 times the vertical height in the case of a single element, i.e., nondirectional antenna or 10 times the spacing between the elements of a directional antenna), measurements shall be made on eight or more radials, at intervals of approximately 0.2 kilometer up to 3 kilometers (1.87 miles) from the antenna, at intervals of approximately 1 kilometer from 3 kilometers (1.87 miles) to 10 kilometers (6.2 miles) from the antenna, at intervals of approximately 3 kilometers from 10 kilometers (6.2 miles) to 25 or 34 kilometers (15.5 miles or 20 miles) from the antenna, and a few additional measurements if needed at greater distances from the antenna. Where the antenna is rurally located and unobstructed measurements can be made, there shall be as many as 18 measurements on each radial. However, where the antenna is located in a city where unobstructed measurements are difficult to make, measurements shall be made on each radial at as many unobstructed locations as possible, even though the intervals are considerably less than stated above, particularly within 3 kilometers of the antenna. In cases where it is not possible to obtain accurate measurements at the closer distances (even out to 8 or 10 kilometers due to

the character of the intervening terrain), the measurements at greater distances should be made at closer intervals. (It is suggested that ''wave tilt'' measurements may be made to determine and compare locations for taking field strength measurements, particularly to determine that there are no abrupt changes in ground conductivity or that reflected waves are not causing abnormal strengths.

(2) The data required by paragraph (a)(1) of this section should be plotted for each radial in accordance with either of the two methods set forth below:

(i) Using log-log coordinate paper, plot field strengths as ordinate and distance as abscissa.

(ii) Using semi-log coordinate paper, plot field strength times distance as ordinate on the log scale and distance as abscissa on the linear scale.

(3) However, regardless of which of the methods in paragraph (a)(2) of this section is employed, the proper curve to be drawn through the points plotted shall be determined by comparison with the curves in §73.184 as follows: Place the sheet on which the actual points have been plotted over the appropriate Graph in §73.184, hold to the light if necessary and adjust until the curve most closely matching the points is found. This curve should then be drawn on the sheet on which the points were plotted, together with the inverse distance curve corresponding to that curve. The field at 1 kilometer for the radial concerned shall be the ordinate on the inverse distance curve at 1 kilometer.

(4) When all radials have been analyzed in accordance with paragraph (a)(3) of this section, a curve shall be plotted on polar coordinate paper from the fields obtained, which gives the inverse distance field pattern at 1 kilometer. The radius of a circle, the area of which is equal to the area bounded by this pattern, is the effective field. (See §73.14.)

(5) The antenna power of the station shall be maintained at the authorized level during all field measurements. The power determination will be made using the direct method as described in §73.51(a) with instruments of acceptable accuracy specified in §73.1215.

(b) Complete data taken in conjunction with the field strength measurements shall be submitted to the Commission in affidavit form including the following:

(1) Tabulation by number of each point of measurement to agree with the map required in paragraph (b)(2) of this section, the date and time of each measurement, the field strength (E), the distance from the antenna (D) and the product of the field strength and distance (ED) (if data for each radial are plotted on semilogarithmic paper, see above) for each point of measurement.

(2) Map showing each point of measurement numbered to agree with tabulation required above.

(3) Description of method used to take field strength measurements.

(4) The family of theoretical curves used in determining the curve for each radial properly identified by conductivity and dielectric constants.

(5) The curves drawn for each radial and the field strength pattern.

(6) The antenna resistance at the operating frequency.

(7) Antenna current or currents maintained during field strength measurements.

[28 FR 13574, Dec. 14, 1963, as amended at 41 FR 44178, Oct. 7, 1976; 46 FR 11995, Feb. 12, 1981; 49 FR 49851, Dec. 24, 1984; 50 FR 18843, May 2, 1985; 50 FR 47055, Nov. 14, 1985; 51 FR 2707, Jan. 21, 1986; 52 FR 10570, Apr. 2, 1987]

### §73.187 Limitation on daytime radiation.

(a)(1) Except as otherwise provided in paragraphs (a)(2) and (3) of this section, no authorization will be granted for a Class B or Class D station on a frequency specified in §73.25 if the proposed operation would radiate during the period of critical hours (the two hours after local sunrise and the two hours before local sunset) toward any point on the 0.1 mV/m contour of a co-channel U.S. Class A station, at or below the pertinent vertical angle determined from Curve 2 of Figure 6a of §73.190, values in excess of those obtained as provided in paragraph (b) of this section.

(2) The limitation set forth in paragraph (a)(1) of this section shall not apply in the following cases:

(i) Any Class B or Class D operation authorized before November 30, 1959; or

(ii) For Class B and Class D stations authorized before November 30, 1959, subsequent changes of facilities which do not involve a change in frequency, an increase in radiation toward any point on the 0.1 mV/m contour of a co-channel U.S. Class A station, or the move of transmitter site materially closer to the 0.1 mV/m contour of such Class A station.

(3) A Class B or Class D station authorized before November 30, 1959, and subsequently authorized to increase daytime radiation in any direction toward the 0.1 mV/m contour of a co-channel U.S. Class A station (without a change in frequency or a move of transmitter site materially closer to such contour), may not, during the two hours after local sunrise or the two hours before local sunset, radiate in such directions a value exceeding the higher of:

(i) The value radiated in such directions with facilities last authorized before November 30, 1959, or

(ii) The limitation specified in paragraph (a)(1) of this section.

(b) To obtain the maximum permissible radiation for a Class B or Class D station on a given frequency from 640 through 990 kHz, multiply the radiation value obtained for the given distance and azimuth from the 500 kHz chart (Figure 9 of § 73.190) by the appropriate interpolation factor shown in the $K_{500}$ column of paragraph (c) of this section; and multiply the radiation value obtained for the given distance and azimuth from the 1000 kHz chart (Figure 10 of § 73.190) by the appropriate interpolation factor shown in the $K_{1000}$ column of paragraph (c) of this section. Add the two products thus obtained; the result is the maximum radiation value applicable to the Class B or Class D station in the pertinent directions. For frequencies from 1010 to 1580 kHz, obtain in a similar manner the proper radiation values from the 1000 and 1600 kHz charts (Figures 10 and 11 of § 73.190), multiply each of these values by the appropriate interpolation factors in the $K'_{1000}$ and $K'_{1600}$ columns in paragraph (c) of this section, and add the products.

(c) *Interpolation factors.* (1) Frequencies below 1000 kHz.

| fkHz | $K_{500}$ | $K_{1000}$ |
|---|---|---|
| 640 | 0.720 | 0.280 |
| 650 | 0.700 | 0.300 |
| 660 | 0.680 | 0.320 |
| 670 | 0.660 | 0.340 |
| 680 | 0.640 | 0.360 |
| 690 | 0.620 | 0.380 |
| 700 | 0.600 | 0.400 |
| 710 | 0.580 | 0.420 |
| 720 | 0.560 | 0.440 |
| 730 | 0.540 | 0.460 |
| 740 | 0.520 | 0.480 |
| 750 | 0.500 | 0.500 |
| 760 | 0.480 | 0.520 |
| 770 | 0.460 | 0.540 |
| 780 | 0.440 | 0.560 |
| 800 | 0.400 | 0.600 |
| 810 | 0.380 | 0.620 |
| 820 | 0.360 | 0.640 |
| 830 | 0.340 | 0.660 |
| 840 | 0.320 | 0.680 |
| 850 | 0.300 | 0.700 |
| 860 | 0.280 | 0.720 |
| 870 | 0.260 | 0.740 |
| 880 | 0.240 | 0.760 |
| 890 | 0.220 | 0.780 |
| 900 | 0.200 | 0.800 |
| 940 | 0.120 | 0.880 |
| 990 | 0.020 | 0.980 |

(2) Frequencies above 1000 kHz.

| f'kHz | $K'_{1000}$ | $K'_{1600}$ |
|---|---|---|
| 1010 | 0.983 | 0.017 |
| 1020 | 0.967 | 0.033 |
| 1030 | 0.950 | 0.050 |
| 1040 | 0.933 | 0.067 |
| 1050 | 0.917 | 0.083 |
| 1060 | 0.900 | 0.100 |
| 1070 | 0.883 | 0.117 |
| 1080 | 0.867 | 0.133 |
| 1090 | 0.850 | 0.150 |
| 1100 | 0.833 | 0.167 |
| 1110 | 0.817 | 0.183 |
| 1120 | 0.800 | 0.200 |
| 1130 | 0.783 | 0.217 |
| 1140 | 0.767 | 0.233 |
| 1160 | 0.733 | 0.267 |
| 1170 | 0.717 | 0.283 |
| 1180 | 0.700 | 0.300 |
| 1190 | 0.683 | 0.317 |
| 1200 | 0.667 | 0.333 |
| 1210 | 0.650 | 0.350 |
| 1220 | 0.633 | 0.367 |
| 1500 | 0.167 | 0.833 |
| 1510 | 0.150 | 0.850 |
| 1520 | 0.133 | 0.867 |
| 1530 | 0.117 | 0.883 |
| 1540 | 0.100 | 0.900 |
| 1550 | 0.083 | 0.917 |
| 1560 | 0.067 | 0.933 |
| 1570 | 0.050 | 0.950 |
| 1580 | 0.033 | 0.967 |

[28 FR 13574, Dec. 14, 1963, as amended at 49 FR 43962, Nov. 1, 1984; 56 FR 64868, Dec. 12, 1991]

### § 73.189 Minimum antenna heights or field strength requirements.

(a) Section 73.45 requires that all applicants for new, additional, or different broadcast facilities and all licensees requesting authority to move 0the transmitter of an existing station, shall specify a radiating system, the efficiency of which complies with the requirements of good engineering practice for the class and power of the station.

(b) The specifications deemed necessary to meet the requirements of good engineering practice at the present state of the art are set out in detail below.

(1) The licensee of a AM broadcast station requesting a change in power, time of operation, frequency, or transmitter location must also request authority to install a new antenna system or to make changes in the existing antenna system which will meet the minimum height requirements, or submit evidence that the present antenna system meets the minimum requirements with respect to field strength, before favorable consideration will be given thereto. (See §73.186.) In the event it is proposed to make substantial changes in an existing antenna system, the changes shall be such as to meet the minimum height requirements or will be permitted subject to the submission of field strength measurements showing that it meets the minimum requirements with respect to effective field strength.

(2) These minimum actual physical vertical heights of antennas permitted to be installed are shown by curves A, B, and C of Figure 7 of §73.190 as follows:

(i) Class C stations, and stations in Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands on 1230, 1240, 1340, 1400, 1450 and 1490 kHz that were formerly Class C and were redesignated as Class B pursuant to §73.26(b), 45 meters or a minimum effective field strength of 241 mV/m for 1 kW (121 mV/m for 0.25 kW). (This height applies to a Class C station on a local channel only. Curve A shall apply to any Class C stations in the 48 conterminous States that are assigned to Regional channels.)

(ii) Class A (Alaska), Class B and Class D stations other than those covered in §73.189(b)(2)(i), a minimum effective field strength of 282 mV/m for 1 kW.

(iii) Class A stations, a minimum effective field strength of 362 mV/m for 1 kW.

(3) The heights given on the graph for the antenna apply regardless of whether the antenna is located on the ground or on a building. Except for the reduction of shadows, locating the antenna on a building does not necessarily increase the efficiency and where the height of the building is in the order of a quarter wave the efficiency may be materially reduced.

(4) At the present development of the art, it is considered that where a vertical radiator is employed with its base on the ground, the ground system should consist of buried radial wires at least one-fourth wave length long. There should be as many of these radials evenly spaced as practicable and in no event less than 90. (120 radials of 0.35 to 0.4 of a wave length in length and spaced 3° is considered an excellent ground system and in case of high base voltage, a base screen of suitable dimensions should be employed.)

(5) In case it is contended that the required antenna efficiency can be obtained with an antenna of height or ground system less than the minimum specified, a complete field strength survey must be supplied to the Commission showing that the field strength at a mile without absorption fulfills the minimum requirements. (See §73.186.) This field survey must be made by a qualified engineer using equipment of acceptable accuracy.

(6) The main element or elements of a directional antenna system shall meet the above minimum requirements with respect to height or effective field strength. No directional antenna system will be approved which is so designed that the effective field of the array is less than the minimum prescribed for the class of station concerned, or in case of a Class A station less than 90 percent of the ground wave field which would be obtained from a perfect antenna of the height specified by Figure 7 of §73.190 for operation on frequencies below 1000 kHz, and in the case of a Class B or Class D station less than 90 percent of the ground wave

field which would be obtained from a perfect antenna of the height specified by Figure 7 of § 73.190 for operation on frequencies below 750 kHz.

[28 FR 13574, Dec. 14, 1963, as amended at 31 FR 8069, June 8, 1966; 33 FR 15420, Oct. 17, 1968; 44 FR 36038, June 20, 1979; 50 FR 18844, May 2, 1985; 51 FR 2707, Jan. 21, 1986; 51 FR 4753, Feb. 7, 1986; 52 FR 10570, Apr. 2, 1987; 56 FR 64868, Dec. 12, 1991]

### § 73.190 Engineering charts and related formulas.

(a) This section consists of the following Figures: 2, r3, 5, 6a, 7, 8, 9, 10, 11, 12, and 13. Additionally, formulas that are directly related to graphs are included.

(b) Formula 1 is used for calculation of 50% skywave field strength values.

FORMULA 1. Skywave field strength, 50% of the time (at SS+6):

The skywave field strength, $F_c(50)$, for a characteristic field strength of 100 mV/m at 1 km is given by:

$$F_c(50) = (97.5 - 20\log D) - \left(2\pi + 4.95\tan^2\phi_M\right)\sqrt{\left(\frac{D}{1000}\right)} \quad dB(\mu V/m) \qquad \text{(Eq. 1)}$$

The slant distance, $D$, is given by:

$$D = \sqrt{40{,}000 + d^2} \quad km \qquad \text{(Eq. 2)}$$

The geomagnetic latitude of the midpoint of the path, $\Phi_M$, is given by:

$\Phi_M$ = arcsin[sin $a_M$ 18.31° + cos $a_M$ cos 78.5° COS(69 + $b_M$)]

degrees (Eq. 3)

The short great-circle path distance, $d$, is given by:

$$d = 111.18d° \; km \qquad \text{(Eq. 4)}$$

Where:

$d°$ = arccos[sin $a_T$ sin $a_R$ + cos $a_T$ cos $a_R$ cos($b_R$ − $b_T$)]

degrees (Eq.5)

Where:

$a_T$ is the geographic latitude of the transmitting terminal (degrees)

$a_R$ is the geographic latitude of the receiving terminal (degrees)

$b_T$ is the geographic longitude of the transmitting terminal (degrees)

$b_R$ is the geographic longitude of the receiving terminal (degrees)

$a_M$ is the geographic latitude of the midpoint of the great-circle path (degrees) and is given by:

$b_M$ is the geographic longitude of the midpoint of the great-circle path (degrees) and is given by:

$$a_M = 90 - \arccos\left[\sin a_R \cos\left(\frac{d°}{2}\right) + \cos a_R \sin\left(\frac{d°}{2}\right)\left(\frac{\sin a_T - \sin a_R \cos d°}{\cos a_R \sin d°}\right)\right] \qquad \text{(Eq. 6)}$$

$$b_M = b_R + k\left[\arccos\left(\frac{\cos\left(\frac{d°}{2}\right) - \sin a_R \sin a_M}{\cos a_R \cos a_M}\right)\right] \qquad \text{(Eq. 7)}$$

Note (1): If | $F_M$| IS GREATER THAN 60 DEGREES, EQUATION (1) IS EVALUATED FOR | $F_M$| = 60 DEGREES.

Note (2): North and east are considered positive; south and west negative.

Note (3): In equation (7), $k = -1$ for west to east paths (i.e., $b_R > b_T$), otherwise $k = 1$.

(c) Formula 2 is used for calculation of 10% skywave field strength values.

FORMULA 2. Skywave field strength, 10% of the time (at SS+6):

The skywave field strength, $F_c(10)$, is given by:

$F_c(10) = F_c(50) + \Delta$ DB(μV/M)

Where:

$\Delta = 6$ when $|F_M| < 40$

$\Delta = 0.2 |F_M| - 2$ when $40 \leq |F_M| \leq 60$

$\Delta = 10$ when $|F_M| > 60$

(d) Figure 6a depicts angles of departure versus transmission range. These angles may also be computed using the following formulas:

$$\theta^\circ = \tan^{-1}\left(k_n \cot\frac{d}{444.54}\right) - \frac{d}{444.54}$$

Where:

d=distance in kilometers

n=1 for 50% field strength values

n=2 or 3 for 10% field strength values

and where

$K_1$=0.00752

$K_2$=0.00938

$K_3$=0.00565

NOTE: Computations using these formulas should not be carried beyond 0.1 degree.

(e) In the event of disagreement between computed values using the formulas shown above and values obtained directly from the figures, the computed values will control.

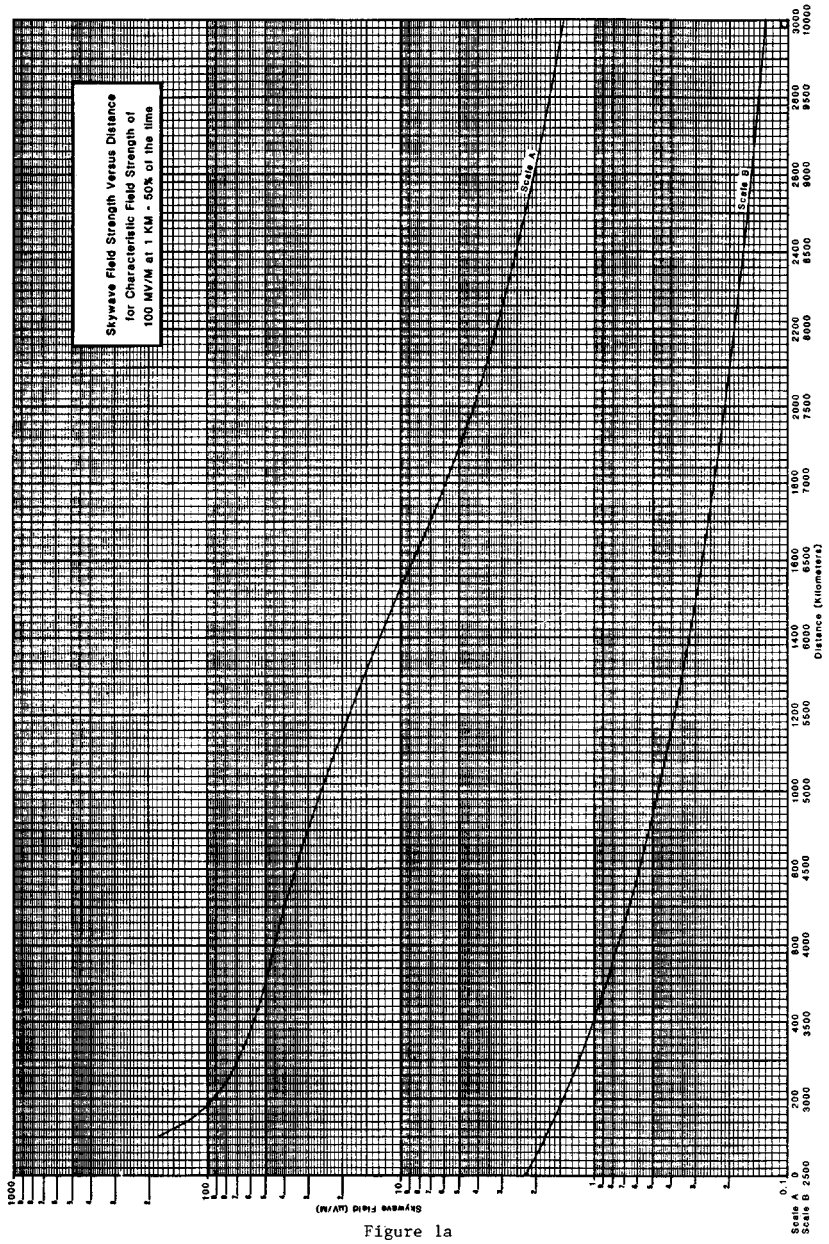
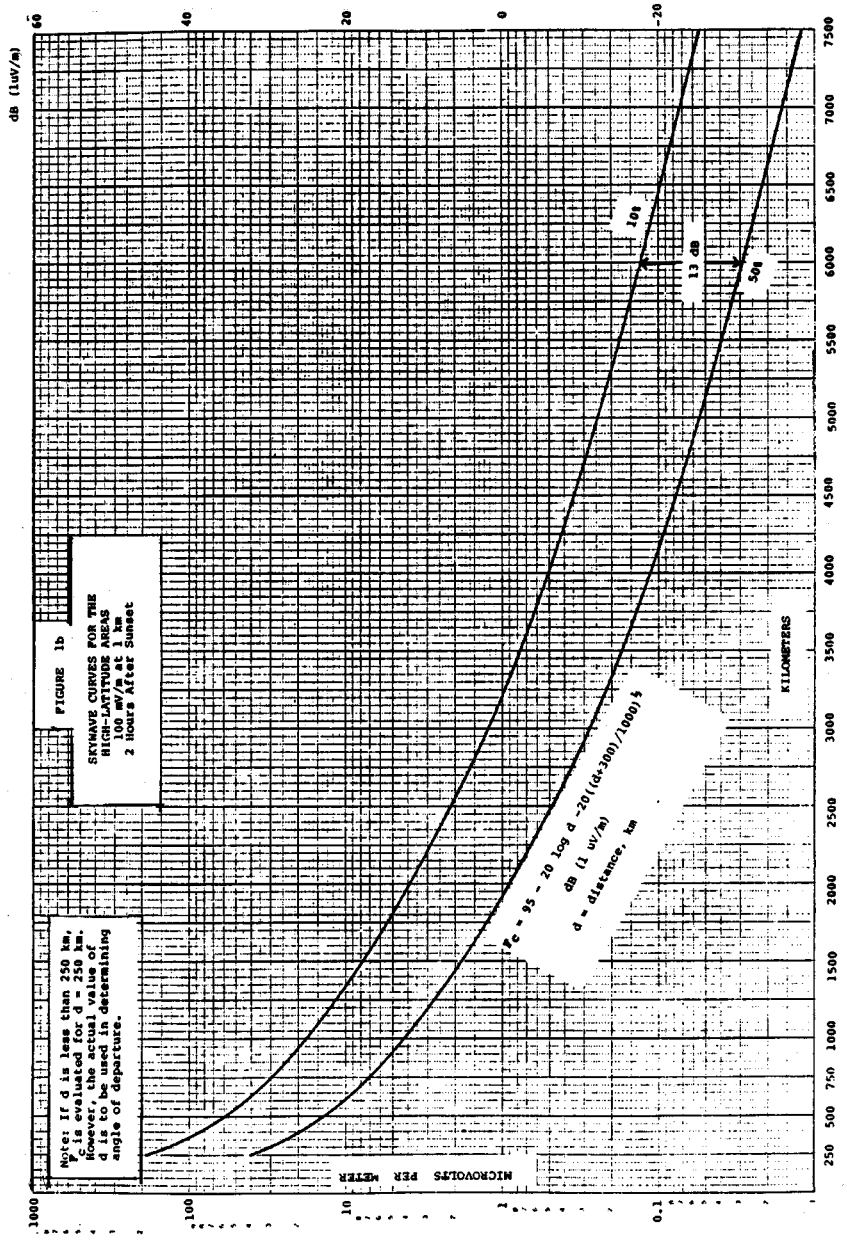
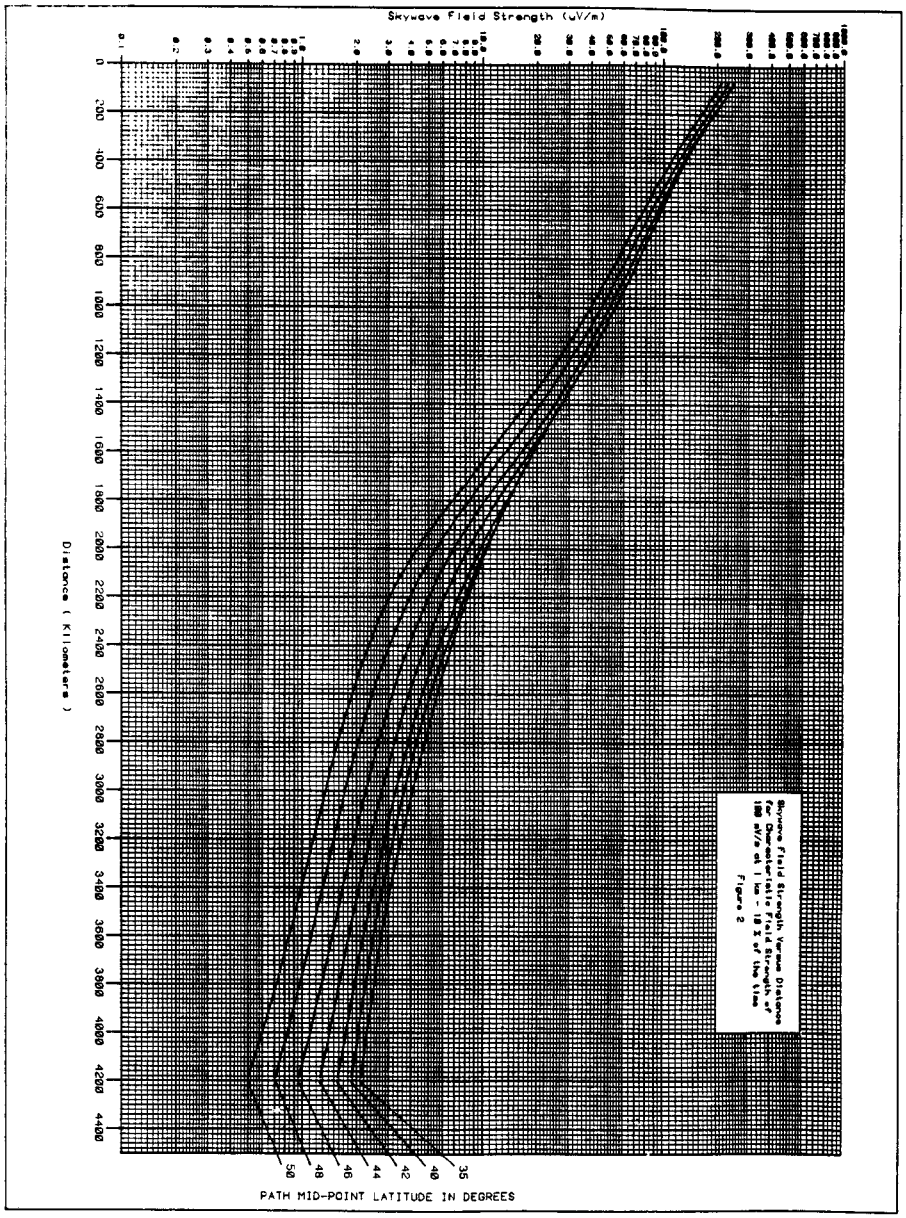

Skywave Field Strength Versus Distance
for Characteristic Field Strength of
100 MV/M at 1 KM - 50% of the time
Scale A
Scale B
Skywave Field (uV/M)
Distance (kilometers)
Scale A
Scale B

Figure 1a


dB (1uV/m)
60
40
20
0
-20
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
750
500
250
10%
50%
13 dB
KILOMETERS
MICROVOLTS PER METER
1000
100
10
1
0.1
FIGURE 1b
SKYWAVE CURVES FOR THE HIGH-LATITUDE AREAS 100 mV/m at 1 km 2 Hours After Sunset
Note: If d is less than 250 km, F(c) is evaluated for d = 250 km. However, the actual value of d is to be used in determining angle of departure.
F(c) = 95 - 20 log d -20((d-300)/1000)½
dB (1 uV/m)
d = distance, km




Skywave Field Strength Versus Distance for Characteristic Field Strength of 100 mV/m at 1 km - 10 % of the time
Figure 2

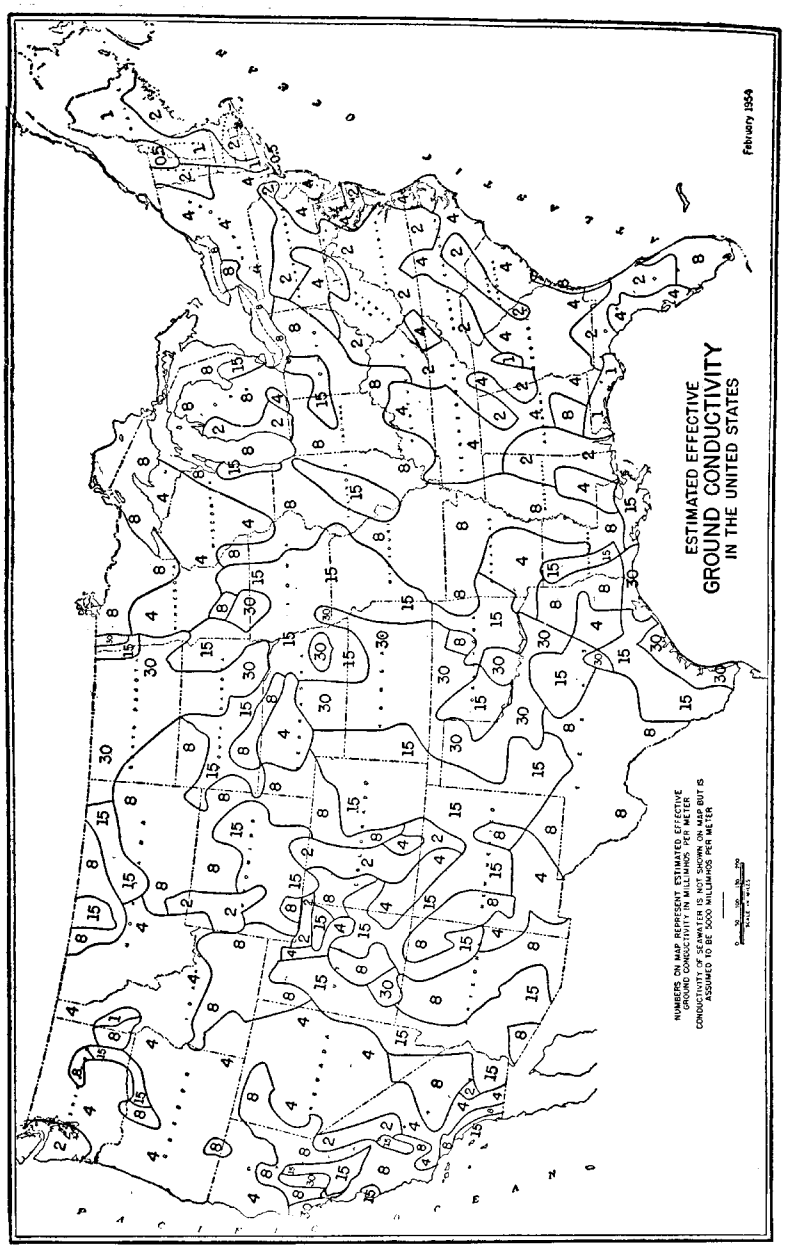

ESTIMATED EFFECTIVE
GROUND CONDUCTIVITY
IN THE UNITED STATES
February 1954
NUMBERS ON MAP REPRESENT ESTIMATED EFFECTIVE GROUND CONDUCTIVITY IN MILLIMHOS PER METER
CONDUCTIVITY OF SEAWATER IS NOT SHOWN ON MAP BUT IS ASSUMED TO BE 5000 MILLIMHOS PER METER

FIGURE R3.

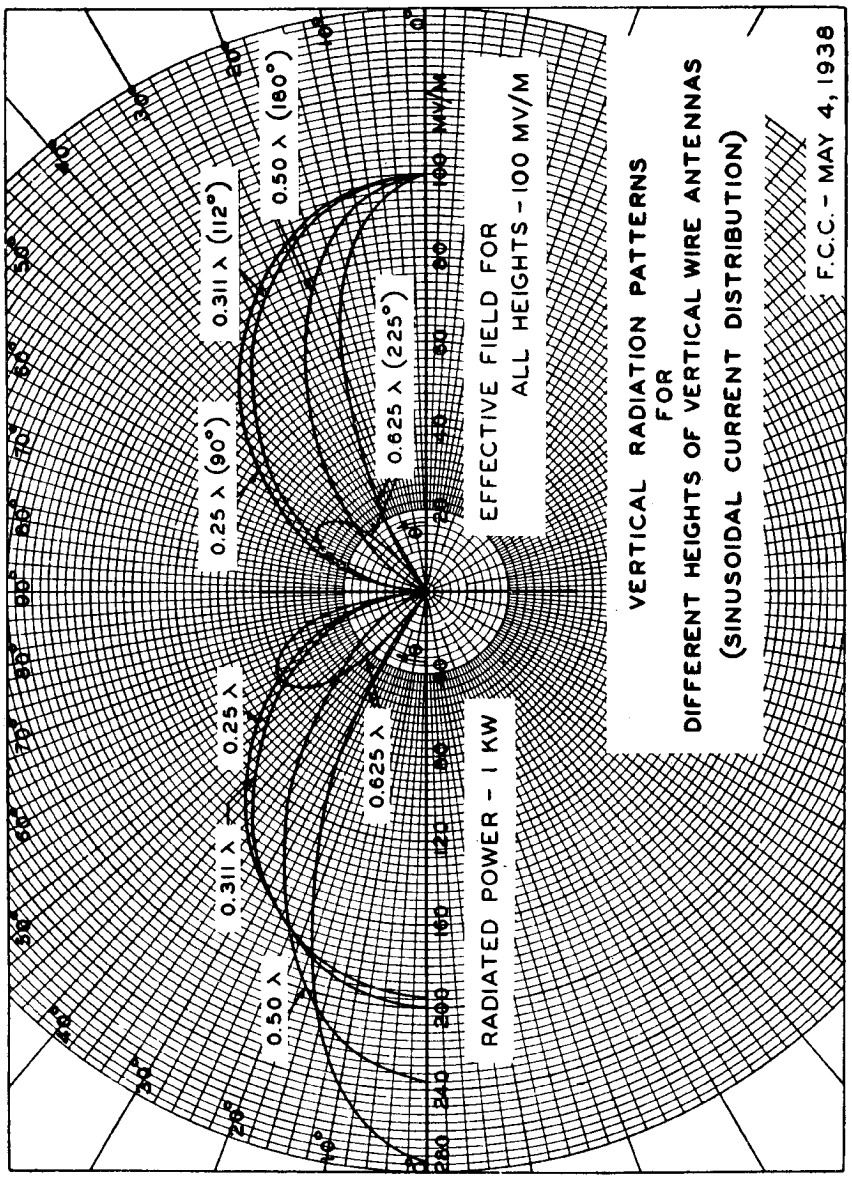
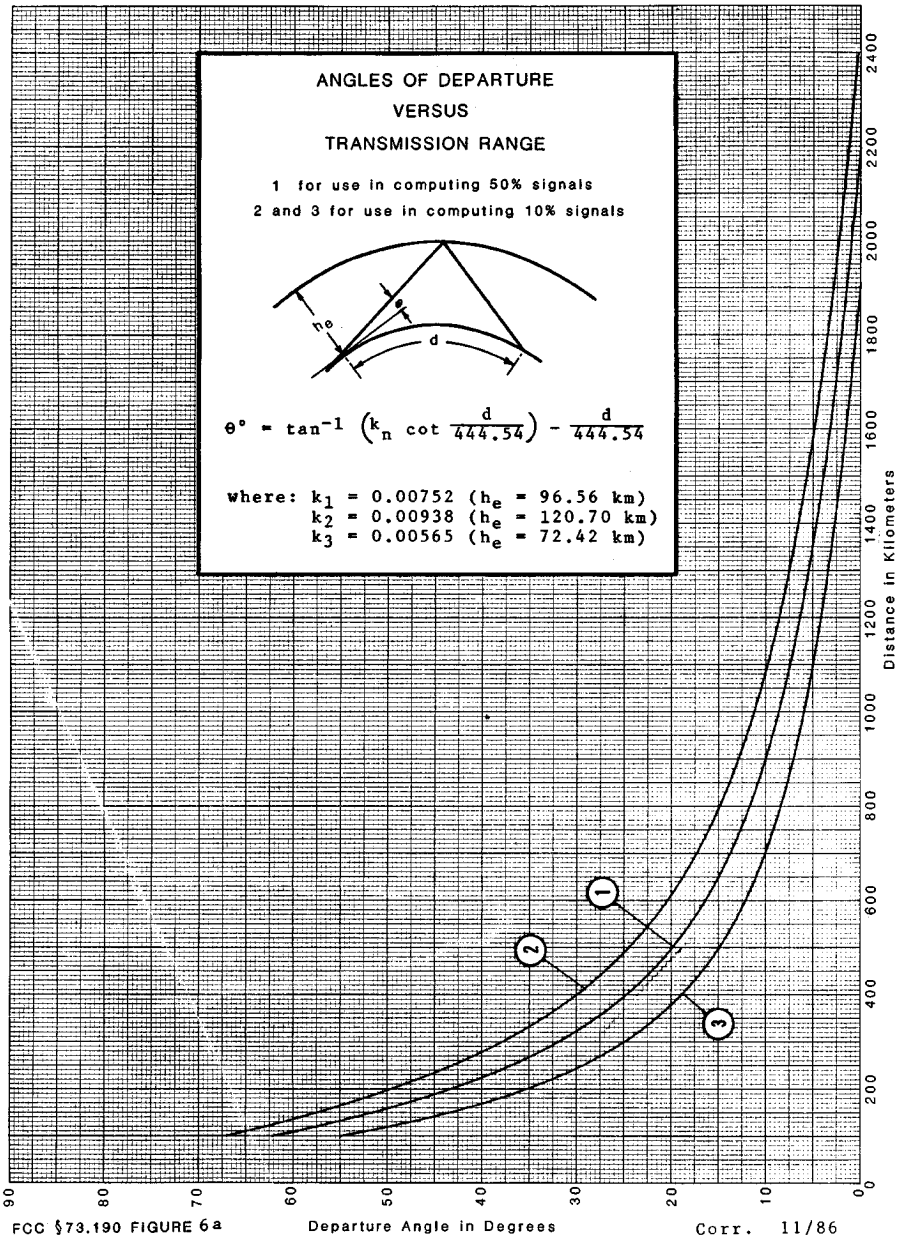

VERTICAL RADIATION PATTERNS
FOR
DIFFERENT HEIGHTS OF VERTICAL WIRE ANTENNAS
(SINUSOIDAL CURRENT DISTRIBUTION)
F.C.C. - MAY 4, 1938
EFFECTIVE FIELD FOR
ALL HEIGHTS - 100 MV/M
RADIATED POWER - 1 KW
0.25 λ
0.311 λ
0.50 λ
0.625 λ
0.25 λ (90°)
0.311 λ (112°)
0.50 λ (180°)
0.625 λ (225°)

Figure 5


ANGLES OF DEPARTURE
VERSUS
TRANSMISSION RANGE
1 for use in computing 50% signals
2 and 3 for use in computing 10% signals
$\theta° = \tan^{-1}\left(k_n \cot \frac{d}{444.54}\right) - \frac{d}{444.54}$
where: $k_1 = 0.00752$ ($h_e = 96.56$ km)
$k_2 = 0.00938$ ($h_e = 120.70$ km)
$k_3 = 0.00565$ ($h_e = 72.42$ km)
Distance in Kilometers
Departure Angle in Degrees
FCC §73.190 FIGURE 6a
Corr. 11/86

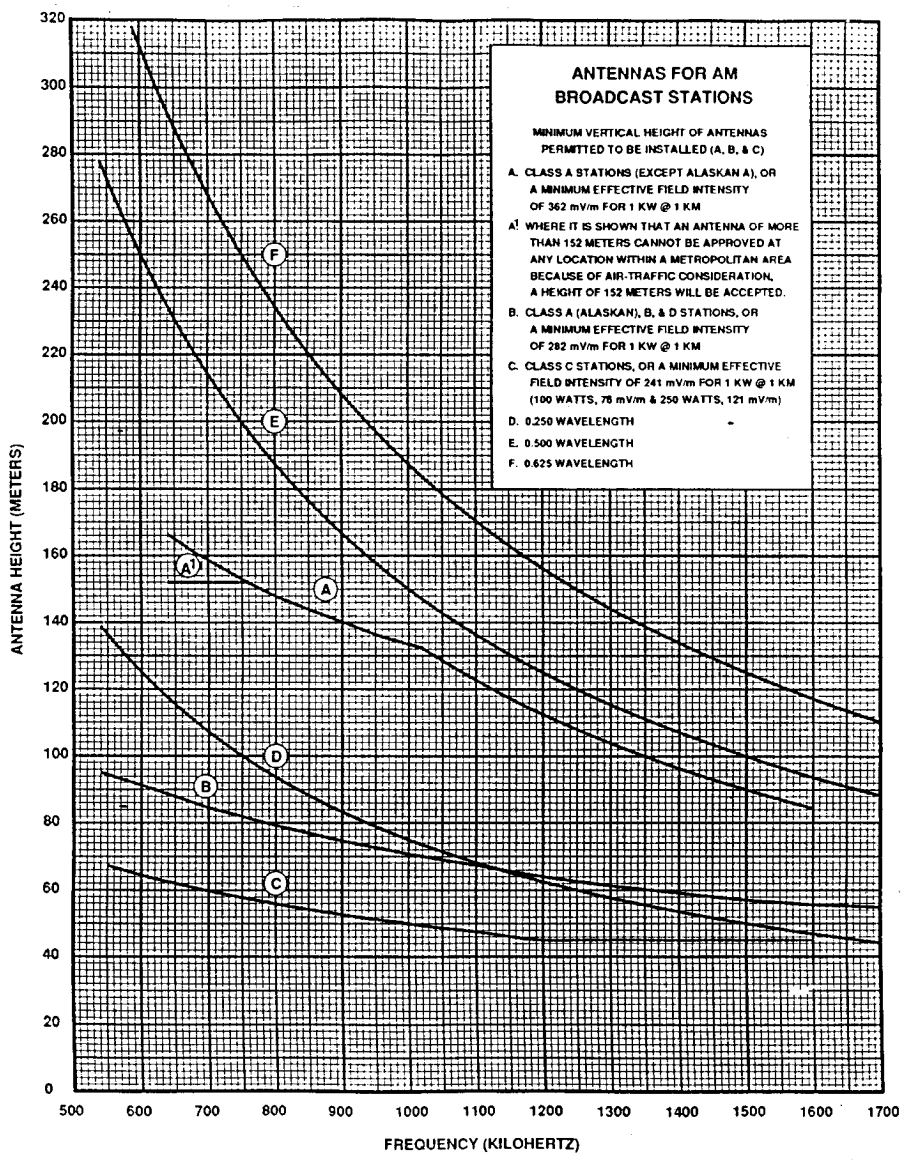

ANTENNAS FOR AM BROADCAST STATIONS
MINIMUM VERTICAL HEIGHT OF ANTENNAS PERMITTED TO BE INSTALLED (A, B, & C)
A. CLASS A STATIONS (EXCEPT ALASKAN A), OR A MINIMUM EFFECTIVE FIELD INTENSITY OF 362 mV/m FOR 1 KW @ 1 KM
A1 WHERE IT IS SHOWN THAT AN ANTENNA OF MORE THAN 152 METERS CANNOT BE APPROVED AT ANY LOCATION WITHIN A METROPOLITAN AREA BECAUSE OF AIR-TRAFFIC CONSIDERATION, A HEIGHT OF 152 METERS WILL BE ACCEPTED.
B. CLASS A (ALASKAN), B, & D STATIONS, OR A MINIMUM EFFECTIVE FIELD INTENSITY OF 282 mV/m FOR 1 KW @ 1 KM
C. CLASS C STATIONS, OR A MINIMUM EFFECTIVE FIELD INTENSITY OF 241 mV/m FOR 1 KW @ 1 KM (100 WATTS, 76 mV/m & 250 WATTS, 121 mV/m)
D. 0.250 WAVELENGTH
E. 0.500 WAVELENGTH
F. 0.625 WAVELENGTH
ANTENNA HEIGHT (METERS)
320
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
FREQUENCY (KILOHERTZ)
F
E
A1
A
D
B
C

Figure 7

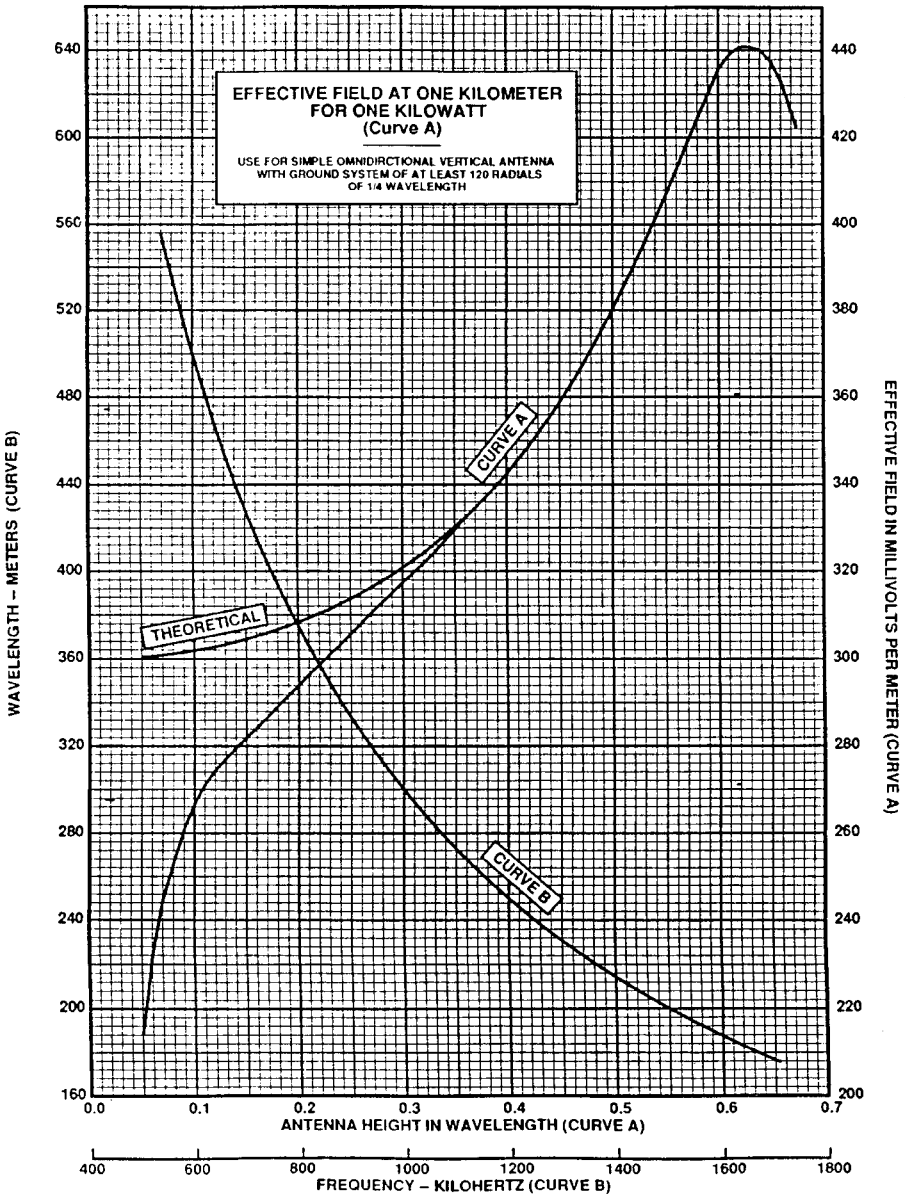

EFFECTIVE FIELD AT ONE KILOMETER
FOR ONE KILOWATT
(Curve A)
USE FOR SIMPLE OMNIDIRCTIONAL VERTICAL ANTENNA
WITH GROUND SYSTEM OF AT LEAST 120 RADIALS
OF 1/4 WAVELENGTH
CURVE A
THEORETICAL
CURVE B
WAVELENGTH – METERS (CURVE B)
EFFECTIVE FIELD IN MILLIVOLTS PER METER (CURVE A)
640
600
560
520
480
440
400
360
320
280
240
200
160
440
420
400
380
360
340
320
300
280
260
240
220
200
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
ANTENNA HEIGHT IN WAVELENGTH (CURVE A)
400
600
800
1000
1200
1400
1600
1800
FREQUENCY – KILOHERTZ (CURVE B)

Figure 8

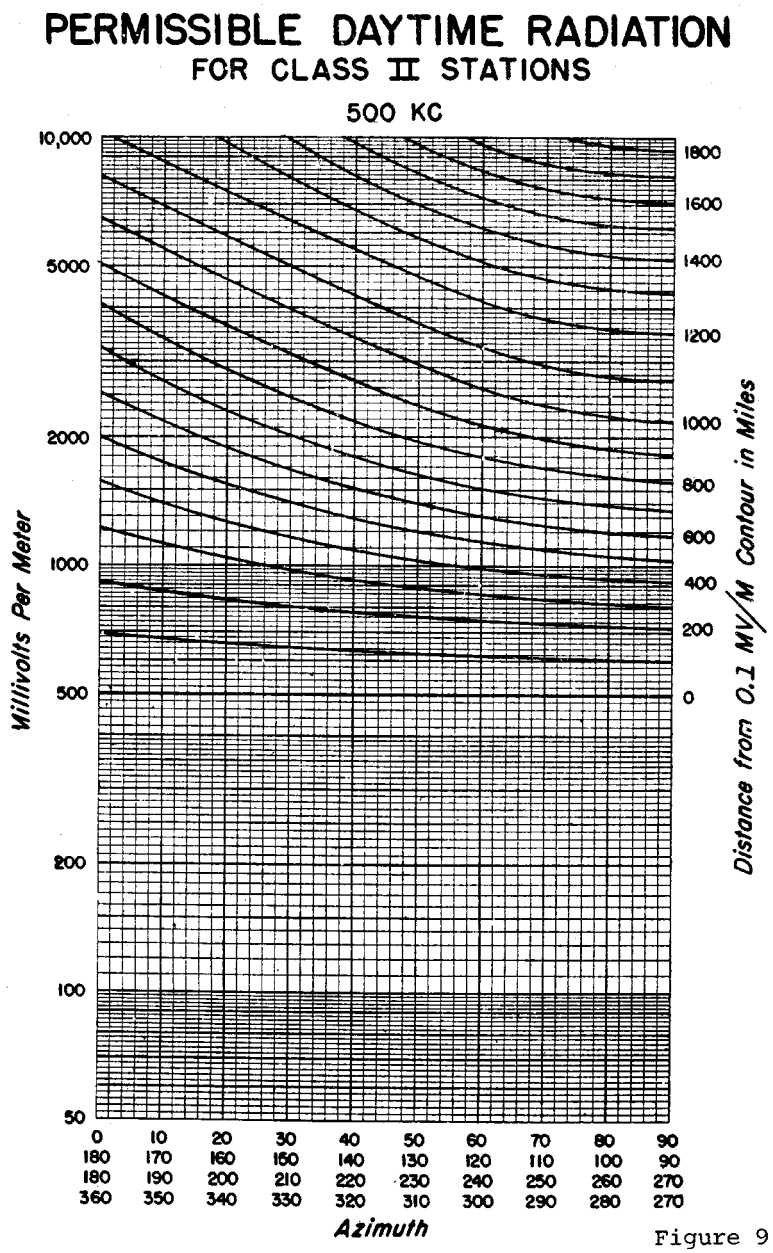

PERMISSIBLE DAYTIME RADIATION
FOR CLASS III STATIONS
500 KC
Millivolts Per Meter
10,000
5000
2000
1000
500
200
100
50
Distance from 0.1 MV/M Contour in Miles
1800
1600
1400
1200
1000
800
600
400
200
0
0 10 20 30 40 50 60 70 80 90
180 170 160 150 140 130 120 110 100 90
180 190 200 210 220 230 240 250 260 270
360 350 340 330 320 310 300 290 280 270
Azimuth

Figure 9

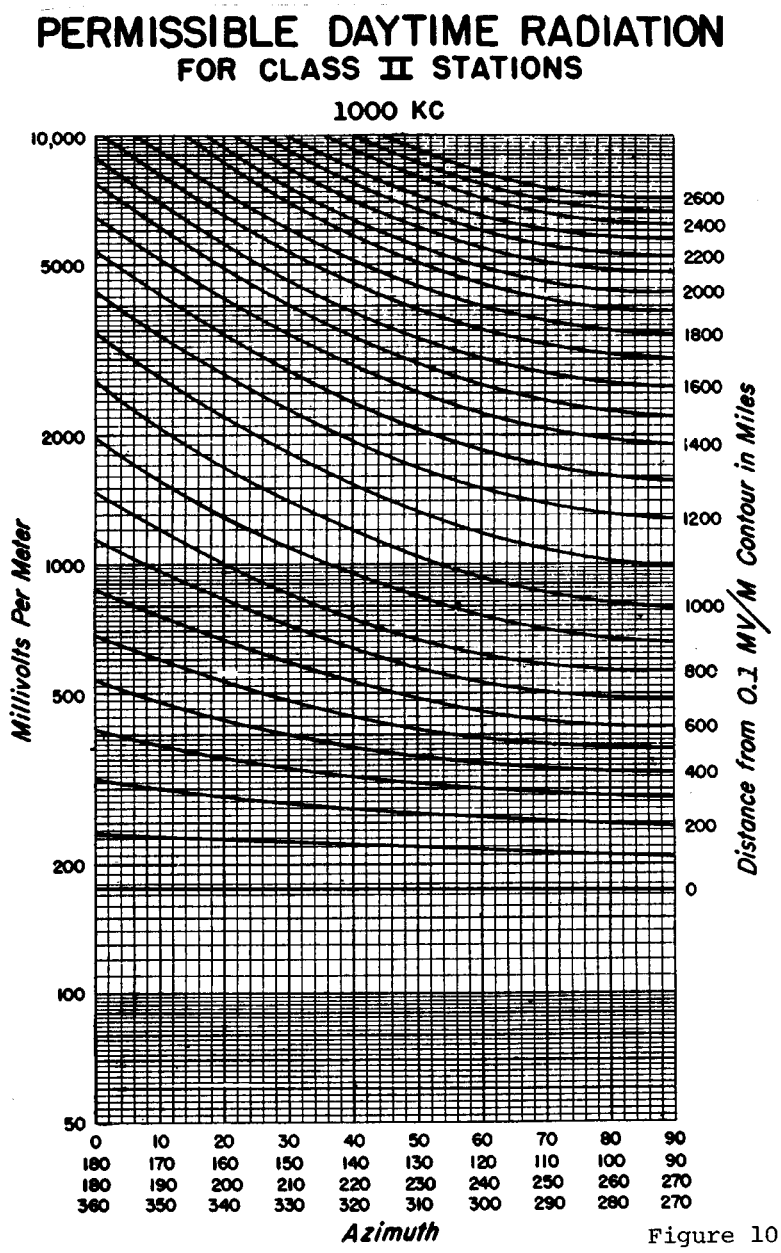

PERMISSIBLE DAYTIME RADIATION
FOR CLASS II STATIONS
1000 KC
Millivolts Per Meter
10,000
5000
2000
1000
500
200
100
50
Distance from 0.1 MV/M Contour in Miles
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 10 20 30 40 50 60 70 80 90
180 170 160 150 140 130 120 110 100 90
180 190 200 210 220 230 240 250 260 270
360 350 340 330 320 310 300 290 280 270
Azimuth

Figure 10

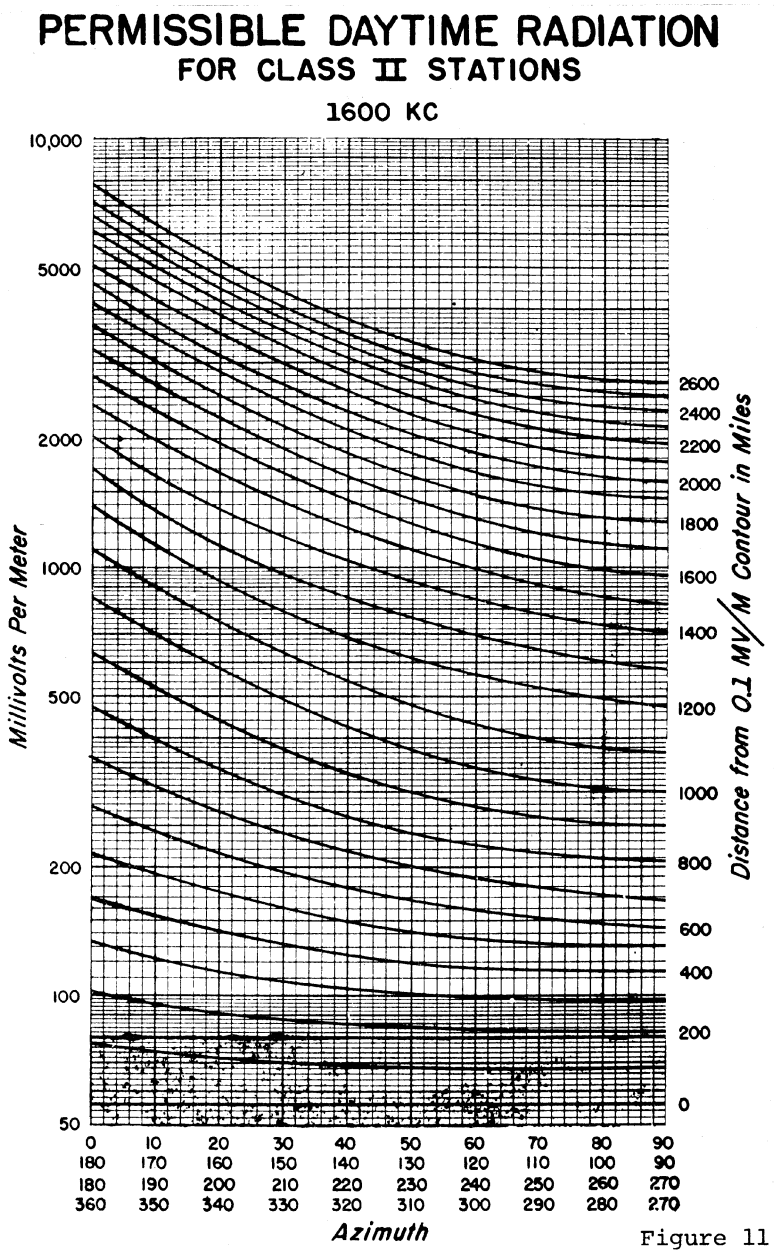
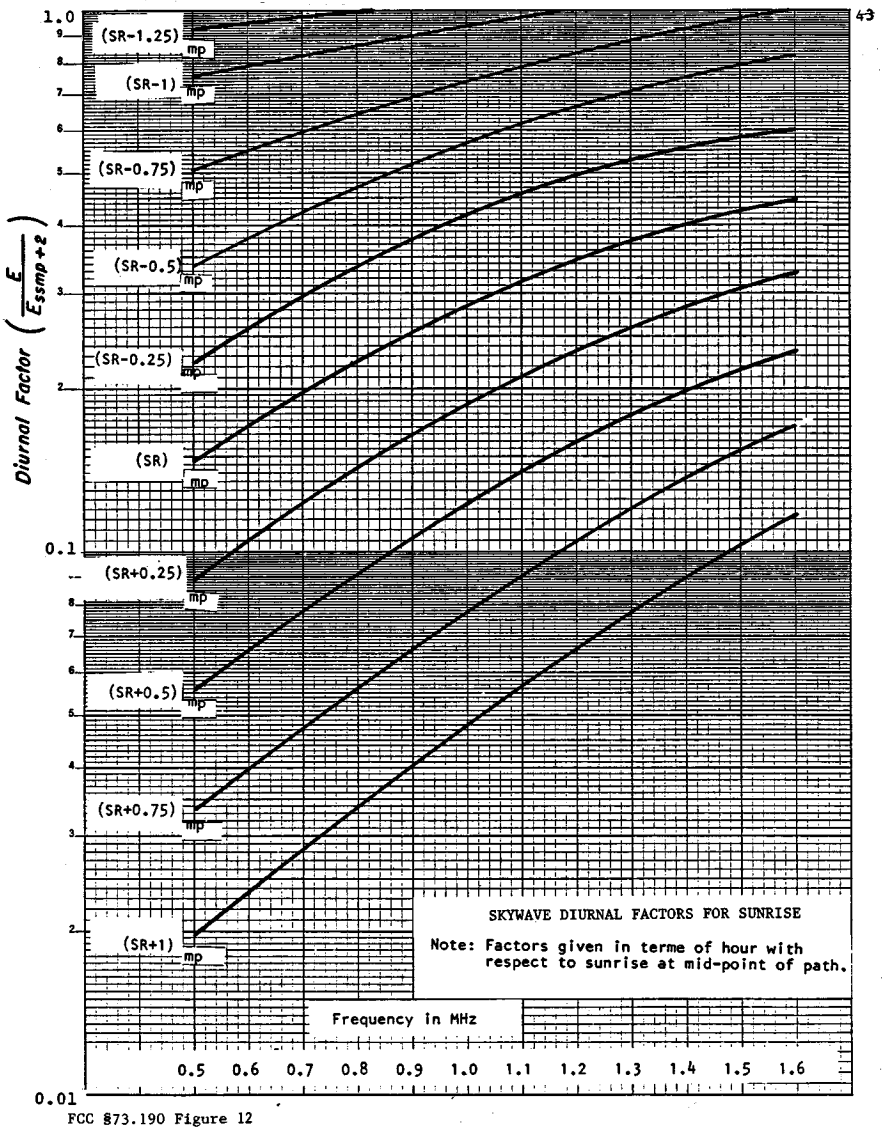
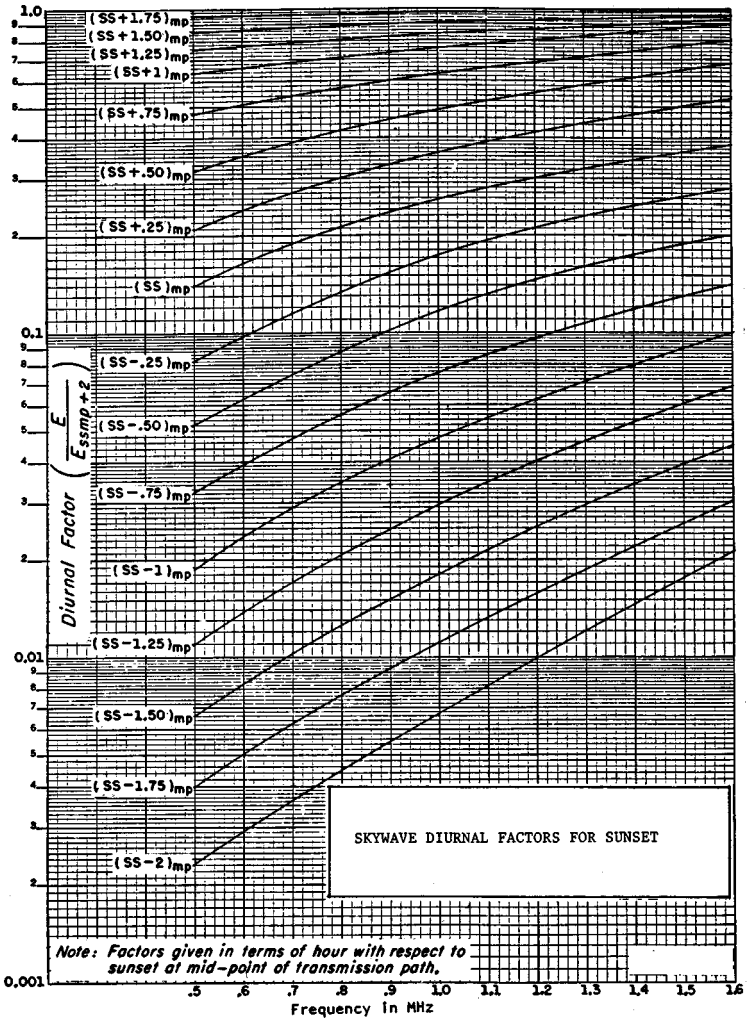

PERMISSIBLE DAYTIME RADIATION
FOR CLASS II STATIONS
1600 KC
Millivolts Per Meter
10,000
5000
2000
1000
500
200
100
50
Distance from 0.1 MV/M Contour in Miles
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 10 20 30 40 50 60 70 80 90
180 170 160 150 140 130 120 110 100 90
180 190 200 210 220 230 240 250 260 270
360 350 340 330 320 310 300 290 280 270
Azimuth

Figure 11




FCC §73.190 Figure 12




FCC § 73.190 Figure 13

[28 FR 13574, Dec. 14, 1963, as amended at 30 FR 12720, Oct. 6, 1965; 33 FR 15420, Oct 17, 1968; 48 FR 42959, Sept. 20, 1983; 49 FR 43963, Nov. 1, 1984; 50 FR 18844, May 2, 1985; 51 FR 4753, Feb. 7, 1986; 52 FR 36879, Oct. 1, 1987; 56 FR 64869, Dec. 12, 1991]

## Subpart B—FM Broadcast Stations

### § 73.201 Numerical designation of FM broadcast channels.

The FM broadcast band consists of that portion of the radio frequency spectrum between 88 MHz and 108 MHz. It is divided into 100 channels of 200 kHz each. For convenience, the frequencies available for FM broadcasting (including those assigned to noncommercial educational broadcasting) are given numerical designations which are shown in the table below:

| Frequency (Mc/s) | Channel No. |
|---|---|
| 88.1 | 201 |
| 88.3 | 202 |

| Frequency (Mc/s) | Channel No. |
|---|---|
| 88.5 | 203 |
| 88.7 | 204 |
| 88.9 | 205 |
| 89.1 | 206 |
| 89.3 | 207 |
| 89.5 | 208 |
| 89.7 | 209 |
| 89.9 | 210 |
| 90.1 | 211 |
| 90.3 | 212 |
| 90.5 | 213 |
| 90.7 | 214 |
| 90.9 | 215 |
| 91.1 | 216 |
| 91.3 | 217 |
| 91.5 | 218 |
| 91.7 | 219 |
| 91.9 | 220 |
| 92.1 | 221 |
| 92.3 | 222 |
| 92.5 | 223 |
| 92.7 | 224 |
| 92.9 | 225 |
| 93.1 | 226 |
| 93.3 | 227 |
| 93.5 | 228 |
| 93.7 | 229 |
| 93.9 | 230 |
| 94.1 | 231 |
| 94.3 | 232 |
| 94.5 | 233 |
| 94.7 | 234 |
| 94.9 | 235 |
| 95.1 | 236 |
| 95.3 | 237 |
| 95.5 | 238 |
| 95.7 | 239 |
| 95.9 | 240 |
| 96.1 | 241 |
| 96.3 | 242 |
| 96.5 | 243 |
| 96.7 | 244 |
| 96.9 | 245 |
| 97.1 | 246 |
| 97.3 | 247 |
| 97.5 | 248 |
| 97.7 | 249 |
| 97.9 | 250 |
| 98.1 | 251 |
| 98.3 | 252 |
| 98.5 | 253 |
| 98.7 | 254 |
| 98.9 | 255 |
| 99.1 | 256 |
| 99.3 | 257 |
| 99.5 | 258 |
| 99.7 | 259 |
| 99.9 | 260 |
| 100.1 | 261 |
| 100.3 | 262 |
| 100.5 | 263 |
| 100.7 | 264 |
| 100.9 | 265 |
| 101.1 | 266 |
| 101.3 | 267 |
| 101.5 | 268 |
| 101.7 | 269 |
| 101.9 | 270 |
| 102.1 | 271 |
| 102.3 | 272 |
| 102.5 | 273 |
| 102.7 | 274 |
| 102.9 | 275 |
| 103.1 | 276 |
| 103.3 | 277 |
| 103.5 | 278 |
| 103.7 | 279 |
| 103.9 | 280 |
| 104.1 | 281 |
| 104.3 | 282 |
| 104.5 | 283 |
| 104.7 | 284 |
| 104.9 | 285 |
| 105.1 | 286 |
| 105.3 | 287 |
| 105.5 | 288 |
| 105.7 | 289 |
| 105.9 | 290 |
| 106.1 | 291 |
| 106.3 | 292 |
| 106.5 | 293 |
| 106.7 | 294 |
| 106.9 | 295 |
| 107.1 | 296 |
| 107.3 | 297 |
| 107.5 | 298 |
| 107.7 | 299 |
| 107.9 | 300 |

NOTE: The frequency 108.0 MHz may be assigned to VOR test stations subject to the condition that interference is not caused to the reception of FM broadcasting stations, present or future.

[28 FR 13623, Dec. 14, 1963, as amended at 30 FR 4480, Apr. 7, 1965; 52 FR 10570, Apr. 2, 1987]

### § 73.202 Table of Allotments.

(a) *General.* The following Table of Allotments contains the channels (other than noncommercial educational Channels 201–220) designated for use in communities in the United States, its territories, and possessions. All listed channels are for Class B stations in Zones I and I–A and for Class C stations in Zone II unless otherwise specifically designated.

(1) Channels designated with an asterisk may be used only by noncommercial educational broadcast stations. The rules governing the use of those channels are contained in § 73.501.

(2) Each channel listed in the Table of Allotments reflects the class of station that is authorized, or has an application filed, to use it based on the minimum and maximum facility requirements for each class contained in § 73.211.

NOTE: The provisions of this paragraph [(a)(2) of this section] become effective [3 years from the effective date of the Report and Order in BC Docket 80–90].

(b) *Table of FM Allotments.*

ALABAMA

| | Channel No. |
|---|---|
| Abbeville | 232C3 |
| Addison | 289A |
| Albertville | 286C |
| Alexander City | 291C1 |
| Andalusia | 251C1, 279A |
| Anniston | 263C |
| Arab | 224A |
| Ashland | 238A |
| Athens | 282C |
| Atmore | 290A |
| Auburn | 249A |
| Bay Minette | 288A |
| Birmingham | 229C, 233C, 243C, 258C, 284C, 295C, 299C |
| Brantley | 262A |
| Brewton | 292A |
| Brundidge | 234A |
| Butler | 228C2 |
| Camden | 272A |
| Carrollton | 231C |
| Centre | 290A |
| Chickasaw | 252C2 |
| Citronelle | 271C3 |
| Clanton | 249A |
| Columbia | 221A |
| Columbiana | 268A |
| Cordova | 237A |
| Cullman | 221A, 266C |
| Dadeville | 247A |
| Daphne | 293C2 |
| Decatur | 245C, 271C1 |
| Demopolis | 293C3 |
| Dora | 223A |
| Dothan | 238C, 259C1, 267A, 273C3 |
| East Brewton | 239A |
| Elba | 266A |
| Enterprise | 245C, 294C |
| Eufaula | 224C2, 250A |
| Eutaw | 282A |
| Eva | 260A |
| Evergreen | 227C1 |
| Fairhope | 221C3 |
| Fayette | 251C1 |
| Florence | 241A, 297C |
| Fort Mitchell | 252A |
| Fort Rucker | 263A |
| Fruithurst | 274A |
| Gadsden | 279C |
| Geneva | 229C1 |
| Georgiana | 299C2 |
| Glencoe | 226A |
| Greensboro | 256A |
| Greenville | 232A, 240A |
| Grovehill | 291C3 |
| Guntersville | 240C3 |
| Haleyville | 224A |
| Hamilton | 221A |
| Hartselle | 291C3 |
| Headland | 287C3 |
| Homewood | 247A |
| Huntsville | 236C2, 256C |
| Jackson | 233C2 |
| Jasper | 273C |
| Linden | 275C2, 253C1 |
| Lisman | 299A |
| Luverne | 282C1 |
| Meridianville | 231A |
| Millbrook | 246A |
| Mobile | 225C, 235C, 241C, 248C, 260C |
| Monroeville | 257C2 |
| Montgomery | 222C, 241A, 255C1, 255C2, 270C, 277C |

ALABAMA—Continued

| | Channel No. |
|---|---|
| Moulton | 276A |
| Muscle Shoals | 288A |
| Northport | 264C3 |
| Oneonta | 249A |
| Opelika | 244A |
| Opp | 272A |
| Orange Beach | 289A |
| Orrville | 274A |
| Oxford | 250A |
| Ozark | 280C3, 285A |
| Phoenix City | 261A |
| Pine Hill | 244C3 |
| Prattville | 236C2 |
| Reform | 269C2 |
| Repton | 266A |
| Roanoke | 272C3 |
| Rogersville | 230A |
| Russellville | 249A |
| Saint Florian | 274A |
| Scottsboro | 252A |
| Selma | 261C2, 265C2, 287C2 |
| Sheffield | 292C3 |
| Smiths | 267A |
| Stevenson | 269A |
| Sylacauga | 252A |
| Talladega | 224A, 248A |
| Tallassee | 260A |
| Thomaston | 249A |
| Thomasville | 238C3 |
| Trinity | 223A |
| Troy | 289C |
| Trussville | 290A |
| Tuscaloosa | 225C1, 239C1, 288A |
| Tuscumbia | 262C |
| Tuskegee | 240A |
| Union Springs | 231A |
| Uniontown | 298A |
| Valley | 237A |
| Vernon | 293A |
| Warrior | 254C1, 254C2 |
| Wetumpka | 250A |
| Winfield | 290A |
| York | 285C2 |

ALASKA

| | Channel No. |
|---|---|
| Anchorage | 225C, 229C2, 247C1, 251C1, 255C1, 263C2, 267C2, 271C3, 276C1, 281C1,287C1, 293C, 298C1 |
| Bethel | 252C3, 261C3 |
| College | 280A |
| Cordova | 265A |
| Delta Junction | 228A |
| Dillingham | 256A |
| Fairbanks | 240C3, 245C3, 251C1, 266C2, 273C, 284C3 |
| Haines | *272A |
| Homer | 278C |
| Houston | 221A, 234C2, 241A, 242A |
| Juneau | 264A, 274A, 282A, 286A, 292C3 |
| Kasilof | 295A |
| Kenai | 261C3 |
| Ketchikan | 260A, 290C3, 294A |
| Kodiak | 261A, 266A |
| Kotzebue | 280A |
| Naknek | 265A |
| Nikiski | 227C2 |
| Nome | 241A, 262A |

ALASKA—Continued

| | Channel No. |
|---|---|
| North Pole | 262C1 |
| Palmer | 238C1 |
| Petersburg | *265A |
| Seward | 290A |
| Sitka | 276C2, 284A |
| Soldotna | 243C3, 269C3 |
| Valdez | 227A |
| Wasilla | 259C1 |
| Wrangell | *269A |
| Yakutat | 280A |

ARIZONA

| | Channel No. |
|---|---|
| Ajo | 252A |
| Apache junction | 296C2 |
| Arizona City | 293A |
| Bagdad | 276C3 |
| Benson | 249A |
| Bisbee | 222A |
| Buckeye | 295C2 |
| Bullhead City | 274C |
| Casa Grande | 288C2 |
| Chandler | 300C |
| Chinle | 297C2 |
| Chino Valley | 280C3 |
| Claypool | 291A |
| Clifton | 271C1 |
| Colorado City | 296C3 |
| Comobabi | *275A |
| Cottonwood | 240C1, 289C3 |
| Douglas | 237A, 243A |
| Duncan | 264A |
| Eager | 223C1 |
| Flagstaff | 225C, 230C, 248C, 261C2 |
| Florence | 276C1 |
| Gilbert | 280C2 |
| Glendale | 222C, 278C |
| Globe | 247C3, 262C |
| Green Valley | 221C2, 246C3 |
| Holbrook | 221C1 |
| Kachina Village | 286C2 |
| Kearny | 287C2 |
| Kingman | 234C, 260C2, 290C1 |
| Lake Havasu City | 224C2, 244C2, 266C3, 283C2, 286C2 |
| Marana | 252A |
| Mesa | 284C, 227C |
| Miami | 252A |
| Nogales | 252A, 256A |
| Oracle | 292A |
| Oraibi | 255C |
| Oro Valley | 248A, 270A |
| Page | 227C2 |
| Paradise Valley | 290C3 |
| Parker | 230C3, 257C2 |
| Payson | 257A, 266C1, 282C |
| Phoenix | 233C, 238C, 245C, 254C, 260C, 268C, 273C |
| Pima | 296A |
| Pinetop | 294C1 |
| Prescott | 256C, 271C |
| Prescott Valley | 252C2, 294C2 |
| Quartzsite | 232A |
| Safford | 231C1 |
| Salome | 241A |
| Seligman | 277A |
| St. Johns | 239C |
| Strasburg | 272A |
| Scottsdale | 264C |

ARIZONA—Continued

| | Channel No. |
|---|---|
| Sedona | 275C, 298C |
| Show Low | 228C3, 243C |
| Sierra Vista | 265A, 269A |
| Springerville | 269C2 |
| Sun City | 292C2 |
| Tempe | 250C |
| Thatcher | 256C |
| Tuba City | 250C1 |
| Tucson | 225C, 229C, 235C, 241C, 258C, 281A, 298C |
| Tusayan | 221A |
| Wellton | 283C2 |
| Wickenburg | 231C3, 287C2 |
| Willcox | 223C3, 285C2 |
| Williams | 244A |
| Window Rock | 241C1, 274C3 |
| Winslow | 236C |
| Yarnell | 258A |
| Yuma | 226C, 236C, 265A |

ARKANSAS

| | Channel No. |
|---|---|
| Arkadelphia | 265A |
| Ashdown | 227C3, 280A |
| Atkins | 257A |
| Augusta | 249C2 |
| Bald Knob | 296C3 |
| Barling | 233A |
| Batesville | 226C, 258A |
| Beebe | 268A |
| Bella Vista | 293C2 |
| Benton | 294C2 |
| Bentonville | 239A, 252C1 |
| Berryville | 296C3 |
| Blossom | 224C2 |
| Blytheville | 242C1 |
| Booneville | 284C2 |
| Cabot | 273A |
| Calico Rock | 246A |
| Camden | 246C2, 283A |
| Cherokee Village | 252A |
| Clarendon | 281A |
| Clarksville | 224A, 295A |
| Clinton | 221C3 |
| Coalgate | 288C2 |
| Colt | 272C2 |
| Conway | 224A, 286C1 |
| Corning | 228A |
| Crossett | 285A |
| Danville | 288A |
| Dardanelle | 272C3 |
| De Witt | 247C2 |
| DeQueen | 221C2 |
| Dermott | 276A, 289A |
| Des Arc | 284A |
| Dumas | 295C3 |
| Earle | 280C3 |
| East Camden | 237C1 |
| El Dorado | 227C3, 240A, 254C3, 268A, 277C1 |
| England | 243C3 |
| Eudora | 268A |
| Eureka Springs | 265A |
| Fairfield Bay | 291C2 |
| Fayetteville | 221C3, 280C1, 300C |
| Fordyce | 272A |
| Forrest City | 228C3 |
| Fort Smith | 229C, 256C, 260C, 264C2 |
| Glenwood | 283A |
| Gosnell | 297A |

ARKANSAS—Continued

| | Channel No. |
|---|---|
| Gould | 273A |
| Greenwood | 268A, 292C3 |
| Grosnell | 230A |
| Gurdon | 295A |
| Hamburg | 258A |
| Hampton | 293C3 |
| Hardy | 284A |
| Harrisburg | 240C3 |
| Harrison | 244A, 241C2, 275C1 |
| Hatfield | 281C2 |
| Heber Springs | 264C2 |
| Helena | 233C3, 276C3 |
| Hope | 269C2, 285A |
| Horseshoe Bend | 293A |
| Hot Springs | 244A, 248C1, 290C1 |
| Hot Springs Village | 225A |
| Hoxie | 287A |
| Humnoke | 269A |
| Huntsville | 258C3 |
| Jacksonville | 262C1 |
| Jonesboro | 263C2, 270C, 300C1 |
| Lakeview | 228C3 |
| Lake City | 285C3 |
| Lake Village | 240A, 278A |
| Little Rock | 231C, 239C, 253C, 258A, 279C |
| Lonoke | 292C2 |
| Lowell | 270C2 |
| Magnolia | 300C1 |
| Malvern | 227A, 268A |
| Mammoth Spring | 236C1 |
| Marianna | 287A |
| Marion | 296A |
| Marked Tree | 229A |
| Marshall | 282C |
| Maumelle | 235C, 245A |
| Mena | 242C1, 271C3, 287C3 |
| Monticello | 229C3, 260C3 |
| Morrilton | 269A |
| Mountain Home | 250C2, 288C2, 298C1 |
| Mountain Pine | 270A |
| Mountain View | 277C |
| Murfreesboro | 258C3 |
| Nashville | 245A, 288A |
| Newport | 244C2 |
| North Crossett | 274C3 |
| North Little Rock | 266A |
| Ola | 267A |
| Ozark | 244A |
| Pangburn | 256A |
| Paragould | 296A |
| Paris | 237C2 |
| Piggott | 288A |
| Pine Bluff | 222C1, 257A, 267C3 |
| Pocohontas | 281A |
| Prairie Grove | 235C2 |
| Rogers | 232C2 |
| Russellville | 265A |
| Saint Paul | 287A |
| Salem | 265A |
| Searcy | 260C2 |
| Sheridan | 275C2 |
| Sherwood | 271A |
| Siloam Springs | *266A, 289C |
| Springdale | 285A |
| Stamps | 263C2, 282A |
| Stuttgart | 288A |
| Texarkana | 284A, 292C2, 296A |
| Trumann | 294A |
| Van Buren | 274C3 |
| Viola | 232C3 |
| Waldo | 256A |
| Waldron | 276C3 |

ARKANSAS—Continued

| | Channel No. |
|---|---|
| Walnut Ridge | 292A |
| Warren | 288A |
| West Helena | 233C3, 285A |
| White Hall | 283A |
| Wilson | 234A |
| Wrightsville | 299C2 |
| Wynne | 223C2 |
| Yellville | 269A |

CALIFORNIA

| | Channel No. |
|---|---|
| Alameda | 224A |
| Alturas | 267C, 293C1, 297C |
| Anaheim | 240A |
| Anderson | 234C2 |
| Apple Valley | 272A |
| Arcadia | 296A |
| Arcata | 226C |
| Arnold | 240A, 291B1 |
| Arvin | 223A |
| Atascadero | 283B |
| Atwater | 223A |
| Auberry | 286B1 |
| Auburn | 266B |
| Avalon | 224A |
| Avenal | 289A |
| Baker | 235B1, 268B |
| Bakersfield | 221A, 231B, 243B, 257B1, 268B, 296A, 300B |
| Barstow | 232B1, 240B1 |
| Beaumont | 265A |
| Berkeley | 231B, 275B |
| Big Bear City | 227A |
| Big Bear Lake | 269A |
| Big Pine | 227B |
| Bishop | 264B |
| Blue Lake | 292A |
| Blythe | 262B |
| Booneville | 241A |
| Brawley | 233B, 241B |
| Burney | 291C |
| Calexico | 249A |
| California City | 295A |
| Calipatria | 265A |
| Calistoga | 265A |
| Camarillo | 212B, 240B1 |
| Cambria | 235B1, 278A |
| Carlsbad | 239B |
| Carmel | 238A, 269A |
| Carnelian Bay | 279C1 |
| Carpinteria | 269A |
| Cartago | 275A |
| Cathedral City | 253B |
| Central Valley | 257C2 |
| Chester | 255C, 259A |
| Chico | 230B1, 236B, 224A |
| China Lake | 274A |
| Chowchilla | 227A |
| Clovis | 221B |
| Coachella | 229B |
| Coalinga | 247A, 261B |
| Coarsegold | 233A |
| Columbia | 255A |
| Colusa | 276A, 298B |
| Compton | 272A |
| Copperopolis | 288A |
| Corcoran | 272B1 |
| Corning | 264C1 |
| Cresent City | 232C3 |

CALIFORNIA—Continued

| | Channel No. |
|---|---|
| Cresent North | 250C2 |
| Davis | 282A |
| Delano | 253B, 287B |
| Desert Center | 288A |
| Dinuba | 255B |
| Dunnigan | 288B1 |
| Dunsmuir | 261C3 |
| Earlimart | 228A |
| East Hemet. | |
| East Los Angeles | 250B |
| East Porterville | 263B1 |
| El Cajon | 227B |
| El Centro | 298B |
| El Rio | 279A |
| Ellwood | 233B |
| Escondido | 221A |
| Esparto | 250A |
| Essex | 255B, 280B |
| Eureka | 222C1, 242C, 268C, 288C1 |
| Fair Oaks | 234B1 |
| Fallbrook | 296A |
| Farmington | 232A |
| Felton | 229A |
| Ferndale | 257A |
| Firebaugh | 234A |
| Ford City | 271A |
| Fort Bragg | 228B, 237B1, 253B1 |
| Fortuna | 262C1 |
| Fowler | 244B1 |
| Freedom | 298A |
| Fremont | 285A |
| Fresno | 229B, 239B, 250B, 257A, 266B, 270B, 274B, 290B |
| Garberville | 279C1, 284C |
| Garden Grove | 232A |
| George | 264A |
| Gilroy | 233B |
| Glendale | 270B |
| Goleta | 292A |
| Gonzales | 282A |
| Grass Valley | 232B1, 257A, 277A |
| Greenacres | 291B1 |
| Greenfield | 258B, 300B |
| Gridley | 268A |
| Grover City | 297B |
| Guadalupe | 288A |
| Gualala | 263b1 |
| Hanford | 233A, 279B, 298B |
| Healdsburg | 225B, 240A, 244A |
| Hollister | 228A |
| Holtville | 261A |
| Huron | 252A |
| Hydesville | 231C1 |
| Idyllwild | 267A |
| Imperial | 257A |
| Independence | 223B |
| Indio | 224A, 272A |
| Inglewood | 280A |
| Jackson | 259A |
| Johannesburg | 280B1 |
| Joshua Tree | 221A |
| Julian | 261A |
| Kerman | 232A, 237A |
| Kernville | 273A |
| King City | 230B1, 271B |
| Kings Beach | 299C3 |
| Kingsburg | 292A |
| La Quinta | 244A |
| Lake Arrowhead | 280A |
| Lake Isabella | 283A |
| Lakeport | 252A, 258B |
| Lancaster | 292A |

CALIFORNIA—Continued

| | Channel No. |
|---|---|
| Lenwood | 245A, 283A |
| Lindsay | 277B1 |
| Livermore | 269A |
| Livingston | 240A |
| Lodi | 249A |
| Lompoc | 262B1, 281B1, 285A, 294B1 |
| Long Beach | 288A |
| Los Altos | 249A |
| Los Angeles | 222B, 226B, 230B, 234B, 238B, 242B, 246B, 254B, 258B, 262B, 266B, 274B, 278B, 282B, 286B, 290B, 298B |
| Los Banos | 284B, 295A |
| Los Gatos | 237A |
| Los Molinos | 269A |
| Los Osos-Baywood Pk. | 267B |
| Lucerne Valley | 293A |
| Ludlow | 261B1, 289A |
| Madera | 296B1 |
| Mammoth Lakes | 293B1 |
| Manteca | 244A |
| Marina | 224B1 |
| Mariposa | 242B, 280A |
| Marysville | 260B |
| McCloud | 238C3 |
| McFarland | 247A, 275B1 |
| Mecca | 249A |
| Mendocino | 224A |
| Mendota | 263A |
| Merced | 231A, 248B, 292A, 299A |
| Middletown | 254A |
| Modesto | 230A, 272A, 277B, 281B |
| Mojave | 249A |
| Monte Rio | 249B1 |
| Montecito | 225A |
| Monterey | 245B |
| Morro Bay | 231A, 259A |
| Morgan Hill | 241A |
| Mount Bullion | 260B |
| Mount Shasta | 300A |
| Mountain Pass | 258B |
| Needles | 250C1, 296B |
| Newberry Springs | 279A |
| Newport Beach | 276A |
| Oakdale | 236B |
| Oakhurst | 276B1 |
| Oceanside | 271B |
| Oildale | 237B1 |
| OJAI | 288A |
| Ontario | 228A |
| Orange Cove | 262A |
| Orcutt | 239B1 |
| Orland | 294B |
| Oroville | 249B1 |
| Oxnard | 252B1, 275A, 284B |
| Pacific Grove | 286B1 |
| Palm Dessert | 276A |
| Palm Springs | 263B1, 284B, 291B |
| Paradise | 244B1, 278B1 |
| Pasadena | 294B |
| Paso Robles | 223B, 276A |
| Patterson | 226B, 246A |
| Pismo Beach | 237A |
| Placerville | 221A |
| Point Arena | 272B1, 296B1 |
| Porterville | 259B |
| Quincy | 240A, 262A |
| Rancho Mirage | 258A |
| Red Bluff | 239B, 274C2 |
| Redding | 247C, 251C, 282C |
| Redlands | 244A |

CALIFORNIA—Continued

| | Channel No. |
|---|---|
| Redondo Beach | 228A |
| Ridgecrest | 224B1, 285B1 |
| Rio Del | 297C2 |
| Riverside | 224A, 248B, 256B |
| Rohnert Park | 285A |
| Rosamond | 228A, 288A |
| Roseville | 229B1 |
| Sacramento | 223B, 241B, 245B, 253B, 263B, 278A, 286B, 293B, 300B |
| Salinas | 250A, 264B, 273B, 278A |
| San Bernardino | 236B, 260B |
| San Clemente | 300B |
| San Diego | 231B, 235B, 243B, 247B, 251B, 264B, 268B, 275B, 279B, 287B, 293B |
| San Fernando | 232A |
| San Francisco | 227B, 235B, 239B, 243B, 247B, 251B, 255B, 259B, 267B, 271B, 279B, 283B, 287B, 291B, 295B |
| San Jacinto | 241A |
| San Joaquin | 288A |
| San Jose | 222B, 253B, 262B, 293B |
| San Luis Obispo | 227B, 241B, 246B1, 251B |
| San Mateo | 299B |
| San Rafael | 264A |
| Santa Ana | 244A, 292A |
| Santa Barbara | 229B, 248B, 260B, 277B, 299B1 |
| Santa Clara | 289B |
| Santa Cruz | 256B |
| Santa Margarita | 291B1 |
| Santa Maria | 256B, 273B |
| Santa Paula | 244A |
| Santa Rosa | 261B1, 269A |
| Santa Ynez | 290A |
| Searcy | 260C2 |
| Seaside | 280A, 296A |
| Sebastopol | 229A |
| Shafter | 249A, 282A |
| Shasta Lake City | 257C3, 296C3 |
| Shingle Springs | 270B |
| Shingletown | 241A, 287C2 |
| Soledad | 292A |
| Solvang | 244A |
| Sonora | 224A |
| South Lake Tahoe | 230B1, 275C |
| South Oroville | 285A |
| St. Helena | 257A |
| Stockton | 257A, 261A, 297B |
| Sun City | 225A |
| Susanville | 222C2, 227C, 242C3 |
| Sutter Creek | 298A |
| Taft | 280A |
| Tahoe City | 243C1 |
| Tehachapi | 261A, 276A |
| Temecula | 233A, 277A |
| Templeton | 263A |
| Thousand Oaks | 216B, 224A, 234A |
| Tipton | 285A |
| Tracy | 265A |
| Truckee | 268A |
| Tulare | 235B, 294B |
| Tulelake | 243C |
| Turlock | 252A |
| Twin Harte | 228A |
| Twentynine Palms | 242A, 299B1 |
| Ukiah | 233B, 246A, 277B, 290B |
| Vacaville | 237B1 |
| Ventura | 236B, 264B, 296A |
| Victorville | 276A |
| Visalia | 255B, 241A, 246B |
| Walnut Creek | 221A |
| Weaverville | 266A, 276C2 |

CALIFORNIA—Continued

| | Channel No. |
|---|---|
| Weed | 272C1 |
| Westley | 238A |
| West Covina | 252A |
| Williams | 256A |
| Willows | 292A |
| Windon | 254A |
| Windsor | 281A |
| Woodlake | 281B |
| Woodland | 281B |
| Yermo | 251B |
| Yreka | 280C1 |
| Yuba City | 280B1 |
| Yucca Valley | 295B |

COLORADO

| | Channel No. |
|---|---|
| Alamosa | 228A |
| Aspen | 249C3, 296C3 |
| Avon | 276C2 |
| Basalt | 291A |
| Boulder | 247C |
| Buena Vista | 281C3 |
| Breckenridge | 272A |
| Brush | 292A, 296A |
| Burlington | 257C1, 281C1 |
| Calhan | 284A |
| Canon City | 283A |
| Castle Rock | 221C2 |
| Colorado Springs | 225C, 232C, 236C, 251C, 270C |
| Cortez | 250C, 254C |
| Craig | 229C1, 273C |
| Delta | 236C, 277C2 |
| Denver | 239C, 253C, 258C, 262C, 266C, 278C, 286C, 290C, 294C |
| Dolores | 227C2 |
| Durango | 259C2, 263C1, 267C1, 287A |
| Eagle | 268C |
| Eckley | 237C1 |
| Estes Park | 271C3 |
| Evergreen | 243C |
| Fort Collins | 227C, 300C1 |
| Fort Morgan | 269A |
| Fountain | 241C3 |
| Frisco | 230A |
| Fruita | 260C |
| Glenwood Springs | 224C, 238A, 256C3 |
| Grand Junction | 222C, 226C, 264C1, 282C, 300C |
| Greeley | 223C1, 241C1 |
| Gunnison | 252C3, 272A |
| Hayden | 240C3, 297A |
| Holyoke | 222C2 |
| Idalia | 231A |
| Julesburg | 243C1 |
| Kremmling | 292C3 |
| La Junta | 221C3, 293C1, |
| Lafayette | 234C |
| Lakewood | 298C |
| Lamar | 227C1, 289C1 |
| Las Animas | 297A |
| Leadville | 228A |
| Limon | 229A, 276C1 |
| Longmont | 282C1 |
| Loveland | 273C2 |
| Manitou Springs | 274C |
| Meeker | 251C |
| Monte Vista | 237A |
| Montrose | 231C, 241C |
| Oak Creek | 281C3 |
| Otis | 252C1 |

COLORADO—Continued

| | Channel No. |
|---|---|
| Ouray | 289C3 |
| Pagosa Springs | 292C3 |
| Pueblo | 245C, 255C, 260C, 264C, 296C2, 300C1 |
| Pueblo West | 280C1 |
| Rifle | 287C |
| Rocky Ford | 238C1 |
| Salida | 222C3, 229C3 |
| Security | 288C3 |
| Silverton | 279C2, 297C1 |
| Snowmass Village | 280A |
| Strasburg | *249C3, 272A |
| Steamboat Springs | 245C2, 255A |
| Sterling | 284C1, 288A |
| Telluride | 285C3 |
| Trinidad | 223C1 |
| Vail | 284C1 |
| Walsenburg | 272C3 |
| Wellington | 232C3 |
| Widefield | 292C2 |
| Windsor | 256C |
| Yuma | 265C3 |

CONNECTICUT

| | Channel No. |
|---|---|
| Bridgeport | 260B |
| Brookfield | 236B |
| Danbury | 252A |
| East Lyme | 254A |
| Enfield | 250A |
| Groton | 288A |
| Hamden | 267B |
| Hartford | 229B, 243B, 275B, 290B, 295B |
| Hartford-Meriden | 239B |
| Ledyard | 293A |
| Litchfield | 247A |
| Middletown | 285A |
| New Britain | 263B |
| New Haven | 232A, 256B |
| New London | 265A |
| Norwalk | 240A |
| Norwich | 249A |
| Pawcatuck | 299A |
| Salisbury | 251A |
| Sharon | 277A |
| Stamford | 244A |
| Stonington | 272A |
| Waterbury | 223B, 281B |
| Westport | 300B |
| Willimantic | 252A |

DELAWARE

| | Channel No. |
|---|---|
| Bethany Beach | 240B1, 278A |
| Dover | 234B |
| Fenwick Island | 221A |
| Laurel | 237A |
| Lewes | 290A |
| Milford | 249A, 267A |
| Millsboro | 228B |
| Ocean View | 269A |
| Rehoboth Beach | 224A |
| Seaford | 253A |
| Selbyville | 250A |
| Smyrna | 225A |
| Wilmington | 229B, 258B |

DISTRICT OF COLUMBIA

| | Channel No. |
|---|---|
| Washington | 230B, 242B, 246B, 254B, 258B, 262B, 266B, 278B, 297B |

FLORIDA

| | Channel No. |
|---|---|
| Alachua | 223A |
| Apalachicola | 263C3, 288C2 |
| Apopka | 237A |
| Atlantic Beach | 283C |
| Avon Park | 256C3 |
| Baldwin | 289A |
| Belle Glade | 228A |
| Beverly Hills | 292C3 |
| Big Pine Key | 281C1 |
| Blountstown | 272A |
| Boca Raton | 260C |
| Bonifay | 249C1 |
| Bonita Springs | 241C |
| Bradenton | 278C |
| Callahan | 227C2 |
| Callaway | 278C1 |
| Cape Coral | 280C1, 292A |
| Carrabelle | 293C1 |
| Cedar Key | 274C3 |
| Century | 286C3 |
| Charlotte Harbor | 225C1 |
| Chiefland | 300A |
| Clearwater | 239C1, 250C |
| Clewiston | 258C3 |
| Cocoa | 257C2 |
| Cocoa Beach | 266C, 281C |
| Coral Cove | 300C2 |
| Coral Gables | 286C |
| Crawfordville | 231A |
| Crestview | 284C1 |
| Cross City | 295C1 |
| Crystal City | 253C1 |
| Dade City | 241A |
| Daytona Beach | 233C, 270C1 |
| Defuniak Springs | 276C2 |
| Deland | 290C |
| Destin | 221C3 |
| Dunnellon | 272C2 |
| Edgewater | 226C3 |
| Englewood | 290A |
| Fernandina Beach | 287A |
| Five Points | 293A |
| Fort Lauderdale | 264C, 278C, 290C, 294C |
| Fort Mead | 252C2 |
| Fort Myers | 237C1, 245C, 270C |
| Fort Myers Beach | 257C2 |
| Fort Myers Villas | 292C2 |
| Fort Pierce | 238C1, 254C |
| Fort Walton Beach | 243C1, 258C2 |
| Gainesville | 265A, 279C1, 287A |
| Gifford | 234A |
| Goulds | 252C |
| Graceville | 269A |
| Green Cove Springs | 224A |
| Gretna | 227A |
| Gulf Breeze | 291A |
| Havana | 285C2 |
| Hialeah | 222C2 |
| High Springs | 285A |
| Hobe Sound | 288C2 |
| Holiday | 246C2 |
| Holly Hill | 277A |
| Holmes Beach | 254C3 |
| Horseshoe Beach | 234C3 |

FLORIDA—Continued

| | Channel No. |
|---|---|
| Homosassa Springs | 237A |
| Immokalee | 221A |
| Indian River Shores | 246C3 |
| Indiantown | 276C2 |
| Inglis | 282A |
| Jacksonville | 236C, 241C, 245C, 256C, 275C, 297C1 |
| Jensen Beach | 272C3 |
| Jupiter | 292C3 |
| Key Colony Beach | 267C2 |
| Key Largo | 292C2 |
| Key West | 223C1, 228C2, 254C1, 258C1, 296A, 300C1 |
| LaBelle | 223A |
| LaCrosse | 258A |
| Lafayette | 260C2 |
| LaCrosse | 258A |
| Lake City | 232C2 |
| Lakeland | 231C |
| Lehigh Acres | 296C2 |
| Live Oak | 251C2, 291A |
| MacClenny | 221C3 |
| Madison | 274A |
| Marathon | 232C2, 249C1, 288C2 |
| Marco | 255A, 266C1 |
| Marianna | 231A, 265A |
| Mary Esther | 288C3 |
| Melbourne | 236A, 292C3, 296C1 |
| Mexico Beach | 25C2 |
| Miami | 226C, 243C 247C, 256C1, 268C1, 298C |
| Miami Beach | 230C, 235C |
| Micanopy | 247C2 |
| Midway | 264C3 |
| Milton | 274C |
| Miramar Beach | 292A |
| Monticello | 289C3 |
| Mount Dora | 299C |
| Murdock | 255A |
| Naples | 228A, 233C, 284C3 |
| Naples Park | 288C2 |
| Newberry | 263C3 |
| New Port Richey | 288C1 |
| Niceville | 262A |
| Nocatee | 287A |
| North Miami Beach | 239C2 |
| Ocala | 224A, 229C |
| Orlando | 222C, 243C, 255C2, 262C, 286C |
| Ormond-By-The-Sea | 239C3 |
| Othello | 248C2 |
| Otter Creek | 240A |
| Palatka | 260C |
| Palm Beach | 250C |
| Panama City | 223C1, 253C, 290C2, 300C1 |
| Panama City Beach | 261C3, 286C2 |
| Parker | 233C |
| Pensacola | 231C, 254C2, 264C, 268C, 297C |
| Perry | 221A, 228A |
| Plantation Key | 262C1, 276C3 |
| Pompano Beach | 274C |
| Ponte Vedra Beach | 227A |
| Port Charlotte | 261C1 |
| Port St. Joe | 228C2 |
| Port St. Lucie | 267A |
| Punta Rassa | 249C3 |
| Quincy | 268C1 |
| Riviera Beach | 232C3 |
| Rock Harbor | 271C2 |
| Rockledge | 274C2 |
| Safety Harbor | 223C2 |
| San Carlos Park | 253C3 |
| Santa Rosa Beach | 271C3 |

FLORIDA—Continued

| | Channel No. |
|---|---|
| Sarasota | 273C, 282A, 293C2 |
| Satellite Beach | 253A |
| Sebastian | 240C3 |
| Sebring | 289C3 |
| Silver Springs | 238A |
| Solana | 285A |
| Springfield | 240C2, 266A |
| St. Augustine | 231C3, 250C2 |
| St. Augustine Beach | 288C3 |
| St. Petersburg | 258C, 268C1, 297C1 |
| Starke | 292A |
| Stuart | 224C2 |
| Summerland Key | 273C2 |
| Tallahassee | 235C1, 241C2, 255C1, 276C2, 281C, 291A |
| Tampa | 227C, 235C, 264C, 284C1 |
| Tavares | 294C1 |
| Tavernier | 245C3 |
| Tice | 275C2 |
| Titusville | 251C1 |
| Trenton | 269C3 |
| Venice | 221C3 |
| Vero Beach | 229C2, 259C2, 269A, 279C2 |
| Watertown | 271C3, 289A |
| West Palm Beach | 221C3, 282C, 300C1 |
| White City | 284A |
| Williston | 267A |
| Wilson Creek | 277C3 |
| Winter Haven | 248C |
| Winter Park | 276C3 |
| Woodville | 250A |
| Yankeetown | 242A |
| Zolfo Springs | 295A |

GEORGIA

| | Channel No. |
|---|---|
| Adel | 221A |
| Albany | 242C1, 269A, 283C1 |
| Alma | 282A |
| Americus | 234C3, 254C3 |
| Ashburn | 289A |
| Athens | 238C, 284C |
| Atlanta | 225C1, 235C, 241C, 253C, 259C, 277C |
| Augusta | 272A, 276A, 282C, 289C |
| Bainbridge | 247C, 270A |
| Baxley | 233C |
| Blackshear | 286C2 |
| Blakely | 266C3 |
| Blue Ridge | 280A |
| Bolingbroke | 271A |
| Boston | 292A |
| Bostwick | 222A |
| Bowdon | 288A |
| Broxton | 279A |
| Brunswick | 264C1, 268C, 281A |
| Buford | 272A |
| Cairo | 272A |
| Camilla | 288A |
| Canton | 289C2 |
| Carrollton | 221A |
| Chatsworth | 255A |
| Chauncey | 267C2 |
| Clarkesville | 275C3 |
| Claxton | 297C3 |
| Clayton | 281A |
| Cleveland | 270A |
| Cochran | 244A |
| Columbus | 275C, 285A, 297C |

GEORGIA—Continued

| | Channel No. |
|---|---|
| Coosa | 237A |
| Cordele | 252A |
| Cornelia | 257C2 |
| Crawford | 271C3 |
| Cusseta | 279A |
| Cuthbert | 264A |
| Dahlonega | 282A |
| Dalton | 283A |
| Dawson | 221A |
| Dock Junction | 290C3 |
| Donalsonville | 292A, 298A |
| Douglas | 258C1, 294C1 |
| Dublin | 224C2, 240C1 |
| Eastman | 248A |
| Eatonton | 249C3 |
| Elberton | 221A, 286A |
| Ellijay | 228A |
| Evans | 222A |
| Fayetteville | 248C3 |
| Fitzgerald | 245A |
| Folkston | 223A |
| Forsyth | 261A |
| Fort Valley | 250C3, 292C2 |
| Gainesville | 246C |
| Gainsville | 294C |
| Gibson | 232A |
| Glennville | 292A |
| Gordon | 296A |
| Gray | 243A |
| Greensboro | 280A |
| Greenville | 239C3 |
| Harlem | 236C3 |
| Hawkinsville | 280C3 |
| Hazlehurst | 228C2 |
| Helen | 286A |
| Hinesville | 222C2, 284C3 |
| Hogansville | 251C3 |
| Homerville | 254A |
| Irwinton | 279A |
| Jackson | 221A |
| Jeffersonville | 229C2 |
| Jesup | 288C3 |
| Kingsland | 292A |
| La Grange | 281C1 |
| Lakeland | 290C3 |
| Leesburg | 278C3 |
| Louisville | 221A |
| Lumpkin | 257C2 |
| Lyons | 265A |
| Mableton | 273A |
| Macon | 222A, 256C1, 287C1, 300C1 |
| Manchester | 227C |
| Marietta | 268C |
| Martinez | 230C3, 299C2 |
| McRae | 274A |
| Metter | 279A |
| Midway | 252C1 |
| Milan | 285C2 |
| Milledgeville | 264A, 272A |
| Millen | 235C3 |
| Montezuma | 236A |
| Moultrie | 230C1 |
| Mt. Vernon | 269A |
| Nashville | 237C3 |
| Ocilla | 249A, 253A |
| Omega | 298A |
| Peachtree City | 244A |
| Pearson | 270A |
| Pelham | 222A |
| Perry | 265A |
| Quitman | 287A |
| Reidsville | 281A |

GEORGIA—Continued

| | Channel No. |
|---|---|
| Richmond Hill | 287C3 |
| Ringgold | 229A, 270A |
| Rockmart | 296C2 |
| Rome | 249C3, 272A |
| Rossville | 288A |
| Roswell | 298A |
| Royston | 279C3 |
| Sandersville | 260A |
| Savannah | 226C1, 231C, 238C1, 243C, 247C, 271C |
| Smithville | 293A |
| Smyrna | 231C |
| Soperton | 291A |
| Sparta | 274A |
| Springfield | 280A |
| St. Marys | 227C2 |
| St. Simons Island | 224A |
| Statenville | 248A |
| Statesboro | 261C2, 275C3 |
| Swainsboro | 251A, 263A |
| Sylvania | 293A |
| Sylvester | 271A, 291A |
| Talking Rock | 261A |
| Tennille | 270A |
| Thomaston | 266A |
| Thomasville | 296C1 |
| Thomson | 269A |
| Tifton | 223C3, 262C |
| Toccoa | 291C |
| Trenton | 274A |
| Trion | 239A |
| Unadilla | 260A |
| Valdosta | 225C1, 239C2, 244C2, 266C1, 300C3 |
| Vidalia | 249A |
| Warner Robins | 269A, 273A |
| Warrenton | 226A |
| Washington | 261A |
| Waycross | 249A, 273C1, 277C |
| Waynesboro | 265A, 296C3 |
| Westpoint | 265A |
| Wrens | 245C3 |
| Wrightsville | 298A |
| Zebulon | 223A |

HAWAII

| | Channel No. |
|---|---|
| Aiea | 300C |
| Haiku | 293C |
| Hali'imaile | 288A |
| Hilo | 224A, 234C1, 240C2, 246C2, 250C1, 262C1 |
| Honolulu | 226C, 230C1, 234C1, 238C, 248C1, 253C1, 258C1, 262C1, 286C, 290C |
| Kahalu'u | 291C |
| Kahului | 260C1 |
| Kailua | 242C |
| Kailua-Kona | 230C |
| Kaneohe | 282C |
| Kaunakakai | 272C |
| Kawaihae | 295A |
| Keaau | 286C2 |
| Kealakekua | 268C1 |
| Kekaha | 277C1 |
| Lahaina | 228C, 266C1 |
| Lanai City | 284C2 |
| Lihue | 228C1, 245C1, 251C1 |
| Makawao | 232A |

HAWAII—Continued

| | Channel No. |
|---|---|
| Paauilo | 279C |
| Pearl City | 270C |
| Poipu | 240A |
| Princeville | 255C1, 260C1 |
| Pukalani | 252C2 |
| Volcano | 299C3 |
| Wailuku | 236C |
| Waimea | 256C |
| Waipahu | 222C, 274C |

IDAHO

| | Channel No. |
|---|---|
| American Falls | 281C1 |
| Ashton | 243A |
| Blackfoot Falls | 247C, 268C, |
| Boise | 222C, 250C, 282C, 286C |
| Bonners Ferry | 221A |
| Burley | 260C |
| Caldwell | 231C, 277C, 296C |
| Chubbuck | 253C2 |
| Coeur D'Alene | 272A, 276C2 |
| Driggs | 271A |
| Eagle | 300C |
| Emmett | 270C |
| Franklin | 249A |
| Fruitland | 258C1 |
| Garden City | 290C |
| Gooding | 264C3 |
| Grangeville | 224C3 |
| Hayden | 233C |
| Homedale | 292C |
| Idaho Falls | 241C, 256C1, 277C1, 288C1, 296A |
| Island Park | 275C |
| Jerome | 275C1 |
| Ketchum | 284C |
| Lewiston | 243C1, 268C1, 286A, 295C |
| McCall | 252C1, 266C1, 294A |
| Moscow | 291C1 |
| Mountain Home | 256C1 |
| Nampa | 235C, 245C |
| New Plymouth | 226C |
| Orofino | 237C3, 253A |
| Payette | 262C1 |
| Pocatello | 221A, 229C, 235C, 273C |
| Preston | 244C1 |
| Rexburg | 232C3, 251C1, 263C1 |
| Rupert | 223C |
| Salmon | 224A, 233A |
| Sandpoint | 237C1, 273A |
| Shelley | 292C1 |
| Soda Springs | 261A |
| Sun Valley | 237C1, 279C, 298C |
| Twin Falls | 239C1, 243C1, 252C1 |
| Victor | 222A, 282A |
| Weston | 240A |
| Wallace | 248C2, 264C |

EFFECTIVE DATE NOTE: At 63 FR 45183, Aug. 25, 1998, Idaho was amended by adding Ashton, channel 243A, effective Oct. 5, 1998.

ILLINOIS

| | Channel No. |
|---|---|
| Aledo | 272A |
| Alton | 262B |
| Anna | 243C2 |

ILLINOIS—Continued

| | Channel No. |
|---|---|
| Arcola | 300A |
| Arlington Heights | 224A |
| Atlanta | 242A |
| Augusta | 253A |
| Aurora | 240A, 300B |
| Ava | 280A |
| Bartonville | 260A |
| Beardstown | 232A |
| Belvidere | 285A |
| Benton | 292B1 |
| Bethalto | 238A |
| Bloomington | 268B |
| Breese | 248A |
| Bushnell | 284A |
| Canton | 252A, 266A, 300B1 |
| Carbondale | 268B, 268C1 |
| Carlyle | 244A |
| Carmi | 247B |
| Carrier Mills | 283A |
| Carterville | 236A |
| Carthage | 221B1, 230A |
| Casey | 282B1 |
| Centralia | 237A |
| Champaign | 233B, 248B, 262B1 |
| Charleston | 221A |
| Chicago | 226B, 230B, 234B, 238B, 242B, 246B, 250B, 254B, 258B, 262B, 266B, 278B, 282B, 298B |
| Chillicothe | 232A |
| Christopher | 278A |
| Clinton | 240A |
| Coal City | 264A |
| Colchester | 244A, 281A |
| Colfax | 255A |
| Columbia | 285C3 |
| Crest Hill | 252A |
| Crete | 272A |
| Danville | 235A, 256B, 271B |
| Decatur | 226A, 236B, 275B |
| DeKalb | 223B, 235A |
| Des Planes | 294B |
| Dixon | 269A |
| Duquoin | 240A |
| Dundee | 280A |
| Dwight | 255A |
| Earlville | 275A |
| East Moline | 267B |
| East St. Louis | 266C2 |
| Effingham | 239B, 249A |
| Eldorado | 272A |
| Elgin | 232A |
| Elmwood | 247B1 |
| Elmwood Park | 290B |
| Eureka | 253A |
| Evanston | 286B |
| Fairbury | 299B1 |
| Fairfield | 285A, 290A |
| Farmer City | 252A |
| Farmington | 234A |
| Fisher | 273A |
| Flora | 280A |
| Freeport | 221A, 253B |
| Galatia | 255A |
| Galena | 298A |
| Galesburg | 224A, 235B |
| Galva | 273A |
| Gibson City | 292A |
| Glasford | 266A |
| Golconda | 232A |
| Granite City | 293C1 |
| Greenville | 269A |
| Harrisburg | 260B |

ILLINOIS—Continued

| | Channel No. |
|---|---|
| Havana | 257A |
| Henry | 263A |
| Herrin | 224B1 |
| Heyworth | 250A |
| Highland Park | 276A |
| Hillsboro | 259B |
| Hoopeston | 265A |
| Jacksonville | 263B |
| Jerseyville | 281B |
| Joliet | 228A, 244A |
| Kankakee | 224A, 236A, 260B |
| Kewanee | 230A |
| Knoxville | 287A |
| La Salle | 257B1 |
| Lansing | 292A |
| Lawrenceville | 276A |
| Le Roy | 281B |
| Lena | 271A |
| Lexington | 258A |
| Lincoln | 230B1 |
| Litchfield | 291B |
| Loves Park | 244A |
| Lynnville | 296A |
| Macomb | 240A, 261A, 274B1 |
| Mahomet | 290A |
| Marion | 297B |
| Maroa | 297A |
| Marseilles | 243A |
| Marshall | 290A |
| Mattoon | 245B |
| Mendota | 261A |
| Metropolis | 252C2, 288A |
| Moline | 245B |
| Monmouth | 249A |
| Monticello | 288A |
| Morris | 276A, 284B |
| Morrison | 274A |
| Morton | 272A |
| Mount Carmel | 235B |
| Mount Morris | 239A |
| Mount Olive | 287A |
| Mount Vernon | 231B, 271B1 |
| Mount Zion | 257A |
| Murphysboro | 286B1 |
| Nashville | 284A |
| Neoga | 255A, 267B1 |
| Newton | 278B1 |
| Normal | 244A, 264A |
| Oak Park | 274B |
| Ogelsby | 271A |
| Olney | 225B |
| Oregon | 291A |
| Ottawa | 237A |
| Pana | 265A |
| Paris | 253B |
| Paxton | 285A |
| Pekin | 238B1, 285A |
| Peoria | 222A, 227B, 289B, 295B |
| Peru | 265A |
| Petersburg | 249A |
| Pinckneyville | 282A |
| Pittsfield | 248B1 |
| Plano | 296A |
| Polo | 299A |
| Pontiac | 229B1 |
| Princeton | 251A |
| Quincy | 258B, 280A, 286B |
| Ramsey | 227A |
| Rantoul | 237A, 241A |
| Robinson | 269A |
| Rochelle | 272A |
| Rock Island | 255B |

ILLINOIS—Continued

| | Channel No. |
|---|---|
| Rockford | 248B, 265A |
| Rockton | 276A |
| Rushville | 223A |
| Salem | 261A |
| Savanna | 262B1 |
| Seneca | 239A |
| Shelbyville | 286B1 |
| Skokie | 270B |
| South Jacksonville | 288A |
| Spring Valley | 277A |
| Springfield | 254B, 270B, 279B, 283B |
| Sterling | 232A |
| Streator | 249A, 291A |
| Sullivan | 294B1 |
| Taylorville | 224B1, 232A, 247A |
| Teutopolis | 272A |
| Tower Hill | 252A |
| Tuscola | 228A |
| Urbana | 223B1, 296A |
| Vandalia | 296A |
| Virden | 244A |
| Virginia | 267A |
| Watseka | 231B |
| Waukegan | 272A |
| West Frankfort | 249A |
| Wilmington | 288A |
| Winnebago | 237A |
| Woodlawn | 295A |
| Woodstock | 288A |
| Zion | 245B |

EFFECTIVE DATE NOTES: 1. At 63 FR 49291, Sep. 15, 1998, Illinois was amended by removing channel 266A at Canton and by adding Glasford, channel 266A, effective Oct. 19, 1998.

2. At 63 FR 50995, Sept. 24, 1998, Illinois was amended by removing channel 268B and adding channel 268C1 at Carbondale, effective Nov. 2, 1998.

INDIANA

| | Channel No. |
|---|---|
| Alexandria | 224A |
| Anderson | 250B, 254A |
| Angola | 262A |
| Attica | 239A |
| Auburn | 272A |
| Aurora | 257A |
| Austin | 224A, 242A |
| Batesville | 280A |
| Battle Ground | 254A |
| Bedford | 288A |
| Berne | 224A |
| Bicknell | 289A |
| Bloomfield | 266A |
| Bloomington | 222B, 224A, 279B |
| Bluffton | 261A |
| Booneville | 296A |
| Brazil | 249A |
| Bremen | 245A |
| Brookston | 237A |
| Brownsburg | 270A |
| Cannelton | 275C3 |
| Chandler | 228A |
| Charlestown | 282A |
| Churubusco | 242B1 |
| Clarksville | 226A |
| Clinton | 230A |

INDIANA—Continued

| | Channel No. |
|---|---|
| Columbia City | 292A |
| Columbus | 268B, 285A |
| Connersville | 262B |
| Corydon | 243A, 299B |
| Covington | 276A |
| Crawfordsville | 280A, 292A |
| Crown Point | 280A |
| Danville | 296A |
| Decatur | 286B1 |
| Delphi | 275A |
| Earl Park | 251B1 |
| Edinburgh | 275A |
| Elkhart | 264B, 284B |
| Ellettsville | 286A |
| Elwood | 269A |
| Evansville | 281B, 287B, 298A |
| Farmersburg | 242A |
| Ferdinand | 253A |
| Fort Branch | 268A |
| Fort Wayne | 222A, 236B, 247B, 269A, 280A |
| Fowler | 291A |
| Frankfort | 259B |
| Franklin | 240A |
| French Lick | 261A |
| Goshen | 249A |
| Greencastle | 232A |
| Greenfield | 258B |
| Greensburg | 297B |
| Greenwood | 294A |
| Hammond | 222B |
| Hardinsburg | 245A |
| Hartford City | 228A |
| Huntingburg | 265B1 |
| Huntington | 275A |
| Indianapolis | 226B, 234B, 238B, 242A, 277B, 283B, 289B, 300B |
| Jasper | 284B |
| Jeffersonville | 239B |
| Kendallville | 227B |
| Kentland | 269A |
| Knox | 257A |
| Kokomo | 223A, 263B |
| La Porte | 244A |
| Lafayette | 228A, 243B, 287B |
| Lagrange | 288A |
| Lebanon | 265A |
| Ligonier | 274A |
| Linton | 227B1 |
| Logansport | 272A |
| Loogootee | 231A |
| Lowell | 296A |
| Madison | 244A |
| Marion | 295B |
| Martinsville | 272A |
| Michigan City | 240A |
| Mitchell | 273A |
| Monticello | 299A |
| Mount Vernon | 294A |
| Muncie | 221A, 281B, 285A |
| Nappanee | 239A |
| Nashville | 236A |
| New Albany | 234A |
| New Carlisle | 272A |
| New Castle | 273B |
| New Haven | 300A |
| Newburgh | 291A |
| Noblesville | 230A |
| North Vernon | 291B |
| Paoli | 237A |
| Peru | 253A |
| Petersburg | 272A |
| Plainfield | 252A |

INDIANA—Continued

| | Channel No. |
|---|---|
| Plymouth | 232B1 |
| Portland | 265A |
| Princeton | 251B, 263A |
| Rensselaer | 249A |
| Richmond | 241B, 267B |
| Roann | 270A |
| Roanoke | 231A |
| Rochester | 221A |
| Rockville | 285A |
| Royal Center | 279A |
| Rushville | 232A |
| Salem | 250A |
| Santa Clause | 277A |
| Scottsburg | 287A |
| Seelyville | 240A |
| Seymour | 229B |
| Shelbyville | 246B |
| South Bend | 225B, 268B, 276A, 280A, 292A |
| South Whitley | 266A |
| Spencer | 224A |
| Sullivan | 237A |
| Syracuse | 278A |
| Tell City | 289A |
| Terre Haute | 260B, 264B, 274B, 298B |
| Valparaiso | 288A |
| Van Buren | 257A |
| Veedersburg | 225A |
| Versailles | 276A |
| Vevay | 240A |
| Vincennes | 221A, 244A |
| Wabash | 240A, 290A |
| Walton | 229A |
| Warsaw | 297B |
| Washington | 293B, 300A |
| West Lafayette | *267A, 294A |
| West Terre Haute | 288A |
| Winamac | 261A |
| Winchester | 252A |

IOWA

| | Channel No. |
|---|---|
| Albia | 244C3 |
| Algona | 224C2 |
| Alta | 248A |
| Ames | 281C, 286C3 |
| Anamosa | 239A |
| Ankeny | 223C2, 292C3 |
| Asbury | 238A, 277C3 |
| Atlantic | 239C3 |
| Audubon | 243C1 |
| Belle Plaine | 238C3 |
| Bettendorf | 228A |
| Bloomfield | 292C3 |
| Boone | 252C2, 257A |
| Britt | 258A |
| Brooklyn | 256C2 |
| Burlington | 228A, 297C1, 276C3 |
| Carroll | 229C1 |
| Castana | 298C3 |
| Cedar Falls | 253C3 |
| Cedar Rapids | 243C1, 251C1, 275C1, 283C1 |
| Centerville | 254C1 |
| Chariton | 287C2 |
| Charles City | 240A |
| Cherokee | 221A 272A |
| Clarinda | 257C2 |
| Clarion | 245C1 |
| Clear Lake | 276A |
| Clinton | 241C1, 234A |

IOWA—Continued

| | Channel No. |
|---|---|
| Council Bluffs | 253C |
| Cresco | 272A |
| Creston | 267C3 |
| Davenport | 279C, 293C1 |
| Decorah | 263C2, 284A |
| Denison | 296A |
| Des Moines | 227C, 235C, 247C1, 262C, 273C, 298C1 |
| DeWitt | 285C3 |
| Dubuque | 225C1, 272A, 287C2 |
| Dyersville | 257A |
| Eagle Grove | 264C3 |
| Eddyville | 268C2 |
| Eldon | 282C3 |
| Eldora | 258A |
| Emmetsburg | 252A, 261A |
| Epworth | 247C3 |
| Estherville | 240C3 |
| Fairfield | 240A |
| Forest City | 297C2 |
| Fort Dodge | 221A, 233C1 |
| Fort Madison | 269A |
| Garnavillo | 261A |
| Glenwood | 279C |
| Grinnell | 294C2 |
| Grundy Center | 249C3 |
| Hampton | 285A |
| Harlan | 287C3 |
| Hudson | 241A |
| Humboldt | 249A |
| Ida Grove | 225C3 |
| Independence | 237A |
| Iowa City | 231C1, 264C1 |
| Iowa Falls | 237A |
| Jefferson | 255C3 |
| Keokuk | 237C1 |
| Knoxville | 221C3 |
| Lake City | 294C3 |
| Lamoni | 250C3 |
| Le Mars | 258C1 |
| Madrid | 241A |
| Manchester | 234C3 |
| Maquoketa | 236A |
| Marshalltown | 266C1 |
| Mason City | 230C1, 250A, 291C1 |
| Milford | 271C2 |
| Mount Pleasant | 288C3 |
| Muscatine | 226A, 259C1 |
| New Hampton | 236A |
| New London | 247A |
| New Sharon | 260C3 |
| Newton | 240A |
| Northwood | 274A |
| Oelwein | 222C |
| Onawa | 272C1 |
| Osage | 254A |
| Osceola | 295C2 |
| Oskaloosa | 285C2 |
| Ottumwa | 224C3, 249C3 |
| Parkersburg | 255A |
| Patterson | 290A |
| Pella | 277C1 |
| Perry | 288A |
| Red Oak | 237C3 |
| Rock Valley | 295C3 |
| Sac City | 284A |
| Sageville | 291A |
| St. Ansgar | 238A |
| Sheldon | 287C2 |
| Sibley | 262A |
| Sioux Center | 230C2 |
| Sioux City | 238C1, 250C1, 277C1 |

IOWA—Continued

| | Channel No. |
|---|---|
| Sioux Rapids | 275C2 |
| Spencer | 285C3, 299C1 |
| Spirit Lake | 280C2 |
| Storm Lake | 269C1 |
| Stuart | 300C3 |
| Twin Lakes | 290C3 |
| Washington | 291A |
| Waterloo | 270C, 289C, 300C |
| Waukon | 278C2 |
| Waverly | 257A |
| Webster City | 239C3 |
| Winterset | 258A |

KANSAS

| | Channel No. |
|---|---|
| Abilene | 253C1 |
| Andover | 230C3 |
| Arkansas City | 273A, 293C |
| Atkins | 257A |
| Augusta | 283C2 |
| Baxter Springs | 296A |
| Belle Plaine | 224C3 |
| Belleville | 221C3 |
| Beloit | 288C2 |
| Burlington | 237A |
| Caney | 266A |
| Cawker City | 242C3 |
| Chanute | 228A |
| Clay Center | 265A |
| Clearwater | 254C2 |
| Coffeyville | 225A |
| Colby | 250C1, 262C1 |
| Columbus | 287C3 |
| Concordia | 235C1 |
| Copeland | 251C1, 256C1, *280C1 |
| Dearing | 251A |
| Derby | 242C2 |
| Dodge City | 230C1, 238C1 |
| Downs | 231C2 |
| El Dorado | 256C1 |
| Emporia | 258A, 269A, 285A |
| Eureka | 228A |
| Fort Scott | 280A, 284C3 |
| Fredonia | 281A |
| Galena | 282A |
| Garden City | 247C1 |
| Girard | 256A |
| Goodland | 273C1, 299C1 |
| Great Bend | 282C1, 300C1 |
| Hays | 258C1, 277C |
| Haysville | 287C |
| Herington | 289C3 |
| Hiawatha | 280C2 |
| Hill City | 270C |
| Hoisington | 264C1 |
| Horton | 229C3 |
| Hugoton | 294C2 |
| Humboldt | 232C3 |
| Hutchinson | 240A, 246C3, 271C, 275C |
| Independence | 275A |
| Ingalls | 242C1, 290A |
| Iola | 257A |
| Junction City | 233C1 |
| Kansas City | 231C, 251C |
| Kingman | 232C2, 262C2 |
| Kiowa | 252C1 |
| Larned | 244A, 295C1 |
| Lawrence | 290C1 |
| Leavenworth | 255C |

KANSAS—Continued

| | Channel No. |
|---|---|
| Leoti | 260C1 |
| Liberal | 268C1, 274C1, 286C2, 298C1 |
| Lindsborg | 269C3, 238C3 |
| Lyons | 291C1 |
| Manhattan | 268C2, 284C2 |
| Marysville | 276C3 |
| McPherson | 244A |
| Medicine Lodge | 269C2 |
| Minneapolis | 224C2 |
| Ness City | 285A |
| Newton | 222C1 |
| North Fort Riley | 273C1 |
| Norton | 294A |
| Oberlin | 266C1 |
| Ogden | 278C2 |
| Olathe | 222C3 |
| Osage City | 225C2 |
| Ottawa | 239C1 |
| Parsons | 228A |
| Phillipsburg | 223C1, 237A |
| Pittsburg | 245C1 |
| Plainville | 244A |
| Pratt | 226C |
| Riley | 242C3 |
| Russell | 240A |
| Salina | 229C1, 260C1, 285A |
| Scott City | 223C1 |
| Seneca | 221A |
| Silver Lake | 223A |
| Sterling | 234C3 |
| St. Marys | 275C2 |
| Topeka | 247C, 257A, 262C, 295C, 299C |
| Wamego | 237A |
| Wellington | 228A |
| Wichita | 236C1, 250C, 267C, 279C1, 297C1 |
| Winfield | 240C3, 300C2 |

KENTUCKY

| | Channel No. |
|---|---|
| Albany | 292A |
| Allen | 261A |
| Ashland | 229C1 |
| Barbourville | 241C3 |
| Bardstown | 244A |
| Beattyville | 271A |
| Beaver Dam | 264A |
| Benton | 256A |
| Berea | 294A |
| Bowling Green | 244C3, 227C3 |
| Brandenburg | 228A |
| Brodhead | 270A |
| Brownsville | 264C3 |
| Burkesville | 300A |
| Burnside | 230C2 |
| Calvert City | 239A |
| Campbellsville | 281C3 |
| Campton | 279A |
| Carlisle | 221C3 |
| Carrollton | 237A |
| Catlettsburg | 224A |
| Cave City | 279C3 |
| Central City | 270C1 |
| Clinton | 271C3 |
| Columbia | 228A |
| Corbin | 258C2, 297C2 |
| Cumberland | 274A |
| Cynthiana | 272A |
| Danville | 296A |
| Drakesboro | 280A |

KENTUCKY—Continued

| | Channel No. |
|---|---|
| Edmonton | 256A |
| Elizabethtown | 252C3, 261A |
| Elkhorn City | 276A |
| Eminence | 289A |
| Erlanger | 265A |
| Falmouth | 298A |
| Flemingsburg | 236A |
| Fort Campbell | 300C1 |
| Fort Knox | 288A |
| Frankfort | 279A, 285A |
| Fredonia | 221A |
| Fulton | 257A |
| Garrison | 252A |
| Georgetown | 277A |
| Glasgow | 231A, 236C, 287C3 |
| Grayson | 272A |
| Greensburg | 276A |
| Greenup | 289C3 |
| Greenville | 228C3 |
| Hardinsburg | 232C2, 282A |
| Harlan | 286A |
| Harold | 285A |
| Harrodsburg | 257A |
| Hartford | 292A |
| Hawesville | 246A |
| Hazard | 266C, 284A |
| Henderson | 258C, 276A |
| Hindman | 296A |
| Hodgenville | 292A |
| Hopkinsville | 248A, 254C1, 262C |
| Horse Cave | 294A |
| Hyden | 250C3 |
| Irvine | 264C3 |
| Jackson | 293A |
| Jamestown | 285A |
| Jeffersontown | 267A |
| Jenkins | 232C2 |
| Lancaster | 286A |
| Lawrenceburg | 271A |
| Lebanon | 265C3 |
| Leitchfield | 285A |
| Lexington | 225C1, 233C1, 251C1 |
| Lexington-Fayette | 283C2 |
| Liberty | 254C3 |
| London | 222C2, 280A |
| Louisa | 222A |
| Louisville | 248C1, 259B, 263C2, 272A, 280A, 295B |
| Madisonville | 230C2 |
| Manchester | 276A, 289A |
| Mannsville | 260C3 |
| Marion | 274A |
| Mayfield | 234C2 |
| Maysville | 240A |
| McKee | 300A |
| Middlesboro | 224A |
| Midway | 300A |
| Monticello | 226A, 269A |
| Morehead | 242A, 291C3 |
| Morganfield | 237A |
| Mount Sterling | 288A, 294B1 |
| Mount Vernon | 275A |
| Munfordville | 272A |
| Murray | 279C1 |
| Nicholasville | 273A |
| Oak Grove | 293C3 |
| Owensboro | 223C, 241C |
| Owingsville | 299A |
| Paducah | 227C1, 245C1 |
| Paintsville | 255C1 |
| Paris | 245C2 |
| Philpot | 234A |

KENTUCKY—Continued

| | Channel No. |
|---|---|
| Pikeville | 226C2 |
| Pineville | 292A |
| Prestonsburg | 238C, 288A |
| Princeton | 285A |
| Providence | 249A |
| Radcliff | 278C3 |
| Reidland | 294A |
| Richmond | 268C3 |
| Russellville | 266C1 |
| Russell Springs | 224A |
| St. Matthews | 276A |
| Salyersville | 247A |
| Scottsville | 257A |
| Shelbyville | 269A |
| Shepherdsville | 286A |
| Smiths Grove | 296C2 |
| Somerset | 246C2, 272A |
| Springfield | 274A |
| Stamping Ground | 241A |
| Stanford | 242C3 |
| Stanton | 285A |
| Sturgis | 267A |
| Tompkinsville | 221A, 274A |
| Valley Station | 290A |
| Vanceburg | 285A |
| Vancleve | 260A |
| Versailles | 292A |
| Vine Grove | 268A |
| Virgie | 298A |
| Whitesburg | 280A |
| Whitley City | 252A |
| Wickliffe | 240A |
| Williamsburg | 282A |
| Williamstown | 293A |
| Wilmore | 237A |
| Winchester | 261C2 |
| West Liberty | 275A |
| Westwood | 259A |

EFFECTIVE DATE NOTES: 1. At 63 FR 49291, Sept. 15, 1998, Kentucky was amended by removing channel 264A at Beaver, and by adding Brownsville, channel 264C3, effective Oct. 19, 1998.

2. At 63 FR 49668, Sept. 17, 1998, Kentucky was amended by adding Sturgis, channel 267A, effective Oct. 26, 1998

LOUISIANA

| | Channel No. |
|---|---|
| Abbeville | 286C3 |
| Alexandria | 226C, 230A, 245C, 262C, 295A |
| Amite | 243A |
| Arcadia | 223A |
| Atlanta | 293A |
| Baker | 297A |
| Ball | 288A |
| Basile | 271C1 |
| Bastrop | 230C3, 232A, 261C2, 247A |
| Baton Rouge | 251C, 264C1, 268C, 273C |
| Bayou Vista | 237C3 |
| Belle Chasse | 275C3 |
| Benton | 221A |
| Berwick | 290A |
| Blanchard | 271C3 |
| Boyce | 272C3 |
| Breaux Bridge | 243C3 |
| Brusly | 241C2 |

LOUISIANA—Continued

| | Channel No. |
|---|---|
| Bunkie | 282C3 |
| Clayton | 257A |
| Clinton | 224C2 |
| Columbia | 276C3 |
| Coushatta | 235C3 |
| Crowley | 275C |
| Delhi | 228A |
| Deridder | 221C3, 269A |
| Donaldsonville | 285A |
| Dubach | 249C3 |
| Erath | 300C1 |
| Eunice | 288A |
| Farmerville | 224A |
| Ferriday | 296C3 |
| Folsom | 285A |
| Franklin | 288A, 295C3 |
| Franklinton | 255A |
| Galliano | 232C1 |
| Gibsland | 283A |
| Grand Isle | 283A |
| Hammond | 277C, 296A |
| Haughton | 279A |
| Haynesville | 288A |
| Homer | 272A, 294C2 |
| Houma | 281C, 298C1 |
| Jackson | 283A |
| Jena | 274A |
| Jennings | 225C2 |
| Jonesboro | 285C3 |
| Jonesville | 286A |
| Kaplan | 247C2 |
| Kenner | 287C1 |
| Kentwood | 231C1 |
| Lacombe | 234A |
| Lafayette | 233C, 238C2, 260C |
| Lake Arthur | 298C2 |
| Lake Charles | 241C, 258C1, 279C1, 287C2 |
| Lake Providence | 224A |
| LaPlace | 222C |
| Larose | 262C2 |
| Leesville | 224A, 289C3 |
| Mamou | 266C3 |
| Mansfield | 224A, 284C3 |
| Mansura | 240A |
| Many | 296C3 |
| Marksville | 249A |
| Maurice | 292A |
| Minden | 239C2 |
| Monroe | 270C, 281C, 287C2, 291C |
| Moreauville | 221A |
| Morgan City | 244A |
| Natchitoches | 247C3, 264C3 |
| New Iberia | 229C1, 256C |
| New Orleans | 227C, 239C, 246C, 253C1, 258C, 266C, 270C |
| New Roads | 293C2 |
| North Fort Polk | 294A |
| Oak Grove | 244C3 |
| Oakdale | 254C1 |
| Opelousas | 290A, 296A |
| Port Sulphur | 294C1 |
| Rayne | 294A |
| Rayville | 222C2 |
| Reserve | 235C3 |
| Richwood | 265A |
| Ruston | 258A, 298C |
| Shreveport | 229C, 233C, 243C1, 259C2, 266C, 275C2 |
| South Fort Polk | 239A |
| Springhill | 225C2 |
| Sulphur | 267C3 |
| Tallulah | 283C3 |

LOUISIANA—Continued

| | Channel No. |
|---|---|
| Thibodaux | 292C3 |
| Tioga | 278C2 |
| Varnado | 225A |
| Vidalia | 284A |
| Ville Platte | 223A |
| Vivian | 287A |
| Washington | 284C3 |
| West Monroe | 252C2 |
| Winnfield | 221A |
| Winnsboro | 240A |

MAINE

| | Channel No. |
|---|---|
| Auburn | 260B |
| Augusta | 222B, 267B |
| Bangor | 225B, 246B |
| Bar Harbor | 256B, 299B1 |
| Bath | 290B |
| Belfast | 284B |
| Biddeford | 232B1 |
| Boothbay Harbor | 244B1 |
| Brewer | 262B, 293C |
| Brunswick | 255B |
| Calais | 224A |
| Camden | 273B |
| Caribou | 249C3 |
| Dennysville | 275C1 |
| Dexter | 271C2 |
| Dover-Foxcroft | 276A |
| Ellsworth | 233B, 239B |
| Fairfield | 228C3 |
| Farmington | 257A |
| Fort Kent | *293C3 |
| Gardiner | 282B |
| Houlton | 261C3 |
| Howland | 280C |
| Islesboro | 288B1 |
| Kennebunk | 257A |
| Kennebunkport | 284A |
| Kittery | 287A |
| Lewiston | 230B, 298B |
| Lincoln | 289C2 |
| Machias | 237A, 266B |
| Madawaska | 272A |
| Madison | 248A |
| Mexico | 264A |
| Milbridge | 229B |
| Millinocket | 235C2 |
| North Windham | 294A |
| Norway | 224A |
| Old Town | 297C2 |
| Pittsfield | 258A |
| Portland | 226B, 250B, 270B, 275C |
| Presque Isle | 241C, 245C, 270C2, 291C |
| Rockland | 277B |
| Rumford | 242C |
| Saco | 240A |
| Sanford | 221A |
| Scarborough | 292A |
| Searsport | 269A |
| Skowhegan | 286C, 300C3 |
| Thomaston | 295, 295B |
| Topsham | 238A |
| Van Buren | 251A |
| Waterville | 253C2 |
| Westbrook | 265B1 |
| Winslow | 237A |
| Winter Harbor | 249B |
| York Center | 237A |

MARYLAND

| | Channel No. |
|---|---|
| Annapolis | 256B, 300B |
| Baltimore | 222B, 226B, 236B, 250B, 270B, 274B, 282B, 293B |
| Berlin | 280A |
| Bethesda | 234B, 272A |
| Braddock Heights | 280A |
| California | 275A |
| Cambridge | 292A |
| Catonsville | 289B |
| Crisfield | 245A |
| Cumberland | 275B, 291B |
| Easton | 244B1 |
| Federalsburg | 296A |
| Frederick | 260B |
| Frostburg | *246A, 287B |
| Glen Burnie | 240A |
| Grasonville | 276A |
| Hagerstown | 284B, 295B |
| Halfway | 244A |
| Havre De Grace | 279B |
| Hurlock | 265A |
| Lexington Park | 249A |
| Mechanicsville | 252A |
| Middletown | 276A |
| Morningside | 238B |
| Mountain Lake Park | 283A |
| Oakland | 222A |
| Ocean City | 260B, 295A |
| Ocean City-Salisbury | 284B |
| Ocean Pines | 246A |
| Pocomoke City | 223A, 293A |
| Prince Frederick | 224A |
| Princess Anne | 273B |
| Salisbury | 248A, 255A, 288A |
| Snow Hill | 266A |
| St. Michaels | 232A |
| Waldorf | 281, 281B |
| Westernport | 266A |
| Westminster | 264B |
| Williamsport | 240A |

MASSACHUSETTS

| | Channel No. |
|---|---|
| Amherst | 265A |
| Athol | 260A |
| Barnstable | 260B |
| Boston | 233B, 245B, 253B, 264B, 277B, 281B, 294B |
| Brockton | 249A |
| Brookline | 225B |
| Cambridge | 237A |
| Chatham | 298B |
| Fairhaven | 296A |
| Falmouth | 270B |
| Fitchburg | 283B |
| Framingham | 289B |
| Gloucester | 285A |
| Great Barrington | 286A |
| Greenfield | 237A, 252A |
| Harwichport | 228A |
| Haverhill | 223B |
| Hyannis | 275A, 291B |
| Lawrence | 229B |
| Lowell | 258B |
| Lynn | 269A |
| Marshfield | 240A |
| Mashpee | 266A |
| Medford | 300B |
| Nantucket | 242B |

MASSACHUSETTS—Continued

| | Channel No. |
|---|---|
| New Bedford | 247B, 251B |
| North Adams | 261A |
| Northampton | 257A, 292A |
| Orange | 247A |
| Orleans | 284B |
| Pittsfield | 240A, 269A, 288A |
| Plymouth | 256B |
| Provincetown | *221A |
| Southbridge | 261A |
| South Yarmouth | 280A |
| Springfield | 226B, 234B, 271B |
| Taunton | 227B |
| Tisbury | 224A |
| Truro | 272A |
| Turners Falls | 230A |
| Waltham | 273B |
| Webster | 255A |
| West Yarmouth | 235B |
| Winchendon | 249A |
| Worcester | 241B, 297B |

MICHIGAN

| | Channel No. |
|---|---|
| Adrian | 237A, 280A |
| Albion | 244A |
| Allegan | 222A |
| Alma | 285A |
| Alpena | 257C2, 299C1 |
| Ann Arbor | 275B, 296A |
| Ashley | 223A |
| Atlanta | 223C |
| Bad Axe | 271C2 |
| Baraga | 282C1 |
| Battle Creek | 237A, 277B |
| Bay City | 241C, 273B |
| Bear Lake | 261A |
| Beaverton | 249A |
| Benton Harbor | 235A, 260B |
| Beulah | 221A |
| Big Rapids | 265A, 272C3 |
| Birmingham | 234B |
| Boyne City | 228C2 |
| Bridgman | 248A |
| Bronson | *234A |
| Brooklyn | 287A |
| Buchanan | 256A |
| Cadillac | 225C, 244C3, 296A |
| Caro | 221A |
| Carrollton | 263A |
| Charlevoix | 290C1, 300A |
| Charlotte | 224A |
| Cheboygan | 286C1 |
| Clare | 237A |
| Coldwater | 253B |
| Coleman | 269A |
| Crystal Falls | 264C1 |
| Dearborn | 262B |
| Detroit | 222B, 226B, 238B, 242B, 246B, 250B, 254B, 258B, 266B, 270B, 278B, 282B, 286B, 290B, 294B, 298B |
| Dewitt | 243A |
| Dowagiac | 221A |
| East Jordan | 265A |
| East Lansing | 235B, 256B |
| Escanaba | 284C, 246C |
| Essexville | 247A |
| Fife Lake | 240A |
| Flint | 224A, 236B, 288B1, 300B |

MICHIGAN—Continued

| | Channel No. |
|---|---|
| Frankenmuth | 229A |
| Frankfort | 257C2 |
| Fremont | 261A |
| Gaylord | 237A, 294C1 |
| Gladstone | 288C1 |
| Gladwin | 276C3, |
| Glen Arbor | 227A, 238C2, 251C2 |
| Grand Haven | 221A |
| Grand Rapids | 229B, 239B, 245B, 250B, 254A, 267B, 275B, 281B, 289B |
| Grayling | 262C1 |
| Greenville | 297B |
| Gulliver | 234C1 |
| Hancock | 228C3, 254C2 |
| Harbor Beach | 279C2 |
| Harbor Springs | 280C2 |
| Harrietta | 229A |
| Harrison | 221A |
| Hart | 287C1 |
| Hartford | 279A |
| Hastings | 261A |
| Hillman | 235C2 |
| Hillsdale | 221A |
| Holland | 233B, 241B |
| Honor | 264A |
| Houghton | 242C1, 249A, 272C2 |
| Houghton Lake | 253C1 |
| Howell | 228A |
| Hudson | 273A |
| Iron Mountain | 226C1, 268C1, 294A |
| Iron River | 256C2 |
| Ironwood | 259C1, 295C1 |
| Ishpeming | 222C, 298C1 |
| Jackson | 231B, 283A, 291B |
| Kalamazoo | 271B, 293B, 299B |
| Kalkaska | 248C2 |
| Kingsford | 251A |
| L'Anse | 291C2 |
| Lake City | *285A |
| Lakeview | 292A |
| Lansing | 248B, 264B, 269A |
| Lapeer | 276A |
| Leland | 232C2 |
| Lexington | 245A |
| Ludington | 292A |
| Mackinaw City | 233C3 |
| Manistee | 249A, 268A |
| Manistique | 260A |
| Marlette | 223A |
| Marquette | 239C1, 277C1, 231A |
| Marshall | 285A |
| McMillan | 244C3 |
| Menominee | 279C3 |
| Midland | 227C2, 259C |
| Mio | 280C2 |
| Monroe | 252A |
| Mount Clemens | 274B |
| Mount Pleasant | 233C1, 282A |
| Munising | 252 C2 |
| Muskegon | 283B, 295B, 300B1 |
| Muskegon Heights | 269B1 |
| Negaunee | 258A, 270A |
| Newaygo | 223A |
| Newberry | 229A, 250C2 |
| Niles | 237A |
| North Muskegon | 252A |
| Norway | 232C3 |
| Ontonagon | 266C2 |
| Oscoda | 239 C2, 264C3 |
| Otsego | 265A |
| Owosso | 280A |
| Pentwater | 231C3, 276A |

MICHIGAN—Continued

| | Channel No. |
|---|---|
| Petoskey | 242C1, 255C1 |
| Pickford | 288A |
| Pinconning | 265A, 281A |
| Port Huron | 272A, 296A |
| Portage | 243A |
| Reed City | 247A |
| Rogers City | 244C2, 260C2 |
| Roscommon | 266A |
| Saginaw | 251B, 283A, 292A, 296A |
| Sandusky | 249A |
| Saugatuck | 224A |
| Sault Ste. Marie | 252C3, 258C2, 267C1, *272C3 |
| Scottville | 235C3 |
| South Haven | 252A |
| Spring Arbor | 295A |
| St. Ignace | 275C |
| St. Johns | 221A |
| St. Joseph | 296A |
| Standish | 245A |
| Stephenson | 257A, 292C2 |
| Sturgis | 257A |
| Tawas City | 277A, 284C2, 291C3 |
| Three Rivers | 240A |
| Traverse City | 270C1, 278C, 283A, 29C2 |
| Tuscola | 268A |
| Vassar | 255A |
| Walhalla | 255A |
| Walker | 263A |
| West Branch | 288A |
| Whitehall | 237A, 248A |
| Zeeland | 257A |

MINNESOTA

| | Channel No. |
|---|---|
| Ada | 292A |
| Aitkin | 232C3 |
| Albany | 288A |
| Albert Lea | 235A, 241A |
| Alexandria | 222C3, 257A, 264C1 |
| Anoka | 300C |
| Atwater | 231A |
| Austin | 260C1 |
| Babbitt | 294C2 |
| Bagley | 244C3 |
| Bemidji | 238C1, 266C1, 279C1 |
| Benson | 228A |
| Belview | 290A |
| Blackduck | 252C2 |
| Blooming Prarie | 265C1 |
| Blue Earth | 251C3, 283C2 |
| Brainerd | 278C3, 294C1, 298C1 |
| Breckenridge | 286C1 |
| Breezy Point | 282 C2 |
| Browerville | 259A |
| Buhl | *223C2 |
| Caledonia | 234A |
| Cambridge | 287C3 |
| Cloquet | 243C3, 263C1 |
| Cold Spring | 235C2 |
| Coleraine | 241C1 |
| Crookston | 241C1, 246C1 |
| Crosby | 268C3 |
| Dassel | 295C3 |
| Deer River | 288C1 |
| Detroit Lakes | 236C1, 272C2 |
| Duluth | 225C1, 235C1, 239C1, *240C2, 255C2, 269C2, 277C1, 286C1 |
| East Grand Forks | 282C1 |
| Eden Prairie | 289A |

MINNESOTA—Continued

| | Channel No. |
|---|---|
| Ely | 233A |
| Eveleth | 250C1 |
| Farimont | 293C1 |
| Fairbault | 298C2 |
| Fergus Falls | 243C1, 277C1 |
| Forest Lake | 240A |
| Fosston | 296C2 |
| Glencoe | 242C2 |
| Glenwood | 296A |
| Golden Valley | 223C |
| Grand Marais | 237C1 |
| Grand Rapids | 245C1 |
| Granite Falls | 230A |
| Hermantown | 221C3 |
| Hibbing | 230C1, 292C3 |
| International Falls | 258C1, 281C3 |
| Jackson | 289C3 |
| La Crescent | 274C3 |
| Lake City | 235A, 273C3 |
| Lake Crystal | 239A |
| Lakeville | 286A |
| Lanesboro | 280A |
| Little Falls | 221A, 231A |
| Luverne | 266C1 |
| Madison | 221C3 |
| Mahnomen | 268C3 |
| Mankato | 256C1, 278C1 |
| Marshall | 259C1, 298C3 |
| Minneapolis | 229C, 246C, 253C, 258C, 262C1, 275C |
| Mantevideo | 288A |
| Moose Lake | 296C3 |
| Moorhead | 254C1, 260C1 |
| Mora | 238C3 |
| Morris | 239C1 |
| Nashwauk | 275C3 |
| New Prague | 238A |
| New Ulm | 226C1 |
| Nisswa | 227C |
| North Mankato | 244C3 |
| Olivia | 261C3 |
| Ortonville | 268C, 292A |
| Osakis | 280A |
| Owatonna | 285A |
| Park Rapids | 223C3, 248C1 |
| Paynesville | 255C2 |
| Pelican Rapids | 281C2 |
| Perham | 258A |
| Pequot Lakes | 261A, 274C2 |
| Pillager | 240A |
| Pine City | 265A |
| Pipestone | 254C |
| Preston | 276C3 |
| Princeton | 291C2 |
| Proctor | 299C2 |
| Red Lake | 231C1 |
| Red Wing | 290A, 290C3 |
| Redwood Falls | 249C1 |
| Richfield | 267C |
| Rochester | *225A, 243C2, 248C, 269C2, 295C |
| Roseau | 271C2, 278C2 |
| Rushford | 257C3 |
| Saint Joseph | 260A |
| Sartell | 244C2 |
| Sauk Centre | 232A |
| Sauk Rapids | 269C2 |
| Slayton | 291C2 |
| Sleepy Eye | 297A |
| Spring Grove | 252C2 |
| Spring Valley | 282C3 |
| Springfield | 234C2 |
| St. Charles | 299A |

MINNESOTA—Continued

| | Channel No. |
|---|---|
| St. Cloud | 251C, 284C |
| St. James | 263C2, 268C3 |
| St. Joseph | 225C3 |
| St. Louis Park | 281C |
| St. Paul | 233C, 237A, 271C |
| St. Peter | 288A |
| Staples | 234C2 |
| Starbuck | 247C2 |
| Stewartville | 287C2 |
| Thief River Falls | 257C3, 262C1, 274C1 |
| Tracy | 286C2 |
| Two Harbors | 282C2 |
| Vernon Center | 231A |
| Virginia | 260C1 |
| Wadena | 290C1 |
| Waite Park | 279C3 |
| Walker | 256C1, 270A, 275C3 |
| Warroad | 223C1 |
| Waseca | 221C3 |
| Willmar | 237C2, 273C1 |
| Windom | 232A |
| Winona | 237C3, 266C3 |
| Worthington | 228A, 236C1 |

MISSISSIPPI

| | Channel No. |
|---|---|
| Aberdeen | 287C2 |
| Ackerman | 300C |
| Amory | 237A |
| Artesia | 261A, 260C2 |
| Baldwyn | 223A |
| Batesville | 263C2 |
| Bay Springs | 232C2 |
| Bay St. Louis | 300C |
| Belzoni | 292A, 296C3 |
| Biloxi | 229C |
| Booneville | 257A |
| Brandon | 249A |
| Brookhaven | 221A |
| Brooksville | 255C3 |
| Bruce | 233A |
| Bude | 282C3 |
| Byhalia | 235A |
| Calhoun City | 272A |
| Canton | 269A |
| Carthage | 252C3 |
| Centreville | 285A |
| Charleston | 239A |
| Clarksdale | 221A, 243A, 268C3, 293C2 |
| Cleveland | 225C2, 252C3, 280C3 |
| Clinton | 228A |
| Coldwater | 237A |
| Collins | 296A |
| Columbia | 244A |
| Columbus | 235C2, 276C2, 280C2 |
| Como | 278C |
| Corinth | 232A, 237A |
| Crenshaw | 295A |
| D'Iberville | 250C2 |
| De Kalb | 289C2 |
| Drew | 237A |
| Durant | 266A |
| Ellisville | 273C2 |
| Eupora | 241C2 |
| Fayette | 249A |
| Flora | 247C3 |
| Forest | 223C |
| Fulton | 270C2 |
| Gluckstadt | 269C2 |

MISSISSIPPI—Continued

| | Channel No. |
|---|---|
| Greenville | 250C2, 264C1, 284C2 |
| Greenwood | 230C3, 256C, 282C2 |
| Grenada | 222A, 261C2, 267A |
| Gulfport | 244A, 272C3, 296A |
| Hattiesburg | 221A, 226A, 279C, 283C1 |
| Hazlehurst | 225A |
| Heidelberg | 257C2 |
| Holly Springs | 224A |
| Houston | 227C |
| Indianola | 245C2, 288A |
| Iuka | 285C2 |
| Jackson | 234C, 238C, 242C, 259C, 275C |
| Kosciusko | 277C3, 286C1 |
| Laurel | 251A, 262C |
| Leland | 232C2, 272A |
| Lexington | 273C3 |
| Liberty | 299C3 |
| Long Beach | 233A |
| Louisville | 296C3 |
| Lucedale | 295A |
| Lumberton | 237C1 |
| Macon | 263A |
| Magee | 298C |
| Marion | 236C2 |
| McComb | 289C1 |
| McLain | 245A |
| Meridian | 246C, 267C1, 271A |
| Monticello | 271C2 |
| Moss Point | 285C2 |
| Mound Bayou | 271A |
| Natchez | 236C, 247A |
| New Albany | 268A, 294C2 |
| New Augusta | 269A |
| Newton | 250A |
| Ocean Springs | 223A, 276C2 |
| Olive Brance | 239A |
| Oxford | 229C3, 238A, 248C1, 286A |
| Pascagoula | 256C1, 290C3 |
| Pearl | 230C3 |
| Petal | 292C3 |
| Philadelphia | 272A |
| Picayune | 291C2 |
| Pickens | 290C2 |
| Pontotoc | 244A |
| Port Gibson | 263A |
| Potts Camp | 240A |
| Prentiss | 252A |
| Quitman | 255C3 |
| Redwood | 288A |
| Richtown | 243A |
| Ripley | 272A |
| Rosedale | 298C3 |
| Sardis | 271A |
| Starkville | 221A, 291C2 |
| State College | 283C3 |
| Stonewall | 295A |
| Sumrall | 247A |
| Taylorsville | 240C2 |
| Tunica | 241C3 |
| Tupelo | 253C1 |
| Tylertown | 249A, 297A |
| Union | 281C2 |
| University | 221A |
| Utica | 265C2 |
| Vicksburg | 254C1, 267A, 294C |
| Water Valley | 288A |
| Waynesboro | 288A |
| West Point | 265A |
| Winona | 236C3 |
| Yazoo City | 221C3, 226A |

MISSOURI

| | Channel No. |
|---|---|
| Arcadia | 280A |
| Ash Grove | 281C3 |
| Asbury | 278C3 |
| Ashland | 791C1 |
| Aurora | 263C2 |
| Ava | 221A |
| Bethany | 238C2 |
| Birch Tree | 296C3 |
| Bismarck | 258C3 |
| Bonne Terre | 282A |
| Boonville | 226A, 257C2 |
| Bowling Green | 231C3 |
| Bourbon | 231A |
| Branson | 292C2 |
| Brookfield | 245C2 |
| Brookline | 271A |
| Buffalo | 260C3 |
| Butler | 221A |
| Cabool | 251A |
| California | 232C2 |
| Cameron | 261C2 |
| Campbell | 298C3 |
| Canton | 265C2 |
| Cape Girardeau | 264C, 275B |
| Carrollton | 264C1 |
| Carthage | 236C2 |
| Caruthersville | 286A |
| Centralia | 221A |
| Chaffee | 284A |
| Channel | 223A |
| Charleston | 291C2 |
| Chillicothe | 280C3 |
| Clayton | 256C |
| Clinton | 237C3, 241C |
| Columbia | 244C1, 252C2, 268C1, 272A |
| Crestwood | 234C |
| Cuba | 271A, 297C3 |
| De Soto | 261A |
| Deerfield | 264C3 |
| Dexter | 272A |
| Dixon | 221A |
| Doniphan | 248C2 |
| Doolittle | 283A |
| East Prairie | 287A |
| Eldon | 224C2, 270A |
| Eldorado Springs | 288A |
| Ellington | 280A, 294A |
| Farmington | 253C |
| Fayette | 230C3 |
| Florissant | 246C1 |
| Fulton | 263A |
| Gainesville | 259C2 |
| Gallatin | 269C3 |
| Garden City | 287A |
| Gideon | 280A |
| Gordonville | 257A |
| Halfway | 256C3 |
| Hannibal | 225C1 |
| Harrisonville | 264C1 |
| Houston | 257C2 |
| Huntsville | 278C2 |
| Ironton | 224A |
| Jefferson City | 261C2, 281A, 295C |
| Joplin | 223C1, 273C1 |
| Kansas City | 227C, 235C, 243C, 259C, 271C, 277C, 282C |
| Kennett | 255C, 282A |
| Kimberling City | 261C2 |
| Kirksville | 229C2, 233C1, 299C2, 300C1 |
| Knob Noster | 289C2 |
| Lake Ozark | 274A |
| Lamar | 260A |

MISSOURI—Continued

| | Channel No. |
|---|---|
| La Monte | 246C3 |
| Lebanon | 279C, 300C2 |
| Lexington | 297C |
| Liberty | 293C1 |
| Louisiana | 269A, 271C3 |
| Lutesville | 281A |
| Macon | 260C3 |
| Malden | 225C2 |
| Malta Bend | 248C3 |
| Mansfield | 240A |
| Marble Hill | 247A |
| Marshall | 275C1 |
| Marshfield | 284C2 |
| Maryville | 246C3 |
| Memphis | 263C3 |
| Mexico | 239C |
| Miner | 296A |
| Moberly | 247C3, 284C, 288C2 |
| Monett | 240A |
| Monroe City | 298A |
| Montgomery City | 280A |
| Mount Vernon | 294C3 |
| Mountain Grove | 223A |
| Mountain View | 245C2 |
| Naylor | 260A |
| Neosho | 259C3 |
| Nevada | 249A |
| New London | 290C3 |
| New Madrid | 293C2 |
| Nixa | 290C2 |
| Osage Beach | 228C3 |
| Osceola | 222A |
| Otterville | 299A |
| Owensville | 237A |
| Ozark | 225C2 |
| Palmyra | 250C2 |
| Perryville | 266A |
| Piedmont | 285C3 |
| Pleasant Hope | 238C2 |
| Poplar Bluff | 223A, 233C, 238C1, 244A, 278C2 |
| Potosi | 249C3 |
| Republic | 258A |
| Richmond | 223A |
| Rolla | 248A, 287C1 |
| Saint Robert | 255A |
| Salem | 240A |
| Savannah | 224C2 |
| Scott City | 230A |
| Sedalia | 221A |
| Seligman | 227C1 |
| Shell Knob | 249A |
| Sikeston | 250C2 |
| Southwest City | 262A |
| Sparta | 243C2 |
| Springfield | 234C, 247C1, 254C1, 267C |
| St. Genevieve | 289C |
| St. James | 259C3 |
| St. Joseph | 286C1 |
| St. Louis | 222C, 229C1, 242C1, 251C1, 273C, 277C1, 299C |
| Steelville | 227C2 |
| Stockton | 299A |
| Sullivan | 265A |
| Tarkio | 228C3 |
| Thayer | 222A |
| Trenton | 222C3 |
| Troy | 264A |
| Union | 269A |
| Vandalia | 282A |
| Versailles | 236C3 |
| Warrenton | 260C3 |
| Warsaw | 249A, 253A |

MISSOURI—Continued

| | Channel No. |
|---|---|
| Washington | 283A |
| Waynesville | 249A, 250A, 272A |
| Webb City | 250A |
| West Plains | 230C1, 273C2 |
| Wheeling | 290A |
| Willard | 286C2 |
| Willow Springs | 262C2 |

EFFECTIVE DATE NOTE: At 63 FR 50995, Sept. 24, 1998, Missouri was amended by adding Arcadia, channel 280A, and by removing channel 280A and adding channel 294A at Ellington, effective Nov. 2, 1998.

MONTANA

| | Channel No. |
|---|---|
| Anaconda | 249C3 |
| Baker | 263C1 |
| Belgrade | 244C2, 256A |
| Big Sky | 283A |
| Billings | 227C1, 231C1, 242C1, 246C2, 253C1, 275C1, 279C1, 286A, 298C |
| Bozeman | 229C1, 236C1, *240C3, 260C1, *271C2, 278C1 |
| Butte | 223C1, 231C, 238C, *295A |
| Cascade | 285C |
| Chinook | 267C1 |
| Colstrip | 229A |
| Columbia Falls | 240C |
| Conrad | 229C1 |
| Cut Bank | 274C1 |
| Deer Lodge | 243C2 |
| Dillon | 252C3 |
| East Helena | 281C1 |
| Ennis | 254C2 |
| Eureka | 228C3 |
| Forsyth | 267C |
| Glasgow | 228A |
| Glendive | 243C1 |
| Great Falls | 225C1, 233C1, 255C1, 262C, 291C1, 297C |
| Hamilton | 240C3, 251C3 |
| Hardin | 238C |
| Havre | 223C, 236C |
| Helena | 258C1, 266C, *276C, 287C |
| Kalispell | 246C, 253C, 280C1, 292C |
| Lewistown | 240A |
| Laurel | 269C1 |
| Libby | 269A |
| Livingston | 248C1, 264C |
| Malta | 261A |
| Miles City | 223C |
| Missoula | 227C, 235C, 261C1, 273C1 |
| Outlook | 289C |
| Plentywood | 261A |
| Red Lodge | 257A |
| Ronan | 222C |
| Scobey | 239C1 |
| Shelby | 242C1, 250C |
| Sidney | 226C1, 236C1 |
| Superior | 298A |
| West Yellowstone | 225C, 243A |
| Wolf Point | 224A |

EFFECTIVE DATE NOTE: At 63 FR 45183, Aug. 25, 1998, Montana was amended by removing channel 243A and adding channel 225C at West Yellowstone, effective Oct. 5, 1998.

NEBRASKA

| | Channel No. |
|---|---|
| Ainsworth | 224A |
| Albion | 224C2 |
| Alliance | 271C1, 290C1 |
| Auburn | 288A |
| Aurora | 247C1 |
| Beatrice | 225C1 |
| Bennington | 227A |
| Blair | 247C3, 268C3 |
| Bridgeport | 267C |
| Broken Bow | 252A |
| Central City | 262C |
| Chadron | 234C1, 248C1 |
| Columbus | 228C1, 266C1 |
| Cozad | 283C1 |
| Crete | 280A |
| Crookston | 241C1 |
| Fairbury | 258C1 |
| Falls City | 267A |
| Fremont | 288A |
| Gering | 280C1 |
| Gordon | 238C2 |
| Grand Island | 239C1, 243C1, 299C1 |
| Hastings | 233C2, 268C |
| Holdrege | 249C1 |
| Imperial | 276A |
| Kearney | 255C1, 272C3, 290C |
| Kimball | 261A |
| Lexington | 226C1 |
| Lincoln | 236C2, 270C, 274C1, 287A, 292C2, 297C1 |
| McCook | 230C2, 241A, 253C2, 287C1 |
| Milford | 251C |
| Nebraska City | 249C1 |
| Norfolk | 234C1, 294C |
| North Platte | 235C, 246C1, 278C1 |
| O'Neil | 275C1 |
| Ogallala | 259C1, 293C1 |
| Omaha | 222C, 231C, 241C, 260C, 264C, 283C, 290C2 |
| Orchard | 287C1 |
| Ord | 280C3 |
| Plattsmouth | 295A |
| Sargent | 221C1 |
| Scottsbluff | 225C, 231C1 |
| Seward | 245C1 |
| Sidney | 254C1 |
| South Sioux City | 296A |
| Superior | 280A |
| Terrytown | 245C1 |
| Wayne | 285A |
| West Point | 300C2 |
| Winnebago | 289C2 |
| York | 285C2 |

NEVADA

| | Channel No. |
|---|---|
| Amargosa Valley | 266A |
| Battle Mountain | 253A |
| Beatty | 262A |
| Boulder City | 288C2 |
| Carson City | 247C, 251C |
| Elko | 229C2, 237C1 |
| Ely | 224C3, 244C1, 269C3 |
| Fallon | 257A, 267C2 |
| Gardnerville-Minden | 256A |
| Hawthorne | 228A |

NEVADA—Continued

| | Channel No. |
|---|---|
| Henderson | 231C, 238C, 263C |
| Incline Village | 261C2 |
| Indian Springs | 257A |
| Las Vegas | 222C, 226C, 242C, 246C, 253C, 270C, 278C, 286C2, 293C |
| Laughlin | 228C1 |
| Mesquite | 244C, 248C1 |
| Moapa Valley | 284A |
| North Las Vegas | 282C |
| Pahrump | 236A, 298C |
| Pioche | 255A |
| Reno | 225C, 238C, 271C3, 283C, 289C, 295C |
| Smith | 222C3 |
| Sparks | 221A, 265A |
| Sun Valley | 229A, 233C2 |
| Tonopah | 224A |
| Wendover | 272C |
| Winnemucca | 224C3 |

NEW HAMPSHIRE

| | Channel No. |
|---|---|
| Bedford | 243A |
| Belmont | 227A |
| Berlin | 279C |
| Campton | 289A |
| Claremont | 291B |
| Concord | 272A, 288A |
| Conway | 228A, 283A |
| Dover | 248B |
| Exeter | 296A |
| Farmington | 293A |
| Franklin | 231A |
| Gorham | 296A |
| Hampton | 271A |
| Hanover | 222A, 257A |
| Haverhill | 267A |
| Henniker | 256A |
| Hillsboro | 299A |
| Hinsdale | 285A |
| Jackson | 258A |
| Keene | 279B |
| Laconia | 252A |
| Lancaster | 272A |
| Lebanon | 263C3 |
| Lisbon | 244A |
| Littleton | 292A |
| Manchester | 239B, 266B |
| Meredith | 268A |
| Moultonborough | 295A |
| Mount Washington | 235C |
| Nashua | 292A |
| Newport | 269A |
| New London | 259A |
| Peterborough | 221A |
| Plymouth | 261A |
| Portsmouth | 262B |
| Rochester | 244A |
| Somersworth | 254A |
| Walpole | 242A |
| Winchester | 254A |
| Wolfeboro | 285A |

NEW JERSEY

| | Channel No. |
|---|---|
| Asbury Park | 232A |

NEW JERSEY—Continued

| | Channel No. |
|---|---|
| Atlantic City | 236B, 245B, 279B, 297B1 |
| Avalon | 232A |
| Belvidere | 296A |
| Blairstown | 292A |
| Bridgeton | 299B |
| Camden | 295B |
| Canton | 269A |
| Cape May | 272A |
| Cape May Court House. | 288A |
| Dover | 288A |
| Eatontown | 292A |
| Egg Harbor | 285B1 |
| Franklin | 272A |
| Long Branch | 296A |
| Manahawkin | 261A, 289B1 |
| Margate City | 241A |
| Millville | 247B |
| New Brunswick | 252A |
| Newark | 234B, 262B, 290B1 |
| Newton | 279B1 |
| North Cape May | 294A |
| Ocean Acres | 253A |
| Ocean City | 252A, 292A |
| Paterson | 226B |
| Peterson | 274A |
| Pleasantville | 257A |
| Point Pleasant | 240A |
| Princeton | 277B |
| Toms River | 224A |
| Trenton | 233B, 248B, 268B |
| Tuckerton | 259A |
| Villas | 254A |
| Vineland | 221A |
| Wildwood | 264B |
| Wildwood Crest | 226A |
| Zarephath | 256B |

NEW MEXICO

| | Channel No. |
|---|---|
| Alamogordo | 232C3, 279A, 287C2, 300A |
| Albuquerque | 222C, 227C, 231C, 242C, 258C, 262C, 267A, 277C, 300C |
| Angel Fire | 256C2 |
| Armijo | 296C2 |
| Artesia | 225C |
| Aztec | 235C1 |
| Bayard | 275C1 |
| Belen | 249C1 |
| Bloomfield | 283C |
| Bosque Farms | 284C |
| Carlsbad | 221A, 281C1, 291C2 |
| Chama | 255A |
| Clayton | 228A |
| Cloudcroft | 244C, 250C1 |
| Clovis | 256C1, 260C1, 268C1, 272C3, 298C1 |
| Corrales | 236C1 |
| Deming | 232A |
| Espanola | 225C2 |
| Eunice | 265A |
| Farmington | 225C1, 239C1, 245C, 271C |
| Gallup | 229C, 233C, 256C, 268C1, 291C2 |
| Grants | 224C2, 264C2, 279C, 288C |
| Hatch | 266C |
| Hobbs | 231C1, 239C3, 243A, 275C1 |
| Jal | 279C1 |
| Kirtland | 275C |
| La Luz | 224A |

NEW MEXICO—Continued

| | Channel No. |
|---|---|
| Las Cruces | 258C, 276A, 280A |
| Las Vegas | 244A, 251C, 264C3 |
| Lordsburg | 250C, 279C3, 289C3 |
| Los Alamos | 253C, 294C1, 298C1 |
| Los Lunas | 273C, 292C1 |
| Lovington | 269C3 |
| Maljamar | *254C1, 286C |
| Mesilla Park | 285A |
| Portales | 237A |
| Raton | 229C2, 243A, 249A |
| Reserve | 283C3 |
| Rio Rancho | 269A |
| Roswell | 235C, 246C1, *258A, 263C1, 284C2, 293C1 |
| Ruidoso | 228C3, 268A |
| Santa Clara | 237C1 |
| Santa Fe | 234C1, 238C1, 247C, 281C, 286C, 290C |
| Santa Rosa | 240A |
| Silver City | 225C2 |
| Socorro | 225A |
| Taos | 260, 270C1 |
| Tatum | 296C |
| Texico | 243A |
| Thoreau | 260C |
| Truth or Consequences. | 254C |
| Tucumcari | 224A |
| White Rock | 266A |

NEW YORK

| | Channel No. |
|---|---|
| Albany | 238B, 265A, 276A, 293B, 299B |
| Albion | 271A |
| Alfred | 270A |
| Altamont | 285A |
| Amherst | 221A |
| Amsterdam | 249A |
| Arlington | 245A |
| Attica | 269A |
| Auburn | 295B |
| Avon | 227A |
| Babylon | 272A |
| Baldwinsville | 221B1 |
| Ballston Spa | 272A |
| Bath | 252A, 276A |
| Bay Shore | 276A |
| Big Flats | 249A |
| Binghamton | 251B, 256B |
| Boonville | 267A |
| Briarcliff Manor | 296A |
| Bridgehampton | 273A |
| Bridgeport | 258A |
| Brighton | 231A |
| Brockport | 288A |
| Buffalo | 225B, 233B, 241B, 245B, 258B, 273B, 277B, 281B, 293B |
| Calverton-Roanoke | 287A |
| Canajoharie | 227A |
| Canandaigua | 272A |
| Canton | 268A |
| Cape Vincent | 234A, 274A |
| Carthage | 276A |
| Catskill | 253A |
| Center Moriches | 241A |
| Chateaugay | 234C2 |
| Chenango Bridge | 281A |
| Cherry Valley | 270B |
| Clifton Park | 244A |

NEW YORK—Continued

| | Channel No. |
|---|---|
| Clyde | 229A |
| Cobleskill | 278B |
| Conklin | 263A |
| Copenhagen | 294C3 |
| Corinth | 228A |
| Corning | 254A, 291B |
| Cortland | 260B |
| Dansville | 230A |
| Delhi | 262A |
| Depew | 229B |
| Deposit | 234A |
| Deruyter | 286B |
| Dundee | 240A |
| East Hampton | 244A |
| Ellenville | 257A |
| Elmira | 224A, 232A |
| Endicott | 289B |
| Endwell | 298A |
| Essex | 267A |
| Port Plain | 266A |
| Frankfort | 235B |
| Fredonia | 243A |
| Fulton | 284B |
| Garden City | 224A |
| Geneva | 269A |
| Glens Falls | 240A |
| Gouverneur | 237A |
| Grand Gorge | 287A |
| Hague | 229A |
| Hammondsport | 252A |
| Hampton Bays | 296A |
| Hempstead | 252A |
| Henderson | 264A |
| Herkimer | 224A |
| Highland | 297A |
| Homer | 268A |
| Honeoye Falls | 236B |
| Hoosick Falls | 248A |
| Hornell | 221A, 287B |
| Horseheads | 265A |
| Hudson | 228A |
| Hudson Falls | 269A, 296A |
| Hyde Park | 249A |
| Irondequoit | 294A |
| Ithaca | 228A, 247B, 279B |
| Jamestown | 227B, 270A |
| Jeffersonville | 271A, 291A |
| Jewett | 250A |
| Kingston | 232A |
| Lake George | 256A |
| Lake Luzerne | 234A |
| Lake Placid | 288A |
| Lake Success | 278B |
| Lakewood | 295B1 |
| Liberty | 240A |
| Little Falls | 288A |
| Lowville | 257A |
| Malone | 243C3 |
| Manlius | 237A |
| Mechanicville | 283A |
| Mexico | 280A |
| Middletown | 224A |
| Minetto | 293A |
| Montauk | 235A, 284A |
| Monticello | 252A, 259A |
| Montour Falls | 285A |
| Morristown | 275A |
| Mount Kisco | 292A |
| New Paltz | 277A |
| New Rochelle | 228A |
| New York | 222B, 230B, 238B, 242B, 246B, 250B, 254B, 258B, 266B, 270B, 274B, 282B, 286B, 294B, 298B |

NEW YORK—Continued

| | Channel No. |
|---|---|
| Newburgh | 276A |
| Newport Village | 259A |
| Niagara Falls | 253B |
| North Syracuse | 265A |
| Norwich | 237A, 230B |
| Norwood | 241A |
| Ogdensburg | 224A, 254A |
| Old Forge | 223A, 231A |
| Olean | 239B, 268A |
| Oneonta | 276A, 280A |
| Oneida | 292A |
| Oswego | 244A, 288A |
| Owego | 269A |
| Palmyra | 259A |
| Patchogue | 248B, 291B |
| Patterson | 288A |
| Peekskill | 264B |
| Phoenix | 271A |
| Plattsburgh | 260C, 286C3 |
| Port Henry | 221C3 |
| Port Jervis | 244A |
| Potsdam | 257A |
| Poughkeepsie | 221A, 241A, 268B, 284B |
| Pulaski | 269A |
| Queensbury | 289B1 |
| Ravena | 233A |
| Remsen | 228A |
| Rensselaer | 280A |
| Riverhead | 280A |
| Rochester | 223B, 243B, 250B, 255B, 263B, 267B, 280A, 290A |
| Rome | 240A, 273B |
| Rosendale | 273A |
| Rotterdam | 252A |
| Sag Harbor | 221A |
| Salamanca | 252A |
| Saranac Lake | 269A, 292C3 |
| Saugerties | 225A |
| Schenectady | 258B |
| Seneca Falls | 257A |
| Sidney | 265A |
| Smithtown | 232A |
| Sodus | 278A |
| South Bristol Twsp | 297A |
| Southampton | 225A, 237A |
| Southhold | 269A |
| Southport | 258A |
| Speculator | 243A |
| Star Lake | 290B1 |
| Stillwater | 267A |
| Sylvan Beach | 262A |
| Syracuse | 226B, 233B, 275B, 290A, 300B |
| Ticonderoga | 280A |
| Troy | 222B |
| Tupper Lake | 272A |
| Utica | 245B, 254B, 264A, 282B, 297B |
| Vestal | 277B1 |
| Walton | 221A |
| Warrensburg | 262B1 |
| Waterloo | 253A |
| Watertown | 228A, 248C1 |
| Waverly | 271A |
| Webster | 274A |
| Wellsville | 278A |
| Westhampton | 253A |
| Westport | 273A |
| Wethersfield Townsh | 299B |
| White Plains | 280A |
| Whitehall | 231A |
| Whitesboro | 250A |
| Willsboro | 244A |
| Windsor | 294A |

NEW YORK—Continued

| | Channel No. |
|---|---|
| Woodstock | 261A |
| Wurtsboro | 247A |

NORTH CAROLINA

| | Channel No. |
|---|---|
| Ahoskie | 257A |
| Albemarle | 265A |
| Asheboro | 222C |
| Ashville | 260C |
| Atlantic | 297C3 |
| Aurora | 283A |
| Banner Elk | 264A |
| Bayboro | 250C3 |
| Beech Mountain | 272A |
| Belhaven | 266C2 |
| Biltmore Forest | 243A |
| Black Mountain | 295C |
| Burgaw | 260C1 |
| Burlington | 230C, 266C |
| Calabash | 285C3 |
| Carolina Beach | 294A |
| Charlotte | 236C, 279C, 284C, 300C |
| Clinton | 297C3 |
| Columbia | 273C1, 289C1 |
| Concord | 250C |
| Dunn | 278C2 |
| Durham | 286C, 296A |
| Eden | 233C1 |
| Edenton | 261C2 |
| Elizabeth City | 244A |
| Elizabethtown | 289A |
| Elkin | 265A |
| Enfield | 297A |
| Fairbluff | 287A |
| Fairmont | 265C2 |
| Farmville | 232A |
| Fayetteville | 251C1 |
| Forest City | 227C |
| Franklin | 244A |
| Fuquay-Varina | 280C3 |
| Gaston | 250A |
| Gastonia | 270C |
| Goldsboro | 245C, 272A |
| Greensboro | 246C, 254C |
| Greenville | 300C |
| Grifton | 258C2 |
| Hamlet | 282A |
| Harkers Island | 262C1 |
| Harrisburg | 224A |
| Hatteras | 233C1, 246C1 |
| Havelock | 286C3 |
| Henderson | 223C |
| Hendersonville | 273C1 |
| Hertford | 285C2 |
| Hickory | 239C, 275C1 |
| Highlands | 283A |
| High Point | 238C1, 258C, 262C |
| Hope Mills | 283A |
| Jacksonville | 222C2, 254C1, 288C2 |
| Jefferson | 291C3 |
| Iniannapolis | 259C |
| Kill Devil Hills | 281C1 |
| Kinston | 236C, 249A, 275A |
| Laurinburg | 243C |
| Leland | 231A |
| Lenoir | 277A |
| Lexington | 231C |
| Louisburg | 273A |
| Lumberton | 239C, 272A |

NORTH CAROLINA—Continued

| | Channel No. |
|---|---|
| Manteo | 252A, 256C2 |
| Morehead City | 242C1 |
| Morganton | 221A |
| Moyock | 221C3 |
| Murfreesboro | 252A |
| Murphy | 274A |
| Nags Head | 222C3 |
| Nashville | 259A |
| New Bern | 270C1, 293C1 |
| Newport | 277C1 |
| Norlina | 232A |
| North Wilkesboro | 247C |
| Ocean Isle Beach | 228A |
| Ocracoke | 224C1 |
| Old Fort | 282A |
| Oriental | 231C3 |
| Pinetops | 238C3 |
| Plymouth | 240A |
| Raleigh | 234C, 241C, 268C, 275A |
| Reidsville | 271C |
| Roanoke Rapids | 272A |
| Robbins | 276A |
| Robbinsville | 240A |
| Rocky Mount | 221A, 253C3, 264C |
| Rose Hill | 284A |
| Roxboro | 244A |
| St. Pauls | 297A, 299A |
| Salisbury | 293C1 |
| Sanford | 288A |
| Semora | 294C2 |
| Shallottee | 252C3, 279C3, 292A |
| Shelby | 241C |
| Southern Pines | 273A, 295C2 |
| Southern Shores | 265C2 |
| Southport | 298C2 |
| Statesville | 245C, 289C |
| Tarboro | 282C1 |
| Thomasville | 252A |
| Topsail Beach | 280C3 |
| Wadesboro | 228C3 |
| Wallace | 232A |
| Wanchese | 237C3 |
| Washington | 227C, 252A |
| Waxhaw | 291C3 |
| Waynesville | 285A |
| Whiteville | 256C1 |
| Williamston | 279C1 |
| Wilmington | 247C1, 267C2, 274C1, 283A |
| Wilson | 291C |
| Windsor | 249A, 255A |
| Winston-Salem | 226C, 281C, 298C |
| Wrightsville Beach | 229A |

NORTH DAKOTA

| | Channel No. |
|---|---|
| Arthur | 244A |
| Beulah | 250A |
| Bismarck | 225C, 233C, 243C, 248C, 254C, 268C |
| Bottineau | 270C1 |
| Carrington | 252A |
| Cavalier | 286C1 |
| Devils Lake | 244C2, 273C1, 278C1 |
| Dickinson | 221C3, 256C1 |
| Fargo | 229C, 250C, 270C1, 300C1 |
| Grafton | 265C3 |
| Grand Forks | 225C1, 234C1, 298C1 |
| Harwood | 264C3 |
| Hettinger | 228A |

NORTH DAKOTA—Continued

| | Channel No. |
|---|---|
| Hope | 284A |
| Jamestown | 227C1, 238C1 |
| Kindred | 224C3 |
| Langdon | 239A |
| Lisbon | 291C2 |
| Mandan | 284C1 |
| Mayville | 288C3 |
| Minot | 229C1, 246C, 260C1, 287C1, 295C2 |
| Rugby | 237A |
| Sarles | 290C |
| Tioga | 280A |
| Valley City | 266C2 |
| Wahpeton | 295C2 |
| Walhalla | 294C2 |
| Williston | 241C1, 253C1, 266C1 |
| Wishek | 262C1 |

OHIO

| | Channel No. |
|---|---|
| Ada | 235A |
| Akron | 243B, 248B |
| Alliance | 223B |
| Archbold | 241A |
| Ashland | 267B |
| Ashtabula | 246B, 252A |
| Athens | 240A, 288A |
| Barnesville | 228A |
| Beavercreek | 280A |
| Bellaire | 263A |
| Bellefontaine | 252A |
| Bellevue | 221A |
| Belpre | 296A |
| Bowling Green | 228A |
| Bryan | 265A |
| Bucyrus | 224A |
| Byesville | 249A |
| Cadiz | 292A |
| Caldwell | 285A |
| Cambridge | 244A |
| Canton | 231B, 251B, 295B |
| Castalia | 249A |
| Celina | 232A, 244A |
| Chillicothe | 227B, 232B1 |
| Cincinnati | 223B, 227B, 231B, 253B, 270B, 274B, 286B |
| Circleville | 296A |
| Cleveland | 226B, 238B, 253B, 258B, 264B, 271B, 277B, 281B, 289B, 293B 300B |
| Cleveland Heights | 222B |
| Clyde | 265A |
| Coal Grove | 246A |
| Columbus | 222B, 234B, 242B, 246B, 250B, 259B, 298A |
| Conneaut | 288A |
| Coshocton | 257A |
| Crestline | 254A |
| Crooksville | 297A |
| Dayton | 256B, 284B, 299B |
| Defiance | 251B, 290A |
| Delaware | 300A |
| Delphos | 296A |
| Delta | 293A |
| Dover | 269A |
| East Liverpool | 282B |
| Eaton | 225B |
| Edgewood | 273A |
| Elyria | 297B |
| Englewood | 233A |

OHIO—Continued

| | Channel No. |
|---|---|
| Fairfield | 235B |
| Findlay | 263B |
| Fort Shawnee | 298A |
| Fostoria | 244A |
| Fredericktown | 252A |
| Fremont | 256B1 |
| Gahanna | 285A |
| Galion | 272A |
| Gallipolis | 268B |
| Geneva | 284A |
| Georgetown | 249A |
| Gibsonburg | 239A |
| Greenfield | 248A |
| Greenville | 293B |
| Grove City | 266A |
| Hamilton | 243B, 278B |
| Harrison | 282A |
| Hicksville | 294A |
| Hillsboro | 294B |
| Holland | 272A |
| Hubbard | 270A |
| Huron | 241A |
| Ironton | 296A |
| Jackson | 249A |
| Johnstown | 276A |
| Kent | 261A |
| Kenton | 237A |
| Kettering | 260B |
| Lancaster | 238B, 278A |
| Lebanon | 247A |
| Lima | 226A, 249A, 271B, 285A |
| Logan | 252A |
| London | 292A |
| Lorain | 285A |
| Loudonville | 299A |
| Manchester | 267A |
| Mansfield | 287B, 291B |
| Marietta | 271B1 |
| Marion | 232A, 295B |
| Marysville | 289A |
| McArthur | 254A |
| McConnelsville | 265A |
| Medina | 235B |
| Miamisburg | 229B |
| Middleport | 221A |
| Middletown | 290B |
| Milford | 296A |
| Millersburg | 237A |
| Montpelier | 283A |
| Mount Gilead | 236 |
| Mount Vernon | 229B |
| Napoleon | 276A |
| Nelsonville | 299A |
| New Lexington | 292A |
| New Philadelphia | 240A |
| Newark | 262B, 269A |
| Niles | 291A |
| North Baltimore | 299A |
| North Kingsville | 298A |
| North Madison | 229A |
| Norwalk | 237A |
| Oak Harbor | 247A |
| Ottawa | 292A |
| Oxford | 249A |
| Paulding | 259A |
| Piketon | 261A |
| Piqua | 239B |
| Pleasant City | 221A |
| Port Clinton | 233B |
| Portsmouth | 257A, 281C, 298A |
| Richwood | 282A |
| Ripley | 258C3 |

OHIO—Continued

| | Channel No. |
|---|---|
| St. Marys | 277A |
| Salem | 286B |
| Sandusky | 274B |
| Shadyside | 239B1 |
| Shelby | 261A |
| Sidney | 288A |
| South Webster | 235A |
| South Zanesville | 224B1 |
| Springfield | 264B, 275B |
| Steubenville | 278B |
| Swanton | 297A |
| Sylvania | 288A |
| Tiffin | 279B |
| Toledo | 223B, 260B, 268B, 284B |
| Troy | 245A |
| Uhrichsville | 260A |
| Union City | 248A |
| Upper Arlington | 255A |
| Upper Sandusky | 240A |
| Urbana | 269A |
| Van Wert | 230A, 255B |
| Wapakoneta | 221A |
| Washington Court-house. | 288A |
| Wauseon | 245A |
| Waverly | 265A |
| Wellston | 244B1 |
| West Carrollton | 221A |
| West Union | 276A |
| Westerville | 280A |
| Willard | 245A |
| Wilmington | 272A |
| Wooster | 283B |
| Xenia | 237A |
| Youngstown | 227B, 255B, 266B |
| Zanesville | 273B |

OKLAHOMA

| | Channel No. |
|---|---|
| Ada | 257A |
| Altus | 228C2, 300C3 |
| Alva | 259C1, 278C1, 289C2 |
| Anadarko | 279C1 |
| Antlers | 222C2, 284A |
| Ardmore | 239C1, 253A |
| Atoka | 276C2 |
| Bartlesville | 261C1 |
| Bethany | 285A |
| Bixby | 287C2 |
| Blossom | 224C2 |
| Bristow | 285A |
| Broken Arrow | 221C2 |
| Broken Bow | 291C2 |
| Byng | 261C2 |
| Chelsea | 264A |
| Chickasha | 288A |
| Clinton | 238C2, 294C1 |
| Coalgate | 288C2 |
| Collinsville | 268C3 |
| Comanche | 246A |
| Cordell | 229A, 257C3 |
| DeQueen | 227A |
| Dickson | 278C3 |
| Duncan | 272A |
| Durant | 248C2, 296C3 |
| Edmond | 250A |
| Eldorado | 246A |
| Elk City | 232C3, 243C1, 253C |
| Enid | 245C, 276C3 |

OKLAHOMA—Continued

| | Channel No. |
|---|---|
| Eufaula | 273C3 |
| Frederick | 240A |
| Grove | 257A |
| Guymon | 224C3, 258C1 |
| Healdton | 229C2 |
| Heavener | 223A |
| Henryetta | 258C1 |
| Hobart | 290C |
| Holdenville | 293C3 |
| Hollis | 223A |
| Hugo | 238C2 |
| Idabel | 244C3, 275A |
| Ketchum | 298C1 |
| Kingfisher | 287A |
| Lahoma | 239C3 |
| Lawton | 231C, 237C3, 251C1, 258C3, 268C1, 297C2 |
| Lindsay | 286A |
| Locust Grove | 233A |
| Lone Grove | 294A |
| Madill | 273A |
| Mangum | 249A |
| Marlow | 221C1 |
| McAlester | 267C1, 286A |
| Miami | 265A |
| Muskogee | 246C, 295C |
| Newcastle | 227C1 |
| Norman | 292A |
| Nowata | 285A |
| Oklahoma City | 223C, 234C, 241C, 255C, 263C, 270C, 274C, 281C, 299C |
| Okmulgee | 231C1 |
| Owosso | 291C |
| Pauls Valley | 249C3 |
| Pawhuska | 280A |
| Perry | 286A |
| Ponca City | 257A, 265A, 284A |
| Poteau | 250C, 297C |
| Pryor | 283C1 |
| Roland | 222A |
| Sallisaw | 240C2 |
| Sand Springs | 272C2 |
| Sapulpa | 265A |
| Seminole | 290A |
| Shawnee | 236C |
| Snyder | 262A |
| Spencer | 289A |
| Stillwater | 229C2, 251A, 288A |
| Sulphur | 291A |
| Taft | 262A |
| Tahlequah | 269C3 |
| Tishomingo | 259C3 |
| Tulsa | 225C, 238C, 243C, 248C, 253C, 277C |
| Vinita | 240A, 241C2 |
| Warner | 271A |
| Watonga | 230A |
| Weatherford | 247C1 |
| Wewoka | 284A |
| Wilburton | 279C1 |
| Woodward | 221C3, 240A, 261C1, 266C, 272A |

EFFECTIVE DATE NOTE: At 63 FR 45182, Aug. 25, 1998, Oklahoma was amended by adding Antlers, channel 222C2, effective Oct. 6, 1998.

OREGON

| | Channel No. |
|---|---|
| Albany | 260C, 300C |
| Altamont | 249C1, 267C1 |
| Ashland | 270C, 298C2 |
| Astoria | 225C1 |
| Baker | 237C3, 284C |
| Bandon | 243C3 |
| Banks | 298C1, 298C3 |
| Beaverton | 277C |
| Bend | 231C, 248C1, 252C3, 259A, 264C1, 289C1 |
| Bonanza | 275A |
| Brookings | 237C2 |
| Brownsville | 272C1 |
| Burns | 224A |
| Cannon Beach | 243A |
| Canyon City | 233C |
| Cave Junction | 274C |
| Coos Bay | 228A, 254C2, 290C2 |
| Coquille | 247C1 |
| Corvallis | 268C2, 292C |
| Cottage Grove | 263A, 288A |
| Creswell | 237C3 |
| Dallas | 252C3 |
| Depoe Bay | 288A |
| Eagle Point | 292C3 |
| Enterprise | 221A |
| Eugene | 233C, 241C, 250C, 256C |
| Florence | 284C, 295A |
| Gleneden Beach | 248C2 |
| Gold Beach | 224C1 |
| Gold Hill | 262C1 |
| Grants Pass | 245C |
| Harbeck-Fruitdale | 252C2 |
| Hermiston | 263A |
| Hood River | 288A |
| Keno | 253A |
| Klamath Falls | 223C, 258C1, 284C1, 295C1 |
| La Grande | 254C2, 260C1 |
| Lake Oswego | 294C |
| Lakeview | 228C2, 237C2 |
| Lebanon | 279C |
| Lincoln City | 236C2, 244C2 |
| Malin | 263A |
| Medford | 229C, 239C1, 278C1 |
| Merrill | 289A |
| Milton-Freewater | 250C2 |
| Myrtle Point | 231A |
| Newport | 224C2, 274C1 |
| North Bend | 235C1, 297C1 |
| Nyssa | 254C1 |
| Oakridge | 221A |
| Ontario | 241C1 |
| Pendleton | 279C1, 299C |
| Phoenix | 286C1 |
| Portland | 222C, 229C, 238C, 246C, 254C1, 258C1, 262C, 266C, 270C |
| Prineville | 236C1, 254C3 |
| Redmond | 269C2, 275C1, 298C1 |
| Reed City | 247A |
| Reedsport | 221A, 258C3 |
| Rogue River | 234A |
| Roseburg | 276A |
| Salem | 286C |
| Seaside | 251A, 272C3 |
| Sisters | 281C1 |
| Springfield-Eugene | 226C |
| Sunriver | 224C2 |
| Sutherlin | 266C3 |
| Sweet Home | 296C1 |
| The Dalles | 224C3, 244C3, 249C2, *268C3, 283C |
| Tillamook | 231A, 281C3 |
| Toledo | 264C2 |

OREGON—Continued

| | Channel No. |
|---|---|
| Tri-City | 282C2 |
| Warm Springs | 243C |

PENNSYLVANIA

| | Channel No. |
|---|---|
| Allentown | 264B, 281B |
| Altoona | 251B, 261B1 |
| Avis | 260A |
| Barnesboro | 228A |
| Beaver Falls | 294B |
| Beaver Springs | 291A |
| Bedford | 265A, 298A |
| Bellefonte | 237A |
| Bellwood | 280A |
| Benton | 240A |
| Berwick | 278A |
| Bethlehem | 236B |
| Blairsville | 292A |
| Bloomsburg | 293B |
| Boalsburg | 229A |
| Boyertown | 298B |
| Braddock | 245B |
| Bradford | 261A |
| Brookville | 277B1, 288B1 |
| Burnham | 244A |
| Butler | 249A |
| Cambridge Springs | 283A |
| Canton | 262B1 |
| Carbondale | 232A |
| Carlisle | 272A |
| Central City | 269A |
| Chambersburg | 236B |
| Charleroi | 252A |
| Clarendon | 282A |
| Clarion | 224A |
| Clearfield | 226B1 |
| Cooperstown | 299A |
| Coudersport | 244A |
| Covington | 268A |
| Cresson | 232A |
| Curwensville | 275A |
| Dallas | 229A |
| Danville | 244A |
| Dubois | 271B, 297B |
| Easton | 241B, 260B |
| Ebensburg | 256B |
| Edinboro | 250B1 |
| Elizabethville | 263A |
| Ellwood City | 221A |
| Emporium | 257A |
| Ephrata | 286B |
| Erie | 234A, 260B, 272A, 279B |
| Everett | 282A |
| Fairview | 230A |
| Forest City | 261A |
| Franklin | 257B1 |
| Freeland | 276A |
| Galeton | 264B1 |
| Gettysburg | 299B |
| Greencastle | 232A |
| Greensburg | 296A |
| Greenville | 296A |
| Grove City | 236B |
| Harrisburg | 235B, 247B, 257A, 281B |
| Hawley | 287A |
| Hazleton | 250B |
| Hershey | 294B |
| Hollidaysburg | 285A |
| Honesdale | 237A |

PENNSYLVANIA—Continued

| | Channel No. |
|---|---|
| Huntingdon | 278A, 292A |
| Indiana | 223A |
| Jenkintown | 280A |
| Jersey Shore | 242B1, 249A |
| Johnsonburg | 263A |
| Johnstown | 221A, 238B, 243B |
| Kane | 280A |
| Lancaster | 233B, 245B, 267B |
| Laporte | 280A |
| Lebanon | 261A |
| Lewisburg | 279A |
| Lewistown | 240A, 288A |
| Linesville | 269A |
| Lock Haven | 221A |
| Mansfield | 222A |
| Martinsburg | 224A |
| Masontown | 295A |
| McConnellsburg | 279A |
| Meadville | 262B |
| Mechanicsburg | 228A |
| Media | 262B |
| Mercer | 244A, 280A |
| Mercersburg | 221A |
| Mexico | 223A |
| Meyersdale | 227A |
| Mifflinburg | 252A |
| Mifflintown | 296A |
| Mill Hall | 254A |
| Millersburg | 255A |
| Milton | 265A |
| Montrose | 243B |
| Mountaintop | 246A |
| Mount Carmel | 259A |
| Mount Union | 258A |
| Muncy | 227B1 |
| Nanticoke | 221A |
| New Kensington | 264B |
| North East | 265B1 |
| Northumberland | 297A |
| Oil City | 242A, 253B1 |
| Oliver | 235B1 |
| Olyphant | 239A |
| Palmyra | 221A |
| Patton | 234A |
| Philadelphia | 223B, 227B, 231B, 239B, 243B, 251B, 255B, 266B, 271B, 275B, 283B, 287B, 291B |
| Philipsburg | 290A |
| Pittsburgh | 225B, 229B, 233B, 241B, 259B, 268B, 273B, 284B, 290B, 300B |
| Pittston | 272A |
| Pocono Pines | 290A |
| Port Allegany | 235A |
| Port Matilda | 300A |
| Portage | 289A |
| Pottsville | 270B |
| Punxsutawney | 281A |
| Reading | 273B |
| Red Lion | 241B |
| Renovo | 295A |
| Reynoldsville | 293A |
| Ridgebury | 245A |
| Riverside | 222A |
| Russell | 276A |
| Saegertown | 232A |
| Salladsburg | 238A |
| Scottdale | 280A |
| Scranton | 258, 267B, 285A, 295A |
| Shamokin | 237A |
| Sharon | 275B |
| Sharpsville | 240A |
| Smethport | 292A |

PENNSYLVANIA—Continued

| | Channel No. |
|---|---|
| Somerset | 249A |
| South Waverly | 241A |
| South Williamsport | 257A |
| Spangler | 247A |
| St. Marys | 230B1, 248B |
| Starview | 224A |
| State College | 233A, 276A |
| Stroudsburg | 228A |
| Sunbury | 231B |
| Susquehanna | 223A |
| Tamaqua | 288A |
| Tioga | 234B1 |
| Tobyhanna | 300A |
| Towanda | 237A |
| Tunkhannock | 299A |
| Tyrone | 266B |
| Union City | 292A |
| Uniontown | 257A |
| University Park | 246A |
| Warren | 222B |
| Washington | 237A |
| Waynesboro | 268B |
| Waynesburg | 276A |
| Wellsboro | 283B |
| Whitneyville | 296A |
| Wilkes-Barre | 225B, 253B |
| Williamsport | 274B, 286B, 300A |
| York | 277B, 289B |
| York-Hanover | 253B |

RHODE ISLAND

| | Channel No. |
|---|---|
| Block Island | 257A |
| Middletown | 262A |
| Narragansett Pier | 274A |
| Providence | 222B, 231B, 238B, 268B, 286B |
| Wakefield-Peacedale | 259A |
| Westerly | 279B |
| Woonsocket | 292A |

SOUTH CAROLINA

| | Channel No. |
|---|---|
| Abbeville | 225A |
| Aiken | 242C2, 258C2 |
| Allendale | 228A |
| Anderson | 266C, 297C |
| Andrews | 264A |
| Atlantic Beach | 262A |
| Bamberg | 239A |
| Barnwell | 256C3 |
| Batesburg | 226A |
| Beaufort | 254C1 |
| Bishopville | 229A |
| Blackville | 250A |
| Bluffton | 295C1 |
| Bowman | 233A |
| Branchville | 286A |
| Bucksport | 300C2 |
| Camden | 274A |
| Cayce | 244A |
| Charleston | 236C, 245C, 263C3, 278C1 |
| Cheraw | 277C2 |
| Chester | 257C3 |
| Chesterfield | 297A |
| Clearwater | 252A |
| Clemson | 285A |

SOUTH CAROLINA—Continued

| | Channel No. |
|---|---|
| Columbia | 228A, 248C1, 276A, 284C |
| Conway | 230A |
| Cross Hill | 231A |
| Darlington | 288C3 |
| Dillon | 225C |
| Easley | 280A |
| Elloree | 262A, 262C3 |
| Florence | 292A |
| Folly Beach | 251C2 |
| Forest Acres | 232A |
| Gaffney | 287C |
| Garden City | 249C1 |
| Georgetown | 229A, 293C2 |
| Goose Creek | 232C3 |
| Gray Court | 263C |
| Greenville | 223C, 229C, 233C |
| Greenwood | 244A, 278C3 |
| Greer | 277A |
| Hampton | 221A |
| Hanahan | 241C1 |
| Hardeeville | 266C2 |
| Hartsville | 253A |
| Hilton Head Island | 291C2, 300C2 |
| Honea Path | 276A |
| Johnsonville | 286A |
| Johnston | 224A |
| Kingstree | 231A, 257C3 |
| Ladson | 292A |
| Lake City | 261A |
| Lancaster | 296A |
| Latta | 232C3 |
| Lexington | 253A |
| Loris | 235A |
| Manning | 223C |
| Marion | 263C3 |
| McClellanville | 255C2 |
| Moncks Corner | 287C3 |
| Mount Pleasant | 283C2 |
| Mullins | 296C2 |
| Murrell's Inlet | 233A |
| Myrtle Beach | 221C2, 269C2, 281C1 |
| New Ellenton | 274A |
| Newberry | 292C3 |
| North Charleston | 273C |
| North Myrtle Beach | 290C3 |
| Orangeburg | 275A, 280C3, 294C1 |
| Pageland | 272A |
| Pamplico | 271C2 |
| Parris Island | 276C3 |
| Pawley's Island | 253A |
| Port Royal | 259C |
| Ravenel | 269C3 |
| Ridgeland | 285C3 |
| Ridgeville | 265C3 |
| St. Andrews | 272A |
| St. George | 298C |
| St. Matthews | 230A |
| St. Stephen | 291A |
| Saluda | 221A |
| Scranton | 275A |
| Seneca | 251C |
| Socastee | 258C3 |
| South Congaree | 237A |
| Spartanburg | 255C |
| Summerton | 252A |
| Summerville | 227C2 |
| Sumter | 234A, 267C |
| Surfside Beach | 276C3 |
| Walhalla | 242A |
| Walterboro | 229A |
| Wedgefield | 238A |
| West Columbia | 261A |

SOUTH CAROLINA—Continued

| | Channel No. |
|---|---|
| Williston | 234A |

SOUTH DAKOTA

| | Channel No. |
|---|---|
| Aberdeen | 231C1, 235C, 294C1 |
| Belle Fourche | 240C1, 271C3 |
| Brookings | 229C1 |
| Canton | 274C2 |
| Clear Lake | 296C3 |
| Custer | 286C2 |
| Deadwood | 236C |
| Dell Rapids | 239C3 |
| Faith | 246C |
| Flandreau | 300C3 |
| Gregory | 268C1 |
| Hot Springs | 244C2 |
| Huron | 256A, 286A |
| Ipswich | 300A |
| Lead | 232C |
| Lowry | 264C1 |
| Madison | 276C2 |
| Martin | 273C1 |
| Milbank | 282C1 |
| Mission | 264A |
| Mitchell | 290C1, 297C1 |
| Mobridge | 258C1 |
| Murdo | 285A |
| Pierre | 224C1, 237C2 |
| Pine Ridge | 228A |
| Presho | 262A |
| Rapid City | 222C, 230C1, 250C1, 254C1, 262C1, 281C1, 292C |
| Redfield | 249A, 279C1 |
| Reliance | 233C |
| Roscoe | 287A |
| Salem | 263C1 |
| Sioux Falls | 223C, 233A, 243C, 247C1, 270C2, 279C2, 284C |
| Sisseton | 258C2, 275C1 |
| Spearfish | 266C, 297C |
| Sturgis | 226C |
| Vermillion | 292C2 |
| Volga | 272C3 |
| Watertown | 225C1, 241C1, 245C |
| Wessington Springs | 227C1, 252C1 |
| Winner | 229C1 |
| Yankton | 226C1, 281C1 |

TENNESSEE

| | Channel No. |
|---|---|
| Alamo | 226C3 |
| Athens | 269C3 |
| Atwood | 229A |
| Baxter | 299C3 |
| Belle Meade | 294A |
| Benton | 226A |
| Bolivar | 244A |
| Bristol | 245C |
| Brownsville | 237A |
| Bulls Gap | 264A |
| Byrdstown | 244A |
| Calhoun | 281A |
| Camden | 240A |
| Carthage | 281A |
| Celina | 268A |
| Centerville | 244A |

TENNESSEE—Continued

| | Channel No. |
|---|---|
| Chattanooga | 222C, 243C, 293C |
| Cleveland | 237A, 264C |
| Clifton | 293A |
| Clinton | 237A |
| Coalmont | 284A |
| Collinwood | 235C3 |
| Colonial Heights | 240C2 |
| Columbia | 269A |
| Cookeville | 234C, 253C2 |
| Covington | 228A |
| Crossville | 257A, 273C3 |
| Dayton | 285A |
| Dickson | 273C1 |
| Dresden | 236A |
| Dyer | 232A |
| Dyersburg | 261C2 |
| East Ridge | 300C3 |
| Elizabethton | 257C3 |
| Erwin | 280A |
| Etowah | 276C2 |
| Fayetteville | 288A |
| Franklin | 261A |
| Gallatin | 283C1 |
| Gatlinburg | 288A |
| Germantown | 231C2, 298C3 |
| Goddlettsville | 246C2 |
| Graysville | 239A |
| Greensville | 235C |
| Harriman | 224A |
| Harrogate | 243A |
| Henderson | 239A, 299C3 |
| Hendersonville | 221A |
| Humboldt | 272A, 287A |
| Huntingdon | 265C3 |
| Jackson | 268A, 276C2, 281C1 |
| Jamestown | 280A, 286A |
| Jefferson City | 257A |
| Jellico | 274A |
| Johnson City | 268C |
| Karns | 226A |
| Kingsport | 253C, 285A |
| Kingston Springs | 229A |
| Knoxville | 248C, 278C, 283A, 299C |
| Lafayette | 271A |
| La Follette | 285A |
| Lawrenceburg | 240A, 248A |
| Lebanon | 255A, 298C |
| Lenoir City | 228A |
| Lewisburg | 232A |
| Lexington | 257A |
| Livingston | 240C2 |
| Lobelville | 233C2 |
| Loudon | 256A, 287A |
| Madisonville | 258A |
| Manchester | 259C |
| Martin | 269A |
| Maryville | 239A |
| McKenzie | 295C1 |
| McKinnon | 268A |
| McMinnville | 280A |
| Memphis | 246C1, 259C, 266C1, 274C1, 283C1, 290C |
| Middleton | 264C3 |
| Milan | 222C |
| Millington | 251C |
| Minor Hill | 221A |
| Monterey | 226A, 284A, 295C2 |
| Morristown | 231A |
| Murfreesboro | 242C1 |
| Nashville | 225C, 238C, 250C, 277C, 290C |
| Newport | 225A |
| Norris | 294A |

TENNESSEE—Continued

| | Channel No. |
|---|---|
| Oak Ridge | 232A, 262C |
| Oliver Springs | 254C3 |
| Oneida | 288A |
| Paris | 231C3 |
| Parsons | 247A |
| Pulaski | 252A |
| Red Bank | 232A |
| Ripley | 235A |
| Rockwood | 289A |
| Rogersville | 293A |
| St. Joseph | 268A |
| Savannah | 228A, 269A |
| Selmer | 230A, 288A |
| Sevierville | 271C1 |
| Seymour | 242A |
| Shelbyville | 275C1 |
| Signal Mountain | 251A |
| Smithville | 269A |
| Smyrna | 231A |
| Soddy-Daisy | 272A |
| South Pittsburg | 247C2 |
| Sparta | 288A |
| Spencer | 297A |
| Spring City | 230C3 |
| Springfield | 232A |
| Surgoinsville | 282A |
| Sweetwater | 252A |
| Tazewell | 290A |
| Tiptonville | 267C3 |
| Trenton | 248C3 |
| Tullahoma | 227C |
| Tusculum | 276A |
| Union City | 285A, 289A |
| Wartburg | 267C3 |
| Waverly | 286C2 |
| Woodbury | 285A |

TEXAS

| | Channel No. |
|---|---|
| Abilene | 223C2, 263C, 286C1, 292C2, 300C1 |
| Alamo | 285A |
| Alice | 221A, 272A |
| Alpine | 224A |
| Amarillo | 226C1, 231C, 245C1, 250C, 254C1, 259A, 265C1, 270C1, 275C1, 289C3 |
| Andrews | 288A |
| Anson | 251C2 |
| Arlington | 235C |
| Atlanta | 261C2 |
| Austin | 229C, 238C1, 251C1, 264C, 272C2 |
| Ballinger | 276A |
| Bandera | 252A |
| Bastrop | 296C2 |
| Bay City | 269C1, 273C1 |
| Beaumont | 231C1, 236C1, 248C1, 273C2, 300C |
| Beeville | 250C2, 289C3 |
| Bells | 226A |
| Belton | 292C3 |
| Benavides | 299C2 |
| Big Lake | 252A, 280A |
| Big Spring | 240C3, 232C3 |
| Bishop | 295C3 |
| Bloomington | 295C3 |
| Blossom | 224C2 |
| Bonham | 252C3 |
| Borger | 282C1, 294A |
| Brackettville | 234A |
| Brady | 237A |

TEXAS—Continued

| | Channel No. |
|---|---|
| Breckenridge | 228C2 |
| Brenham | 231C3, 291C2 |
| Bridgeport | 252A |
| Brownfield | 282C2 |
| Brownsville | 258C, 262C |
| Brownwood | 257C2, 268C1, 281C1 |
| Bryan | 252A, 258A, 284C2 |
| Burkburnett | 284C |
| Burnet | 223A, 295A |
| Caldwell | 297A |
| Cameron | 232A, 280C2 |
| Campwood | 256A |
| Canadian | 235C1 |
| Canyon | 296A, 300C1 |
| Carrizo Springs | 221A, 228A |
| Carthage | 255C1, 282A |
| Center | 272A |
| Centerville | 290C3 |
| Childress | 241C2 |
| Claude | 239C1 |
| Clarksville | 253C |
| Cleveland | 246C |
| Clifton | 277C3 |
| Coahoma | 288A |
| Coalgate | 288C2 |
| Coleman | 296C3 |
| College Station | 263C2 |
| Colorado City | 291A |
| Columbus | 252A |
| Comanche | 232C2 |
| Comfort | 236C2 |
| Commerce | 277C3 |
| Conroe | 295C |
| Copperas Cove | 276C3 |
| Corpus Christi | 230C1, 234C3, 238C, 243C1, 256C1 |
| Corsicana | 300C1 |
| Cotulla | 249A |
| Crane | 267C1 |
| Crockett | 224C2, 228C2 |
| Crystal Beach | 268C3 |
| Crystal City | 232A |
| Cuero | 249C3 |
| Daingerfield | 295A |
| Dalhart | 240A |
| Dallas | 223C, 250C, 254C, 262C, 266C, 275C, 283C, 287C |
| Decatur | 289C |
| Del Rio | 232A, 242C1 |
| Denison-Sherman | 269C1 |
| Denton | 256C, 291C |
| Denver City | 248C2 |
| DeQueen | 227A |
| Detroit | 294C2 |
| Devine | 221A |
| Diboll | 238C1 |
| Dilley | 255C2 |
| Dimmitt | 263C3 |
| Dublin | 226C3 |
| Dumas | 237C3 |
| Eagle Pass | 224A |
| Eastland | 236A, 249A |
| Edinburg | 281C, 300C1 |
| Edna | 241C3 |
| El Campo | 245C1 |
| El Paso | 222C, 226C, 230C, 234C, 238C, 242C, 248C, 260C, 271C |
| Electra | 235C2 |
| Elgin | 223A |
| Fabens | 276A |
| Fairfield | 256C3 |
| Falfurrias | 292A |
| Farmersville | 221A |

TEXAS—Continued

| | Channel No. |
|---|---|
| Farwell | 222C1, 252C2 |
| Floresville | 231C2 |
| Flower Mound | 244C |
| Floydada | 237A |
| Fort Stockton | 232A |
| Fort Worth | 231C, 242C, 258C, 298C1 |
| Fort Worth-Dallas | 246C, 271C |
| Franklin | 270C3 |
| Fredericksburg | 266C |
| Freeport | 277C |
| Freer | 240A |
| Friona | 234C2 |
| Gainesville | 233C, 300C2 |
| Galveston | 285A, 293C |
| Ganado | 284C2 |
| Gatesville | 252A |
| George West | 228C3, 281A |
| Georgetown | 244C1, 299C3 |
| Giddings | 268C1 |
| Gilmer | 237C3 |
| Glen Rose | 221C1 |
| Goldsmith | 234A |
| Goliad | 240C3 |
| Gonzales | 292C3 |
| Graham | 296C3 |
| Granbury | 294C |
| Greenville | 228C3 |
| Gregory | 283A |
| Groves | 223C2 |
| Haltom City | 227C2 |
| Hamlin | 279C |
| Harker Heights | 288C2 |
| Harlingen | 233C, 241C |
| Haskell | 238C |
| Hearne | 276A |
| Hebbronville | 269A |
| Hemphill | 280A |
| Hempstead | 287C3 |
| Hereford | 278C2, 292C3 |
| Higland Park-Dallas | 279C |
| Highland Village | 264C |
| Hillsboro | 273C1 |
| Hondo | 253A |
| Hooks | 240C3 |
| Houston | 229C, 233C, 239C, 243C, 250C, 256C, 262C, 266C, 271C, 275C, 281C, 289C |
| Howe | 237C3 |
| Hudson | 242A |
| Huntington | 270C2 |
| Huntsville | 259C3, 269A |
| Hutto | 221A |
| Idalou | 289A, 299A |
| Ingleside | 297C3 |
| Jacksboro | 237A, 299A |
| Jacksonville | 272A, 293C |
| Jasper | 274C2, 297A |
| Jefferson | 283A |
| Johnson City | 300C2 |
| Jourdanton | 239A |
| Junction | 228A |
| Karnes City | 276C2 |
| Kennedy | 221A |
| Kermit | 292A |
| Kerrville | 222C2, 232C2 |
| Kilgore | 241C2 |
| Killeen | 222A, 227C |
| Kingsville | 224C2, 248C1 |
| La Grange | 285A |
| Lake Jackson | 298C |
| Lamesa | 284C1 |
| Lampasas | 255C1 |

TEXAS—Continued

| | Channel No. |
|---|---|
| Laredo | 224A, 235C1, 251C1, 291A |
| Leakey | 282A |
| Lewisville | 300C1 |
| Levelland | 288A |
| Liberty | 260C2 |
| Linden | 257C2 |
| Littlefield | 238C3 |
| Livingston | 222C2 |
| Llano | 242A |
| Lometa | 270A |
| Longview | 247C2, 289C |
| Lorenzo | 251C2 |
| Los Ybanez | 253C2 |
| Lubbock | 229C1, 233C1, 242C1, 258C1, 266C1, 273C1, 293C2 |
| Lufkin | 257C2, 286C |
| Luling | 234C |
| Madisonville | 241C2, 263C3 |
| Malakoff | 240A |
| Marble Falls | 285C3 |
| Marfa | 228A |
| Markham | 223A |
| Marlin | 225C2 |
| Marshall | 222A, 280A |
| Mason | 249C2 |
| McAllen | 245C, 253C |
| Mc Camey | 237A |
| McKinney | 295A |
| Memphis | 287C1 |
| Mercedes | 292A |
| Merkel | 274C1 |
| Mexia | 285A |
| Midland | 222C, 227C1, 236C3, 277C1, 294C1 |
| Mineola | 260A |
| Mineral Wells | 240C1 |
| Mirando City | 263C2 |
| Mission | 288A |
| Monahans | 260C1, 271C |
| Mt. Enterprise | 260A |
| Muenster | 293A |
| Muleshoe | 276A |
| Nacogdoches | 221A, 277C1 |
| Navasota | 223A |
| New Boston | 236C2, 278C2, 286A |
| New Braunfels | 221A |
| New Ulm | 222A |
| Nolanville | 297A |
| Odem | 252C2 |
| Odessa | 241C2, 245C1, 250C1, 256C1, 300C1 |
| Olney | 248C2 |
| Orange | 283C1, 291C |
| Overton | 264C2 |
| Ozona | 232A |
| Palacios | 259A |
| Palestine | 244A, 252C2 |
| Pampa | 262C2 |
| Paris | 230C2, 282C2, 299C2 |
| Pasadena | 225C |
| Pearsall | 237A, 281A |
| Pecos | 247C1, 252A |
| Perryton | 240A |
| Pilot Point | 285C2 |
| Pittsburg | 245A, 276A |
| Plainview | 247C1, 280C1, 295C2 |
| Pleasanton | 252A |
| Point Comfort | 231C3 |
| Port Arthur | 227C, 253C |
| Port Isabel | 266A |
| Port Lavaca | 227C1 |
| Portland | 288A |
| Post | 297C2 |

TEXAS—Continued

| | Channel No. |
|---|---|
| Premont | 264C3 |
| Quanah | 265C3 |
| Raymondville | 271C2, 289A |
| Refugio | 291C3 |
| Rio Grande City | 298C2 |
| Robinson | 300A |
| Robstown | 260C1, 286A |
| Rockdale | 253A |
| Rockport | 272C2 |
| Roma | 249A |
| Rosenberg | 285A |
| Round Rock | 290C2 |
| Rusk | 249C3 |
| San Angelo | 225C1, 230C1, 234C1, 248C1, 254C, 261C2, 270C1, 289C3, 298C1 |
| San Antonio | 225C, 241C1, 247C, 258C, 262C, 270C1, 274Cl, 283C1, 298C |
| San Augustine | 223A |
| San Diego | 290C3 |
| San Marcos | 278C |
| Sanger | 281C3 |
| San Saba | 246A |
| Seabrook | 221C1 |
| Seadrift | 286a |
| Seguin | 287C |
| Seminole | 292A |
| Seymour | 230C2 |
| Shamrock | 224A |
| Silsbee | 269A |
| Sinton | 267C1, 279C1 |
| Slaton | 224C1 |
| Snyder | 246A, 268C2 |
| Sonora | 221A |
| South Padre Island | 224A, 237A |
| Spearman | 252A |
| Stamford | 295A |
| Stanton | 290C2 |
| Stephenville | 252A |
| Sterling City | 243C2 |
| Sulphur Springs | 240A |
| Sweetwater | 244A |
| Tahoka | 237A, 262C1 |
| Tatum | 262A |
| Taylor | 282C2 |
| Temple | 269C3 |
| Terrell | 296A |
| Terrell Hills | 294C |
| Texarkana | 251C, 273C1 |
| Thorndale | 257A |
| Three Rivers | 233C2 |
| Tulia | 285C3 |
| Tye | 259C1 |
| Tyler | 221C3, 226C1, 268C, 281C2 |
| Uvalde | 229A, 272A, 285C3 |
| Vernon | 272A |
| Victoria | 222A, 236C1, 254C1, 265A, 300C1 |
| Waco | 233A, 239C2, 248C, 260C, 296A |
| Wake Village | 233A |
| Wellington | 278C3 |
| Whitehouse | 297C2 |
| Wichita Falls | 225C1, 260C1, 277C1, 273A, 292C2 |
| Willis | 279C3 |
| Winfield | 249C3 |
| Winnie | 264C |
| Winnsboro | 284A |
| Winona | 274A |
| Winters | 241A |
| Woodville | 234C2 |
| Yoakum | 223A |
| Yorktown | 242A |
| Zapata | 228A |

EFFECTIVE DATE NOTE: At 63 FR 45182, Aug. 25, 1998, Texas was amended by adding Detroit, channel 294C2; by removing channel 300C2 and adding channel 300C1 at Gainesville; by adding Lewisville, channel 300C1; by removing channel 300C1 at Corsicana; by adding Robinson, channel 300A; and by removing channel 299A and adding channel 237A at Jacksboro, effective Oct. 6, 1998.

UTAH

| | Channel No. |
|---|---|
| Blanding | 221A |
| Bountiful | 258C |
| Brian Head | 251C |
| Brigham City | 264C, 295C |
| Cedar City | 223C, 235C1 |
| Centerville | 289C |
| Coalville | 223A |
| Delta | 239C1 |
| Huntsville | 276C3 |
| Kanab | 266C1 |
| Levan | 256A |
| Logan | 225C2, 233C |
| Manti | 286C |
| Midvale | 274C |
| Moab | 246C1 |
| Monroe | 257C2 |
| Nephi | 224A, 280C1 |
| Oakley | 268C1 |
| Ogden | 238C1, 250C, 266C, 270C |
| Orem | 298C |
| Payson | 222A |
| Price | 252C3, 265A |
| Provo | 235C, 242C |
| Randolph | 272A |
| Richfield | 229C, 248 |
| Roosevelt | 230A, 253C2 |
| Roy | 300C |
| St. George | 228C2, 240C, 259C |
| Salt Lake City | 227C, 231C, 246C, 254C, 262C, 278C, 282C |
| Smithfield | 280A |
| Spanish Fork | 293C1 |
| Tooele | 221C3 |
| Torrey | 253A |
| Tremonton | 286C2 |
| Vernal | 290C3 |

VERMONT

| | Channel No. |
|---|---|
| Barre | 296A |
| Bellows Falls | 296A |
| Bennington | 232A |
| Brandon | 268A |
| Brattleboro | 224A, 244A |
| Burlington | 225C, 255C1, 300C |
| Canaan | 231C3 |
| Danville | 239A |
| Derby Center | 221C3 |
| Hartford | 282A |
| Killington | 287C2 |
| Lyndon | 249C3 |
| Manchester | 274B |
| Marlboro | 268A |
| Middlebury | 265A |
| Montpelier | 284C2 |
| Randolph | 271C3 |
| Royalton | 276A |
| Rupert | 281A |

VERMONT—Continued

| | Channel No. |
|---|---|
| Rutland | 233C3, 246C2, 251C2 |
| South Burlington | 238C3 |
| Springfield | 228A |
| St. Albans | 272A |
| St. Johnsbury | 288A |
| Stowe | 269A |
| Vergennes | 294C2 |
| Warren | 241A |
| Waterbury | 277C3 |
| West Rutland | 298C3 |
| White River Junction | 237A |
| Wilmington | 264A |
| Woodstock | 230A |

VIRGINIA

| | Channel No. |
|---|---|
| Abingdon | 224A |
| Accomac | 257B1 |
| Alberta | 276A |
| Alta Vista | 288A |
| Amherst | 300C1 |
| Appomattox | 274C1, 296A |
| Arlington | 286B |
| Ashland | 261A |
| Bedford | 295A |
| Berryville | 288A |
| Big Stone Gap | 228C2 |
| Blacksburg | 287C3 |
| Blackstone | 228C3 |
| Bluefield | 292A |
| Bowling Green | 245A |
| Bridgewater | 286A |
| Broadway | 238A |
| Buena Vista | 244A |
| Buffalo Gap | 238A |
| Cape Charles | 241B |
| Cedar Bluff | 299A |
| Charlottesville | 224A, 236A, 248B, 298A |
| Chase City | 260C3 |
| Chesa-Portsm-Va Bea | 271A |
| Chesapeake | 229C1 |
| Chester | 266A |
| Chincoteague | 243A |
| Christiansburg | 264A |
| Churchville | 292B1 |
| Clarksville | 252C3 |
| Clifton Forge | 280A |
| Clinchco | 221A |
| Coeburn | 259C3 |
| Colonial Beach | 240A |
| Colonial Heights | 237B1 |
| Covington | 265A |
| Crewe | 284C1 |
| Crozet | 272A, 278A |
| Culpeper | 276A |
| Danville | 277C1 |
| Deltaville | 222A |
| Dillwyn | 287A |
| Elkton | 252A |
| Emporia | 258A |
| Ettrick | 226A |
| Exmore | 291B1, 298B |
| Falmouth | 283A |
| Farmville | 225A, 239B, 267A |
| Fort Lee | 243B |
| Franklin | 269A |
| Fredericksburg | 227B, 268B |
| Front Royal | 237A, 257A |
| Galax | 251C |

VIRGINIA—Continued

| | Channel No. |
|---|---|
| Gloucester | 256A |
| Goochland | 263A |
| Gretna | 292A |
| Grundy | 249A |
| Hampton | 267B |
| Harrisonburg | 264B, 282B |
| Hot Springs | 296A |
| Jonesville | 256A |
| Kilmarnock | 269A |
| Lawrenceville | 288A |
| Lebanon | 297A |
| Louisa | 288A |
| Luray | 280A, 289A |
| Lynchburg | 250C3, 261C3, 269C3, 290A |
| Manassas | 294B |
| Marion | 230C, 273A, 278A |
| Martinsville | 242C1 |
| Mechanicsville | 221B1 |
| Mount Jackson | 245A |
| Narrows | 267A |
| Newport News | 247B |
| Norfolk | 239B, 254B, 259B, 263B, 275B, 283B, 287B |
| Norton | 292A |
| Onley-Onancock | 277B |
| Orange | 244A |
| Pennington Gap | 288A |
| Petersburg | 257A, 262A |
| Pound | 272A |
| Powhatan | 297A |
| Pulaski | 296C3 |
| Radford | 269A |
| Richlands | 264A, 288A |
| Richmond | 233B, 251B, 271B, 279B, 289A, 293B |
| Roanoke | 222C, 235C, 256C, 285C3 |
| Ruckersville | 270A |
| Rural Retreat | 237A |
| Salem | 228A |
| Shawsville | 273A |
| Shenandoah | 296A |
| South Boston | 237A, 248C1 |
| South Hill | 255C3 |
| Spotsylvania | 257A |
| Stanleytown | 260C3 |
| Staunton | 228A, 232B1, 259B |
| Strasburg | 285A |
| Suffolk | 225B, 295C |
| Tappahannock | 288A |
| Tazewell | 261A |
| Vinton | 268A, 291A, 296A |
| Virginia Beach | 235B |
| Warrenton | 232A, 299B |
| Warsaw | 265A |
| West Point | 300A |
| White Stone | 285A |
| Winchester | 223B, 273B |
| Windsor | 299A |
| Woodbridge | 290B |
| Woodstock | 229B1 |
| Yorktown | 231B |

WASHINGTON

| | Channel No. |
|---|---|
| Aberdeen | 257C1, 284C2 |
| Bellevue | 223C |
| Bellingham | 225C, 282C |
| Bremerton | 295C |
| Camas | 234C2 |

WASHINGTON—Continued

| | Channel No. |
|---|---|
| Cashmere | 294A |
| Castle Rock | 296C3 |
| Centralia | 275C |
| Chelan | 228A |
| Chewelah | *274C3 |
| Cheney | 266C |
| Clarkston | 231C, 275A |
| Cle Elum | 229A |
| Colfax | 273C3 |
| Colville | 221A |
| Davenport | 247C3 |
| Dayton | 223C1, 272A |
| Deer Park | 296C3 |
| Dishman | 293A |
| East Wenatchee | 249A |
| Eatonville | 285A |
| Edmonds | 287C1 |
| Ellensburg | 237C2, 276C2 |
| Elma | 271C3 |
| Ephrata | 222C2, 230C3 |
| Forks | 280A |
| Goldendale | 272C3 |
| Grand Coulee | 253C |
| Grandview | 265C2 |
| Hoquiam | 237C3 |
| Ilwaco | 280C3 |
| Kelso | 233A |
| Kennewick | 287C |
| Leavenworth | 266A |
| Long Beach | 232A |
| Longview | 288A |
| Lynden | 293C |
| Mabton | 254A |
| McCleary | 245C3 |
| Medical Lake | 270C2 |
| Moses Lake | 257A, 262C1 |
| Naches | 245A, 257A |
| Newport | 285A |
| Ocean Shores | 228A |
| Olympia | 241C |
| Omak | 224C2, 282C2 |
| Opportunity | 241C |
| Othello | 248C3 |
| Pasco | 252A, 267C3, 229A |
| Prosser | 269C3 |
| Pullman | 249A, 258C, 282C1 |
| Quincy | 240C3, 244A |
| Raymond | 249C3 |
| Richland | 235C, 274C, 293C |
| Rock Island | 258A |
| Royal City | 242C3 |
| Seattle | 227C, 231C, 235C1, 239C, 243C, 251C, 255C, 260C, 264C, 268C, 273C, 299C |
| Shelton | 233A |
| South Bend | 289C2 |
| Spokane | 225C, 229C, 245C3, 251C, 255C, 260C, 280C2, 284A, 289C, 300C |
| Sunnyside | 244A |
| Tacoma | 247C, 279C, 291C |
| Toppenish | 225C2 |
| Vancouver | 290C2 |
| Wisp | 292A |
| Walla Walla | 227C1, 239C, 246C, 256C2, 264C3, 265A |
| Wenatchee | 271C, 285C2 |
| Westport | 267A |
| Wilson Creek | 278C1 |
| Winlock | 236A |
| Winthrop | 248A |
| Yakima | 233C1, 252A, 259C3, 281C1, 289C1, 297C |

WEST VIRGINIA

| | Channel No. |
|---|---|
| Barrackville | 226A |
| Beckley | 258B, 279B |
| Berkeley Springs | 228A |
| Bethlehem | 288B1 |
| Bluefield | 283C |
| Bridgeport | 281A |
| Buckhannon | 228B1, 267B |
| Charles Town | 252A |
| Charleston | 241B, 248B, 260B, 274B |
| Clarksburg | 224A, 285A, 293B |
| Danville | 223A |
| Dunbar | 233A |
| Elkins | 234B1, 255B1 |
| Elizabeth | 291A |
| Fairmont | 232A, 250B |
| Fisher | 279A |
| Grafton | 240A |
| Hinton | 272A |
| Huntington | 263B, 277B, 300B |
| Kenova | 250A |
| Keyser | 231B, 296A |
| Kingwood | 244A, 299A |
| Lewisburg | 276A |
| Logan | 270B |
| Lost Creek | 242A |
| Mannington | 274A |
| Martinsburg | 248B |
| Matewan | 294C3 |
| Miami | 297B |
| Milton | 292B1 |
| Morgantown | 261A, 270B |
| Moundsville | 243A |
| Mount Gay-Shamrock | 234A |
| Mount Hope | 290B |
| Mullens | 224A |
| New Martinsville | 258A, 280A |
| Oak Hill | 231B |
| Parkersburg | 236B, 256B1, 276A |
| Petersburg | 269A |
| Pocatalico | 254A |
| Point Pleasant | 258A |
| Powhatan | 297A |
| Princeton | 240A, 254C3, 265A |
| Rainelle | 237B1 |
| Ravenswood | 226A |
| Ripley | 252A |
| Romney | 261A, *281A |
| Ronceverte | 249A |
| Salem | 277A, 289A |
| South Charleston | 265A |
| Spencer | 284A |
| St. Albans | 286B |
| St. Marys | 230B1 |
| Summersville | 225B |
| Sutton | 246B1 |
| Vienna | 261A |
| Webster Springs | 262B |
| Welch | 275A |
| Weston | 272B1 |
| Westover | 265A |
| Wheeling | 247B, 254B, 298B |
| White Sulphur Springs | 227A |
| Williamson | 243B |
| Williamstown | 245A |

WISCONSIN

| | Channel No. |
|---|---|
| Adams | 291A |
| Algoma | 244C3, 281A |

WISCONSIN—Continued

| | Channel No. |
|---|---|
| Allouez | 294C3 |
| Altoona | 251C3 |
| Antigo | 287C1, 291C3 |
| Appleton | 289C |
| Ashland | 244C2, 227C1 |
| Balsam Lake | 285C3 |
| Baradoo | 235B |
| Barron | 249A |
| Beaver Dam | 237A |
| Berlin | 284A |
| Birnamwood | 225A |
| Black River Falls | 259C3 |
| Bloomer | 236C3 |
| Brillion | 298C3 |
| Brookfield | 295A |
| Chetek | 294C2 |
| Chippewa Falls | 289C3 |
| Cleveland | 251A |
| Clintonville | 222A |
| Columbus | 263A |
| Cornell | 260C3 |
| Crandon | 276A |
| De Forest | 226A |
| De Pere | 240C3 |
| Dickeyville | 266A |
| Dodgeville | 257A |
| Durand | 240A |
| Eagle River | 233C2 |
| Eau Claire | 231C1, 264C1, 283C |
| Elk Mound | 225A |
| Evansville | 290A |
| Fond Du Lac | 296A |
| Forestville | 271A |
| Fort Atkinson | 297B |
| Green Bay | 253C1, 266C |
| Hallie | 279C1 |
| Hartford | 285A |
| Hayward | 222A, 266A |
| Iron River | 297C3 |
| Janesville | 260B1 |
| Kaukauna | 276C3, 285A |
| Kenosha | 236B |
| Kewaunee | 224A |
| La Crosse | 227C, 239C2, 285A, 292C3 |
| Ladysmith | 224A, 226A |
| Lake Geneva | 241A |
| Lancaster | 249C3 |
| Lomira | 249A |
| Madison | 251B, 268B, 273B, 281B |
| Manitowoc | 221A, 272A |
| Marathon | 285C3 |
| Marinette | 236C1 |
| Marshfield | 293C1 |
| Mauston | 221A |
| Mayville | 254A |
| Medford | 257C3 |
| Menomonee Falls | 252A |
| Merrill | 281C3 |
| Middleton | 292A |
| Milwaukee | 227B, 233B, 239B, 243B, 247B, 256B, 271B, 275B, 299B |
| Minocqua | 240C3 |
| Mishicot | 234A |
| Monomonie | 221C3 |
| Monroe | 229B |
| Mosinee | 234C2 |
| Mount Horeb | 294A |
| Mukwonago | 287A |
| Neehah-Menasha | 232C3, 262C2 |
| Neillsville | 224A, 298C1 |
| Nekoosa | 230C3, 288A |
| New Holstein | 225A |

WISCONSIN—Continued

| | Channel No. |
|---|---|
| New London | 228C2 |
| New Richmond | 296C3 |
| Oconto | 296A |
| Omro | 258C2 |
| Oshkosh | 245A |
| Park Falls | 254C2 |
| Peshtigo | 242C2 |
| Platteville | 296A |
| Plymouth | 283A |
| Port Washington | 261A |
| Portage | 240A, 261A |
| Prairie Du Chien | 232C2 |
| Racine | 221A, 264B |
| Reedsburg | 275A, 285A |
| Rhinelander | 248C1, 261C1 |
| Rice Lake | 242C1, 256C2 |
| Richland Center | 265A |
| Ripon | 241A |
| River Falls | 292A |
| Rudolph | 260C3 |
| Sauk City | 242B1 |
| Seymour | 282A |
| Shawano | 257C3 |
| Sheboygan | 229A |
| Sheboygan Falls | 293A |
| Shell Lake | 237C3 |
| Siren | 289A |
| Soldiers Grove | 290A |
| Sparta | 246C1 |
| Spencer | 222A |
| Spooner | 292A |
| Sturgeon Bay | 230C1, 249A, 259C2 |
| Sturtevant | 284A |
| Sun Prairie | 221A |
| Superior | 273C1 |
| Suring | 274C1 |
| Three Lakes | 229C2 |
| Tomah | 241C2, 255C, 233C3 |
| Tomahawk | 223C3 |
| Trempealeau | 288A |
| Two Rivers | 246A, 255A |
| Verona | 288A |
| Viroqua | 272A |
| Washburn | 290C1 |
| Watertown | 231B |
| Waukesha | 291B |
| Waunakee | 286A |
| Waupaca | 224A |
| Wausau | 238C, 270C, 300C |
| Wautoma | 272A |
| Wauwatosa | 279B |
| West Bend | 223B |
| West Salem | 261A |
| Westby | 280A |
| Whitehall | 272A |
| Whitewater | 283A, 293A |
| Whiting | 244C2 |
| Winneconne | 280C3 |
| Wisconsin Dells | 295A |
| Wisconsin Rapids | 277C1 |

WYOMING

| | Channel No. |
|---|---|
| Afton | 254A |
| Albin | 297C2 |
| Buffalo | 225C1 |
| Burns | 270C2 |
| Casper | 233C, 238C, 247C1, 273A, 279C, 284C1, 295C |

WYOMING—Continued

| | Channel No. |
|---|---|
| Centennial | 224A |
| Cheyenne | 250C1, 260A, 264C1, 285A, 292C3 |
| Chugwater | 258A |
| Cody | 250C |
| Diamondville | 287C2 |
| Douglas | 257A |
| Evanston | 291C3 |
| Fort Bridger | 256C1 |
| Gillette | 245C1, 249A, 264C1 |
| Glendo | 261A |
| Glenrock | 252A |
| Green River | 221C |
| Greybull | 262C |
| Jackson | 227C, 237C, 245C1 |
| Kemmerer | 297A |
| Lander | 248C1 |
| Laramie | 236C, 244A, 275C, 283C2, 288C3 |
| Lost Cabin | 256C |
| Midwest | 300A |
| Mills | 288A |
| Moorcroft | 228A |
| Newcastle | 257A |
| Pine Bluffs | 287C2 |
| Pinedale | 2266A |
| Powell | 233C, 281C |
| Rawlins | 224A |
| Riverton | 226C1, 230C1 |
| Rock Springs | 236C, 243C, 283C |
| Sheridan | 235C1, 243C3 |
| Sundance | 276C1 |
| Thermopolis | 252A, 269A |
| Torrington | 252C3 |
| Wheatland | 269A |
| Worland | 241C2 |

AMERICAN SAMOA

| | Channel No. |
|---|---|
| Fagaitua | 276C2 |
| Leone | 230C1 |
| Pago Pago | 221C3, 226C1 |

CENTRAL MARIANAS

| | Channel No. |
|---|---|
| Saipan | 230A |

GARAPAN

| | Channel No. |
|---|---|
| Saipan | 258C1, 262C2, 266C3, 280C3 |

GUAM

| | Channel No. |
|---|---|
| Agana | 230C2, 238C2, 248C2, 262C2, 270C2, 275C |
| Dededo | 286C |

PUERTO RICO

| | Channel No. |
|---|---|
| Aguada | 288A |

PUERTO RICO—Continued

| | Channel No. |
|---|---|
| Aguadilla | 225B, 262B |
| Arecibo | 293B1, 297B |
| Bayamon | 234B, 264B |
| Cabo Rojo | 272A |
| Caguas | 277B |
| Camuy | 275B |
| Carolina | 299B |
| Cidra | 249A |
| Corozal | 223B |
| Culebra | 254A |
| Fajardo | 243B |
| Guayama | 295B |
| Hormigueros | 221A, 291A |
| Isabela | 268B |
| Lajas | 279B |
| Las Piedras | 252A |
| Luguillo | 221A |
| Manati | 245B |
| Maricao | 241B |
| Mayaguez | 231B, 248B, 254B |
| Naguabo | 225A |
| Ponce | 227B1, 266B, 270B, 286B |
| Quebradillas | 258A |
| Rio Grande | 247A |
| Rio Piedras | 239B |
| San German | 236B |
| San Juan | 229B, 256B, 260B, 273B, 284B, 289B |
| Santa Isabel | 251A |
| Utuado | 281B |
| Vieques | 291B |

VIRGIN ISLANDS

| | Channel No. |
|---|---|
| Charlotte Amalie | *226A, 241B1, 250B, 271B, *275A, 282B, 287B, 297B1 |
| Christiansted | 228B, 236B, 258B, 262B, 285A |
| Cruz Bay | 267B |
| Frederiksted | 253A, 269B1, 278A |

(Sec. 316, 66 Stat. 717; 47 U.S.C. 316; sec. 5, 48 Stat., as amended, 1068; 47 U.S.C. 154, 155; secs. 2, 3, 4, 301, 303, 307, 308, 309, 315, 317, 48 Stat. as amended, 1064, 1065, 1066, 1081, 1082, 1083, 1084, 1085, 1088, 1089; (47 U.S.C. 152, 153, 301, 303, 307, 308, 309, 315, 317); secs 1, 201–205, 208, 215, 218, 313, 314, 403, 404, 410, 602; 48 Stat. as amended; 1070, 1071, 1072, 1073, 1076, 1077, 1087, 1094, 1098, 1102 (47 U.S.C. 151, 201–205, 208, 215, 218, 313, 314, 403, 404, 410, 602))

[FR 12711, Oct. 6, 1965]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §73.202 see the List of CFR Sections Affected in the Finding Aids section of this volume.

### § 73.203 Availability of channels.

(a) Except as provided for in paragraph (b) of this section, applications may be filed to construct FM broadcast stations only at the communities and on the channels contained in the Table of Allotments (§73.202(b)). Applications

that fail to comply with this requirements, whether or not accompanied by a petition to amend the Table, will not be accepted for tender.

(b) Applications filed on a first come, first served basis may propose a lower or higher class adjacent, intermediate frequency or co-channel. Applications for the modification of an existing FM broadcast station may propose a lower or higher class adjacent, intermediate frequency or co-channel, or an same class adjacent channel. In these cases, the applicant need not file a petition for rule making to amend the Table of Allotments (§73.202(b)) to specify the modified channel class.

NOTE: Changes in channel and/or class by application are limited to modifications on first, second and third adjacent channels, intermediate frequency (IF) channels, and co-channels which require no other changes to the FM Table of Allotments. Applications requesting such modifications must meet either the minimum spacing requirements of §73.207 at the site specified in the application, without resort to the provisions of the Commission's Rules permitting short spaced stations as set forth in §§73.213 through 73.215 or demonstrate by a separate exhibit attached to the application the existence of a suitable allotment site that fully complies with §§73.207 and 73.315 without resort to §§73.213 through 73.215.

[54 FR 11954, Mar. 23, 1989, as amended at 58 FR 38535, July 19, 1993]

### §73.204 International agreements and other restrictions on use of channels.

See §§73.207, 73.220 and 73.1650.

[49 FR 10264, Mar. 20, 1984]

### §73.205 Zones.

For the purpose of allotments and assignments, the United States is divided into three zones as follows:

(a) Zone I consists of that portion of the United States located within the confines of the following lines drawn on the United States Albers Equal Area Projection Map (based on standard parallels 291/2° and 451/2°; North American datum): Beginning at the most easterly point on the State boundary line between North Carolina and Virginia; thence in a straight line to a point on the Virginia-West Virginia boundary line located at north latitude 37°49′ and west longitude 80°12′30″; thence westerly along the southern boundary lines of the States of West Virginia, Ohio, Indiana, and Illinois to a point at the junction of the Illinois, Kentucky, and Missouri State boundary lines; thence northerly along the western boundary line of the State of Illinois to a point at the junction of the Illinois, Iowa, and Wisconsin State boundary lines; thence easterly along the northern State boundary line of Illinois to the 90th meridian; thence north along this meridian to the 43.5° parallel; thence east along this parallel to the United States-Canada border; thence southerly and following that border until it again intersects the 43.5° parallel; thence east along this parallel tothe 71st meridian; thence in a straight line to the intersection of the 69th meridian and the 45th parallel; thence east along the 45th parallel to the Atlantic Ocean. When any of the above lines pass through a city, the city shall be considered to be located in Zone I. (See Figure 1 of §73.699.)

(b) Zone I–A consists of Puerto Rico, the Virgin Islands and that portion of the State of California which is located south of the 40th parallel.

(c) Zone II consists of Alaska, Hawaii and the rest of the United States which is not located in either Zone I or Zone I–A.

[29 FR 14116, Oct. 14, 1964, and 31 FR 10125, July 27, 1966, as amended at 48 FR 29504, June 27, 1983]

### §73.207 Minimum distance separation between stations.

(a) Except for assignments made pursuant to §73.213 or 73.215, FM allotments and assignments must be separated from other allotments and assignments on the same channel (co-channel) and five pairs of adjacent channels by not less than the minimum distances specified in paragraphs (b) and (c) of this section. The Commission will not accept petitions to amend the Table of Allotments unless the reference points meet all of the minimum distance separation requirements of this section. The Commission will not accept applications for new stations, or applications to change the channel or location of existing assignments unless transmitter sites meet the minimum

distance separation requirements of this section, or such applications conform to the requirements of § 73.213 or 73.215. However, applications to modify the facilities of stations with short-spaced antenna locations authorized pursuant to prior waivers of the distance separation requirements may be accepted, provided that such applications propose to maintain or improve that particular spacing deficiency. Class D (secondary) assignments are subject only to the distance separation requirements contained in paragraph (b)(3) of this section. (See § 73.512 for rules governing the channel and location of Class D (secondary) assignments.)

(b) The distances listed in Tables A, B, and C apply to allotments and assignments on the same channel and each of five pairs of adjacent channels. The five pairs of adjacent channels are the first (200 kHz above and 200 kHz below the channel under consideration), the second (400 kHz above and below), the third (600 kHz above and below), the fifty-third (10.6 MHz above and below), and the fifty-fourth (10.8 MHz above and below). The distances in the Tables apply regardless of whether the proposed station class appears first or second in the ''Relation'' column of the table.

(1) Domestic allotments and assignments must be separated from each other by not less than the distances in Table A which follows:

TABLE A—MINIMUM DISTANCE SEPARATION REQUIREMENTS IN KILOMETERS (MILES)

| Relation | Co-channel | 200 kHz | 400/600 kHz | 10.6/10.8 MHz |
|---|---|---|---|---|
| A to A | 115 (71) | 72 (45) | 31 (19) | 10 (6) |
| A to B1 | 143 (89) | 96 (60) | 48 (30) | 12 (7) |
| A to B | 178 (111) | 113 (70) | 69 (43) | 15 (9) |
| A to C3 | 142 (88) | 89 (55) | 42 (26) | 12 (7) |
| A to C2 | 166 (103) | 106 (66) | 55 (34) | 15 (9) |
| A to C1 | 200 (124) | 133 (83) | 75 (47) | 22 (14) |
| A to C | 226 (140) | 165 (103) | 95 (59) | 29 (18) |
| B1 to B1 | 175 (109) | 114 (71) | 50 (31) | 14 (9) |
| B1 to B | 211 (131) | 145 (90) | 71 (44) | 17 (11) |
| B1 to C3 | 175 (109) | 114 (71) | 50 (31) | 14 (9) |
| B1 to C2 | 200 (124) | 134 (83) | 56 (35) | 17 (11) |
| B1 to C1 | 233 (145) | 161 (100) | 77 (48) | 24 (15) |
| B1 to C | 259 (161) | 193 (120) | 105 (65) | 31 (19) |
| B to B | 241 (150) | 169 (105) | 74 (46) | 20 (12) |
| B t0 C3 | 211 (131) | 145 (90) | 71 (44) | 17(11) |
| B to C2 | 241 (150) | 169 (105) | 74 (46) | 20 (12) |
| B to C1 | 270 (168) | 195 (121) | 79 (49) | 27 (17) |
| B to C | 274 (170) | 217 (135) | 105 (65) | 35 (22) |
| C3 to C3 | 153 (95) | 99 (62) | 43 (27) | 14 (9) |
| C3 to C2 | 177 (110) | 117 (73) | 56 (35) | 17 (11) |
| C3 to C1 | 211 (131) | 144 (90) | 76 (47) | 24 (15) |
| C3 to C | 237 (147) | 176 (109) | 96 (60) | 31 (19) |
| C2 to C2 | 190 (118) | 130 (81) | 58 (36) | 20 (12) |
| C2 to C1 | 224 (139) | 158 (98) | 79 (49) | 27 (17) |
| C2 to C | 249 (155) | 188 (117) | 105 (65) | 35 (22) |
| C1 to C1 | 245 (152) | 177 (110) | 82 (51) | 34 (21) |
| C1 to C | 270 (168) | 209 (130) | 105 (65) | 41 (25) |
| C to C | 290 (180) | 241 (150) | 105 (65) | 48 (30) |

(2) Under the Canada-United States FM Broadcasting Agreement, domestic U.S. allotments and assignments within 320 kilometers (199 miles) of the common border must be separated from Canadian allotments and assignments by not less than the distances given in Table B, which follows. When applying Table B, U.S. Class C2 allotments and assignments are considered to be Class B; also, U.S. Class C3 allotments and assignments and U.S. Class A assignments operating with more than 3 kW ERP and 100 meters antenna HAAT (or equivalent lower ERP and higher antenna HAAT based on a class contour distance of 24 km) are considered to be Class B1.

TABLE B—MINIMUM DISTANCE SEPARATION REQUIREMENTS IN KILOMETERS

| Relation | Co-Channel | Adjacent Channels | | | I.F. |
|---|---|---|---|---|---|
| | 0 kHz | 200 kHz | 400 kHz | 600 kHz | 10.6/10.8 MHz |
| A–A | 132 | 85 | 45 | 37 | 8 |
| A–B1 | 180 | 113 | 62 | 54 | 16 |
| A–B | 206 | 132 | 76 | 69 | 16 |
| A–C1 | 239 | 164 | 98 | 90 | 32 |
| A–C | 242 | 177 | 108 | 100 | 32 |
| B1–B1 | 197 | 131 | 70 | 57 | 24 |
| B1–B | 223 | 149 | 84 | 71 | 24 |
| B1–C1 | 256 | 181 | 106 | 92 | 40 |
| B1–C | 259 | 195 | 116 | 103 | 40 |
| B–B | 237 | 164 | 94 | 74 | 24 |
| | | | | | ..... |
| B–C1 | 271 | 195 | 115 | 95 | 40 |
| B–C | 274 | 209 | 125 | 106 | 40 |
| C1–C1 | 292 | 217 | 134 | 101 | 48 |
| C1–C | 302 | 230 | 144 | 111 | 48 |
| C–C | 306 | 241 | 153 | 113 | 48 |

(3) Under the 1992 Mexico-United States FM Broadcasting Agreement, domestic U.S. assignments or allotments within 320 kilometers (199 miles) of the common border must be separated from Mexican assignments or allotments by not less than the distances given in Table C in this paragraph (b)(3). When applying Table C—

(i) U.S. or Mexican assignments or allotments which have been notified internationally as Class A are limited to a maximum of 3.0 kW ERP at 100 meters HAAT, or the equivalent;

(ii) U.S. or Mexican assignments or allotments which have been notified internationally as Class AA are limited to a maximum of 6.0 kW ERP at 100 meters HAAT, or the equivalent;

(iii) U.S. Class C3 assignments or allotments are considered Class B1;

(iv) U.S. Class C2 assignments or allotments are considered Class B; and

(v) Class C1 assignments or allotments assume maximum facilities of 100 kW ERP at 300 meters HAAT. However, U.S. Class C1 stations may not, in any event, exceed the domestic U.S. limit of 100 kW ERP at 299 meters HAAT, or the equivalent.

TABLE C—MINIMUM DISTANCE SEPARATION REQUIREMENTS IN KILOMETERS

| Relation | Co-Channel | 200 kHz | 400 kHz or 600 kHz | 10.6 or 10.8 MHz (I.F.) |
|---|---|---|---|---|
| A to A | 100 | 61 | 25 | 8 |
| A to AA | 111 | 68 | 31 | 9 |
| A to B1 | 138 | 88 | 48 | 11 |
| A to B | 163 | 105 | 65 | 14 |
| A to C1 | 196 | 129 | 74 | 21 |
| A to C | 210 | 161 | 94 | 28 |
| AA to AA | 115 | 72 | 31 | 10 |
| AA to B1 | 143 | 96 | 48 | 12 |
| AA to B | 178 | 125 | 69 | 15 |
| AA to C1 | 200 | 133 | 75 | 22 |
| AA to C | 226 | 165 | 95 | 29 |
| B1 to B1 | 175 | 114 | 50 | 14 |
| B1 to B | 211 | 145 | 71 | 17 |
| B1 to C1 | 233 | 161 | 77 | 24 |
| B1 to C | 259 | 193 | 96 | 31 |
| B to B | 237 | 164 | 65 | 20 |
| B to C1 | 270 | 195 | 79 | 27 |
| B to C | 270 | 215 | 98 | 35 |
| C1 to C1 | 245 | 177 | 82 | 34 |
| C1 to C | 270 | 209 | 102 | 41 |
| C to C | 290 | 228 | 105 | 48 |

(c) The distances listed below apply only to allotments and assignments on Channel 253 (98.5 MHz). The Commission will not accept petitions to amend the Table of Allotments, applications for new stations, or applications to change the channel or location of existing assignments where the following minimum distances (between transmitter sites, in kilometers) from any TV Channel 6 allotment or assignment are not met:

MINIMUM DISTANCE SEPARATION FROM TV CHANNEL 6 (82–88 MHz)

| FM Class | TV Zone I | TV Zones II & III |
|---|---|---|
| A | 17 | 22 |
| B1 | 19 | 23 |
| B | 22 | 26 |
| C3 | 19 | 23 |
| C2 | 22 | 26 |
| C1 | 29 | 33 |
| C | 36 | 41 |

[48 FR 29504, June 27, 1983, as amended at 49 FR 10264, Mar. 20, 1984; 49 FR 19670, May 9, 1984; 49 FR 50047, Dec. 26, 1984; 51 FR 26250, July 22, 1986; 54 FR 14963, Apr. 14, 1989; 54 FR 16366, Apr. 24, 1989; 54 FR 19374, May 5, 1989; 54 FR 35338, Aug. 25, 1989; 56 FR 27426, June 14, 1991; 56 FR 57293, Nov. 8, 1991; 62 FR 50256, Sept. 25, 1997]

### § 73.208 Reference points and distance computations.

(a)(1) The following reference points must be used to determine distance separation requirements when petitions to amend the Table of Allotments (§ 73.202(b)) are considered:

(i) First, transmitter sites if authorized, or if proposed in applications with cut-off protection pursuant to paragraph (a)(3) of this section;

(ii) Second, reference coordinates designated by the FCC;

(iii) Third, coordinates listed in the United States Department of Interior publication entitled Index to the National Atlas of the United States of America; or

(iv) Last, coordinates of the main post office.

(The community's reference points for which the petition is submitted will normally be the coordinates listed in the above publication.)

(2) When the distance between communities is calculated using community reference points and it does not meet the minimum separation requirements of § 73.207, the channel may still be allotted if a transmitter site is available that would meet the minimum separation requirements and still permit the proposed station to meet the minimum field strength requirements of § 73.315. A showing indicating the availability of a suitable site should be sumitted with the petition. In cases where a station is not authorized in a community or communities and the proposed channel cannot meet the separation requirement a showing should also be made indicating adequate distance between suitable transmitter sites for all communities.

(3) Petitions to amend the Table of Allotments that do not meet minimum distance separation requirements to transmitter sites specified in pending applications will not be considered unless they are filed no later than:

(i) The last day of a filing window if the application is for a new FM facility or a major change in the non-reserved band and is filed during a filing window established under section 73.3564(d)(3); or

(ii) The cut-off date established in a Commission Public Notice under § 73.3564(d) and 73.3573(e) if the application is for a new FM facility or a major change in the reserved band; or

(iii) The date of receipt of all other types of FM applications. If an application is amended so as to create a conflict with a petition for rule making filed prior to the date the amendment is filed, the amended application will be treated as if filed on the date of the amendment for purposes of this paragraph (a)(3).

NOTE: If the filing of a conflicting FM application renders an otherwise timely filed counterproposal unacceptable, the counterproposal may be considered in the rulemaking proceeding if it is amended to protect the site of the previously filed FM application within 15 days after being placed on the Public Notice routinely issued by the staff concerning the filing of counterproposals. No proposals involving communities not already included in the proceeding can be introduced during the reply comment period as a method of resolving conflicts. The counterproponent is required to make a showing that, at the time it filed the counterproposal, it did not know, and could not have known by exercising due diligence, of

the pendency of the conflicting FM application.

(b) Station separations in licensing proceedings shall be determined by the distance between the coordinates of the proposed transmitter site in one community and

(1) The coordinates of an authorized transmitter site for the pertinent channel in the other community; or, where such transmitter site is not available for use as a reference point,

(2) Reference coordinates designated by the FCC; or, if none are designated,

(3) The coordinates of the other community as listed in the publication listed in paragraph (a) of this section; or, if not contained therein,

(4) The coordinates of the main post office of such other community.

(5) In addition, where there are pending applications in other communities which, if granted, would have to be considered in determining station separations, the coordinates of the transmitter sites proposed in such applications must be used to determine whether the requirements with respect to minimum separations between the proposed stations in the respective cities have been met.

(c) The method given in this paragraph shall be used to compute the distance between two reference points, except that, for computation of distance involving stations in Canada and Mexico, the method for distance computation specified in the applicable international agreement shall be used instead. The method set forth in this paragraph is valid only for distances not exceeding 475 km (295 miles).

(1) Convert the latitudes and longitudes of each reference point from degree-minute-second format to degree-decimal format by dividing minutes by 60 and seconds by 3600, then adding the results to degrees.

(2) Calculate the middle latitude between the two reference points by averaging the two latitudes as follows:

$$ML=(LAT1_{dd}+LAT2_{dd})\div 2$$

(3) Calculate the number of kilometers per degree latitude difference for the middle latitude calculated in paragraph (c)(2) as follows:

$$KPD_{lat}=111.13209-0.56605\cos(2ML)+0.00120\cos(4ML)$$

(4) Calculate the number of kilometers per degree longitude difference for the middle latitude calculated in paragraph (c)(2) as follows:

$$KPD_{lon}=111.41513\cos(ML)-0.09455\cos(3ML)+0.00012\cos(5ML)$$

(5) Calculate the North-South distance in kilometers as follows:

$$NS=KPD_{lat}(LAT1_{dd}-LAT2_{dd})$$

(6) Calculate the East-West distance in kilometers as follows:

$$EW=KPD_{lon}(LON1_{dd}-LON2_{dd})$$

(7) Calculate the distance between the two reference points by taking the square root of the sum of the squares of the East-West and North-South distances as follows:

$$DIST=(NS^{2}+EW^{2})^{0.5}$$

(8) Round the distance to the nearest kilometer.

(9) Terms used in this section are defined as follows:

(i) $LAT1_{dd}$ and $LON1_{dd}$=the coordinates of the first reference point in degree-decimal format.

(ii) $LAT2_{dd}$ and $LON2_{dd}$=the coordinates of the second reference point in degree-decimal format.

(iii) ML=the middle latitude in degree-decimal format.

(iv) $KPD_{lat}$=the number of kilometers per degree of latitude at a given middle latitude.

(v) $KPD_{lon}$=the number of kilometers per degree of longitude at a given middle latitude.

(vi) NS=the North-South distance in kilometers.

(vii) EW=the East-West distance in kilometers.

(viii) DIST=the distance between the two reference points, in kilometers.

[28 FR 13623, Dec. 14, 1963, as amended at 29 FR 14116, Oct. 14, 1964; 48 FR 29505, June 27, 1983; 52 FR 37788, Oct. 9, 1987; 52 FR 39920, Oct. 26, 1987; 54 FR 9806, Mar. 8, 1989; 57 FR 36020, Aug. 12, 1992; 58 FR 38537, July 19, 1993]

### § 73.209 Protection from interference.

(a) Permittees and licensees of FM broadcast stations are not protected from any interference which may be caused by the grant of a new station, or of authority to modify the facilities of an existing station, in accordance with

the provisions of this subpart. However, they are protected from interference caused by Class D (secondary) noncommercial educational FM stations. See § 73.509.

(b) The nature and extent of the protection from interference afforded FM broadcast stations operating on Channels 221–300 is limited to that which results when assignments are made in accordance with the rules in this subpart.

[43 FR 39715, Sept. 6, 1978 and 48 FR 29505, June 27, 1983; 54 FR 9802, Mar. 8, 1989]

### § 73.210 Station classes.

(a) The rules applicable to a particular station, including minimum and maximum facilities requirements, are determined by its class. Possible class designations depend upon the zone in which the station's transmitter is located, or proposed to be located. The zones are defined in § 73.205. Allotted station classes are indicated in the Table of Allotments, § 73.202. Class A, B1 and B stations may be authorized in Zones I and I–A, Class A, C3, C2, C1, and C stations may be authorized in Zone II.

(b) The power and antenna height requirements for each class are set forth in § 73.211. If a station has an ERP and an antenna HAAT such that it cannot be classified using the maximum limits and minimum requirements in § 73.211, its class shall be determined using the following procedure:

(1) Determine the reference distance of the station using the procedure in paragraph (b)(1)(i) of § 73.211. If this distance is less than or equal to 28 km, the station is Class A; otherwise,

(2) For a station in Zone I or Zone I–A, except for Puerto Rico and the Virgin Islands:

(i) If this distance is greater than 28 km and less than or equal to 39 km, the station is Class B1.

(ii) If this distance is greater than 39 km and less than or equal to 52 km, the station is Class B.

(3) For a station in Zone II:

(i) If this distance is greater than 28 km and less than or equal to 39 km, the station is Class C3.

(ii) If this distance is greater than 39 km and less than or equal to 52 km, the station is Class C2.

(iii) If this distance is greater than 52 km and less than or equal to 72 km, the station is Class C1.

(iv) If this distance is greater than 72 km and less than or equal to 92 km, the station is Class C.

(4) For a station in Puerto Rico or the Virgin Islands:

(i) If this distance is less than or equal to 42 km, the station is Class A.

(ii) If this distance is greater than 42 km and less than or equal to 46 km, the station is Class B1.

(iii) If this distance is greater then 46 km and less than or equal to 78 km, the station is Class B.

[52 FR 37788, Oct. 9, 1987; 52 FR 39920, Oct. 26, 1987, as amended at 54 FR 16367, Apr. 24, 1989; 54 FR 19374, May 5, 1989; 54 FR 35339, Aug. 25, 1989]

### § 73.211 Power and antenna height requirements.

(a) *Minimum requirements.* (1) Except as provided in paragraphs (a)(3) and (b)(2) of this section, FM stations must operate with a minimum effective radiated power (ERP) as follows:

(i) The minimum ERP for Class A stations is 0.1 kW.

(ii) The ERP for Class B1 stations must exceed 6 kW.

(iii) The ERP for Class B stations must exceed 25 kW.

(iv) The ERP for Class C3 stations must exceed 6 kW.

(v) The ERP for Class C2 stations must exceed 25 kW.

(vi) The ERP for Class C1 stations must exceed 50 kW.

(vii) The minimum ERP for Class C stations is 100 kW.

(2) Class C stations must have an antenna height above average terrain (HAAT) of at least 300 meters (984 feet). No minimum HAAT is specified for Classes A, B1, B, C3, C2, or C1 stations.

(3) Stations of any class except Class A may have an ERP less than that specified in paragraph (a)(1) of this section, provided that the reference distance, determined in accordance with paragraph (b)(1)(i) of this section, exceeds the distance to the class contour for the next lower class. Class A stations may have an ERP less than 100 watts provided that the reference distance, determined in accordance with

paragraph (b)(1)(i) of this section, equals or exceeds 6 kilometers.

(b) *Maximum limits.* (1) Except for stations located in Puerto Rico or the Virgin Islands, the maximum ERP in any direction, reference HAAT, and distance to the class contour for each FM station class are listed below:

| Station class | Maximum ERP | Reference HAAT in meters (ft.) | Class contour distance in kilometers |
|---|---|---|---|
| A | 6kW (7.8 dBk) | 100 (328) | 28 |
| B1 | 25kW (14.0 dBk) | 100 (328) | 39 |
| B | 50kW (17.0 dBk) | 150 (492) | 52 |
| C3 | 25kW (14.0 dBk) | 100 (328) | 39 |
| C2 | 50kW (17.0 dBk) | 150 (492) | 52 |
| C1 | 100kW (20.0 dBk) | 299 (981) | 72 |
| C | 100kW (20.0 dBk) | 600 (1968) | 92 |

(i) The reference distance of a station is obtained by finding the predicted distance to the 1mV/m contour using Figure 1 of § 73.333 and then rounding to the nearest kilometer. Antenna HAAT is determined using the procedure in § 73.313. If the HAAT so determined is less than 30 meters (100 feet), a HAAT of 30 meters must be used when finding the predicted distance to the 1 mV/m contour.

(ii) If a station's ERP is equal to the maximum for its class, its antenna HAAT must not exceed the reference HAAT, regardless of the reference distance. For example, a Class A station operating with 6 kW ERP may have an antenna HAAT of 100 meters, but not 101 meters, even though the reference distance is 28 km in both cases.

(iii) Except as provided in paragraph (b)(3) of this section, no station will be authorized in Zone I or I–A with an ERP equal to 50 kW and a HAAT exceeding 150 meters. No station will be authorized in Zone II with an ERP equal to 100 kW and a HAAT exceeding 600 meters.

(2) If a station has an antenna HAAT greater than the reference HAAT for its class, its ERP must be lower than the class maximum such that the reference distance does not exceed the class contour distance. If the antenna HAAT is so great that the station's ERP must be lower than the minimum ERP for its class (specified in paragraphs (a)(1) and (a)(3) of this section), that lower ERP will become the minimum for that station.

(3) For stations located in Puerto Rico or the Virgin Islands, the maximum ERP in any direction, reference HAAT, and distance to the class contour for each FM station class are listed below:

| Station class | Maximum ERP | Reference HAAT in meters (ft.) | Class contour distance in kilometers |
|---|---|---|---|
| A | 6kW (7.8 dBk) | 240 (787) | 42 |
| B1 | 25kW (14.0 dBk) | 150 (492) | 46 |
| B | 50kW (17.0 dBk) | 472 (1549) | 78 |

(c) *Existing stations.* Stations authorized prior to March 1, 1984 that do not conform to the requirements of this section may continue to operate as authorized. Stations operating with facilities in excess of those specified in paragraph (b) of this section may not increase their effective radiated powers or extend their 1 mV/m field strength contour beyond the location permitted by their present authorizations. The provisions of this section will not apply to applications to increase facilities for those stations operating with less than the minimum power specified in paragraph (a) of this section.

[53 FR 17042, May 13, 1988, as amended at 54 FR 16367, Apr. 24, 1989; 54 FR 19374, May 5, 1989; 54 FR 35339, Aug. 25, 1989]

### § 73.212 Administrative changes in authorizations.

(a) In the issuance of FM broadcast station authorizations, the Commission will specify the transmitter output power and effective radiated power in accordance with the following tabulation:

| Power (watts or kW) | Rounded out to nearest figure (watts or kW) |
|---|---|
| 1 to 3 | .05 |
| 3 to 10 | .1 |
| 10 to 30 | .5 |
| 30 to 100 | 1 |
| 100 to 300 | 5 |
| 300 to 1,000 | 10 |

(b) Antenna heights above average terrain will be rounded out to the nearest meter.

[28 FR 13623, Dec. 14, 1963, as amended at 48 FR 29506, June 27, 1983]

**§ 73.213 Grandfathered short-spaced stations.**

(a) Stations at locations authorized prior to November 16, 1964, that did not meet the separation distances required by § 73.207 and have remained continuously short-spaced since that time may be modified or relocated with respect to such short-spaced stations, *provided that* (i) any area predicted to receive interference lies completely within any area currently predicted to receive co-channel or first-adjacent channel interference as calculated in accordance with paragraph (a)(1) of this section, or that (ii) a showing is provided pursuant to paragraph (a)(2) of this section that demonstrates that the public interest would be served by the proposed changes.

(1) The F(50,50) curves in Figure 1 of § 73.333 are to be used in conjunction with the proposed effective radiated power and antenna height above average terrain, as calculated pursuant to § 73.313(c), (d)(2) and (d)(3), using data for as many radials as necessary, to determine the location of the desired (service) field strength. The F(50,10) curves in Figure 1a of § 73.333 are to be used in conjunction with the proposed effective radiated power and antenna height above average terrain, as calculated pursuant to § 73.313(c), (d)(2) and (d)(3), using data for as many radials as necessary, to determine the location of the undesired (interfering) field strength. Predicted interference is defined to exist only for locations where the desired (service) field strength exceeds 0.5 mV/m (54 dBu) for a Class B station, 0.7 mV/m (57 dBu) for a Class B1 station, and 1 mV/m (60 dBu) for any other class of station.

(i) Co-channel interference is predicted to exist, for the purpose of this section, at all locations where the undesired (interfering station) F(50,10) field strength exceeds a value 20 dB below the desired (service) F(50,50) field strength of the station being considered (e.g., where the protected field strength is 60 dBu, the interfering field strength must be 40 dBu or more for predicted interference to exist).

(ii) First-adjacent channel interference is predicted to exist, for the purpose of this section, at all locations where the undesired (interfering station) F(50,10) field strength exceeds a value 6 dB below the desired (service) F(50,50) field strength of the station being considered (e.g., where the protected field strength is 60 dBu, the interfering field strength must be 54 dBu or more for predicted interference to exist).

(2) For co-channel and first-adjacent channel stations, a showing that the public interest would be served by the changes proposed in an application must include exhibits demonstrating that the total area and population subject to co-channel or first-adjacent channel interference, caused and received, would be maintained or decreased. In addition, the showing must include exhibits demonstrating that the area and the population subject to co-channel or first-adjacent channel interference caused by the proposed facility to each short-spaced station individually is not increased. In all cases, the applicant must also show that any area predicted to lose service as a result of new co-channel or first-adjacent-channel interference has adequate aural service remaining. For the purpose of this section, adequate service is defined as 5 or more aural services (AM or FM).

(3) For co-channel and first-adjacent-channel stations, a copy of any application proposing interference caused in any areas where interference is not currently caused must be served upon the licensee(s) of the affected short-spaced station(s).

(4) For stations covered by this paragraph (a), there are no distance separation or interference protection requirements with respect to second-adjacent and third-adjacent channel short-spacings that have existed continuously since November 16, 1964.

(b) Stations at locations authorized prior to May 17, 1989, that did not meet the IF separation distances required by § 73.207 and have remained short-spaced since that time may be modified or relocated provided that the overlap area of the two stations' 36 mV/m field strength contours is not increased.

(c) Short spacings involving at least one Class A allotment or authorization. Stations that became short spaced on or after November 16, 1964 (including stations that do not meet

the minimum distance separation requirements of paragraph (c)(1) of this section and that propose to maintain or increase their existing distance separations) may be modified or relocated in accordance with paragraph (c)(1) or (c)(2) of this section, except that this provision does not apply to stations that became short spaced by grant of applications filed after October 1, 1989, or filed pursuant to §73.215. If the reference coordinates of an allotment are short spaced to an authorized facility or another allotment (as a result of the revision of §73.207 in the Second Report and Order in MM Docket No. 88–375), an application for the allotment may be authorized, and subsequently modified after grant, in accordance with paragraph (c)(1) or (c)(2) of this section only with respect to such short spacing. No other stations will be authorized pursuant to these paragraphs.

(1) *Applications for authorization under requirements equivalent to those of prior rules.* Each application for authority to operate a Class A station with no more than 3000 watts ERP and 100 meters antenna HAAT (or equivalent lower ERP and higher antenna HAAT based on a class contour distance of 24 km) must specify a transmitter site that meets the minimum distance separation requirements in this paragraph. Each application for authority to operate a Class A station with more than 3000 watts ERP (up to a maximum of 5800 watts), but with an antenna HAAT lower than 100 meters such that the distance to the predicted 0.05 mV/m (34 dBμ *V/m) F(50,10) field strength contour does not exceed 98 km must specify a transmitter site that meets the minimum distance separation requirements in this paragraph. Each application for authority to operate an FM station of any class other than Class A must specify a transmitter site that meets the minimum distanceseparation requirements in this paragraph with respect to Class A stations operating pursuant to this paragraph or paragraph (c)(2) of this section, and that meets the minimum distance separation requirements of §73.207 with respect to all other stations.*

MINIMUM DISTANCE SEPARATION REQUIREMENTS IN KILOMETERS (MILES)

| Relation | Co-channel | 200 kHz | 400/600 kHz | 10.6/10.8 MHz |
|---|---|---|---|---|
| A to A | 105 (65) | 64 (40) | 27 (17) | 8 (5) |
| A to B1 | 138 (86) | 88 (55) | 48 (30) | 11 (6) |
| A to B | 163 (101) | 105 (65) | 69 (43) | 14 (9) |
| A to C3 | 138 (86) | 84 (52) | 42 (26) | 11 (6) |
| A to C2 | 163 (101) | 105 (65) | 55 (34) | 14 (9) |
| A to C1 | 196 (122) | 129 (80) | 74 (46) | 21 (13) |
| A to C | 222 (138) | 161 (100) | 94 (58) | 28 (17) |

(2) Applications for authorization of Class A facilities greater than 3,000 watts ERP and 100 meters HAAT. Each application to operate a Class A station with an ERP and HAAT such that the reference distance would exceed 24 kilometers must contain an exhibit demonstrating the consent of the licensee of each co-channel, first, second or third adjacent channel station (for which the requirements of §73.207 are not met) to a grant of that application. Each such application must specify a transmitter site that meets the applicable IF-related channel distance separation requirements of §73.207. Applications that specify a new transmitter site which is short-spaced to an FM station other than another Class A station which is seeking a mutual increase in facilities may be granted only if no alternative fully-spaced site or less short-spaced site is available. Licensees of Class A stations seeking mutual increases in facilities need not show that a fully spaced site or less short-spaced site is available. Applications submitted pursuant to the provisions of this paragraph may be granted only if such action is consistent with the public interest.

[52 FR 37789, Oct. 9, 1987, as amended at 54 FR 14964, Apr. 14, 1989; 54 FR 35339, Aug. 25, 1989; 56 FR 27426, June 14, 1991; 62 FR 50521, Sept. 26, 1997; 63 FR 33876, June 22, 1998]

### § 73.215 Contour protection for short-spaced assignments.

The Commission will accept applications that specify short-spaced antenna locations (locations that do not meet the domestic co-channel and adjacent channel minimum distance separation requirements of § 73.207); Provided That, such applications propose contour protection, as defined in paragraph (a) of this section, with all short-spaced assignments, applications and allotments, and meet the other applicable requirements of this section. Each application to be processed pursuant to this section must specifically request such processing on its face, and must include the necessary exhibit to demonstrate that the requisite contour protection will be provided. Such applications may be granted when the Commission determines that such action would serve the public interest, convenience, and necessity.

(a) *Contour protection*. Contour protection, for the purpose of this section, means that on the same channel and on the first, second and third adjacent channels, the predicted interfering contours of the proposed station do not overlap the predicted protected contours of other short-spaced assignments, applications and allotments, and the predicted interfering contours of other short-spaced assignments, applications and allotments do not overlap the predicted protected contour of the proposed station.

(1) The protected contours, for the purpose of this section, are defined as follows. For all Class B and B1 stations on Channels 221 through 300 inclusive, the F(50,50) field strengths along the protected contours are 0.5 mV/m (54 dBμ) and 0.7 mV/m (57 dBμ), respectively. For all other stations, the F(50,50) field strength along the protected contour is 1.0 mV/m (60 dBμ).

(2) The interfering contours, for the purpose of this section, are defined as follows. For co-channel stations, the F(50,10) field strength along the interfering contour is 20 dB lower than the F(50,50) field strength along the protected contour for which overlap is prohibited. For first adjacent channel stations (±200 kHz), the F(50,10) field strength along the interfering contour is 6 dB lower than the F(50,50) field strength along the protected contour for which overlap is prohibited. For both second and third adjacent channel stations (±400 kHz and ±600 kHz), the F(50,10) field strength along the interfering contour is 40 dB higher than the F(50,50) field strength along the protected contour for which overlap is prohibited.

(3) The locations of the protected and interfering contours of the proposed station and the other short-spaced assignments, applications and allotments must be determined in accordance with the procedures of paragraphs (c), (d)(2) and (d)(3) of § 73.313, using data for as many radials as necessary to accurately locate the contours.

(4) Stations in Puerto Rico and the Virgin Islands may submit application for short-spaced locations provided the predicted distance to their 1 mV/m field strength contour is not extended toward the 1 mV/m field strength contour of any short-spaced station.

(b) Applicants requesting short-spaced assignments pursuant to this section must take into account the following factors in demonstrating that contour protection is achieved:

(1) The ERP and antenna HAAT of the proposed station in the direction of the contours of other short-spaced assignments, applications and allotments. If a directional antenna is proposed, the pattern of that antenna must be used to calculate the ERP in particular directions. See § 73.316 for additional requirements for directional antennas.

(2) The ERP and antenna HAAT of other short-spaced assignments, applications and allotments in the direction of the contours of the proposed station. The ERP and antenna HAATs in the directions of concern must be determined as follows:

(i) For vacant allotments, contours are based on the presumed use, at the allotment's reference point, of the maximum ERP that could be authorized for the station class of the allotment, and antenna HAATs in the directions of concern that would result from a non-directional antenna mounted at a standard eight-radial antenna HAAT equal to the reference HAAT for the station class of the allotment.

(ii) For existing stations that were not authorized pursuant to this section, including stations with authorized ERP that exceeds the maximum ERP permitted by §73.211 for the standard eight-radial antenna HAAT employed, and for applications not requesting authorization pursuant to this section, contours are based on the presumed use of the maximum ERP for the applicable station class (as specified in §73.211), and the antenna HAATs in the directions of concern that would result from a non-directional antenna mounted at a standard eight-radial antenna HAAT equal to the reference HAAT for the applicable station class, without regard to any other restrictions that may apply (e.g. zoning laws, FAA constraints, application of §73.213).

(iii) For stations authorized pursuant to this section, except stations with authorized ERP that exceeds the maximum ERP permitted by §73.211 for the standard eight-radial antenna HAAT employed, contours are based on the use of the authorized ERP in the directions of concern, and HAATs in the directions of concern derived from the authorized standard eight-radial antenna HAAT. For stations with authorized ERP that exceeds the maximum ERP permitted by §73.211 for the standard eight-radial antenna HAAT employed, authorized under this section, contours are based on the presumed use of the maximum ERP for the applicable station class (as specified in §73.211), and antenna HAATs in the directions of concern that would result from a non-directional antenna mounted at a standard eight-radial antenna HAAT equal to the reference HAAT for the applicable station class, without regard to any other restrictions that may apply.

(iv) For applications containing a request for authorization pursuant to this section, except for applications to continue operation with authorized ERP that exceeds the maximum ERP permitted by §73.211 for the standard eight-radial antenna HAAT employed, contours are based on the use of the proposed ERP in the directions of concern, and antenna HAATs in the directions of concern derived from the proposed standard eight-radial antenna HAAT. For applications to continue operation with an ERP that exceeds the maximum ERP permitted by §73.211 for the standard eight-radial HAAT employed, if processing is requested under this section, contours are based on the presumed use of the maximum ERP for the applicable station class (as specified in §73.211), and antenna HAATs in the directions of concern that would result from a non-directional antenna mounted at a standard eight-radial antenna HAAT equal to the reference HAAT for the applicable station class, without regard to any other restrictions that may apply.

NOTE TO PARAGRAPH (b): Applicants are cautioned that the antenna HAAT in any particular direction of concern will not usually be the same as the standard eight-radial antenna HAAT or the reference HAAT for the station class.

(c) Applications submitted for processing pursuant to this section are not required to propose contour protection of any assignment, application or allotment for which the minimum distance separation requirements of §73.207 are met, and may, in the directions of those assignments, applications and allotments, employ the maximum ERP permitted by §73.211 for the standard eight-radial antenna HAAT employed.

(d) Stations authorized pursuant to this section may be subsequently authorized on the basis of compliance with the domestic minimum separation distance requirements of §73.207, upon filing of an FCC Form 301 or FCC Form 340 (as appropriate) requesting a modification of authorization.

(e) The Commission will not accept applications that specify a short-spaced antenna location for which the following minimum distance separation requirements, in kilometers (miles), are not met:

| Relation | Co-Channel | 200 kHz | 400/600 kHz |
|---|---|---|---|
| A to A | 92(57) | 49(30) | 29(18) |
| A to B1 | 119(74) | 72(45) | 46(29) |
| A to B | 143(89) | 96(60) | 67(42) |
| A to C3 | 119(74) | 72(45) | 40(25) |
| A to C2 | 143(89) | 89(55) | 53(33) |
| A to C1 | 178(111) | 111(69) | 73(45) |
| A to C | 203(126) | 142(88) | 93(58) |
| B1 to B1 | 143(89) | 96(60) | 48(30) |
| B1 to B | 178(111) | 114(71) | 69(43) |
| B1 to C3 | 143(89) | 96(60) | 48(30) |

| Relation | Co-Channel | 200 kHz | 400/600 kHz |
|---|---|---|---|
| B1 to C2 | 175(109) | 114(71) | 55(34) |
| B1 to C1 | 200(124) | 134(83) | 75(47) |
| B1 to C | 233(145) | 165(103) | 95(59) |
| B to B | 211(131) | 145(90) | 71(44) |
| B to C3 | 178(111) | 114(70) | 69(43) |
| B to C2 | 211(131) | 145(90) | 71(44) |
| B to C1 | 241(150) | 169(105) | 77(48) |
| B to C | 270(168) | 195(121) | 105(65) |
| C3 to C3 | 142(88) | 89(55) | 42(26) |
| C3 to C2 | 166(103) | 106(66) | 55(34) |
| C3 to C1 | 200(124) | 133(83) | 75(47) |
| C3 to C | 226(140) | 165(103) | 95(59) |
| C2 to C2 | 177(110) | 117(73) | 56(35) |
| C2 to C1 | 211(131) | 144(90) | 76(47) |
| C2 to C | 237(147) | 176(109) | 96(60) |
| C1 to C1 | 224(139) | 158(98) | 79(49) |
| C1 to C | 249(155) | 188(117) | 105(65) |
| C to C | 270(168) | 209(130) | 105(65) |

[54 FR 9802, Mar. 8, 1989, as amended at 54 FR 35340, Aug. 25, 1989; 56 FR 57294, Nov. 8, 1991; 57 FR 46325, Oct. 8, 1992]

### § 73.220 Restrictions on use of channels.

(a) The frequency 89.1 MHz (channel 206) is revised in the New York City metropolitan area for the use of the United Nations with the equivalent of an antenna height of 150 meters (492 feet) above average terrain and effective radiated power of 20 kWs, and the FCC will make no assignments which would cause objectionable interference with such use.

(b) In Alaska, FM broadcast stations operating on Channels 221–300 (92.1–107.9 MHz) shall not cause harmful interference to and must accept interference from non-Government fixed operations authorized prior to January 1, 1982.

[43 FR 45845, Oct. 4, 1978, as amended at 46 FR 50376, Oct. 13, 1981, 47 FR 30068, July 12, 1982; 48 FR 29507, June 27, 1983]

### § 73.232 Territorial exclusivity.

No licensee of an FM broadcast station shall have any arrangement with a network organization which prevents or hinders another station serving substantially the same area from broadcasting the network's programs not taken by the former station, or which prevents or hinders another station serving a substantially different area from broadcasting any program of the network organization: *Provided, however,* That this section does not prohibit arrangements under which the station is granted first call within its primary service area upon the network's programs. The term ''network organization'' means any organization originating program material, with or without commercial messages, and furnishing the same to stations interconnected so as to permit simultaneous broadcast by all or some of them. However, arrangements involving only stations under common ownership, or only the rebroadcast by one station of programming from another with no compensation other than a lump-sum payment by the station rebroadcasting, are not considered arrangements with a network organization. The term ''arrangement'' means any contract, arrangement or understanding, express or implied.

[42 FR 16422, Mar. 28, 1977, as amended at 57 FR 48333, Oct. 23, 1992]

### § 73.239 Use of common antenna site.

No FM broadcast station license or renewal of FM broadcast station license will be granted to any person who owns, leases, or controls a particular site which is peculiarly suitable for FM broadcasting in a particular area and (a) which is not available for use by other FM broadcast station licensees; and (b) no other comparable site is available in the area; and (c) where the exclusive use of such site by the applicant or licensee would unduly limit the number of FM broadcast stations that can be authorized in a particular area or would unduly restrict competition among FM broadcast stations.

[28 FR 13623, Dec. 14, 1963]

### § 73.258 Indicating instruments.

(a) Each FM broadcast station shall be equipped with indicating instruments which conform with the specifications described in § 73.1215 for determining power by the indirect method; for indicating the relative amplitude of the transmission line radio frequency current, voltage, or power; and with such other instruments as are necessary for the proper adjustment, operation, and maintenance of the transmitting system.

(b) The function of each instrument shall be clearly and permanently shown in the instrument itself or on

the panel immediately adjacent thereto.

(c) In the event that any one of these indicating instruments becomes defective when no substitute which conforms with the required specifications is available, the station may be operated without the defective instrument pending its repair or replacement for a period not in excess of 60 days without further authority of the FCC: *Provided that,* if the defective instrument is the transmission line meter of a station which determines the output power by the direct method, the operating power shall be determined by the indirect method in accordance with §73.267(c) during the entire time the station is operated without the transmission line meter.

(d) If conditions beyond the control of the licensee prevent the restoration of the meter to service within the above allowed period, an informal letter request in accordance with §73.3549 may be filed with the FCC, Attention: Audio Services Division, Mass Media Bureau, in Washington, DC, for such additional time as may be required to complete repairs of the defective instrument.

[41 FR 36818, Sept. 1, 1976, as amended at 48 FR 44805, Sept. 30, 1983; 50 FR 32416, Aug. 12, 1985; 63 FR 33876, June 22, 1998]

### §73.267 Determining operating power.

(a) The operating power of each FM station is to be determined by either the direct or indirect method.

(b) Direct method. The direct method of power determination for an FM station uses the indications of a calibrated transmission line meter (responsive to relative voltage, current, or power) located at the RF output terminals of the transmitter. This meter must be calibrated whenever there is any indication that the calibration is inaccurate or whenever any component of the metering circuit is repaired or replaced. The calibration must cover, as a minimum, the range from 90% to 105% of authorized power. The meter calibration may be checked by measuring the power at the transmitter terminals while either:

(1) Operating the transmitter into the transmitting antenna, and determining actual operating power by the indirect method described in §73.267(c); or

(2) Operating the transmitter into a load (of substantially zero reactance and a resistance equal to the transmission line characteristic impedance) and using an electrical device (within ±5% accuracy) or temperature and coolant flow indicator (within ±4% accuracy) to determine the power.

(3) The calibration must cover, as a minimum, the range from 90% to 105% of authorized power and the meter must provide clear indications which will permit maintaining the operating power within the prescribed tolerance or the meter shall be calibrated to read directly in power units.

(c) *Indirect method.* The operating power is determined by the indirect method by applying an appropriate factor to the input power to the last radio-frequency power amplifier stage of the transmitter, using the following formula:

Transmitter output power=Ep x Ip x *F*

Where:

Ep=DC input voltage of final radio stage.
Ip=Total DC input current of final radio stage.
*F*=Efficiency factor.

(1) If the above formula is not appropriate for the design of the transmitter final amplifier, use a formula specified by the transmitter manufacturer with other appropriate operating parameters.

(2) The value of the efficiency factor, *F*, established for the authorized transmitter output power is to be used for maintaining the operating power, even though there may be some variation in *F* over the power operating range of the transmitter.

(3) The value of *F* is to be determined and a record kept thereof by one of the following procedures listed in order of preference:

(i) Using the most recent measurement data for calibration of the transmission line meter according to the procedures described in paragraph (b) of this section or the most recent measurements made by the licensee establishing the value of *F*. In the case of composite transmitters or those in which the final amplifier stages have

been modified pursuant to FCC approval, the licensee must furnish the FCC and also retain with the station records the measurement data used as a basis for determining the value of *F*.

(ii) Using measurement data shown on the transmitter manufacturer's test data supplied to the licensee; *Provided,* That measurements were made at the authorized frequency and transmitter output power.

(iii) Using the transmitter manufacturer's measurement data submitted to the FCC for type acceptance and as shown in the instruction book supplied to the licensee.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[44 FR 58731, Oct. 11, 1979, as amended at 45 FR 28141, Apr. 28, 1980; 48 FR 38479, Aug. 24, 1983; 49 FR 4210, Feb. 3, 1984; 49 FR 49851, Dec. 24, 1984]

### § 73.277 Permissible transmissions.

(a) No FM broadcast licensee or permittee shall enter into any agreement, arrangement or understanding, oral or written, whereby it undertakes to supply, or receives consideration for supplying, on its main channel a functional music, background music, or other subscription service (including storecasting) for reception in the place or places of business of any subscriber.

(b) The transmission (or interruption) of radio energy in the FM broadcast band is permissible only pursuant to a station license, program test authority, construction permit, or experimental authorization and the provisions of this part of the rules.

[29 FR 7471, June 10, 1964. Redesignated at 39 FR 38655, Nov. 1, 1974 and amended at 48 FR 28454, June 22, 1983]

### § 73.293 Use of FM multiplex subcarriers.

Licensees of FM broadcast stations may transmit, without further authorization, subcarrier communication services in accordance with the provisions of §§ 73.319 and 73.322.

[51 FR 17028, May 8, 1986]

### § 73.295 FM subsidiary communications services.

(a) Subsidiary communication services are those transmitted on a subcarrier within the FM baseband signal, but do not include services which enhance the main program broadcast service, or exclusively relate to station operations (see § 73.293). Subsidiary communications include, but are not limited to services such as functional music, specialized foreign language programs, radio reading services, utility load management, market and financial data and news, paging and calling, traffic control signal switching, bilingual television audio, and point to point or multipoint messages.

(b) FM subsidiary communications services that are common carrier in nature are subject to common carrier regulation. Licensees operating such services are required to apply to the FCC for the appropriate authorization and to comply with all policies and rules applicable to the service. Responsibility for making the initial determinations of whether a particular activity is common carriage rests with the FM station licensee. Initial determinations by licensees are subject to FCC examination and may be reviewed at the FCC's discretion.

(c) Subsidiary communications services are of a secondary nature under the authority of the FM station authorization, and the authority to provide such communications services may not be retained or transferred in any manner separate from the station's authorization. The grant or renewal of an FM station permit or license is not furthered or promoted by proposed or past services. The permittee or licensee must establish that the broadcast operation is in the public interest wholly apart from the subsidiary communications services provided.

(d) The station identification, delayed recording and sponsor identification announcements required by §§ 73.1201, 73.1208, and 73.1212 are not applicable to material transmitted under an SCA.

(e) The licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material that it deems inappropriate or undesirable.

[48 FR 28454, June 22, 1983, as amended at 48 FR 44805, Sept. 30, 1983; 49 FR 33663, Aug. 15, 1984; 50 FR 32416, Aug. 12, 1985; 57 FR 48333, Oct. 23, 1992]

### § 73.297 FM stereophonic sound broadcasting.

(a) An FM broadcast station may, without specific authority from the FCC, transmit stereophonic (biphonic, quadraphonic, etc.) sound programs upon installation of stereophonic sound transmitting equipment under the provisions of §§ 2.1001, 73.322, and 73.1590 of the Rules. Prior to commencement of stereophonic sound broadcasting, equipment performance measurements must be made to ensure that the transmitted signal complies with all applicable rules and standards.

(b) Each licensee or permittee engaging in multichannel broadcasting must measure the pilot subcarrier frequency as often as necessary to ensure that it is kept at all times within 2 Hz of the authorized frequency.

[48 FR 28454, June 22, 1983, and 48 FR 38479, Aug. 24, 1983]

### § 73.310 FM technical definitions.

(a) *Frequency modulation.*

*Antenna height above average terrain (HAAT).* HAAT is calculated by: determining the average of the antenna heights above the terrain from 3 to 16 kilometers (2 to 10 miles) from the antenna for the eight directions evenly spaced for each 45° of azimuth starting with True North (a different antenna height will be determined in each direction from the antenna): and computing the average of these separate heights. In some cases less than eight directions may be used. (See § 73.313(d).) Where circular or elliptical polarization is used, the antenna height above average terrain must be based upon the height of the radiation of the antenna that transmits the horizontal component of radiation.

*Antenna power gain.* The square of the ratio of the root-mean-square (RMS) free space field strength produced at 1 kilometer in the horizontal plane in millivolts per meter for 1 kW antenna input power to 221.4 mV/m. This ratio is expressed in decibels (dB). If specified for a particular direction, antenna power gain is based on that field strength in the direction only.

*Auxiliary facility.* An auxiliary facility is an antenna separate from the main facility's antenna, permanently installed on the same tower or at a different location, from which a station may broadcast for short periods without prior Commission authorization or notice to the Commission while the main facility is not in operation (*e.g.,* where tower work necessitates turning off the main antenna or where lightning has caused damage to the main antenna or transmission system) (*See* § 73.1675).

*Center frequency.* The term ''center frequency'' means:

(1) The average frequency of the emitted wave when modulated by a sinusoidal signal.

(2) The frequency of the emitted wave without modulation.

*Composite antenna pattern.* The composite antenna pattern is a relative field horizontal plane pattern for 360 degrees of azimuth, for which the value at a particular azimuth is the greater of the horizontally polarized or vertically polarized component relative field values. The composite antenna pattern is normalized to a maximum of unity (1.000) relative field.

*Composite baseband signal.* A signal which is composed of all program and other communications signals that frequency modulates the FM carrier.

*Effective radiated power.* The term ''effective radiated power'' means the product of the antenna power (transmitter output power less transmission line loss) times: (1) The antenna power gain, or (2) the antenna field gain squared. Where circular or elliptical polarization is employed, the term effective radiated power is applied separately to the horizontal and vertical components of radiation. For allocation purposes, the effective radiated power authorized is the horizontally polarized component of radiation only.

*Equivalent isotropically radiated power (EIRP).* The term ''equivalent isotropically radiated power (also

known as ''effective radiated power above isotropic) means the product of the antenna input power and the antenna gain in a given direction relative to an isotropic antenna.

*FM Blanketing.* Blanketing is that form of interference to the reception of other broadcast stations which is caused by the presence of an FM broadcast signal of 115 dBu (562 mV/m) or greater signal strength in the area adjacent to the antenna of the transmitting station. The 115 dBu contour is referred to as the blanketing contour and the area within this contour is referred to as the blanketing area.

*FM broadcast band.* The band of frequencies extending from 88 to 108 MHz, which includes those assigned to noncommercial educational broadcasting.

*FM broadcast channel.* A band of frequencies 200 kHz wide and designated by its center frequency. Channels for FM broadcast stations begin at 88.1 MHz and continue in successive steps of 200 kHz to and including 107.9 MHz.

*FM broadcast station.* A station employing frequency modulation in the FM broadcast band and licensed primarily for the transmission of radiotelephone emissions intended to be received by the general public.

*Field strength.* The electric field strength in the horizontal plane.

*Free space field strength.* The field strength that would exist at a point in the absence of waves reflected from the earth or other reflecting objects.

*Frequency departure.* The amount of variation of a carrier frequency or center frequency from its assigned value.

*Frequency deviation.* The peak difference between modulated wave and the carrier frequency.

*Frequency modulation.* A system of modulation where the instantaneous radio frequency varies in proportion to the instantaneous amplitude of the modulating signal (amplitude of modulating signal to be measured after preemphasis, if used) and the instantaneous radio frequency is independent of the frequency of the modulating signal.

*Frequency swing.* The peak difference between the maximum and the minimum values of the instantaneous frequency of the carrier wave during modulation.

*Multiplex transmission.* The term ''multiplex transmission'' means the simultaneous transmission of two or more signals within a single channel. Multiplex transmission as applied to FM broadcast stations means the transmission of facsimile or other signals in addition to the regular broadcast signals.

*Percentage modulation.* The ratio of the actual frequency deviation to the frequency deviation defined as 100% modulation, expressed in percentage. For FM broadcast stations, a frequency deviation of *±75kHz is defined as 100% modulation.*

(b) *Stereophonic sound broadcasting.*

*Cross-talk.* An undesired signal occurring in one channel caused by an electrical signal in another channel.

*FM stereophonic broadcast.* The transmission of a stereophonic program by a single FM broadcast station utilizing the main channel and a stereophonic subchannel.

*Left (or right) signal.* The electrical output of a microphone or combination of microphones placed so as to convey the intensity, time, and location of sounds originating predominately to the listener's left (or right) of the center of the performing area.

*Left (or right) stereophonic channel.* The left (or right) signal as electrically reproduced in reception of FM stereophonic broadcasts.

*Main channel.* The band of frequencies from 50 to 15,000 Hz which frequency-modulate the main carrier.

*Pilot subcarrier.* A subcarrier that serves as a control signal for use in the reception of FM stereophonic sound broadcasts.

*Stereophonic separation.* The ratio of the electrical signal caused in sound channel A to the signal caused in sound channel B by the transmission of only a channel B signal. Channels A and B may be any two channels of a stereophonic sound broadcast transmission system.

*Stereophonic sound.* The audio information carried by plurality of channels arranged to afford the listener a sense of the spatial distribution of sound sources. Stereophonic sound broadcasting includes, but is not limited to, biphonic (two channel), triphonic

(three channel) and quadrophonic (four channel) program services.

*Stereophonic sound subcarrier.* A subcarrier within the FM broadcast baseband used for transmitting signals for stereophonic sound reception of the main broadcast program service.

*Stereophonic sound subchannel.* The band of frequencies from 23 kHz to 99 kHz containing sound subcarriers and their associated sidebands.

(c) *Visual transmissions.* Communications or message transmitted on a subcarrier intended for reception and visual presentation on a viewing screen, teleprinter, facsimile printer, or other form of graphic display or record.

(d) *Control and telemetry transmissions.* Signals transmitted on a multiplex subcarrier intended for any form of control and switching functions or for equipment status data and aural or visual alarms.

[28 FR 13623, Dec. 14, 1963, as amended at 39 FR 10575, Mar. 21, 1974; 44 FR 36038, June 20, 1979; 48 FR 28454, June 22, 1983; 48 FR 29507, June 27, 1983; 48 FR 37216, Aug. 17, 1983; 49 FR 45145, Nov. 15, 1984; 57 FR 48333, Oct. 23, 1992; 62 FR 51058, Sept. 30, 1997]

### § 73.311 Field strength contours.

(a) Applications for FM broadcast authorizations must show the field strength contours required by FCC Form 301 or FCC Form 340, as appropriate.

(b) The field strength contours provided for in this section shall be considered for the following purposes only:

(1) In the estimation of coverage resulting from the selection of a particular transmitter site by an applicant for an FM broadcast station.

(2) In connection with problems of coverage arising out of application of § 73.3555.

(3) In determining compliance with § 73.315(a) concerning the minimum field strength to be provided over the principal community to be served.

(4) In determining compliance with § 73.215 concerning contour protection.

[28 FR 13623, Dec. 14, 1963, as amended at 31 FR 10126, July 27, 1966; 32 FR 11471, Aug. 9, 1967; 52 FR 10570, Apr. 2, 1987; 54 FR 9802, Mar. 8, 1989]

### § 73.312 Topographic data.

(a) In the preparation of the profile graphs previously described, and in determining the location and height above mean sea level of the antenna site, the elevation or contour intervals shall be taken from United States Geological Survey Topographic Quadrangle Maps, United States Army Corps of Engineers Maps or Tennessee Valley Authority maps, whichever is the latest, for all areas for which such maps are available. If such maps are not published for the area in question, the next best topographic information should be used. Topographic data may sometimes be obtained from state and municipal agencies. The data from the Sectional Aeronautical Charts (including bench marks) or railroad depot elevations and highway elevations from road maps may be used where no better information is available. In cases where limited topographic data can be obtained, use may be made of an altimeter in a car driven along roads extending generally radially from the transmitter site.

(b) The Commission will not ordinarily require the submission of topographical maps for areas beyond 24 km (15 miles) from the antenna site, but the maps must include the principal city or cities to be served. If it appears necessary, additional data may be requested.

(c) The U.S. Geological Survey Topography Quadrangle Sheets may be obtained from the U.S. Geological Survey Department of the Interior, Washington, DC 20240. The Sectional Aeronautical Charts are available from the U.S. Coast and Geodetic Survey, Department of Commerce, Washington, DC 20235. These maps may also be secured from branch offices and from authorized agents or dealers in most principal cities.

(d) In lieu of maps, the average terrain elevation may be computer generated except in cases of dispute, using elevations from a 30 second, point or better topographic data file. The file must be identified and the data processed for intermediate points along each radial using linear interpolation techniques. The height above mean sea

level of the antenna site must be obtained manually using appropriate topographic maps.

[28 FR 13623, Dec. 14, 1963, as amended at 31 FR 10126, July 27, 1966; 49 FR 48937, Dec. 17, 1984; 58 FR 44950, Aug. 25, 1993; 63 FR 33877, June 22, 1998]

### § 73.313 Prediction of coverage.

(a) All predictions of coverage made pursuant to this section shall be made without regard to interference and shall be made only on the basis of estimated field strengths.

(b) Predictions of coverage shall be made only for the same purposes as relate to the use of field strength contours as specified in § 73.311.

(c) In predicting the distance to the field strength contours, the F(50,50) field strength chart, Figure 1 of § 73.333 must be used. The 50% field strength is defined as that value exceeded for 50% of the time.

(1) The F(50,50) chart gives the estimated 50% field strengths exceeded at 50% of the locations in dB above 1 uV/m. The chart is based on an effective power radiated from a half-wave dipole antenna in free space, that produces an unattenuated field strength at 1 kilometer of about 107 dB above 1 uV/m (221.4 mV/m).

(2) To use the chart for other ERP values, convert the ordinate scale by the appropriate adjustment in dB. For example, the ordinate scale for an ERP of 50 kW should be adjusted by 17 dB [10 log (50 kW) = 17 dBk], and therefore a field strength of 60 dBu would correspond to the field strength value at (60 − 17 =) 44 dBu on the chart. When predicting the distance to field strength contours, use the maximum ERP of the main radiated lobe in the pertinent azimuthal direction (do not account for beam tilt). When predicting field strengths over areas not in the plane of the maximum main lobe, use the ERP in the direction of such areas, determined by considering the appropriate vertical radiation pattern.

(d) The antenna height to be used with this chart is the height of the radiation center of the antenna above the average terrain along the radial in question. In determining the average elevation of the terrain, the elevations between 3 and 16 kilometers from the antenna site are used.

(1) Profile graphs must be drawn for eight radials beginning at the antenna site and extending 16 kilometers therefrom. The radials should be drawn for each 45° of azimuth starting with True North. At least one radial must include the principal community to be served even though it may be more than 16 kilometers from the antenna site. However, in the event none of the evenly spaced radials include the principal community to be served, and one or more such radials are drawn in addition, these radials must not be used in computing the antenna height above average terrain.

(2) Where the 3 to 16 kilometers portion of a radial extends in whole or in part over a large body of water or extends over foreign territory but the 50 uV/m (34 dBu) contour encompasses land area within the United States beyond the 16 kilometers portion of the radial, the entire 3 to 16 kilometers portion of the radial must be included in the computation of antenna height above average terrain. However, where the 50 uV/m (34 dBu) contour does not so encompass United States land area, and (i) the entire 3 to 16 kilometers portion of the radial extends over large bodies of water or over foreign territory, such radial must be completely omitted from the computation of antenna height above average terrain, and (ii) where a part of the 3 to 16 kilometers portion of a radial extends over large bodies of water or foreign territory, only that part of the radial extending from 3 kilometers to the outermost portion of land in the United States covered by the radial used must be used in the computation of antenna height above average terrain.

(3) The profile graph for each radial should be plotted by contour intervals of from 12 to 30 meters and, where the data permits, at least 50 points of elevation (generally uniformly spaced) should be used for each radial. In instances of very rugged terrain where the use of contour intervals of 30 meters would result in several points in a short distance, 60 or 120 meter contour intervals may be used for such distances. On the other hand, where the terrain is uniform or gently sloping the

smallest contour interval indicated on the topographic map should be used, although only relatively few points may be available. The profile graph should indicate the topography accurately for each radial, and the graphs should be plotted with the distance in kilometers as the abscissa and the elevation in meters above mean sea level as the ordinate. The profile graphs should indicate the source of the topographical data used. The graph should also show the elevation of the center of the radiating system. The graph may be plotted either on rectangular coordinate paper or on special paper that shows the curvature of the earth. It is not necessary to take the curvature of the earth into consideration in this procedure as this factor is taken care of in the charts showing signal strengths. The average elevation of the 13 kilometer distance between 3 and 16 kilometers from the antenna site should then be determined from the profile graph for each radial. This may be obtained by averaging a large number of equally spaced points, by using a planimeter, or by obtaining the median elevation (that exceeded for 50% of the distance) in sectors and averaging those values.

(4) Examples of HAAT calculations:

(i) The heights above average terrain on the eight radials are as follows:

| | Meters |
|---|---|
| 0° | 120 |
| 45° | 255 |
| 90° | 185 |
| 135° | 90 |
| 180° | −10 |
| 225° | −85 |
| 270° | 40 |
| 315° | 85 |

The antenna height above terrain (defined in §73.310(a)) is computed as follows:

(120+255+185+90−10−85+40+85)/8=85 meters.

(ii) Same as paragraph (d)(4)(i) of this section, except the 0° radial is entirely over sea water. The antenna height above average terrain is computed as follows (note that the divisor is 7 not 8):

(255+185+90−10−85+40+85)/7=80 meters.

(iii) Same as paragraph (d)(4)(i) of this section, except that only the first 10 kilometers of the 90° radial are in the United States; beyond 10 kilometers the 90° radial is in a foreign country. The height above average terrain of the 3 to 10 kilometer portion of the 90° radial is 105 meters. The antenna height above average terrain is computed as follows (note that the divisor is 8 not 7.5):

(120+255+105+90−10−85+40+85)/8=75 meters.

(e) In cases where the terrain in one or more directions from the antenna site departs widely from the average elevation of the 3 to 16 kilometer sector, the prediction method may indicate contour distances that are different from what may be expected in practice. For example, a mountain ridge may indicate the practical limit of service although the prediction method may indicate otherwise. In such cases, the prediction method should be followed, but a supplemental showing may be made concerning the contour distances as determined by other means. Such supplemental showings should describe the procedure used and should include sample calculations. Maps of predicted coverage should include both the coverage as predicted by the regular method and as predicted by a supplemental method. When measurements of area are required, these should include the area obtained by the regular prediction method and the area obtained by the supplemental method. In directions where the terrain is such that antenna heights less than 30 meters for the 3 to 16 kilometer sector are obtained, an assumed height of 30 meters must be used for the prediction of coverage. However, where the actual contour distances are critical factors, a supplemental showing of expected coverage must be included together with a description of the method used in predicting such coverage. In special cases, the FCC may require additional information as to terrain and coverage.

(f) The effect of terrain roughness on the predicted field strength of a signal at points distant from an FM transmitting antenna is assumed to depend on the magnitude of a terrain roughness factor (h) which, for a specific propagation path, is determined by the characteristics of a segment of the terrain

profile for that path 40 kilometers in length located between 10 and 50 kilometers from the antenna. The terrain roughness factor has a value equal to the distance, in meters, between elevations exceeded by all points on the profile for 10% and 90% respectively, of the length of the profile segment. (See §73.333, Figure 4.)

(g) If the lowest field strength value of interest is initially predicted to occur over a particular propagation path at a distance that is less than 50 kilometers from the antenna, the terrain profile segment used in the determination of terrain roughness factor over that path must be that included between points 10 kilometers from the transmitter and such lesser distances. No terrain roughness correction need be applied when all field strength values of interest are predicted to occur 10 kilometers or less from the transmitting antenna.

(h) Profile segments prepared for terrain roughness factor determinations are to be plotted in rectangular coordinates, with no less than 50 points evenly spaced within the segment using data obtained from topographic maps with contour intervals of approximately 15 meters (50 feet) or less if available.

(i) The field strength charts (§73.333, Figs. 1–1a) were developed assuming a terrain roughness factor of 50 meters, which is considered to be representative of average terrain in the United States. Where the roughness factor for a particular propagation path is found to depart appreciably from this value, a terrain roughness correction ($\Delta F$) should be applied to field strength values along this path, as predicted with the use of these charts. The magnitude and sign of this correction, for any value of $\Delta h$, may be determined from a chart included in §73.333 as Figure 5.

(j) Alternatively, the terrain roughness correction may be computed using the following formula:

$$\Delta F = 1.9 - 0.03(\Delta h)(1 + f/300)$$

Where:

$\Delta F$=terrain roughness correction in dB

$\Delta k$=terrain roughness factor in meters

$f$=frequency of signal in MHz (MHz)

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[28 FR 13623, Dec. 14, 1963, as amended at 40 FR 27678, July 1, 1975; 48 FR 29507, June 27, 1983; 52 FR 11655, Apr. 10, 1987; 52 FR 37789, Oct. 9, 1987; 57 FR 48333, Oct. 23, 1992; 63 FR 33877, June 22, 1998]

EFFECTIVE DATE NOTE: At 42 FR 25736, May 19, 1977, the effective date of §73.313 paragraphs (i) and (j) was stayed indefinitely.

### §73.314 Field strength measurements.

(a) Except as provided for in §73.209, FM broadcast stations shall not be protected from any type of interference or propagation effect. Persons desiring to submit testimony, evidence or data to the Commission for the purpose of showing that the technical standards contained in this subpart do not properly reflect the levels of any given type of interference or propagation effect may do so only in appropriate rule making proceedings concerning the amendment of such technical standards. Persons making field strength measurements for formal submission to the Commission in rule making proceedings, or making such measurements upon the request of the Commission, shall follow the procedure for making and reporting such measurements outlined in paragraph (b) of this section. In instances where a showing of the measured level of a signal prevailing over a specific community is appropriate, the procedure for making and reporting field strength measurements for this purpose is set forth in paragraph (c) of this section.

(b) Collection of field strength data for propagation analysis.

(1) *Preparation for measurements.* (i) On large scale topographic maps, eight or more radials are drawn from the transmitter location to the maximum distance at which measurements are to be made, with the angles included between adjacent radials of approximately equal size. Radials should be oriented so as to traverse representative types of terrain. The specific number of radials and their orientation should be such as to accomplish this objective.

(ii) Each radial is marked, at a point exactly 16 kilometers from the transmitter and, at greater distances, at successive 3 kilometer intervals. Where measurements are to be conducted over extremely rugged terrain, shorter intervals may be used, but all such intervals must be of equal length. Accessible roads intersecting each radial as nearly as possible at each 3 kilometer marker are selected. These intersections are the points on the radial at which measurements are to be made, and are referred to subsequently as measuring locations. The elevation of each measuring location should approach the elevation at the corresponding 3 kilometer marker as nearly as possible.

(2) *Measurement procedure.* All measurements must be made utilizing a receiving antenna designed for reception of the horizontally polarized signal component, elevated 9 meters above the roadbed. At each measuring location, the following procedure must be used:

(i) The instrument calibration is checked.

(ii) The antenna is elevated to a height of 9 meters.

(iii) The receiving antenna is rotated to determine if the strongest signal is arriving from the direction of the transmitter.

(iv) The antenna is oriented so that the sector of its response pattern over which maximum gain is realized is in the direction of the transmitter.

(v) A mobile run of at least 30 meters is made, that is centered on the intersection of the radial and the road, and the measured field strength is continuously recorded on a chart recorder over the length of the run.

(vi) The actual measuring location is marked exactly on the topographic map, and a written record, keyed to the specific location, is made of all factors which may affect the recorded field, such as topography, height and types of vegetation, buildings, obstacles, weather, and other local features.

(vii) If, during the test conducted as described in paragraph (b)(2)(iii) of this section, the strongest signal is found to come from a direction other than from the transmitter, after the mobile run prescribed in paragraph (b)(2)(v) of this section is concluded, additional measurements must be made in a ''cluster'' of at least five fixed points. At each such point, the field strengths with the antenna oriented toward the transmitter, and with the antenna oriented so as to receive the strongest field, are measured and recorded. Generally, all points should be within 60 meters of the center point of the mobile run.

(viii) If overhead obstacles preclude a mobile run of at least 30 meters, a ''cluster'' of five spot measurements may be made in lieu of this run. The first measurement in the cluster is identified. Generally, the locations for other measurements must be within 60 meters of the location of the first.

(3) *Method of reporting measurements.* A report of measurements to the Commission shall be submitted in affidavit form, in triplicate, and should contain the following information:

(i) Tables of field strength measurements, which, for each measuring location, set forth the following data:

(A) Distance from the transmitting antenna.

(B) Ground elevation at measuring location.

(C) Date, time of day, and weather.

(D) Median field in dBu for 0 dBk, for mobile run or for cluster, as well as maximum and minimum measured field strengths.

(E) Notes describing each measuring location.

(ii) U.S. Geological Survey topographic maps, on which is shown the exact location at which each measurement was made. The original plots shall be made on maps of the largest available scale. Copies may be reduced in size for convenient submission to the Commission, but not to the extent that important detail is lost. The original maps shall be made available, if requested. If a large number of maps is involved, an index map should be submitted.

(iii) All information necessary to determine the pertinent characteristics of the transmitting installation, including frequency, geographical coordinates of antenna site, rated and actual power output of transmitter, measured transmission line loss, antenna power gain, height of antenna above ground,

above mean sea level, and above average terrain. The effective radiated power should be computed, and horizontal and vertical plane patterns of the transmitting antenna should be submitted.

(iv) A list of calibrated equipment used in the field strength survey, which, for each instrument, specifies its manufacturer, type, serial number and rated accuracy, and the date of its most recent calibration by the manufacturer, or by a laboratory. Complete details of any instrument not of standard manufacture shall be submitted.

(v) A detailed description of the calibration of the measuring equipment, including field strength meters, measuring antenna, and connecting cable.

(vi) Terrain profiles in each direction in which measurements were made, drawn on curved earth paper for equivalent 4/3 earth radius, of the largest available scale.

(c) Collection of field strength data to determine FM broadcast service in specific communities.

(1) *Preparation for measurement.* (i) The population (P) of the community, and its suburbs, if any, is determined by reference to an appropriate source, e.g., the 1970 U.S. Census tables of population of cities and urbanized areas.

(ii) The number of locations at which measurements are to be made shall be at least 15, and shall be approximately equal to $0.1(P)^{1/2}$, if this product is a number greater than 15.

(iii) A rectangular grid, of such size and shape as to encompass the boundaries of the community is drawn on an accurate map of the community. The number of line intersections on the grid included within the boundaries of the community shall be at least equal to the required number of measuring locations. The position of each intersection on the community map determines the location at which a measurement shall be made.

(2) *Measurement procedure.* All measurements must be made using a receiving antenna designed for reception of the horizontally polarized signal component, elevated 9 meters above ground level.

(i) Each measuring location shall be chosen as close as feasible to a point indicated on the map, as previously prepared, and at as nearly the same elevation as that point as possible.

(ii) At each measuring location, after equipment calibration and elevation of the antenna, a check is made to determine whether the strongest signal arrives from a direction other than from the transmitter.

(iii) At 20 percent or more of the measuring locations, mobile runs, as described in paragraph (b)(2) of this section shall be made, with no less than three such mobile runs in any case. The points at which mobile measurements are made shall be well separated. Spot measurements may be made at other measuring points.

(iv) Each actual measuring location is marked exactly on the map of the community, and suitably keyed. A written record shall be maintained, describing, for each location, factors which may affect the recorded field, such as the approximate time of measurement, weather, topography, overhead wiring, heights and types of vegetation, buildings and other structures. The orientation, with respect to the measuring location shall be indicated of objects of such shape and size as to be capable of causing shadows or reflections. If the strongest signal received was found to arrive from a direction other than that of the transmitter, this fact shall be recorded.

(3) *Method of reporting measurements.* A report of measurements to the Commission shall be submitted in affidavit form, in triplicate, and should contain the following information:

(i) A map of the community showing each actual measuring location, specifically identifying the points at which mobile runs were made.

(ii) A table keyed to the above map, showing the field strength at each measuring point, reduced to dBu for the actual effective radiated power of the station. Weather, date, and time of each measurement shall be indicated.

(iii) Notes describing each measuring location.

(iv) A topographic map of the largest available scale on which are marked the community and the transmitter site of the station whose signals have been measured, which includes all areas on or near the direct path of signal propagation.

(v) Computations of the mean and standard deviation of all measured field strengths, or a graph on which the distribution of measured field strength values is plotted.

(vi) A list of calibrated equipment used for the measurements, which for each instrument, specifies its manufacturer, type, serial number and rated accuracy, and the date of its most recent calibration by the manufacturer, or by a laboratory. Complete details of any instrument not of standard manufacture shall be submitted.

(vii) A detailed description of the procedure employed in the calibration of the measuring equipment, including field strength meters, measuring antenna, and connecting cable.

[40 FR 27682, July 1, 1975; 40 FR 28802, July 9, 1975, as amended at 48 FR 29508, June 27, 1983]

### §73.315 FM transmitter location.

(a) The transmitter location shall be chosen so that, on the basis of the effective radiated power and antenna height above average terrain employed, a minimum field strength of 70 dB above one uV/m (dBu), or 3.16 mV/m, will be provided over the entire principal community to be served.

NOTE: The requirements of paragraph (a) of this section do not apply to noncommercial educational FM broadcast stations operating on reserved channels. (Channels 200 through 220)

(b) The transmitter location should be chosen to maximize coverage to the city of license while minimizing interference. This is normally accomplished by locating in the least populated area available while maintaining the provisions of paragraph (a) of this section. In general, the transmitting antenna of a station should be located in the most sparsely populated area available at the highest elevation available. The location of the antenna should be so chosen that line-of-sight can be obtained from the antenna over the principle city or cities to be served; in no event should there be a major obstruction in this path.

(c) The transmitting location should be selected so that the 1 mV/m contour encompasses the urban population within the area to be served. It is recognized that topography, shape of the desired service area, and population distribution may make the choice of a transmitter location difficult. In such cases consideration may be given to the use of a directional antenna system, although it is generally preferable to choose a site where a nondirectional antenna may be employed.

(d) In cases of questionable antenna locations it is desirable to conduct propagation tests to indicate the field strength expected in the principal city or cities to be served and in other areas, particularly where severe shadow problems may be expected. In considering applications proposing the use of such locations, the Commission may require site tests to be made. Such tests should include measurements made in accordance with the measurement procedures described in §73.314, and full data thereon shall be supplied to the Commission. The test transmitter should employ an antenna having a height as close as possible to the proposed antenna height, using a balloon or other support if necessary and feasible. Information concerning the authorization of site tests may be obtained from the Commission upon request.

(e) Cognizance must of course be taken regarding the possible hazard of the proposed antenna structure to aviation and the proximity of the proposed site to airports and airways. Procedures and standards with respect to the Commission's consideration of proposed antenna structures which will serve as a guide to persons intending to apply for radio station licenses are contained in Part 17 of this chapter (Construction, Marking, and Lighting of Antenna Structures).

[28 FR 13623, Dec. 14, 1963, as amended at 41 FR 22943, June 8, 1976; 49 FR 38131, Sept. 27, 1984; 49 FR 45146, Nov. 15, 1984; 51 FR 9965, Mar. 24, 1986; 52 FR 10570, Apr. 2, 1987]

### §73.316 FM antenna systems.

(a) It shall be standard to employ horizontal polarization; however, circular or elliptical polarization may be employed if desired. Clockwise or counterclockwise rotation may be used. The supplemental vertically polarized effective radiated power required for circular or elliptical polarization shall in

no event exceed the effective radiated power authorized.

(b) *Directional antennas.* A directional antenna is an antenna that is designed or altered for the purpose of obtaining a non-circular radiation pattern.

(1) Applications for the use of directional antennas that propose a ratio of maximum to minimum radiation in the horizontal plane of more than 15 dB will not be accepted.

(2) Directional antennas used to protect short-spaced stations pursuant to §73.213 or §73.215 of the rules, that have a radiation pattern which varies more than 2 dB per 10 degrees of azimuth will not be authorized.

(c) *Applications for directional antennas.* Applications proposing the use of directional antenna systems must be accompanied by the following:

(1) A complete description of the proposed antenna system, including the manufacturer and model number of the proposed directional antenna. It is not sufficient to label the antenna with only a generic term such as ''dipole''. A specific model number must be provided. In the case of individually designed antennas with no model number, or in the case of a composite antenna composed of two or more individual antennas, the antenna must be described as a ''custom'' or ''composite'' antenna, as appropriate. A full description of the design of the antenna must also be submitted.

(2) A relative field horizontal plane pattern of the proposed directional antenna. A single pattern encompassing both the horizontal and vertical polarization is required, rather than separate patterns for horizontal and vertical polarization. A value of 1.0 must be used to correspond to the direction of maximum radiation. The plot of the pattern must be oriented such that 0° corresponds to the direction of maximum radiation or alternatively, in the case of an asymmetrical antenna pattern, the plot must be oriented such that 0° corresponds to the actual azimuth with respect to true North. The horizontal plane pattern must be plotted to the largest scale possible on unglazed letter-size polar coordinate paper (main engraving approximately 18 cm x 25 cm (7 inches x 10 inches)) using only scale divisions and subdivisions of 1, 2, 2.5, or 5 times 10-nth. Values of field strength less than 10% of the maximum field strength plotted on that pattern must be shown on an enlarged scale. In the case of a composite antenna composed of two or more individual antennas, the pattern required is that for the composite antenna, not the patterns for each of the individual antennas.

(3) A tabulation of the relative field pattern required in paragraph (c)(2) of this section. The tabulation must use the same zero degree reference as the plotted pattern, and must contain values for at least every 10°. In addition, tabulated values of all maximas and minimas, with their corresponding azimuths, must be submitted.

(4) Sufficient vertical patterns to indicate clearly the radiation characteristics of the antenna above and below the horizontal plane. Complete information and patterns must be provided for angles of ±10° from the horizontal plane and sufficient additional information must be included on that portion of the pattern lying between +10° and the zenith and −10° and the nadir, to conclusively demonstrate the absence of undesirable lobes in these areas. The vertical plane pattern must be plotted on rectangular coordinate paper with reference to the horizontal plane. In the case of a composite antenna composed of two or more individual antennas, the pattern required is that for the composite antenna, not the patterns for each of the individual antennas.

(5) A statement that the antenna will be mounted on the top of an antenna tower recommended by the antenna manufacturer, or will be side-mounted on a particular type of antenna tower in accordance with specific instructions provided by the antenna manufacturer.

(6) A statement that the directional antennas will not be mounted on the top of an antenna tower which includes a top-mounted platform larger than the nominal cross-sectional area of the tower in the horizontal plane.

(7) A statement that no other antennas of any type are mounted on the same tower level as a directional antenna, and that no antenna of any type is mounted within any horizontal or

vertical distance specified by the antenna manufacturer as being necessary for proper directional operation.

(8) In the case of applications for license upon completion of antenna construction, a statement from an engineer (as well as a statement of the engineer's qualifications) that the antenna has been installed pursuant to the manufacturer's instructions and a statement from a licensed surveyor that the antenna is installed in the proper orientation.

(9) In the case of an application for license upon completion of antenna construction for a station authorized pursuant to §73.215 or §73.509, a showing that the root mean square (RMS) of the measured composite antenna pattern (encompassing both the horizontally and vertically polarized radiation components (in relative field)) is at least 85 percent of the RMS of the authorized composite directional antenna pattern (in relative field). The RMS values, for a composite antenna pattern specified in relative field values, may be determined from the following formula:

RMS = the square root of:

$$\frac{[(\text{relative field value 1})^2 + (\text{relative field value 2})^2 + \cdots + (\text{last relative field value})^2]}{\text{number of relative field values summed}}$$

where the relative field values are taken from at least 36 evenly spaced radials for the entire 360 degrees of azimuth. The application for license must also demonstrate that coverage of the community of license by the 70 dBu contour is maintained for stations authorized pursuant to §73.215 on Channels 221 through 300, as required by §73.315(a), while noncommercial educational stations operating on Channels 201 through 220 must show that the 60 dBu contour covers at least a portion of the community of license.

(d) Applications proposing the use of FM transmitting antennas in the immediate vicinity (*i.e.* 60 meters or less) of other FM or TV broadcast antennas must include a showing as to the expected effect, if any, of such approximate operation.

(e) Where an FM licensee or permittee proposes to mount its antenna on an AM antenna tower, or locate within 3.2 km of an AM antenna tower, the FM licensee or permittee must comply with §73.1692.

[28 FR 13623, Dec. 14, 1963, as amended at 34 FR 14222, Sept. 10, 1969; 37 FR 25841, Dec. 5, 1972; 43 FR 53738, Nov. 17, 1978; 48 FR 29508, June 27, 1983; 51 FR 17028, May 8, 1986; 54 FR 9804, Mar. 8, 1989; 56 FR 57294, Nov. 8, 1991; 58 FR 44950, Aug. 25, 1993; 62 FR 51058, Sept. 30, 1997]

### §73.317 FM transmission system requirements.

(a) FM broadcast stations employing transmitters authorized after January 1, 1960, must maintain the bandwidth occupied by their emissions in accordance with the specification detailed below. FM broadcast stations employing transmitters installed or type accepted before January 1, 1960, must achieve the highest degree of compliance with these specifications practicable with their existing equipment. In either case, should harmful interference to other authorized stations occur, the licensee shall correct the problem promptly or cease operation.

(b) Any emission appearing on a frequency removed from the carrier by between 120 kHz and 240 kHz inclusive must be attenuated at least 25 dB below the level of the unmodulated carrier. Compliance with this requirement will be deemed to show the occupied bandwidth to be 240 kHz or less.

(c) Any emission appearing on a frequency removed from the carrier by more than 240 kHz and up to and including 600 kHz must be attenuated at least 35 dB below the level of the unmodulated carrier.

(d) Any emission appearing on a frequency removed from the carrier by more than 600 kHz must be attenuated at least $43 + 10 \log_{10}$ (Power, in watts) dB below the level of the unmodulated carrier, or 80 dB, whichever is the lesser attenuation.

(e) Preemphasis shall not be greater than the impedance-frequency characteristics of a series inductance resistance network having a time constant of 75 microseconds. (See upper curve of Figure 2 of §73.333.)

[51 FR 17028, May 8, 1986]

### §73.318 FM blanketing interference.

Areas adjacent to the transmitting antenna that receive a signal with a

strength of 115 dBu (562 mV/m) or greater will be assumed to be blanketed. In determining the blanketed area, the 115 dBu contour is determined by calculating the inverse distance field using the effective radiated power of the maximum radiated lobe of the antenna without considering its vertical radiation pattern or height. For directional antennas, the effective radiated power in the pertinent bearing shall be used.

(a) The distance to the 115 dBu contour is determined using the following equation:

D (in kilometers)=0.394√ P
D (in miles)=0.245√ P

Where P is the maximum effective radiated power (ERP), measured in kilowatts, of the maximum radiated lobe.

(b) After January 1, 1985, permittees or licensees who either (1) commence program tests, or (2) replace their antennas, or (3) request facilities modifications and are issued a new construction permit must satisfy all complaints of blanketing interference which are received by the station during a one year period. The period begins with the commencement of program tests, or commencement of programming utilizing the new antenna. Resolution of complaints shall be at no cost to the complainant. These requirements specifically do not include interference complaints resulting from malfunctioning or mistuned receivers, improperly installed antenna systems, or the use of high gain antennas or antenna booster amplifiers. Mobile receivers and non-RF devices such as tape recorders or hi-fi amplifiers (phonographs) are also excluded.

(c) A permittee collocating with one or more existing stations and beginning program tests on or after January 1, 1985, must assume full financial responsibility for remedying new complaints of blanketing interference for a period of one year. Two or more permittees that concurrently collocate on or after January 1, 1985, shall assume shared responsibility for remedying blanketing complaints within the blanketing area unless an offending station can be readily determined and then that station shall assume full financial responsibility.

(d) Following the one year period of full financial obligation to satisfy blanketing complaints, licensees shall provide technical information or assistance to complainants on remedies for blanketing interference.

[28 FR 13623, Dec. 14, 1963, as amended at 52 FR 25866, July 9, 1987]

### § 73.319 FM multiplex subcarrier technical standards.

(a) The technical specifications in this Section apply to all transmissions of FM multiplex subcarriers except those used for stereophonic sound broadcasts under the provisions of § 73.322.

(b) *Modulation.* Any form of modulation may be used for subcarrier operation.

(c) *Subcarrier baseband.* (1) During monophonic program transmissions, multiplex subcarriers and their significant sidebands must be within the range of 20 kHz to 99 kHz.

(2) During stereophonic sound program transmissions (see § 73.322), multiplex subcarriers and their significant sidebands must be within the range of 53 kHz to 99 kHz.

(3) During periods when broadcast programs are not being transmitted, multiplex subcarriers and their significant sidebands must be within the range of 20 kHz to 99 kHz.

(d) *Subcarrier injection.*

(1) During monophonic program transmissions, modulation of the carrier by the arithmetic sum of all subcarriers may not exceed 30% referenced to 75 kHz modulation deviation. However, the modulation of the carrier by the arithmetic sum of all subcarriers above 75 kHz may not modulate the carrier by more than 10%.

(2) During stereophonic program transmissions, modulation of the carrier by the arithmetic sum of all subcarriers may not exceed 20% referenced to 75 kHz modulation deviation. However, the modulation of the carrier by the arithmetic sum of all subcarriers above 75 kHz may not modulate the carrier by more than 10%.

(3) During periods when no broadcast program service is transmitted, modulation of the carrier by the arithmetic sum of all subcarriers may not exceed 30% referenced to 75 kHz modulation

deviation. However, the modulation of the carrier by the arithmetic sum of all subcarriers above 75 kHz may not modulate the carrier by more than 10%.

(4) Total modulation of the carrier wave during transmission of multiplex subcarriers used for subsidiary communications services must comply with the provisions §73.1570(b).

(e) Subcarrier generators may be installed and used with a type accepted FM broadcast transmitter without specific authorization from the FCC provided the generator can be connected to the transmitter without requiring any mechanical or electrical modifications in the transmitter FM exciter circuits.

(f) Stations installing multiplex subcarrier transmitting equipment must ensure the proper suppression of spurious or harmonic radiations. See §§73.317, 73.1590 and 73.1690. If the subcarrier operation causes the station's transmissions not to comply with the technical provisions for FM broadcast stations or causes harmful interference to other communication services, the licensee or permittee must correct the problem promptly or cease operation. The licensee may be required to verify the corrective measures with supporting data. Such data must be retained at the station and be made available to the FCC upon request.

[48 FR 28455, June 22, 1983, as amended at 48 FR 37216, Aug. 17, 1983; 49 FR 15080, Apr. 17, 1984; 49 FR 38131, Sept. 27, 1984; 50 FR 1534, Jan. 11, 1985; 51 FR 17029, May 8, 1986; 57 FR 48333, Oct. 23, 1992]

### §73.322 FM stereophonic sound transmission standards.

(a) An FM broadcast station shall not use 19 kHz ±20 Hz, except as the stereophonic pilot frequency in a transmission system meeting the following parameters:

(1) The modulating signal for the main channel consists of the sum of the right and left signals.

(2) The pilot subcarrier at 19 kHz ±2 Hz, must frequency modulate the main carrier between the limits of 8 and 10 percent.

(3) One stereophonic subcarrier must be the second harmonic of the pilot subcarrier (i.e. 38 kHz) and must cross the time axis with a positive slope simultaneously with each crossing of the time axis by the pilot subcarrier. Additional stereophomic subcarriers are not precluded.

(4) Double sideband, suppressed-carrier, amplitude modulation of the stereophonic subcarrier at 38 kHz must be used.

(5) The stereophonic subcarrier at 38 kHz must be suppressed to a level less than 1% modulation of the main carrier.

(6) The modulating signal for the required stereophonic subcarrier must be equal to the difference of the left and right signals.

(7) The following modulation levels apply:

(i) When a signal exists in only one channel of a two channel (biphonic) sound transmission, modulation of the carrier by audio components within the baseband range of 50 Hz to 15 kHz shall not exceed 45% and modulation of the carrier by the sum of the amplitude modulated subcarrier in the baseband range of 23 kHz to 53 kHz shall not exceed 45%.

(ii) When a signal exists in only one channel of a stereophonic sound transmission having more than one stereophonic subcarrier in the baseband, the modulation of the carrier by audio components within the audio baseband range of 23 kHz to 99 kHz shall not exceed 53% with total modulation not to exceed 90%.

(b) Stations not transmitting stereo with the method described in (a), must limit the main carrier deviation caused by any modulating signals occupying the band 19 kHz ±20 Hz to 125 Hz.

(c) All stations, regardless of the stereophonic transmission system used, must not exceed the maximum modulation limits specified in §73.1570(b)(2). Stations not using the method described in (a), must limit the modulation of the carrier by audio components within the audio baseband range of 23 kHz to 99 kHz to not exceed 53%.

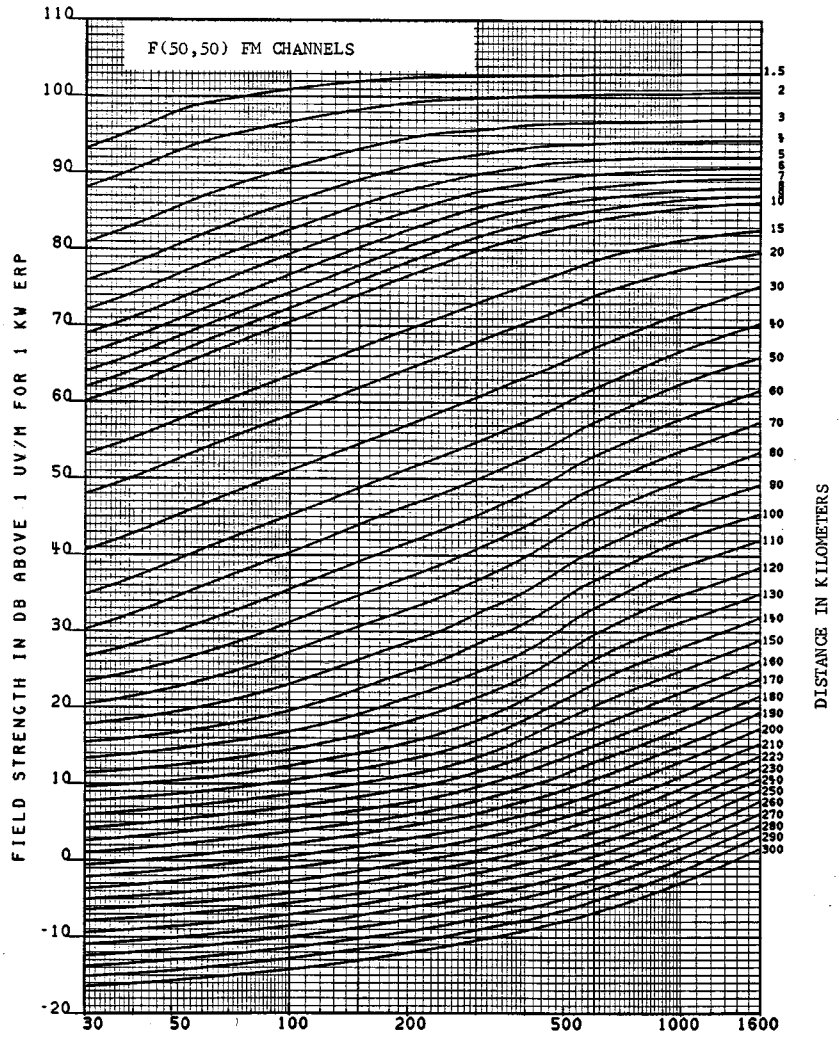
[51 FR 17029, May 8, 1986]

### §73.333 Engineering charts.

This section consists of the following Figures 1, 1a, 2, and slider 4 and 5.

NOTE: The figures reproduced herein, due to their small scale, are not to be used in connection with material submitted to the F.C.C.

C16

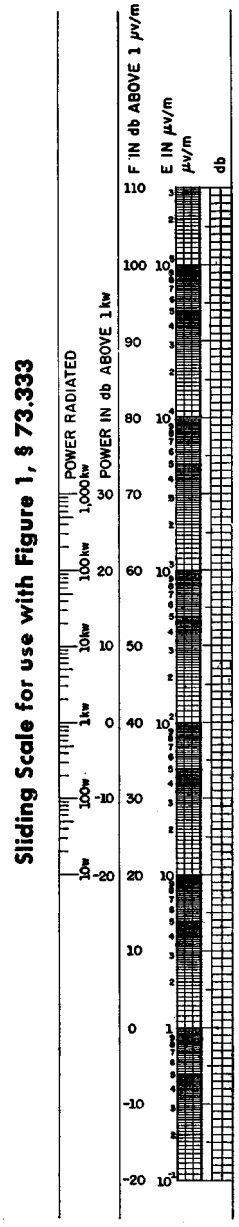


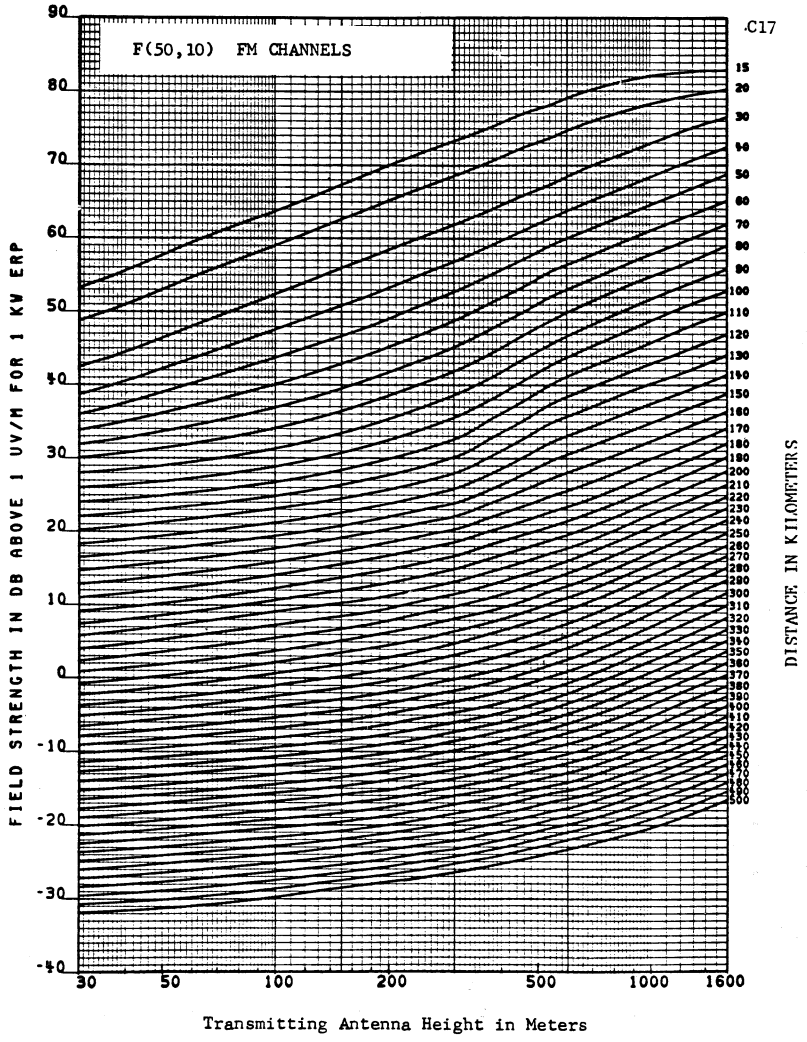

FCC §73.333 FIGURE 1

FM CHANNELS

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50 PERCENT OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9 METERS

**Sliding Scale for use with Figure 1, § 73.333**






FCC §73.333 FIGURE 1a

**FM CHANNELS**

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9 METERS

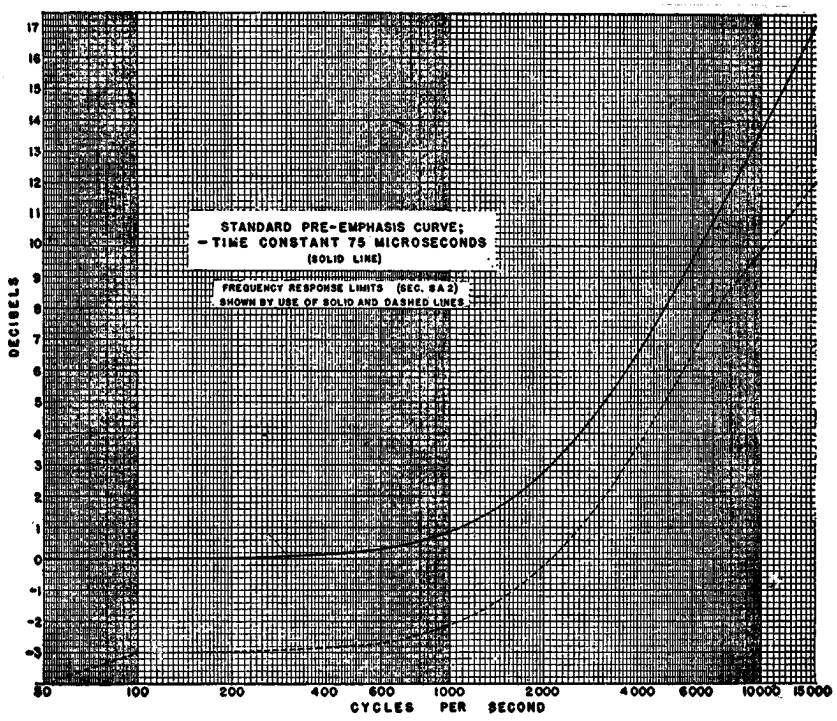
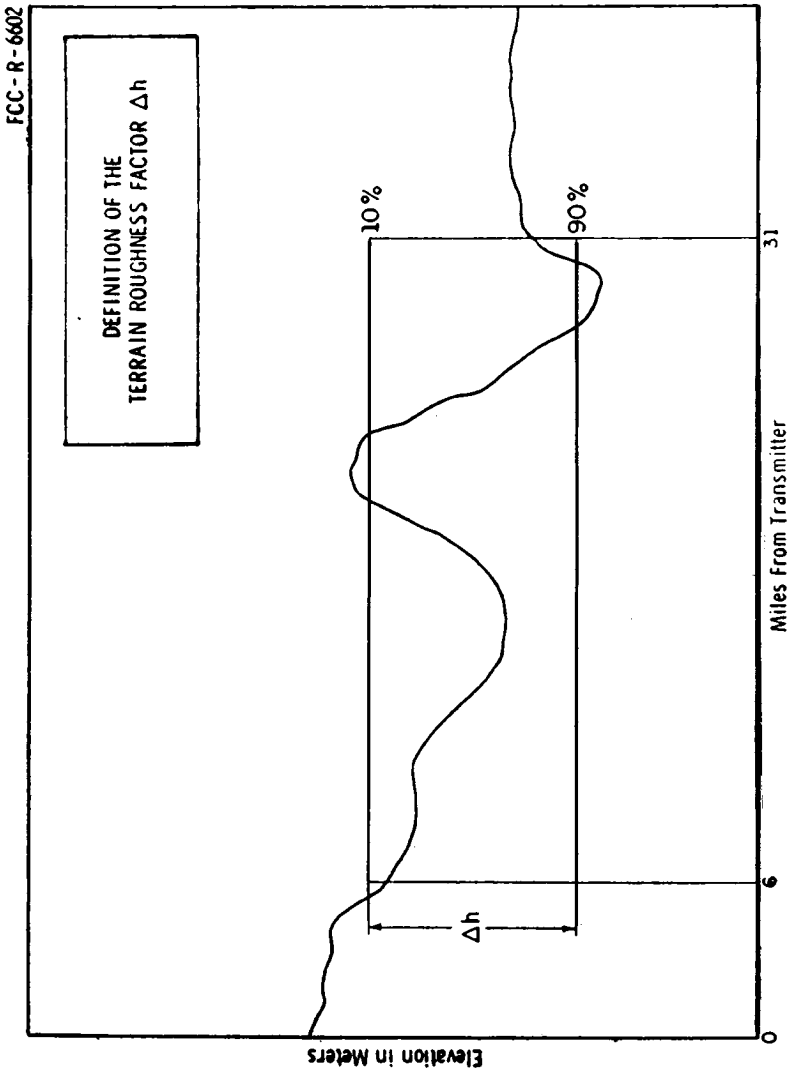
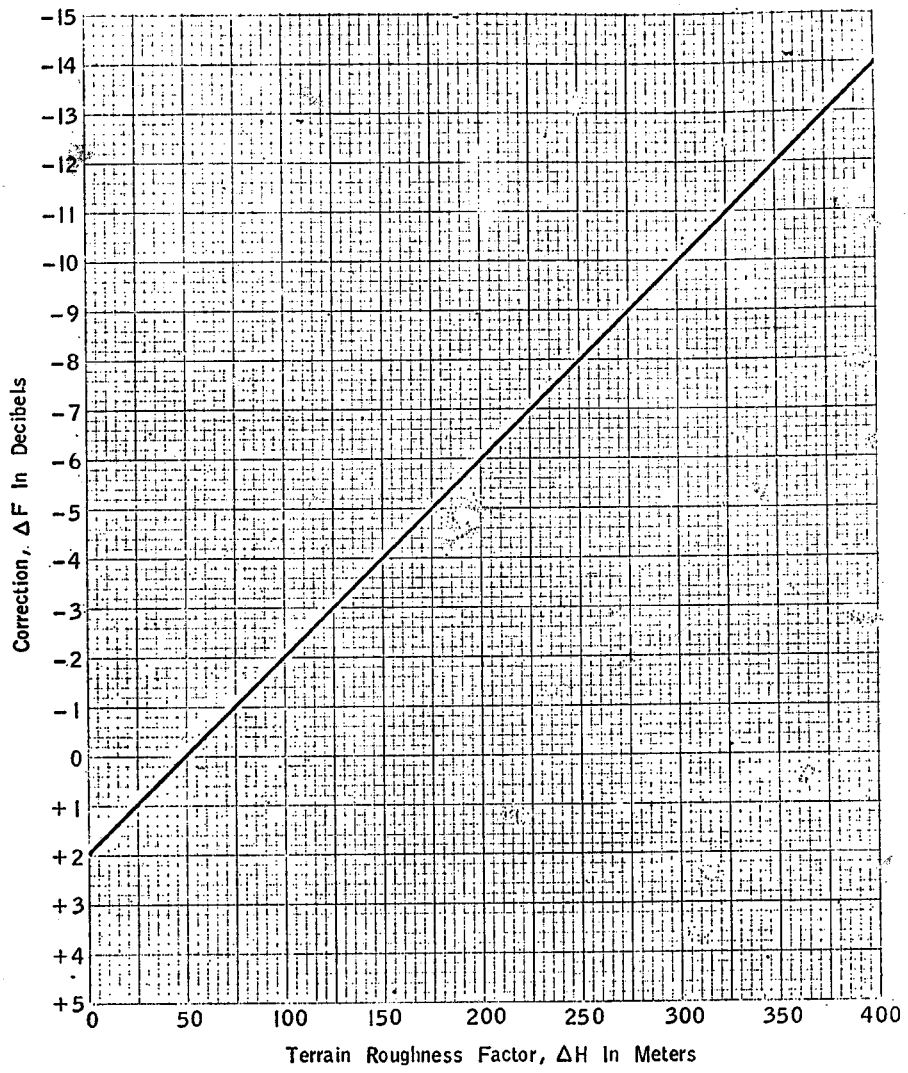

STANDARD PRE-EMPHASIS CURVE;
– TIME CONSTANT 75 MICROSECONDS
(SOLID LINE)
FREQUENCY RESPONSE LIMITS (SEC. 9A.2)
SHOWN BY USE OF SOLID AND DASHED LINES
DECIBELS
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
-1
-2
-3
50
100
200
400
600
1000
2000
4000
6000
10000
15000
CYCLES PER SECOND

FIGURE 2




FCC § 73.333 FIGURE 4
(new)




TERRAIN ROUGHNESS CORRECTION

for use with estimated FM F(50,50) and F(50,10) field strength curves

FCC §73.333 FIGURE 5

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))
[28 FR 13623, Dec. 14, 1963, as amended at 35 FR 2591, Feb. 5, 1970; 40 FR 27679, July 1, 1975; 45 FR 28141, Apr. 28, 1980; 48 FR 29508, June 27, 1983; 49 FR 19670, May 9, 1984]

EFFECTIVE DATE NOTE: At 42 FR 25736, May 19, 1977, the effective date of Figures 4 and 5 was stayed indefinitely.

## Subpart C—Noncommercial Educational FM Broadcast Stations

### § 73.501 Channels available for assignment.

(a) The following frequencies, except as provided in paragraph (b) of this section, are available for noncommercial educational FM broadcasting:

| Frequency (MHz) | Channel No. |
|---|---|
| 87.9 | [1] 200 |
| 88.1 | 201 |
| 88.3 | 202 |
| 88.5 | 203 |
| 88.7 | 204 |
| 88.9 | 205 |
| 89.1 | [2] 206 |
| 89.3 | 207 |
| 89.5 | 208 |
| 89.7 | 209 |
| 89.9 | 210 |
| 90.1 | 211 |
| 90.3 | 212 |
| 90.5 | 213 |
| 90.7 | 214 |
| 90.9 | 215 |
| 91.1 | 216 |
| 91.3 | 217 |
| 91.5 | 218 |
| 91.7 | 219 |
| 91.9 | 220 |

[1] The frequency 87.9 MHz, Channel 200, is available only for use of existing Class D stations required to change frequency. It is available only on a noninterference basis with respect to TV Channel 6 stations and adjacent channel noncommercial educational FM stations. It is not available at all within 402 kilometers (250 miles) of Canada and 320 kilometers (199 miles) of Mexico. The specific standards governing its use are contained in § 73.512.

[2] The frequency 89.1 MHz, Channel 206, in the New York City metropolitan area, is reserved for the use of the United Nations with the equivalent of an antenna height of 150 meters (492 feet) above average terrain and effective radiated power of 20 kW and the Commission will make no assignments which would cause objectionable interference with such use.

(b) In Alaska, FM broadcast stations operating on Channels 200–220 (87.9–91.9 MHz) shall not cause harmful interference to and must accept interference from non-Government fixed operations authorized prior to January 1, 1982.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[43 FR 39715, Sept. 6, 1978, as amended at 47 FR 30068, July 12, 1982; 52 FR 43765, Nov. 16, 1987; 58 FR 44950, Aug. 25, 1993]

### § 73.502 State-wide plans.

In considering the assignment of a channel for a noncommercial educational FM broadcast station, the Commission will take into consideration the extent to which each application meets the requirements of any state-wide plan for noncommercial educational FM broadcast stations filed with the Commission, provided that such plans afford fair treatment to public and private educational institutions, urban and rural, at the primary, secondary, higher, and adult educational levels, and appear otherwise fair and equitable.

[28 FR 13651, Dec. 14, 1963]

### § 73.503 Licensing requirements and service.

The operation of, and the service furnished by noncommercial educational FM broadcast stations shall be governed by the following:

(a) A noncommercial educational FM broadcast station will be licensed only to a nonprofit educational organization and upon showing that the station will be used for the advancement of an educational program.

(1) In determining the eligibility of publicly supported educational organizations, the accreditation of their respective state departments of education shall be taken into consideration.

(2) In determining the eligibility of privately controlled educational organizations, the accreditation of state departments of education and/or recognized regional and national educational accrediting organizations shall be taken into consideration.

(b) Each station may transmit programs directed to specific schools in a system or systems for use in connection with the regular courses as well as routine and administrative material pertaining thereto and may transmit educational, cultural, and entertainment programs to the public.

(c) A noncommercial educational FM broadcast station may broadcast programs produced by, or at the expense of, or furnished by persons other than the licensee, if no other consideration than the furnishing of the program and the costs incidental to its production and broadcast are received by the licensee. The payment of line charges by another station network, or someone other than the licensee of a noncommercial educational FM broadcast station, or general contributions to the operating costs of a station, shall not

be considered as being prohibited by this paragraph.

(d) Each station shall furnish a nonprofit and noncommercial broadcast service. Noncommercial educational FM broadcast stations are subject to the provisions of §73.1212 to the extent they are applicable to the broadcast of programs produced by, or at the expense of, or furnished by others. No *promotional* announcement *on behalf of for profit entities* shall be broadcast at any time in exchange for the receipt, in whole or in part, of consideration to the licensee, its principals, or employees. However, acknowledgements of contributions can be made. *The scheduling of any announcements and acknowledgements may not interrupt regular programming.*

NOTE TO §73.503: Commission interpretation on this rule, including the acceptable form of acknowledgements, may be found in the *Second Report and Order* in Docket No. 21136 (Commission Policy Concerning the Noncommercial Nature of Educational Broadcast Stations), 86 FCC 2d 141 (1981); the *Memorandum Opinion and Order* in Docket No. 21136, 90 FCC 2d 895 (1982), and the *Memorandum Opinion and Order* in Docket 21136, 97 FCC 2d 255 (1984). *See also,* ''Commission Policy Concerning the Noncommercial Nature of Educational Broadcast Stations,'' Public Notice, 7 FCC Rcd 827 (1992), which can be retrieved through the Internet at http://www.fcc.gov/mmb/asd/nature.html.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[28 FR 13651, Dec. 14, 1963, as amended at 35 FR 7558, May 15, 1970; 47 FR 36178, Aug. 19, 1982; 49 FR 29069, July 18, 1984; 63 FR 33877, June 22, 1998]

### §73.504 Channel assignments in the Mexican border area.

(a) NCE–FM stations within 199 miles (320 km) of the United States-Mexican border shall comply with the separation requirements and other provisions of the ''Agreement between the United States of America and the United Mexican States Concerning Frequency Modulation Broadcasting in the 88 to 108 MHz Band'' as amended.

(b) Applicants for noncommercial educational FM stations within 199 miles (320 km) of the United States-Mexican border shall propose at least Class A minimum facilities (see §73.211(a)). However, existing Class D noncommercial educational stations may apply to change frequency within the educational portion of the FM band in accordance with the requirements set forth in §73.512.

(c) Section 73.208 of this chapter shall be complied with as to the determination of reference points and distance computations used in applications for new or changed facilities. However, if it is necessary to consider a Mexican channel assignment or authorization, the computation of distance will be determined as follows: if a transmitter site has been established, on the basis of the coordinates of the site; if a transmitter site has not been established, on the basis of the reference coordinates of the community, town, or city.

[52 FR 43765, Nov. 16, 1987]

### §73.505 Zones.

For the purpose of assignment of noncommercial educational FM stations, the United States is divided into three zones, Zone I, Zone I–A, and Zone II, having the boundaries specified in §73.205.

[42 FR 36828, July 18, 1977]

### §73.506 Classes of noncommercial educational FM stations and channels.

(a) Noncommercial educational stations operating on the channels specified in §73.501 are divided into the following classes:

(1) A Class D educational station is one operating with no more than 10 watts transmitter power output.

(2) A Class D educational (secondary) station is one operating with no more than 10 watts transmitter power output in accordance with the terms of §73.512 or which has elected to follow these requirements before they become applicable under the terms of §73.512.

(3) Noncommercial educational FM (NCE–FM) stations with more than 10 watts transmitter power output are classified as Class A, B1, B, C3, C2, C1, or C depending on the station's effective radiated power and antenna height above average terrain, and on the zone in which the station's transmitter is located, on the same basis as set forth in §§73.210 and 73.211 for commercial stations.

(b) Any noncommercial educational station except Class D may be assigned to any of the channels listed in §73.501. Class D noncommercial educational FM stations applied for or authorized prior to June 1, 1980, may continue to operate on their authorized channels subject to the provisions of §73.512.

[43 FR 39715, Sept. 6, 1978, as amended at 49 FR 10264, Mar. 20, 1984; 52 FR 47569, Dec. 15, 1987; 54 FR 16367, Apr. 24, 1989; 54 FR 19374, May 5, 1989]

### §73.507 Minimum distance separations between stations.

(a) *Minimum distance separations.* No application for a new station, or change in channel or transmitter site or increase in facilities of an existing station, will be granted unless the proposed facilities will be located so as to meet the adjacent channel distance separations specified in §73.207(a) for the class of station involved with respect to assignment on Channels 221, 222, and 223 listed in §73.201 (except where in the case of an existing station the proposed facilities fall within the provisions of §73.207(b)), or where a Class D station is changing frequency to comply with the requirements of §73.512.

(b) Stations authorized as of September 10, 1962, which do not meet the requirements of paragraph (a) of this section and §73.511, may continue to operate as authorized; but any application to change facilities will be subject to the provisions of this section.

(c)(1) Stations separated in frequency by 10.6 or 10.8 MHz (53 or 54 channels) from allotments or assignments on non-reserved channels will not be authorized unless they conform to the separations in Table A given in §73.207.

(2) Under the United States-Mexican FM Broadcasting Agreement, for stations and assignments differing in frequency by 10.6 to 10.8 MHz (53 or 54 channels), U.S. noncommercial educational FM allotments and assignments must meet the separations given in Table C of §73.207 to Mexican allotments or assignments in the border area.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[42 FR 36828, July 18, 1977, as amended at 43 FR 39716, Sept. 6, 1978; 44 FR 65764, Nov. 15, 1979; 49 FR 10264, Mar. 20, 1984; 49 FR 19670, May 9, 1984]

### §73.508 Standards of good engineering practice.

(a) All noncommercial educational stations operating with more than 10 watts transmitter output power shall be subject to all of the provisions of the FM Technical Standards contained in subpart B of this part. Class D educational stations shall be subject to the definitions contained in §73.310 of subpart B of this part, and also to those other provisions of the FM Technical Standards which are specifically made applicable to them by the provisions of this subpart.

(b) The transmitter and associated transmitting equipment of each noncommercial educational FM station licensed for transmitter output power above 10 watts must be designed, constructed and operated in accordance with §73.317.

(c) The transmitter and associated transmitting equipment of each noncommercial educational FM station licensed for transmitter power output of 10 watts or less, although not required to meet all requirements of §73.317, must be constructed with the safety provisions of the current national electrical code as approved by the American Standards Association. These stations must be operated, tuned, and adjusted so that emissions are not radiated outside the authorized band causing or which are capable of causing interference to the communications of other stations. The audio distortion, audio frequency range, carrier hum, noise level, and other essential phases

of the operation which control the external effects, must be at all times capable of providing satisfactory broadcast service. Studio equipment properly covered by an underwriter's certificate will be considered as satisfying safety requirements.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[28 FR 13651, Dec. 14, 1963. Redesignated at 42 FR 36828, July 18, 1977, and amended at 43 FR 53738, Nov. 17, 1978; 45 FR 28141, Apr. 28, 1980]

### § 73.509 Prohibited overlap.

(a) An application for a new or modified NCE–FM station other than a Class D (secondary) station will not be accepted if the proposed operation would involve overlap of signal strength contours with any other station licensed by the Commission and operating in the reserved band (Channels 200–220, inclusive) as set forth below:

| Frequency separation | Contour of proposed station | Contour of other station |
|---|---|---|
| Co-channel .... | 0.1mV/m (40 dBu) ... | 1 mV/m (60 dBu). |
| | 1 mV/m (60 dBu) ..... | 0.1 mV/m (40 dBu). |
| 200 kHz ..... | 0.5 mV/m (54 dBu) .. | 1 mV/m (60 dBu). |
| | 1 mV/m (60 dBu) ..... | 0.5 mV/m (54 dBu). |
| 400 kHz ..... | 10 mV/m (80 dBu) ... | 1 mV/m (60 dBu). |
| | 1 mV/m (60 dBu) ..... | 10 mV/m (80 dBu). |
| 600 kHz ..... | 100 mV/m (100 dBu) | 1 mV/m (60 dBu). |
| | 1 mV/m (60 dBu) ..... | 100 mV/m (100 dBu). |

(b) An application by a Class D (secondary) station, other than an application to change class, will not be accepted if the proposed operation would involve overlap of signal strength contours with any other station as set forth below:

| Frequency separation | Contour of proposed station | Contour of any other station |
|---|---|---|
| Co-channel .... | 0.1 mV/m (40 dBu) .. | 1 mV/m (60 dBu). |
| 200 kHz ..... | 0.5 mV/m (54 dBu) .. | 1 mV/m (60 dBu). |
| 400 kHz ..... | 10 mV/m (80 dBu) ... | 1 mV/m (60 dBu). |
| 600 kHz ..... | 100 mV/m (100 dBu) | 1 mV/m (60 dBu). |

(c) The following standards must be used to compute the distances to the pertinent contours:

(1) The distance of the 60 dBu (1 mV/m) contours are to be computed using Figure 1 of §73.333 [F(50,50) curves] of this part.

(2) The distance to the other contours are to be computed using Figure 1a of §73.333 [F(50,10) curves]. In the event that the distance to the contour is below 16 kilometers (approximately 10 miles), and therefore not covered by Figure 1a, curves in Figure 1 must be used.

(3) The effective radiated power (ERP) that is the maximum ERP for any elevation plane on any bearing will be used.

(d) An application for a change (other than a change in channel) in the facilities of a NCE–FM broadcast station will be accepted even though overlap of signal strength contours, as specified in paragraphs (a) and (b) of this section, would occur with another station in an area where such overlap does not already exists, if:

(1) The total area of overlap with that station would not be increased;

(2) The area of overlap with any other station would not increase;

(3) The area of overlap does not move significantly closer to the station receiving the overlap; and,

(4) No area of overlap would be created with any station with which the overlap does not now exist.

(e) The provisions of this section concerning prohibited overlap will not apply where the area of such overlap lies entirely over water.

[50 FR 27962, July 9, 1985, as amended at 52 FR 43765, Nov. 16, 1987]

### § 73.510 Antenna systems.

(a) All noncommercial educational stations operating with more than 10 watts transmitter output power shall be subject to the provisions of §73.316 concerning antenna systems contained in subpart B of this part.

(b) *Directional antenna.* No application for a construction permit of a new station, or change in channel, or change in an existing facility on the same channel will be accepted for filing if a directional antenna with a maximum-to-minimum ratio of more than 15 dB is proposed.

[42 FR 36829, July 18, 1977]

### § 73.511 Power and antenna height requirements.

(a) No new noncommercial educational station will be authorized with less power than minimum power

requirements for commercial Class A facilities. (See §73.211.)

(b) No new noncommercial educational FM station will be authorized with facilities greater than Class B in Zones I and I–A or Class C in Zone II, as defined in §73.211.

(c) Stations licensed before December 31, 1984, and operating above 50 kW in Zones I and I–A, and above 100 kW and in Zone II may continue to operate as authorized.

[50 FR 27963, July 9, 1985, as amended at 50 FR 31379, Aug. 2, 1985; 54 FR 3602, Jan. 25, 1989]

### §73.512 Special procedures applicable to Class D noncommercial educational stations.

(a) All Class D stations seeking renewal of license for any term expiring June 1, 1980, or thereafter shall comply with the requirements set forth below and shall simultaneously file an application on FCC Form 340, containing full information regarding such compliance with the provisions set forth below.

(1) To the extent possible, each applicant shall select a commercial FM channel on which it proposes to operate in lieu of the station's present channel. The station may select any commercial channel provided no objectionable interference, as set forth in §73.509(b), would be caused. The application shall include the same engineering information as is required to change the frequency of an existing station and any other information necessary to establish the fact that objectionable interference would not result. If no commerical channel is available where the station could operate without causing such interference, the application shall set forth the basis upon which this conclusion was reached.

(2) If a commercial channel is unavailable, to the extent possible each applicant should propose operation on Channel 200 (87.9 MHz) unless the station would be within 402 kilometers (250 miles) of the Canadian border or 320 kilometers (199 miles) of the Mexican border or would cause interference to an FM station operating on Channels 201, 202, or 203 or to TV Channel 6, as provided in §73.509.

(3) If a channel is not available under either paragraph (a) (1) or (2) of this section, the renewal applicant shall study all 20 noncommercial educational FM channels and shall propose operation on the channel which would cause the least preclusion to the establishment of new stations or increases in power by existing stations. Full information regarding the basis for the selection should be provided.

(b) At any time before the requirements of paragraph (a) become effective, any existing Class D station may file a construction permit application on FCC Form 340 to change channel in the manner described above which shall be subject to the same requirements. In either case, any license granted shall specify that the station's license is for a Class D (secondary) station.

(c) Except in Alaska, no new Class D applications nor major change applications by existing Class D stations are acceptable for filing except by existing Class D stations seeking to change frequency. Upon the grant of such application, the station shall become a Class D (secondary) station.

(d) Class D noncommercial educational (secondary) stations (see §73.506(a)(2)) will be permitted to continue to operate only so long as no interference (as defined in §73.509) is caused to any TV or commercial FM broadcast stations. In the event that the Class D (secondary) station would cause interference to a TV or commercial FM broadcast station after that Class D (secondary) station is authorized, the Class D (secondary) station must cease operation when program tests for the TV or commercial FM broadcast station commence. The Class D (secondary) station may apply for a construction permit (see §73.3533) to change to another frequency or antenna site where it would not cause interference (as defined in §73.509). If the Class D (secondary) station must cease operation before the construction permit is granted, an application for temporary authorization (pursuant to §73.3542) to operate with the proposed

facilities may be submitted; where appropriate, such temporary authorization can be granted.

[43 FR 39716, Sept. 6, 1978, as amended at 44 FR 48226, Aug. 17, 1979; 47 FR 28388, June 30, 1982; 50 FR 8326, Mar. 1, 1985]

### § 73.513 Noncommercial educational FM stations operating on unreserved channels.

Noncommercial educational FM stations other than Class D (secondary) which operate on Channels 221 through 300 but which comply with § 73.503 as to licensing requirements and the nature of the service rendered, must comply with the provisions of the following sections of subpart B: §§ 73.201 through 73.213 (Classification of FM Broadcast Stations and Allocations of Frequencies) and such other sections of subpart B as are made specially applicable by the provisions of this subpart C. Stations in Alaska authorized before August 11, 1982, using Channels 261–300 need not meet the minimum effective radiated power requirement specified in § 73.211(a). In all other respects, stations operating on Channels 221 through 300 are to be governed by the provisions of this subpart and not subpart B.

[47 FR 30068, July 12, 1982]

### § 73.525 TV Channel 6 protection.

The provisions of this section apply to all applications for construction permits for new or modified facilities for a NCE–FM station on Channels 200–220 unless the application is accompanied by a written agreement between the NCE–FM applicant and each affected TV Channel 6 broadcast station concurring with the proposed NCE–FM facilities.

(a) *Affected TV Channel 6 Station.* (1) An affected TV Channel 6 station is a TV broadcast station which is authorized to operate on Channel 6 that is located within the following distances of a NCE–FM station operating on Channels 201–220:

TABLE A

| NCE–FM channel | Distance (kilometers) | NCE–FM channel | Distance (kilometers) |
|---|---|---|---|
| 201 | 265 | 211 | 196 |
| 202 | 257 | 212 | 195 |
| 203 | 246 | 213 | 193 |
| 204 | 235 | 214 | 187 |
| 205 | 225 | 215 | 180 |
| 206 | 211 | 216 | 177 |
| 207 | 196 | 217 | 174 |
| 208 | 196 | 218 | 166 |
| 209 | 196 | 219 | 159 |
| 210 | 196 | 220 | 154 |

(2) Where a NCE–FM application has been accepted for filing or granted, the subsequent acceptance of an application filed by a relevant TV Channel 6 station will not require revision of the pending NCE–FM application or the FM station's authorized facilities, unless the provisions of paragraph (e)(3) of this section for TV translator or satellite stations apply.

(b) *Existing NCE–FM Stations.* (1) A NCE–FM station license authorized to operate on channels 201–220 as of December 31, 1984, or a permittee, granted a construction permit for a NCE–FM station as of December 31, 1984, are not subject to this section unless they propose either:

(i) To make changes in operating facilities or location which will increase predicted interference as calculated under paragraph (e) of this section to TV Channel 6 reception in any direction; or,

(ii) To increase its ratio of vertically polarized to horizontally polarized transmissions.

(2) Applicants must comply with the provision of paragraphs (c) or (d) of this section unless the application for modification demonstrates that, for each person predicted to receive new interference as a result of the change, existing predicted interference to two person will be eliminated. Persons predicted to receive new interference are those located outside the area predicted to receive interference from the station's currently authorized facilities (''existing predicted interference area'') but within the area predicted to receive interference from the proposed facilities (''proposed predicted interference area''). Persons for whom predicted interference will be eliminated are those located within the existing predicted interference area and outside

the proposed predicted interference area.

(i) In making this calculation, the provisions contained at paragraph (e) will be used except as modified by paragraph (b)(3) of this section.

(ii) The following adjustment to the population calculation may be made: up to 1,000 persons may be subtracted from the population predicted to receive new interference if, for each person substracted, the applicant effectively installs two filters within 90 days after commencing program tests with the proposed facilities and, no later than 45 days thereafter, provides the affected TV Channel 6 station (as defined in paragraph (a) of this section) with a certification containing sufficient information to permit verification of such installation. The required number of filters will be installed on television receivers located within the predicted interference area; provided that half of the installations are within the area predicted to receive new interference.

(3) Where an NCE–FM applicant wishes to operate with facilities in excess of that permitted under the provisions of paragraphs (c) or (d) of this section, by proposing to use vertically polarized transmissions only, or to increase its ratio of vertically to horizontally polarized transmissions, the affected TV Channel 6 station must be given an option to pay for the required antenna and, if it takes that option, the NCE–FM vertically polarized component of power will be one half (−3 dB) that which would be allowed by the provisions of paragraph (e)(4) of this section.

(4) Applications for modification will include a certification that the applicant has given early written notice of the proposed modification to all affected TV Channel 6 stations (as defined in paragraph (a) of this section).

(5) Where the NCE–FM station demonstrates in its application that it must make an involuntary modification (*e.g.*, due to loss of its transmitter site) that would not otherwise be permitted under this section, its application will be considered on a case-by-case basis. In such cases, the provisions of paragaph (b)(3) of this section do not apply.

(c) *New NCE–FM stations.* Except as provided for by paragraph (d) of this section, applicants for NCE–FM stations proposing to operate on Channels 201–220 must submit a showing indicating that the predicted interference area resulting from the proposed facility contains no more than 3,000 persons.

(1) In making these calculations, the provisions in paragraph (e) of this section will be used.

(2) The following adjustment to population may be made: up to 1,000 persons may be subtracted from the population within the predicted interference area if, for each person subtracted, the applicant effectively installs one filter within 90 days after commencing program tests and, no later than 45 days thereafter, provides the affected TV Channel 6 station with a certification containing sufficient information to permit verification of such installation. The required number of filters will be installed on television receivers located within the predicted interference area.

(d) *Collocated Stations.* As an alternative to the provisions contained in paragraphs (b) and (c) of this section, an application for a NCE–FM station operating on Channels 201–220 and located at 0.4 kilometer (approximately 0.25 mile) or less from a TV Channel 6 station will be accepted under the following requirements:

(1) The effective radiated power cannot exceed the following values:

TABLE B

| NCE–FM channel | Power (kilowatt) | NCE–FM channel | Power (kilowatt) |
|---|---|---|---|
| 201 | 1.1 | 211 | 26.3 |
| 202 | 1.9 | 212 | 31.6 |
| 203 | 3.1 | 213 | 38.0 |
| 204 | 5.0 | 214 | 46.8 |
| 205 | 8.3 | 215 | 56.2 |
| 206 | 10.0 | 216 | 67.6 |
| 207 | 12.0 | 217 | 83.2 |
| 208 | 14.8 | 218 | 100.0 |
| 209 | 17.8 | 219 | 100.0 |
| 210 | 21.4 | 220 | 100.0 |

(2) The NCE–FM application will include a certification that the applicant has coordinated its antenna with the affected TV station by employing either: The same number of antenna bays with radiation centers separated by no more than 30 meters (approximately 100 feet) vertically; or, the FM vertical

pattern not exceeding the TV vertical pattern by more than 2dB.

(e) *Calculation of predicted interference area and population.* Predictions of interference required under this section and calculations to determine the number of persons within a predicted interference area for NCE–FM operation on Channels 201–220 are made as follows:

(1) The predicted interference area will be calculated as follows:

(i) The distances to the TV Channel 6 field strength contours will be predicted according to the procedures specified in §73.684, ''Prediction of coverage,'' using the F(50,50) curves in Figure 9, §73.699.

(ii) For each TV Channel 6 field strength contour, there will be an associated F(50,10) FM interference contour, the value of which (in units of dBu) is defined as the sum of the TV Channel 6 field strength (in dBu) and the appropriate undesired-to-desired (U/D) signal ratio (in dB) obtained from Figures 1 and 2, §73.599, corresponding to the channel of the NCE–FM applicant and the appropriate F(50,50) field strength contour of the TV Channel 6 station.

(iii) An adjustment of 6 dB for television receiving antenna directivity will be added to each NCE–FM interference contour at all points outside the Grade A field strength contour (§73.683) of the TV Channel 6 station and within an arc defined by the range of angles, of which the FM transmitter site is the vertex, from 110° relative to the azimuth from the FM transmitter site to the TV Channel 6 transmitter site, counterclockwise to 250° relative to that azimuth. At all points at and within the Grade A field strength contour of the TV Channel 6 station, the 6 dB adjustment is applicable over the range of angles from 70° clockwise to 110° and from 250° clockwise to 290°.

(iv) The distances to the applicable NCE–FM interference contours will be predicted according to the procedures specified in §73.313, ''Prediction of Coverage,'' using the proposed antenna height and horizontally polarized, or the horizontal equivalent of the vertically polarized, effective radiated power in the pertinent direction and the F(50,10) field strength curves (Figure 1a, §73.333).

(v) The predicted interference area will be defined as the area within the TV Channel 6 station's 47 dBu field strength contour that is bounded by the locus of intersections of a series of TV Channel 6 field strength contours and the applicable NCE–FM interference contours.

(vi) In cases where the terrain in one or more directions departs widely from the surrounding terrain average (for example, an intervening mountain), a supplemental showing may be made. Such supplemental showings must describe the procedure used and should include sample calculations. The application must also include maps indicating the predicted interference area for both the regular method and the supplemental method.

(vii) In cases where the predicted interference area to Channel 6 television from a noncommercial educational FM station will be located within the 90 dBu F(50,50) contour of the television Channel 6 station, the location of the FM interfering contour must be determined using the assumption that the Channel 6 field strength remains constant at 90 dBu everywhere within the 90 dBu TV contour. The FM to Channel 6 U/D signal strength ratio specified in §73.599 corresponding to the Channel 6 TV field strength of 90 dBu shall be used.

(2) The number of persons contained within the predicted interference area will be based on data contained in the most recently published U.S. Census of Population and will be determined by plotting the predicted interference area on a County Subdivision Map of the state published for the Census, and totalling the number of persons in each County Subdivision (such as, Minor Civil Division (MCD), Census County Division (CCD), or equivalent areas) contained within the predicted interference area. Where only a portion of County Subdivision is contained within the interference area:

(i) The population of all incorporated places or Census designated places will be subtracted from the County Subdivision population;

(ii) Uniform distribution of the remaining population over the remaining area of the County Subdivision will be assumed in determining the number of

persons within the predicted interference area in proportion to the share of the remaining area of the County Subdivision that lies within the predicted interference area; and,

(iii) The population of the incorporated places or Census designated places contained within the predicted interference area will then be added to the total, again assuming uniform distribution of the population within the area of each place and adding a share of the population proportional to the share of the area if only a portion of such a place is within the predicted interference area.

(iv) At the option of either the NCE–FM applicant or an affected TV Channel 6 station which provides the appropriate analysis, more detailed population data may be used.

(3) Adjustments to the population calculated pursuant to paragraph (e)(2) of this section may be made as follows:

(i) If any part of the predicted interference area is within the Grade A field strength contour (§ 73.683) of a TV translator station carrying the affected TV Channel 6 station, the number of persons within that overlap area will be subtracted, provided the NCE–FM construction permit and license will contain the following conditions:

(A) When the TV translator station ceases to carry the affected TV Channel 6 station's service and the cessation is not the choice of the affected TV Channel 6 station, the NCE–FM station will modify its facilities, within a reasonable transition period, to meet the requirements of this section which would have applied if no adjustment to population for translator service had been made in its application.

(B) The transition period may not exceed 1 year from the date the NCE–FM station is notified by the TV Channel 6 station that the translator station will cease to carry the affected TV Channel 6 station's service or 6 months after the translator station ceases to carry the affected TV Channel 6 station's service, whichever is earlier.

(ii) If any part of the interference area is within the Grade B field strength contour (§ 73.683) of a satellite station of the affected TV Channel 6 station, the number of persons within the overlap area will be subtracted, provided the NCE–FM permit and license will contain the following conditions:

(A) If the satellite station ceases to carry the affected TV Channel 6 station's service and the cessation is not the choice of the affected TV Channel 6 station, the NCE–FM station will modify its facilities, within a reasonable transition period, to meet the requirements of this rule which would have applied if no adjustment to population for satellite station service had been made in its application.

(B) The transition period may not exceed 1 year from the date the NCE–FM station is notified by the TV Channel 6 station that the satellite station will cease to carry the affected TV Channel 6 stations's service or 6 months after the satellite station ceases to carry the affected TV Channel 6 station's service, whichever is earlier.

(iii) If any part of the predicted interference area is located outside the affected TV Channel 6 station's Area of Dominant Influence (ADI), outside the Grade A field strength contour (§ 73.683), and within the predicted city grade field strength contour (73.685(a)) of a TV broadcast station whose only network affiliation is the same as the only network affiliation of the affected TV Channel 6 station, the number of persons within that part will be subtracted. (For purposes of this provision, a network is defined as ABC, CBS, NBC, or their successors.) In addition, the ADI of an affected TV Channel 6 station and the program network affiliations of all relevant TV broadcast stations will be assumed to be as they were on the filing date of the NCE–FM application or June 1, 1985, whichever is later.

(iv) In calculating the population within the predicted interference area, an exception will be permitted upon a showing (*e.g.*, as survey of actual television reception) that the number of persons within the predicted interference area should be reduced to account for persons actually experiencing co-channel or adjacent channel interference to reception of the affected TV Channel 6 station. The area within which such a showing may be made will be limited to the area calculated as follows:

(A) The distances to the field strength contours of the affected TV Channel 6 station will be predicted according to the procedures specified in §73.684, ''Prediction of coverage,'' using the F(50,50) curves in Figure 9, §73.699.

(B) For each field strength contour of the affected TV Channel 6 station, there will be an associated co-channel or adjacent channel TV broadcast station interference contour, the value of which (in units of dBu) is defined as the sum of the affected TV Channel 6 station's field strength (in dBu) and the appropriate undesired-to-desired signal ratio (in dB) as follows:

Co-channel, normal offset, −22 dB
Co-channel, no offset, −39 dB
Adjacent channel, +12 dB

(C) The distances to the associated co-channel or adjacent channel TV broadcast station interference contour will be predicted according to the procedures specified in §73.684, ''Prediction of coverage,'' using the F(50,10) curves in Figure 9a, §73.699.

(D) The area within which the showing of actual interference may be made will be the area bounded by the locus of intersections of a series of the affected TV Channel 6 station's field strength contours and the associated interference contours of the co-channel or adjacent channel TV broadcast station.

(4) The maximum permissible effective radiated power (ERP) and antenna height may be adjusted for vertical polarity as follows:

(i) If the applicant chooses to use vertically polarized transmissions only, the maximum permissible vertically polarized ERP will be the maximum horizontally polarized ERP permissible at the same proposed antenna height, calculated without the adjustment for television receiving antenna directivity specified in paragraph (e)(1)(iii) of this section, multiplied by either: 40 if the predicted interference area lies entirely outside the limits of a city of 50,000 persons or more; or 10 if it does not.

(ii) If the applicant chooses to use mixed polarity, the permissible ERP is as follows:

[H+(V/A)] is no greater than P
Where:
H is the horizontally polarized ERP in kilowatts for mixed polarity;
V is the vertically polarized ERP in kilowatts for mixed polarity;
A is 40 if the predicted interference area lies entirely outside the limits of a city of 50,000 persons or more, or 10 if it does not; and
P is the maximum permitted horizontally polarized-only power in kilowatts.

(f) *Channel 200 Applications.* No application for use of NCE–FM Channel 200 will be accepted if the requested facility would cause objectionable interference to TV Channel 6 operations. Such objectionable interference will be considered to exist whenever the 15 dBu contour based on the F(50,10) curves in §73.333 Figure 1a would overlap the 40 dBu contour based on the F(50,50) curves in §73.699, Figure 9.

[50 FR 27963, July 9, 1985; 50 FR 30187, July 24, 1985; 50 FR 31379, Aug. 2, 1985, as amended at 51 FR 26250, July 22, 1986; 52 FR 25867, July 9, 1987; 62 FR 51059, Sept. 30, 1997]

### §73.558 Indicating instruments.

The requirements for indicating instruments described in §73.258 are applicable to all educational FM broadcast stations licensed with a transmitter power greater than 0.01 kw.

[51 FR 17029, May 8, 1986]

### §73.561 Operating schedule; time sharing.

(a) All noncommercial educational FM stations will be licensed for unlimited time operation except those stations operating under a time sharing arrangement. All noncommercial educational FM stations are required to operate at least 36 hours per week, consisting of at least 5 hours of operation per day on at least 6 days of the week; however, stations licensed to educational institutions are not required to operate on Saturday or Sunday or to observe the minimum operating requirements during those days designated on the official school calendar as vacation or recess periods.

(b) All stations, including those meeting the requirements of paragraph (a) of this section, but which do not operate 12 hours per day each day of the year, will be required to share use of the frequency upon the grant of an appropriate application proposing such share time arrangement. Such applications shall set forth the intent to share

time and shall be filed in the same manner as are applications for new stations. They may be filed at any time, but in cases where the parties are unable to agree on time sharing, action on the application will be taken only in connection with the renewal of application for the existing station. In order to be considered for this purpose, such an application to share time must be filed no later than the deadline for filing petitions to deny the renewal application of the existing licensee, or, in the case of renewal applications filed by the existing licensee on or before May 1, 1995, no later than the deadline for filing applications in conflict with the such renewal applications.

(1) The licensee and the prospective licensee(s) shall endeavor to reach an agreement for a definite schedule of periods of time to be used by each. Such agreement shall be in writing and shall set forth which licensee is to operate on each of the hours of the day throughout the year. Such agreement shall not include simultaneous operation of the stations. Each licensee shall file the same in triplicate with each application to the Commission for initial construction permit or renewal of license. Such written agreements shall become part of the terms of each station's license.

(2) The Commission desires to facilitate the reaching of agreements on time sharing. However, if the licensees of stations authorized to share time are unable to agree on a division of time, the Commission shall be so notified by statement to that effect filed with the application proposing time sharing. Thereafter the Commission will designate the application for hearing on any qualification issues arising regarding the renewal or new applicants. If no such issues pertain, the Commission will set the matter for expedited hearing limited solely to the issue of the sharing of time. In the event the stations have been operating under a time sharing agreement but cannot agree on its continuation, a hearing will be held, and pending such hearing, the operating schedule previously adhered to shall remain in full force and effect.

(c) A departure from the regular schedule set forth in a time-sharing agreement will be permitted only in cases where a written agreement to that effect is reduced to writing, is signed by the licensees of the stations affected thereby, and is filed in triplicate by each licensee with the Commission, Attention: Audio Services Division, Mass Media Bureau, prior to the time of the proposed change. If time is of the essence, the actual departure in operating schedule may precede the actual filing of the written agreement, provided that appropriate notice is sent to the Commission in Washington, DC, Attention: Audio Services Division, Mass Media Bureau.

(d) In the event that causes beyond the control of a permittee or licensee make it impossible to adhere to the operating schedule in paragraphs (a) or (b) of this section or to continue operating, the station may limit or discontinue operation for a period not exceeding 30 days without further authority from the Commission, *Provided,* That notification is sent to the Commission in Washington, DC, Attention: Audio Services Division, Mass Media Bureau, no later than the 10th day of limited or discontinued operation. During such period, the permittee shall continue to adhere to the requirements of the station license pertaining to the lighting of antenna structures. In the event normal operation is restored prior to the expiration of the 30 day period, the permittee or licensee will notify the FCC, Attention: Audio Services Division of the date that normal operations resumed. If causes beyond the control of the permittee or licensee make it impossible to comply within the allowed period, Special Temporary Authority (*see* Section 73.1635) must be requested to remain silent for such additional time as deemed necessary. The license of a broadcasting station that fails to transmit broadcast signals for any consecutive 12 month period expires as a matter of law at the end of that period, notwithstanding any provision, term, or condition of license to the contrary.

NOTE 1: For allocations purposes, both (all) stations sharing time will be treated as unlimited time stations.

NOTE 2: See §§ 73.1705, 73.1715, and 73.1740.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[43 FR 39717, Sept. 6, 1978, as amended at 43 FR 45845, Oct. 4, 1978; 44 FR 3416, Jan. 19, 1979; 44 FR 65764, Nov. 15, 1979; 47 FR 54448, Dec. 3, 1982; 50 FR 13974, Apr. 9, 1985; 61 FR 18291, Apr. 25, 1996; 61 FR 28767, June 6, 1996; 63 FR 33877, June 22, 1998]

### § 73.567 Determining operating power.

The procedures for determining operating power described in § 73.267 are applicable to noncommercial education FM stations.

[44 FR 58732, Oct. 11, 1979]

### § 73.593 Subsidiary communications services.

The licensee of a noncommercial educational FM station is not required to use its subcarrier capacity, but if it chooses to do so, it is governed by §§ 73.293 through 73.295 of the Commission's Rules regarding the types of permissible subcarrier uses and the manner in which subcarrier operations shall be conducted; *Provided*, however, that remunerative use of a station's subcarrier capacity shall not be detrimental to the provision of existing or potential radio reading services for the blind or otherwise inconsistent with its public broadcasting responsibilities.

[48 FR 26615, June 9, 1983]

### § 73.597 FM stereophonic sound broadcasting.

A noncommercial educational FM broadcast station may, without specific authority from the FCC, transmit stereophonic sound programs upon installation of stereophonic sound transmitting equipment under the provisions of §§ 2.977, 2.1001, 73.322, and 73.1590 of the FCC's Rules.

[51 FR 17029, May 8, 1986]

### § 73.599 NCE–FM engineering charts.

This section consists of the following Figures 1 and 2.

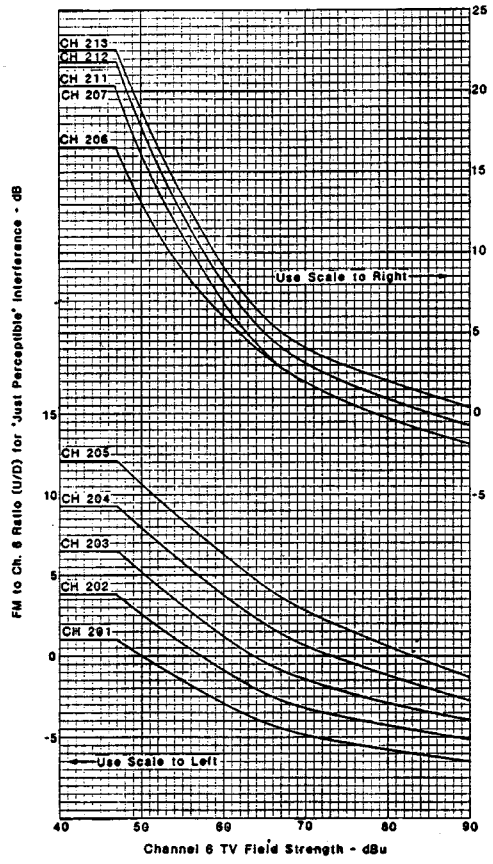



Figure 1
FM/TV 6 PROTECTION RATIOS
BASED ON MEDIAN RECEIVERS
CHANNELS 201-213

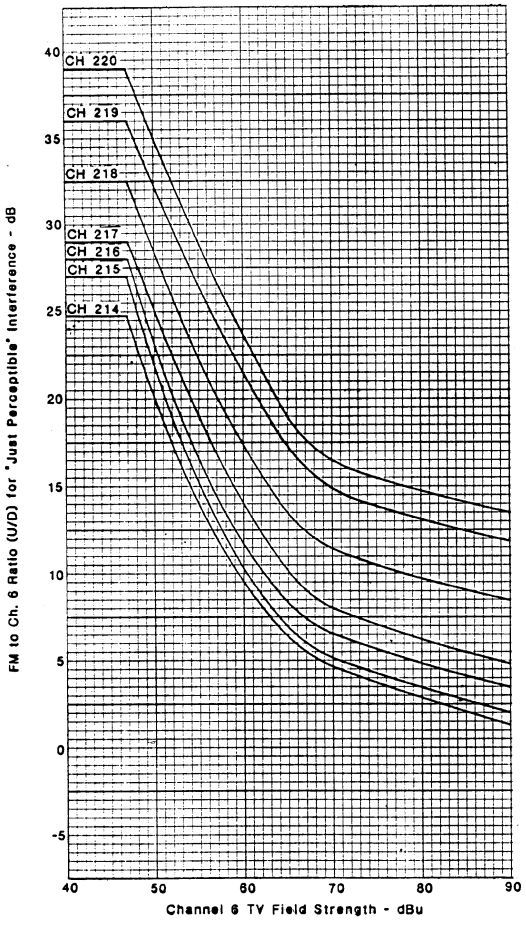



Figure 2
FM/TV 6 PROTECTION RATIOS
BASED ON MEDIAN RECEIVERS
CHANNELS 214-220

[50 FR 27965, July 9, 1985]

## Subpart D [Reserved]

## Subpart E—Television Broadcast Stations

### § 73.601 Scope of subpart.

This subpart contains the rules and regulations (including engineering standards) governing TV broadcast stations, including noncommercial educational TV broadcast stations and, where indicated, low power TV and TV translator stations in the United States, its Territories and possessions. TV broadcast, low power TV, and TV translator stations are assigned channels 6 MHz wide, designated as set forth in § 73.603(a).

[47 FR 21494, May 18, 1982]

### § 73.602 Cross reference to rules in other parts.

See § 73.1010.

[43 FR 32781, July 28, 1978]

### § 73.603 Numerical designation of television channels.

(a)

| Channel No. | Frequency band (MHz) |
|---|---|
| 2 | 54–60 |
| 3 | 60–66 |
| 4 | 66–72 |
| 5 | 76–82 |
| 6 | 82–88 |
| 7 | 174–180 |
| 8 | 180–186 |
| 9 | 186–192 |
| 10 | 192–198 |
| 11 | 198–204 |
| 12 | 204–210 |
| 13 | 210–216 |
| 14 | 470–476 |
| 15 | 476–482 |
| 16 | 482–488 |
| 17 | 488–494 |
| 18 | 494–500 |
| 19 | 500–506 |
| 20 | 506–512 |
| 21 | 512–518 |
| 22 | 518–524 |
| 23 | 524–530 |
| 24 | 530–536 |
| 25 | 536–542 |
| 26 | 542–548 |
| 27 | 548–554 |
| 28 | 554–560 |
| 29 | 560–566 |
| 30 | 566–572 |
| 31 | 572–578 |
| 32 | 578–584 |
| 33 | 584–590 |
| 34 | 590–596 |
| 35 | 596–602 |
| 36 | 602–608 |
| 37 | 608–614 |
| 38 | 614–620 |
| 39 | 620–626 |
| 40 | 626–632 |
| 41 | 632–638 |
| 42 | 638–644 |
| 43 | 644–650 |
| 44 | 650–656 |
| 45 | 656–662 |
| 46 | 662–668 |
| 47 | 668–674 |
| 48 | 674–680 |
| 49 | 680–686 |
| 50 | 686–692 |
| 51 | 692–698 |
| 52 | 698–704 |
| 53 | 704–710 |
| 54 | 710–716 |
| 55 | 716–722 |
| 56 | 722–728 |
| 57 | 728–734 |
| 58 | 734–740 |
| 59 | 740–746 |
| 60 | 746–752 |
| 61 | 752–758 |
| 62 | 758–764 |
| 63 | 764–770 |
| 64 | 770–776 |
| 65 | 776–782 |
| 66 | 782–788 |
| 67 | 788–794 |
| 68 | 794–800 |
| 69 | 800–806 |

(b) In Alaska, television broadcast stations operating on Channel 5 (76–82 MHz) and on Channel 6 (82–88 MHz) shall not cause harmful interference to and must accept interference from non-Government fixed operations authorized prior to January 1, 1982.

(c) Channel 37, 608–614 MHz is reserved exclusively for the radio astronomy service.

(d) In Hawaii, the frequency band 488–494 MHz is allocated for non-broadcast use. This frequency band (Channel 17) will not be assigned in Hawaii for use by television broadcast stations.

[28 FR 13660, Dec. 14, 1963, as amended at 35 FR 11179, July 11, 1970; 39 FR 10576, Mar. 21, 1974; 47 FR 16789, Apr. 20, 1982; 47 FR 30068, July 12, 1982; 47 FR 35989, Aug. 18, 1982; 51 FR 18450, May 20, 1986]

### § 73.606 Table of allotments.

(a) *General.* The following table of allotments contains the channels designated for the listed communities in the United States, its Territories, and possessions. Channels designated with

an asterisk are assigned for use by noncommercial educational broadcast stations only. A station on a channel identified by a plus or minus mark is required to operate with its carrier frequencies offset 10 kHz above or below, respectively, the nominal carrier frequencies.

(b) *Table of Allotments.*

ALABAMA

| | Channel No. |
|---|---|
| Anniston | 40- |
| Arab | 56- |
| Bessemer | 17 |
| Birmingham | 6-, *10-, 13-, 21-, 42+, *62+, 68- |
| Decatur. | |
| Demopolis | *41 |
| Dothan | 4, 18, *39+, 60- |
| Dozier | *2- |
| Florence | 15, 26, *36- |
| Gadsden | 44+, 60 |
| Gulf Shores | 55 |
| Huntsville | 19, *25+, 31+, 48- |
| Huntsville-Decatur | 54 |
| Louisville | *43+ |
| Mobile | 5+, 10+, 15+, 21+, *31, *42, and 61 |
| Montgomery | 12, 20, *26+, 32, 45-, *63 |
| Mount Cheaha | *7- |
| Munford | *16- |
| Opelika | 50, 66 |
| Ozark | 34 |
| Selma | 8, 29- |
| Troy | 67 |
| Tuscaloosa | 23-, 33, *39- |
| Tuscumbia | 52+ |
| Tuskegee | 22- |

ALASKA

| | Channel No. |
|---|---|
| Anchorage | 2-, 4-, 5, *7-, *9, 11, 13-, and 33 |
| Bethel | *4 |
| Dillingham | *2, 10 |
| Fairbanks | 2+, 7+, *9+, 11+, 13+ |
| Juneau | *3, 8, 10 |
| Ketchikan | 2, 4, *9 |
| North Pole | 4+ |
| Seward | 3-, |
| Sitka | 13 |

ARIZONA

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Ajo | *23- |
| Coolidge | *43 |
| Douglas | 3, *28 |
| Flagstaff | 2, 4+, 9, 13, and *16 |
| Globe | *14+ |
| Green Valley | 46 |
| Holbrook | 11+, *18+ |
| Kingman | 6-, *14- |
| Lake Havasu City | 34+ |
| McNary | *22+ |
| Mesa | 12- |
| Nogales | *16+ |
| Page | *17 |

ARIZONA—Continued

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Parker | *17- |
| Phoenix | 3+, 5-, *8+, 10-, 15-, 21, 33, *39, 45, 61 |
| Prescott | 7, *19 |
| Safford | *23+ |
| Sierra Vista | 58 |
| Tolleson | 51 |
| Tucson | 4-, *6+, 9-, 13-, 18-, *27-, 40 |
| Tucson-Nogales | [2] 11 |
| Yuma | 11-, 13+, *16- |

ARKANSAS

| | Channel No. |
|---|---|
| Arkadelphia | *9+ |
| Camden | 237A, 246 |
| Cimarron | 23 |
| El Dorado | 10-, *30+, 43-, and 49- |
| Eureka Springs | 34+ |
| Fayetteville | *13-, 36 |
| Fort Smith | 5-, 24+, 40- |
| Gosnell | 46 |
| Harrison | 31+ |
| Hot Springs | *20, 26 |
| Jonesboro | 8-, *19+, 48+ |
| Little Rock | *2-, 4, 7-, 11, 16-, *36, and 42 |
| Mountain Home | 43+ |
| Mountain View | *6- |
| Newark | *17 |
| Pine Bluff | 25-, 38- |
| Rogers | 51- |
| Russellville | *28+ |
| Springdale | 57 |

CALIFORNIA

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Alturas | 13+ |
| Anaheim | 56- |
| Arcata | 23 |
| Avalon | 54 |
| Bakersfield | 17, 23-, 29, *39-, 45, 65+ |
| Barstow | *35+, 64 |
| Big Bear Lake | 59+ |
| Bishop | *14-, 20+ |
| Blythe | *22- |
| Brawley | *26 |
| Calipatria | 54 |
| Ceres | *23+ |
| Chico | 12-, *18, 24+, *46- |
| Clovis | 43 |
| Coalinga | *27- |
| Concord | 42 |
| Corona | 52 |
| Cotati | *22- |
| El Centro | 7+, 9+ |
| Eureka | 3-, 6-, *13-, and 29 |
| Fort Bragg | 8- |
| Fresno | *18+, 24, 30+, 47, 53, |
| Hanford | 21 |
| Huntington Beach | *50- |
| Indio | *19+ |
| Long Beach | 18- |
| Los Angeles | 2, 4, 5, 7, 9, 11, 13, 22, *28, 34, *58-, *68- |
| Merced | 51 |

### CALIFORNIA—Continued

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Modesto | 19- |
| Novato | 68 |
| Oakland | 2+ |
| Ontario | 46 |
| Oroville | 28 |
| Oxnard | 63+ |
| Palm Springs | 36-, 42 |
| Paradise | 30 |
| Porterville | 61 |
| Rancho Palos Verdes | 44+ |
| Redding | 7, *9, 16 |
| Ridgecrest | *25 |
| Riverside | 62 |
| Sacramento | 3, *6, 10, 29-, 31-, 40-, *52 |
| Salinas-Monterey | 8+, 35-, 46-, *56, 67- |
| San Bernardino | *24-, 30 |
| San Diego | 8, 10, *15, 39, 51, 69 |
| San Francisco | 4-, 5+, 7-, *9+, 14+, 20-, 26-, *32+, 38, 44- |
| San Jose | 11+, 36, 48-, *54, 65 |
| San Luis Obispo | 6+, *15+, and 33 |
| San Mateo | *60 |
| Sanger | 59 |
| Santa Anna | 40, |
| Santa Barbara | 3-, 14,1 *20,1 , 38, and *55 |
| Santa Cruz | *16- |
| Santa Maria | 12+, 42+ |
| Santa Rosa | 50-, *62 |
| Stockton | 13+, 58, 64 |
| Susanville | *14 |
| Twentynine Palms | 31 |
| Vallejo-Fairfield | 66 |
| Ventura | 57 |
| Visalia | 26+, *49 |
| Watsonville | *25+ |
| Weaverville | 32 |
| Willits | 11- |
| Yosemite Valley | 41 |
| Yreka City | *20+ |

### COLORADO

| | Channel No. |
|---|---|
| Alamosa | *16, 47 |
| Boulder | 14 |
| Broomfield | *12 |
| Castle Rock | 53 |
| Colorado Springs | 11, 13, 21 |
| Craig | *16+ |
| Denver | 2, 4-, *6-, 7, 9-, 20, 31, *41, 50, 59 |
| Durango | 6+, *20-, and 33+ |
| Fort Collins | 22- |
| Glenwood Springs | 3-, *19+ |
| Grand Junction | 5-, 8-, *18+, 4*, 11+ |
| Gunnison | *17- |
| La Junta | *22+ |
| Lamar | 12-, *14- |
| Leadville | *15- |
| Longmont | 25 |
| Montrose | 10+, *22 |
| Pueblo | 5, *8, 26+, 32- |
| Salida | *23+ |
| Steamboat Springs | 24+ |
| Sterling | 3, *18+ |
| Trinidad | *24 |

### CONNECTICUT

| | Channel No. |
|---|---|
| Bridgeport | 43-, *49- |
| Hartford | 3+, 18-, *24, 61+ |
| New Britain | 30+ |
| New Haven | 8, 59+, 55 |
| New London | 26+ |
| Norwich | *53 |
| Waterbury | 20 |

### DELAWARE

| | Channel No. |
|---|---|
| Dover | *34 |
| Seaford | 38, *64 |
| Wilmington | *12, 61 |

### DISTRICT OF COLUMBIA

| | Channel No. |
|---|---|
| Washington | 4-, 5-, 7+, 9, 20+, *26-, *32+, 50 |

### FLORIDA

| | Channel No. |
|---|---|
| Boca Raton | *63 |
| Bradenton | *19, 66 |
| Bunnell | 58 |
| Cape Coral | 36 |
| Clearwater | 22 |
| Clermont | 18- |
| Cocoa | *52, 68 |
| Crystal River | 39- |
| Daytona Beach | 2-, 26 |
| Destin | 64+ |
| Fort Lauderdale | 51 |
| Fort Myers | 11+, 20+, *30 |
| Fort Pierce | *21-, 34 |
| Fort Walton Beach | 35, 53, 58 |
| Gainesville | *5-, 20, 61+ |
| High Springs | 53+ |
| Hollywood | 69 |
| Inverness | 64 |
| Islamorada | *9+ |
| Jacksonville | 4+, *7, 12+, 17, 30+, 47-, *59 |
| Kenansville | 31 |
| Key West | 8, *13, and 22+ |
| Lake City | *41 |
| Lake Worth | 67 |
| Lakeland | 32 |
| Leesburg | *45-, 55 |
| Live Oak | 57- |
| Madison | *36- |
| Marathon | 16+ |
| Marianna | *16+, 51 |
| Melbourne | 43+, 56 |
| Miami | *2, 4, 6, 7-, 10+, *17-, 23-, 33, 35, 39, and 45+ |
| Naples | 26-, 46 |
| New Smyrna Beach | *15+ |
| Ocala | *29, 51- |
| Orange Park | 25- |
| Orlando | 6-, 9, * 24-, 27, 35+, and 65 |
| Palatka | *42, 63+ |
| Palm Beach | 61 |
| Panama City | 7+, 13, 28-, *56, 46 |
| Panama City Beach | 46 |
| Pensacola | 3-, *23, 33+, 44 |
| St. Petersburg | 10-, 38, 44+ |

FLORIDA—Continued

| | Channel No. |
|---|---|
| Sarasota | 40 |
| Sebring | *48, 60 |
| Stuart | 59 |
| Tallahassee | *11-, 24, 27+, 40+ |
| Tampa | *3, 8-, 13-, *16, 28, and 50 |
| Tequesta | 25 |
| Tice | 49 |
| Venice | 62 |
| West Palm Beach | 5, 12, 29+, *42+, |

GEORGIA

| | Channel No. |
|---|---|
| Albany | 10, 19-, 31-, and 52- |
| Ashburn | *23+ |
| Athens | *8-, 34 |
| Atlanta | 2, 5-, 11+, 17-, *30, 36, 46-, *57+, 69 |
| Augusta | 6+, 12-, 26, 54- |
| Bainbridge | 49 |
| Baxley | 34 |
| Brunswick | 21+ |
| Carrollton | *49- |
| Carnesville | *52 |
| Cedartown | *65- |
| Chatsworth | *18- |
| Cochran | *29+ |
| Columbus | 3, 9+, *28, 38+, *48, 54+ |
| Cordele | 55+ |
| Dalton | 23 |
| Dawson | *25 |
| Draketown | *27- |
| Elberton | *60+ |
| Flintstone | *41- |
| Lafayette | *35 |
| Macon | 13+, 24+, 41+, *47+, 64- |
| Monroe | 63 |
| Pelham | *14- |
| Perry | 58+ |
| Rome | 14+ |
| Royston | *22+ |
| Savannah | 3, *9-, 11, 22, |
| Thomasville | 6 |
| Toccoa | 32-, *68- |
| Valdosta | *33, 44- |
| Vidalia | *18+ |
| Warm Springs. | |
| Warner Robbins | 35- |
| Waycross | *8+ |
| Wrens | *20- |
| Young Harris | *51- |

HAWAII

| | Channel No. |
|---|---|
| Hilo (Hawaii) | 2, *4, 9, 11, 13, 14+, 20+, 26+, *32+, *38+ |
| Honolulu (Oahu) | 2+, 4-, 5, 9-, *11+, 13-, 14, 20, 26, 32, *38, and *44. |
| Kailua | 50 |
| Kailua-Kona (Hawaii) | 6 |
| Kaneohe | 66+ |
| Lihue (Kauai) | 3+, *8-, 10+, 12-, 15-, *21-, *27-, *67 |
| Wailuku (Maui) | 3, 7, *10, 12, 15, 21, *27, *33, 39 |
| Waimanalo | 56 |

IDAHO

| | Channel No. |
|---|---|
| Boise | 2, *4+, 7, 14 |
| Burley | *17+ |
| Caldwell | 9- |
| Coeur d'Alene | *26+ |
| Filer | *19- |
| Grangeville | *15- |
| Idaho Falls | 3, 8+, 20, *33+ |
| Lewiston | 3- |
| Moscow | *12- |
| Nampa | 6, 12+ |
| Preston | *28 |
| Pocatello | 6-, *10, 15, 25+, 31- |
| Sandpoint | *16+ |
| Sun Valley | 5- |
| Twin Falls | 11, *13-, 35 |
| Weiser | *17 |

ILLINOIS

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Aurora | 60 |
| Bloomington | 43 |
| Carbondale | *8 |
| Champaign | 3+, 15- |
| Charleston | *51+ |
| Chicago | 2-, 5, 7, 9+, *11, *20, 26, 32, 38-, 44 |
| Danville | 68 |
| Decatur | 17, 23- |
| DeKalb | *33, *48- |
| East St. Louis | 46 |
| Edwardsville | *18- |
| Elgin | [4] 66+ |
| Freeport | 23, *65- |
| Galesburg | 67 |
| Harrisburg | 3 |
| Jacksonville | *14 |
| Joliet | [1] 14-, 66+ |
| Kankakee | *54- |
| LaSalle | 35 |
| Macomb | *22+ |
| Marion | 27 |
| Moline | 8, *24- |
| Mount Vernon | 13+ |
| Olney | *16- |
| Paris | 46+ |
| Peoria | 19, 25+, 31+, *47-, 59+ |
| Pontiac | 53 |
| Quincy | 10-, 16+, *27+ |
| Rockford | 13, 17+, 39 |
| Rock Island | 4+ |
| Springfield | 20+, 49-, 55+, *65+ |
| Streator | *63 |
| Urbana | *12-, 27- |
| Vandalia | *21 |

INDIANA

| | Channel No. |
|---|---|
| Anderson | 67+ |
| Angola | 63 |
| Bloomington | 4, *30-, 42+ and 63+ |
| Elkhart | 28+ |
| Evansville | 7, *9+, 14-, 25-, and 44 |
| Fort Wayne | 15+, 21+, 33-, *39-, 55 |
| Gary | 50, *56+ |
| Hammond | 62+ |
| Indianapolis | 6, 8-, 13-, *20-, 40, 59-, *69 |

INDIANA—Continued

| | Channel No. |
|---|---|
| Kokomo | 29- |
| Lafayette | 18, *24 |
| Madison | *60+ |
| Marion | 23 |
| Muncie | 49, *61 |
| Richmond | 43+ |
| Salem | 58+ |
| South Bend | 16, 22, *34-, 46 |
| Terre Haute | 2+, 10, *26-, 38 |
| Vincennes | *22- |

IOWA

| | Channel No. |
|---|---|
| Ames | 5, 23-, *34+ |
| Burlington | 26-, *57- |
| Carroll | *18-, 30+, and 52 |
| Cedar Rapids | 2, 9-, 28+, and 48- |
| Centerville | *31- |
| Council Bluffs | *32 |
| Davenport | 6+, 18+, 30-, *36+ |
| Decorah | *14+ |
| Des Moines | 8-, *11+, 13-, 17+, *43-, 63-, 69 |
| Dubuque | 16-, *29-, 40- |
| Estherville | *49+ |
| Fort Dodge | *21 |
| Fort Madison | *38+ |
| Hampton | 50 |
| High Point | *14- |
| Iowa City | *12+, 20- |
| Keokuk | *44+ |
| Keosauqua | *54+ |
| Lansing | *41+ |
| Mason City | 3+, *24+ |
| Mount Ayr | *25- |
| Newton | 39+ |
| Ottumwa | 15+, *33- |
| Red Oak | *36 |
| Rock Rapids | *25+ |
| Sibley | *33 |
| Sioux City | 4-, 9, 14, *27-, 44 |
| Spirit Lake | *38 |
| Waterloo | 7+, 22-, *32- |

KANSAS

| | Channel No. |
|---|---|
| Chanute | *30+ |
| Cimarron | 23 |
| Colby | 4 |
| Columbus | *48- |
| Dodge City | *21- |
| Emporia | *25+ |
| Ensign | 6+ |
| Fort Scott | 20+ |
| Garden City | 11+, 13-, *18 |
| Goodland | 10 |
| Great Bend | 2 |
| Hays | 7-, *9 |
| Hoisington | 14 |
| Hutchinson | *8, 12, 36+ |
| Junction City | 31 |
| Lakin | *3 |
| Lawrence | 38 |
| Liberal | 5+ |
| Manhattan | *21 |
| Oakley | *15- |
| Parsons | *39 |

KANSAS—Continued

| | Channel No. |
|---|---|
| Phillipsburg | *22- |
| Pittsburg | 7+ and 14 |
| Pratt | *32+ |
| Randall. | |
| Salina | 18+, 34-, 44 |
| Sedan | *28 |
| Topeka | *11, 13+, 27, 43, 49 |
| Wichita | 3-, 10-, *15+, 24-, 33, *42 |

KENTUCKY

| | Channel No. |
|---|---|
| Ashland | *25, 50-, 61+ |
| Beattyville | 65 |
| Blanco | 52+ |
| Bowling Green | 13, *24-, 40+, *53-, 59+ |
| Campbellsville | 34 |
| Covington | *54+ |
| Danville | 56 |
| Elizabethtown | *23+ |
| Harlan | 44- |
| Hazard | *35+, 57- |
| Hopkinsville | 51 |
| Lexington | 18+, 27-, 36, *46, 62 |
| Louisville | 3-, 11, *15, 21-, 32-, 41+, *68+ |
| Madisonville | 19-, *35-, and 57+ |
| Morehead | *38+, 67- |
| Murray | *21+, 38 |
| Newport | 19+ |
| Owensboro | 31-, 48, 61+ |
| Owenton | *52+ |
| Paducah | 6+, 29 and 49 |
| Paintsville | 69+ |
| Pikeville | *22-, 51+ |
| Somerset | 16, *29+ |

LOUISIANA

| | Channel No. |
|---|---|
| Alexandria | 5, *25+, 31+, 41+ |
| Baton Rouge | 2, 9-, *27+, 33-, and 44+ |
| Columbia | 11+ |
| De Ridder | *23- |
| Hammond | 62+ |
| Houma | 11 |
| Lafayette | 3+, 10, 15, *24 |
| Lake Charles | 7-, *18-, 29- |
| Minden | 21+ |
| Monroe | 8+, *13, |
| Morgan City | *14+ |
| Natchitoches | *20+ |
| New Iberia | 36- |
| New Orleans | 4+, 6, 8-, * 12, 20-, 26, * 32+, 38+, and 49 |
| Shreveport | 3-, 12, *24-, 33, and 45+ |
| Slidell | 54+ |
| Tallulah | *19 |
| West Monroe | 14-, 39+ |

MAINE

| | Channel No. |
|---|---|
| Augusta | *10- |
| Bangor | 2-, 5+, 7- |
| Biddeford | *26- |
| Calais | *13- |
| Fort Kent | *46+ |

MAINE—Continued

| | Channel No. |
|---|---|
| Fryeburg | *18+ |
| Houlton | *25+ |
| Kittery | *39 |
| Lewiston | 35- |
| Millinocket | *44- |
| Orono | *12- |
| Poland Spring | 8-. |
| Portland | 6-, 13+, 51 |
| Presque Isle | 8, *10+, 62+ |
| Rumford | *43+ |
| Waterville | 23- |

MARYLAND

| | Channel No. |
|---|---|
| Annapolis | *22+ |
| Baltimore | 2+, 11-, 13+, 24+, 45, 54, *67- |
| Cumberland | 52+, 65 |
| Frederick | *62 |
| Hagerstown | 25-, *31, and 68+ |
| Oakland | *36+ |
| Salisbury | 16+, *28-, 47- |
| Waldorf | *58+ |

MASSACHUSETTS

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Adams | 19 |
| Boston | *2+, 4+, 5-, 7+, 25+, 38, *44, 68+ |
| Cambridge | 56 |
| Greenfield | 32+ |
| Lawrence | 62 |
| Marlborough | 66 |
| New Bedford | 6+, 28-, *34 |
| North Adams | *35 |
| Norwell | 46+ |
| Pittsfield | 51+ |
| Springfield | 22, 40, *57+ |
| Vineyard Haven | 58+ |
| Worcester | 14, [1] 27, *48+, |

MICHIGAN

| | Channel No. |
|---|---|
| Alpena | *6, 11 |
| Ann Arbor | 31+, *58+ |
| Bad Axe | * 15-, 41- |
| Battle Creek | 41+, and 43- |
| Bay City | 5-, 61+ |
| Cadillac | 9, *27, 33 |
| Calumet | 5-, *22- |
| Cheboygan | 4+ |
| Detroit | 2+, 4, 7-, 20+, 50-, *56, 62 |
| East Lansing | *23-, *69- |
| Escanaba | 3+ |
| Flint | 12-, *28-, 66- |
| Grand Rapids | 8+, 13+, 17-, *35+ |
| Iron Mountain | 8-, *17+ |
| Ironwood | *15-, 24+ |
| Ishpeming | 10 |
| Jackson | 18+ |
| Kalamazoo | 3-, *52+, 64 |
| Lansing | 6-, 47, 53- |
| Manistee | *21 |
| Manistique | *15+ |

MICHIGAN—Continued

| | Channel No. |
|---|---|
| Marquette | 6-, *13, 19 |
| Mount Clemens | 38+ |
| Mount Pleasant | *14 |
| Muskegon | 54+ |
| Onondaga | 10- |
| Petoskey | *23+ |
| Port Huron | 46+ |
| Saginaw | 25-, 49- |
| Sault Ste. Marie | 8, 10+, *32- |
| Traverse City | 7+, 29- |
| University Center | *19+. |
| Vanderbilt | 45 |
| West Branch | *24 |

MINNESOTA

| | Channel No. |
|---|---|
| Alexandria | 7, * 24, and 42 |
| Appleton | *10- |
| Austin | 6-, *15- |
| Bemidji | *9, 26+ |
| Brainerd | *22 |
| Crookston | *33 |
| Duluth | 3, *8, 10+, 21+, 27- |
| Ely | *17- |
| Fairmont | *16+ |
| Hibbing | 13-, *18- |
| International Falls | 11, *35+ |
| Mankato | 12, *26- |
| Marshall | *30- |
| Minneapolis-St. Paul | *2-, 4, 5-, 9+, 11-, *17, 23+, 29+, and 45 |
| Redwood Falls | 43 |
| Rochester | 10, 47- |
| St. Cloud | 19, *25-, 41 |
| St. James | 32+ |
| Thief River Falls | 10, *30 |
| Wadena | *20- |
| Walker | 12-, 38- |
| Wilmar | *14- |
| Winona | *35+, 44- |
| Worthington | *20 |

MISSISSIPPI

| | Channel No. |
|---|---|
| Biloxi | 13+, *19+, |
| Booneville | *12- |
| Bude | *17+ |
| Clarksdale | *21 |
| Cleveland | *31- |
| Columbia | *45 |
| Columbus | 4-, *43 |
| Greenville | 15-, 44 |
| Greenwood | 6+, *23+ |
| Gulfport | 25- |
| Grenada | 22+ |
| Hattiesburg | 22, *47 |
| Holly Springs | 40 |
| Houston | 45+ |
| Jackson | 3, 12+, 16, *29+, 40+, and 51 |
| Laurel | 7, 18+ |
| Magee | 34+ |
| Meridian | 11-, *14, 24-, 30- |
| Mississippi State | *2+ |
| Natchez | *42+, 48 |
| Oxford | *18 |
| Senatobia | *34- |

MISSISSIPPI—Continued

| | Channel No. |
|---|---|
| Tupelo | 9-, 35+ |
| Vicksburg | 35- |
| West Point | 27 |
| Wiggins | 43-,56+ |
| Yazoo City | *32- |

MISSOURI

| | Channel No. |
|---|---|
| Birchtree | *20- |
| Bowling Green | *35+ |
| Cape Girardeau | 12, 23, *39- |
| Carrollton | *18 |
| Columbia | 8+, 17-*23+ |
| Flat River | *22 |
| Hannibal | 7- |
| Jefferson City | 13, 25, *36- |
| Joplin | 12+, 16, *26- |
| Kansas City | 4, 5+, 9+, *19+, 32-, 41-, 50-, 62+, *68- |
| Kennett | 58+ |
| King City | *28- |
| Kirksville | 3- |
| LaPlata | *21+ |
| Lowry City | *15- |
| Poplar Bluff | 15+, *26+, 55 |
| Rolla | *28 |
| St. Joseph | 2-, 16-, 22 |
| St. Louis | 2, 4-, 5-, *9, 11-, 24+, 30+, *40-, *46 |
| Sedalia | 6 |
| Sikeston | 45 |
| Springfield | 3+, 10, *21-, 27-, 33-- |

MONTANA

| | Channel No. |
|---|---|
| Anaconda | 2+ |
| Billings | 2-, 6, 8, *11, 14, 20+ |
| Bozeman | 7-, *9 |
| Butte | *2+, 4, 6+, 18, 24 |
| Cut Bank | *14- |
| Dillon | *14+ |
| Glendive | 5+, 13+, *16- |
| Great Falls | 3+, 5+, 16, 26, *32 |
| Hardin | 4+ |
| Havre | 9+, 11-, and *18- |
| Helena | 10+, 12, *15+ |
| Joplin | 35-, 48, 54- |
| Kalispell | 9-, *29- |
| Lewistown | 13 |
| Miles City | 3-, *10 |
| Missoula | 8-, *11+, 13-, 17-, and 23- |
| Wolf Point | *17+ |

NEBRASKA

| | Channel No. |
|---|---|
| Albion | 18, *21+, 24+ |
| Alliance | *13- |
| Bassett | *7- |
| Beatrice | 23+ |
| Falls City | *24 |
| Grand Island | 11-, 17 |
| Hastings | 5-, *29+ |
| Hayes Center | 6 |
| Hay Springs-Scottsbluff. | 4+ |

NEBRASKA—Continued

| | Channel No. |
|---|---|
| Kearney | 13 |
| Lexington | *3+ |
| Lincoln | 8+, 10+, *12-, 45, 51 |
| McCook | 8-, 16+, 12 |
| Merriman | *12 |
| Norfolk | *19+ |
| North Platte | 235, 246, 278 |
| Omaha | 3, 6+, 7, 15, *26, 42+, *48-, and 54 |
| Orchard | 16 |
| Pawnee | 33+ |
| Scottsbluff | 10-, 16 |
| Superior | 4+ |

NEVADA

| | Channel No. |
|---|---|
| Elko | 10-, *14+ |
| Ely | 3-, 6+ |
| Fallon | *25 |
| Goldfield | 7- |
| Henderson | 5+ |
| Las Vegas | 3, 8-, *10+, 13-, 15+, 21+, and 33+ |
| McGill | *13 |
| Paradise | 39+ |
| Pawnee City | *33+ |
| Reno | 2, 4, *5, 8, 11, 21+, and 27+ |
| Tonopah | 9-, *17+ |
| Winnemucca | 7+, *15- |
| Yerington | *16+ |

NEW HAMPSHIRE

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Berlin | *40- |
| Concord | 21+ |
| Derry | 50- |
| Durham | *11 |
| Hanover | *15+ |
| Keene | *52+ |
| Littleton | *49+ |
| Manchester | 9-, |
| Merrimack | 60+ |
| Portsmouth | [1] 17- |

NEW JERSEY

| | Channel No. |
|---|---|
| Atlantic City | *36, 53+, 62- |
| Burlington | 48- |
| Camden | *23+ |
| Linden-Newark | 47+ |
| Montclair | *50+ |
| Newark | 13-, 68 |
| New Brunswick | *58 |
| Newton | 63 |
| Paterson | 41- |
| Secaucus | 9+ |
| Trenton | *52- |
| Vineland | 59-, 65- |
| West Milford | *66- |
| Wildwood | 40 |

### NEW MEXICO

| | Channel No. |
|---|---|
| Alamogordo | *18- |
| Albuquerque | 4+, *5+, 7+, 13+, 14-, 23-, *32+, 41, 50 |
| Carlsbad | 6-, *15+, 25- |
| Clayton | *17 |
| Clovis | 12-- |
| Deming | *16 |
| Farmington | 3, 12+, *15+ |
| Gallup | *8-, 10 |
| Hobbs | 29+ |
| Las Cruces | *22-, 48+ |
| Lovington | *19 |
| Portales | *3+ |
| Raton | *18- |
| Roswell | 8, 10-, 21-, 27-, *33+ |
| Santa Fe | 2+, *9+, 11-, 19- |
| Silver City | 6, 10+, *12 |
| Socorro | *15- |
| Tucumcari | *15 |

### NEW YORK

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Albany-Schenectady | 6, 10-, 13, *17+, 23-, *29+, 45 |
| Amsterdam | *39+, 55 |
| Arcade | 62- |
| Batavia | 51- |
| Bath | 14- |
| Binghamton | 12-, 34, 40-, *46+ |
| Buffalo | 2, 4, 7+, 17, *23, 29-, 49- |
| Carthage | 7- |
| Corning | *30, 48+ |
| Elmira | 18+, 36- |
| Garden City | *21- |
| Glens Falls | *58- |
| Ilion | 67- |
| Ithaca | 52, *65+ |
| Jamestown | 26+, *46 |
| Kingston | 62+ |
| Lake Placid | *34+ |
| New York | 2, 4, 5+, 7, 11+, *25, 31- |
| North Pole | 5 |
| Norwood | *18 |
| Oneonta | [1] 15, *42 |
| Plattsburg | *57 |
| Poughkeepsie | 54+ |
| Riverhead | 55+ |
| Rochester | 8, 10+, 13-, *21, 31+, *61+ |
| Saranac Lake | 61- |
| Smithtown | 67 |
| Springville | 67+ |
| Syracuse | 3-, 5-, 9-, *24+, 43+, 56+, 68- |
| Utica | 2-, 4-, 20+, 33, *59 |
| Watertown | *16, 50+ |
| Waverly | *57- |

### NORTH CAROLINA

| | Channel No. |
|---|---|
| Andrews | *59 |
| Asheville | 13-, 21+, *33, 62+ |
| Belmont | 46+ |
| Bryson City | *67 |
| Burlington | 16 |
| Canton | *27 |
| Chapel Hill | *4+ |
| Charlotte | 3, 9+, 18, 36, *42+ |

### NORTH CAROLINA—Continued

| | Channel No. |
|---|---|
| Columbia | *2 |
| Concord | *58 |
| Cullowhee | 50+ |
| Durham | 11+, 28+ |
| Fayetteville | 40+, 62 |
| Forest City | 66+ |
| Franklin | *56+ |
| Goldsboro | 17- |
| Greensboro | 2-, 48-, 61 |
| Greenville | 9-, 14, *25, and 38+ |
| Hickory | 14- |
| High Point | 8-, *32+, 67+ |
| Jacksonville | *19, 35 |
| Kannapolis | 64- |
| Laurel Hill | 59+ |
| Lexington | 20 |
| Linville | *17 |
| Lumberton | *31 |
| Manteo | 4 |
| Morehead City | 8+ |
| Morganton | 23- |
| New Bern | 12+ |
| Raleigh | 5, 22, *34, 50+ |
| Roanoke Rapids | *36- |
| Rockingham | *53 |
| Rocky Mount | 47+ |
| Washington | 7 |
| Waynesville | 59 |
| Wilmington | 3-, 6, 26-, *39- |
| Wilson | 30- |
| Winston-Salem | 12, *26+, 45 |

### NORTH DAKOTA

| | Channel No. |
|---|---|
| Bismarck | *3, 5, 12-, 17-, 26+ |
| Devils Lake | 8+, *22+ |
| Dickinson | 2+, *9-, 7 |
| Ellendale | *19- |
| Fargo | 6, 11+, *13, 15- |
| Grand Forks | *2, 14+, 27+ |
| Jamestown | 7-, *23 |
| Minot | *6+, 10-, 13-, 14-, 24 |
| Pembina | 12 |
| Valley City | 4- |
| Williston | *4, 8-, 11-, *15- |

### OHIO

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Akron | 23+, *49+, 55- |
| Alliance | *45+ |
| Ashtabula | [1] 15 |
| Athens | 20*, 63- |
| Bowling Green | *27+ |
| Cambridge | *44- |
| Canton | 17-, 67 |
| Chillicothe | 53 |
| Cincinnati | 5-, 9, 12, *48-, 64- |
| Cleveland | 3, 5+, 8, *25+, 61 |
| Columbus | 4-, 6+, 10+, 28-, *34, *56- |
| Dayton | 2, 7+, *16+, 22+, 45 |
| Defiance | 65+ |
| Hillsboro | *24+, 55+ |
| Lima | 35-, 44+, *57+, 17 |
| Lorain | 43 |
| Mansfield | *47+, 68- |

### OHIO—Continued

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Newark | *31-, 51 |
| Oxford | *14+ |
| Portsmouth | 30, *42- |
| Sandusky | 52 |
| Shaker Heights | 19. |
| Springfield | 26+, *66 |
| Steubenville | 9+, *62+ |
| Toledo | 11-, 13, 24-, *30+, 36-, and 40- |
| Xenia | 32 |
| Youngstown | 21-, 27, 33, *58 |
| Zanesville | 18- |

### OKLAHOMA

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Ada | 10+, *22 |
| Altus | *27 |
| Ardmore | *17, *28- |
| Bartlesville | 17+ |
| Cheyenne | 12+ |
| Claremore | *35 |
| Duncan | 40+ |
| Elk City | *15-, and 31 |
| Enid | 20-, *26+ |
| Eufaula | *3 |
| Grove | 45+ |
| Guymon | 9+, *16 |
| Hugo | 42+, [1] *15+, *48+ |
| Lawton | 7+, *36-, 16-, 45 |
| McAlester | *32- |
| Miami | *18- |
| Muskogee | 19 |
| Norman | 46- |
| Oklahoma City | 4-, 5, 9-, *13, 14-, 25-, 34-, 43+, 52, and 62+ |
| Okmulgee | 44- |
| Sayre | 8+ |
| Shawnee | 30 |
| Tulsa | 2+, 6+ 8-, *11-, 23, 41+, 47, 53, and *63 |
| Woodward | *17-, 35+ |

### OREGON

| | Channel No. |
|---|---|
| Astoria | *21 |
| Bend | *3+, *15, 21+ |
| Brookings | *14- |
| Burns | *18 |
| Coos Bay | 11, 23+, 41 |
| Corvallis | *7- |
| Eugene | 9+, 13, 16+, *28-, and 34 |
| Grants Pass | *18+, 30+ |
| Klamath Falls | 2-, *22+, and 31 |
| LaGrande | *13+, 16 |
| Medford | 5, *8+, 10+, 12+, and 26+ |
| North Bend | *17+ |
| Pendleton | 11- |
| Portland | 2, 6+, 8-, *10, 12, 24+, *30, 40- |
| Roseburg | 4+, 36, 46+ |
| Salem | 22, 32 |
| The Dalles | *17- |

### PENNSYLVANIA

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Allentown | *39, 69 |
| Altoona | 10-, 23-, 47, *57+ |
| Bethlehem | 60- |
| Clearfield | *3+ |
| Erie | 12, 24, 35+, *54+, 66+ |
| Greensburg | 40+ |
| Harrisburg | 21+, 27-, *33+ |
| Hazleton | 56 |
| Jeanette | 19+ |
| Johnstown | 6, 8-, 19+, *28+ |
| Lancaster | 8+, 15+ |
| Lebanon | 55- |
| Philadelphia | 3, 6-, 10, 17-, 29, *35-, 57 |
| Pittsburgh | 2-, 4+, 11, *13-, *16, 22, 53+ |
| Reading | 51 |
| Red Lion | 49+ |
| Scranton | 16-, 22-, 38+, *44-, 64 |
| State College | 29+, and *59+ |
| Wilkes Barre | 28 |
| Williamsport | [1] 20-, 53- |
| York | 43, |

### RHODE ISLAND

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Block Island | 69- |
| Providence | 10+, 12+, [1] 16, *36, 64+ |

### SOUTH CAROLINA

| | Channel No. |
|---|---|
| Aiken | *44 |
| Allendale | *14 |
| Anderson | 40 |
| Beaufort | *16- |
| Charleston | 2+, 4, 5+, *7-, 24, and 36+ |
| Columbia | 10-, 19+, 25-, *35+, 47, 57- |
| Conway | *23+ |
| Florence | 13+, 15-, 21, *33+ |
| Georgetown | *41- |
| Greenville | 4-, 16+, *29 |
| Greenwood | *38, 48+ |
| Hardeeville | 28- |
| Myrtle Beach | 32, 43+ |
| Rock Hill | 30+, 55- |
| Spartanburg | 7+, 49 |
| Sumter | *27- and 63- |

### SOUTH DAKOTA

| | Channel No. |
|---|---|
| Aberdeen | 9-, *16- |
| Allen | 22+ |
| Brookings | *8 |
| Eagle Butte | *13 |
| Florence | 3- |
| Huron | 12+ |
| Lead | 5-, 11+ |
| Lowry | *11-, 56, 62+, 68- |
| Martin | *8- |
| Mitchell | 5+ |
| Pierre | 4, *10+ |
| Rapid City | 3+, 7+, *9, 15-, 21- |
| Reliance | 6- |

SOUTH DAKOTA—Continued

| | Channel No. |
|---|---|
| Seneca | *2- |
| Sioux Falls | 11, 13+, 17-, *23, 36+, 46 |
| Vermillion | *2+ |

TENNESSEE

| | Channel No. |
|---|---|
| Athens | *24 |
| Chattanooga | 3+, 9, 12+, *45, 61- |
| Cleveland | 53 |
| Cookeville | *22, 28+ |
| Crossville | 20+, *55+ |
| Fayetteville | *29- |
| Greeneville | 39- |
| Hendersonville | 50 |
| Jackson | 7+, 16+, *32+ |
| Jellico | 54- |
| Johnson City | 11-, *41 |
| Kingsport | 19 |
| Knoxville | 6, 8, 10+, *15-, 26-, 43+ |
| Lebanon | 66-- |
| Lexington | *11+ |
| Livingston | 60- |
| McMinnville | 33+ |
| Memphis | 3-, 5+, *10+, 13+, *14+, 24, 30, 50+, and *56 |
| Murfreesboro | 39+ |
| Nashville | 2-, 4+, 5, *8+, 17+, 30+, *42, and 58 |
| Sneedville | *2+ |
| Tazewell | 48+ |
| Tullahoma | 64+ |
| Union City | 41 |

TEXAS

| | Channel No. |
|---|---|
| Abilene | 9+, 15, *26+, 32+ |
| Alpine | 12- |
| Alvin | 67 |
| Amarillo | *2+, 4, 7, 10, 14+ |
| Austin | 7+, *18+, 24, 36, 42-, and 54 |
| Bay City | *43+ |
| Baytown | 57+ |
| Beaumont | 6-, 12-, 21, *34- |
| Belton | 46- |
| Big Spring | 4-, *14 |
| Blanco | 52+ |
| Boquillas | 8- |
| Brady | 13 |
| Brownsville | 23 |
| Bryan | 3, 28 |
| Childress | *21 |
| College Station | *15, 50- |
| Conroe | 49+ and 55+ |
| Corpus Christi | 3-, 6, 10-, *16, 28-, 38+ |
| Crockett | 40 |
| Dallas | 4+, 8, *13+, 27-, 33+, 39, and 58 |
| Decatur | 29 |
| Del Rio | 10, *24+ |
| Denton | *2 |
| Eagle Pass | 16+ |
| El Paso | 4, 7, 9, *13, 14, 26+, *38--, and 65 |
| Farwell | 18+ |
| Fort Stockton | 5+ |
| Fort Worth | 5+, 11-, 21-, *31+, and 52- |
| Fredericksburg | 2+ |
| Galveston | *22, 48 |
| Garland | 23 |

TEXAS—Continued

| | Channel No. |
|---|---|
| Greenville | 47+ |
| Harlingen | 4+, *44, 60 |
| Houston | 2-, *8, 11+, 13-, *14, 20, 26, 39-, and 61 |
| Irving | 49 |
| Jacksonville | 56 |
| Katy | 51+ |
| Kennville | 35+ |
| Killeen | 62 |
| Lake Dallas | 55 |
| Laredo | 8, 13, 27-, *39 |
| Liano | 14- |
| Longview | 16+, 51-, and 54+ |
| Lubbock | *5-,11,13-, 16+, 28, and 34- |
| Lufkin | 9 |
| McAllen | 48 |
| Marfa | 3 |
| Marshall | *22-, 35+ |
| Midland | 2-, 18 |
| Mineola | 64+ |
| Monahans-Odessa | 9- |
| Nacogdoches | 19-, *32 |
| Odessa | 7-, 24-, 30, *36+, and 42 |
| Palestine | 43 |
| Paris, Texas | 36+, 42+ |
| Port Arthur | 4- |
| Presidio | 7+ |
| Rio Grande City | 40 |
| Rosenberg | 45 |
| San Angelo | 3-, 6, 8+, *21+ |
| San Antonio | 4, 5, *9-, 12+, *23-, 29+, 41+, and 60+ |
| Sherman | 12-, 20-, *26- |
| Snyder | 17- |
| Sonora | 11+ |
| Sulphur Springs | 18 |
| Sweetwater | 12 |
| Temple | 6+, |
| Texarkana | 6, 17-, *34 |
| Tyler | 7,14+, *38, and 60 |
| Uvalde | 26- |
| Victoria | 19+, 25, 31, and *47 |
| Waco | 10+, 25+, *34+, 44- |
| Weslaco | 5- |
| Wichita Falls | 3+, 6-, 18-, *24 |
| Wolfforth | 22- |

UTAH

| | Channel No. |
|---|---|
| Cedar City | 4, *16+ |
| Logan | 12-, *22 |
| Moab | *14+ |
| Monticello | *16- |
| Ogden | *9+, *18-, 24, 30 |
| Price | 3+, *15 |
| Provo | *11-, 16, 32 |
| Richfield | 8+, *19 |
| Salt Lake City | 2-, 4-, 5+, *7-, 13+, 14-, 20+, *26- |
| St. George | 12, *18- |
| Vernal | 6, *17+ |

VERMONT

| | Channel No. |
|---|---|
| Burlington | 3, 22+, *33-, 44+ |
| Hartford | 31 |
| Rutland | *28+ |

VERMONT—Continued

| | Channel No. |
|---|---|
| St. Johnsbury | *20- |
| Windsor | *41 |

VIRGINIA

| | Channel No. |
|---|---|
| Arlington | 14- |
| Ashland | 65+ |
| Blacksburg | *43, 65- |
| Bristol | 5+, *28- |
| Bluefield | *63+ |
| Charlottesville | 29-, *41-, 64+ |
| Courtland | *52 |
| Danville | 24-, 44+, *56 |
| Farmville | *31- |
| Fairfax | *56- |
| Fredericksburg | 69+ |
| Front Royal | *42 |
| Goldvein | *53 |
| Grundy | 68 |
| Harrisonburg | 3- |
| Lynchburg | 13, 21-, *54+ |
| Manassas | 66+ |
| Marion | *52- |
| Norfolk-Portsmouth-Newport News- | 3+, 10+, 13-, *15, 27, 33, 49- and |
| Hampton | *55+ |
| Norton | *47- |
| Onancock | *25+ |
| Petersburg | 8 |
| Richmond | 6+, 12-, *23, 35+, *57-, 63 |
| Roanoke | 7-, 10, *15+, 27+, 38-, and 60 |
| Staunton | *51- |
| Virginia Beach | 21+, 43+ |
| West Point | *46 |

WASHINGTON

| | Channel No. |
|---|---|
| Anacortes | 64 |
| Bellevue | 33+, 51+ |
| Bellingham | 12+, 24, *34 |
| Centralia | *15+ |
| East Wenatchee | 249A |
| Everett | 16- |
| Kennewick | 42+ |
| Morton | 39 |
| Olympia | 67 |
| Pasco | 19- |
| Pullman | *10-, 24+ |
| Richland | 25, *31 |
| Rochester | 26+ |
| Seattle | 4, 5+, 7, *9, 22+, 45+, and *62 |
| Spokane | 2-, 4-, 6-,*7+22, 28-, and 34- |
| Tacoma | 11+, 13-, 20, *28, and *56 |
| Vancouver | *14, 49 |
| Walla Walla | 9+ |
| Wenatchee | *18+, 27 |
| Yakima | 23+, 29+, 35, *47 |

WEST VIRGINIA

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Bluefield | 6-, 40- |
| Charleston | 8+, 11+, 23, 29, *49- |

WEST VIRGINIA—Continued

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Clarksburg | 12+, 46- |
| Fairmont | 66- |
| Grandview | *9- |
| Huntington | 3+, 13+, *33+ |
| Keyser | *30+ |
| Lewisburg | 59 |
| Martinsburg | *44, 60+ |
| Morgantown | *24- |
| Oak Hill | 4 |
| Parkersburg | 15-, 39+, *57 |
| Weirton | *50+ |
| Weston | 5 |
| Wheeling | 7, [1] 14, *41 |
| Williamson | *31+ |

WISCONSIN

| | Channel No. |
|---|---|
| Antigo | 46 |
| Appleton | 32+ |
| Bloomington | *49 |
| Chippewa Falls | 48 |
| Crandon | 4 |
| Eagle River | 34 |
| Eau Claire | 13+, 18 |
| Fond du Lac | 68 |
| Green Bay | 2+, 5+, 11+, 26+, *38, 44+ |
| Highland | *51 |
| Janesville | 57+ |
| Kenosha | 55- |
| Kieler | *46+ |
| LaCrosse | 8+, 19+, 25, *31 |
| Madison | 3, 15, *21-, 27+, 47+ |
| Manitowoc | 16+ |
| Marshfield | 39- |
| Mayville | 52 |
| Menomonie | *28- |
| Milwaukee | 4-, 6, *10+, 12, 18-, 24+, 30, *36, and 58 |
| Oshkosh | 22+and *50+ |
| Park Falls | *36+ |
| Racine | 49+ |
| Rhinelander | 12+ |
| Rice Lake | 16 |
| Richland Center | 45+ |
| Sheboygan | 28 |
| Sturgeon Bay | 42 |
| Superior | 6+, 40 |
| Suring | 14- |
| Tomah | 43 |
| Wausau | 7-, 9, *20+, 33- |
| Wittenberg | 55 |

WYOMING

| | Channel No. |
|---|---|
| Casper | 2+, *6+, 13+, 14-, 20- |
| Cheyenne | 5+, *17, 27-, 33- |
| Jackson | 2, 11+ |
| Lander | *4, 5 |
| Laramie | *8+ |
| Rawlins | 11- |
| Riverton | 10+ |
| Rock Springs | 13 |
| Sheridan | 7, 9+, 12+ |

U.S. TERRITORIES AND POSSESSIONS

[See footnotes at end of tables]

| | Channel No. |
|---|---|
| Guam: | |
| Agana | *4, 8, 10, *12 |
| Tamuning | 14, 20 |
| Puerto Rico: | |
| Aguada | 50 |
| Aguadilla | *32, 44 |
| Arecibo-Aguadilla | 12+ |
| Arecibo | 54, 60 |
| Bayamon | 36 |
| Caguas | 11-, *58 |
| Carolina | 52 |
| Cayey. | |
| Fajardo | 13+, 34, and *40 |
| Guayama | 46 |
| Humacoa | 68 |
| Mayaguez | 3+, 5-, 16, 22 |
| Naranjito | 64 |
| Ponce | 7+, 9-, 14, 20, *26, 48 |
| San Juan | 2+, 4-, *6+, 18, 24, 30, and *62 |
| San Sebastian | 38 |
| Utuado. | |
| Yauco | 42 |
| Virgin Islands: | |
| Charlotte Amalie | 10-, 17, *23, 43 |
| Charlotte Amalie-Christiansted. | *3, [6] *12 |
| Christiansted | 8+, 15, *21, 27 |
| Frederiksted | 66 |

Footnotes to tables:

[1] Following the decision in Docket No. 18261, channels so indicated will not be available for television use until further action by the Commission.

[2] Operation on this channel is subject to the conditions, terms, and requirements set out in the Report and Order in Docket No. 19075, RM–1645, adopted January 5, 1972, released January 7, 1972, FCC 72–19.

[3] [Reserved]

[4] This channel is not available for use at Elgin unless and until it is determined by the Commission that it is not needed for use at Joliet, Ill.

[5] [Reserved]

[6] Stations using these allotments shall limit radiation toward stations on the same channel in Puerto Rico, to no more than the effective radiated power which would be radiated by an omnidirectional radio station using maximum permissible effective radiated power for antenna height above average terrain, at the minimum distances from such stations specified in Sec. 73.610(b). The FCC shall consider the status of the negotiations with the appropriate British authorities concerning these allotments when the applications for construction permits come before the FCC.

(Sec. 5, 48 Stat. 1068; 47 U.S.C. 155)

[28 FR 13660, Dec. 14, 1963]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 73.606, see the List of CFR Sections Affected in the Finding Aids section of this volume.

### § 73.607 Availability of channels.

Applications may be filed to construct TV broadcast stations only on the channels designated in the Table of Allotments (§ 73.606(b)) and only in the communities listed therein. Applications which fail to comply with this requirement, whether or not accompanied by a petition to amend the Table, will not be accepted for filing. However, applications specifying channels which accord with publicly announced FCC Orders changing the Table of Allotments will be accepted for filing even though such applications are tendered before the effective dates of such channel changes.

[51 FR 44070, Dec. 8, 1986]

### § 73.609 Zones.

(a) For the purpose of allotment and assignment, the United States is divided into three zones as follows:

(1) Zone I consists of that portion of the United States located within the confines of the following lines drawn on the U.S. Albers Equal Area Projection Map (based on standard parallels 29½° and 45½°; North American datum): Beginning at the most easterly point on the State boundary line between North Carolina and Virginia; thence in a straight line to a point on the Virginia-West Virginia boundary line located at north latitude 37°49′ and west longitude 80°12′30″; thence westerly along the southern boundary lines of the States of West Virginia, Ohio, Indiana, and Illinois to a point at the junction of the Illinois, Kentucky, and Missouri State boundary lines; thence northerly along the western boundary line of the State of Illinois to a point at the junction of the Illinois, Iowa, and Wisconsin State boundary lines; thence easterly along the northern State boundary line of Illinois to the 90th meridian; thence north along this meridian to the 43.5° parallel; thence east along this parallel to the United States-Canada border; thence southerly and following that border until it again intersects the 43.5° parallel; thence east along this parallel to the 71st meridian; thence in a straight line to the intersection of the 69th meridian and the 45th parallel; thence east along the 45th parallel to the Atlantic Ocean. When any of the above lines pass through a city, the city shall be considered to be located in Zone I. (See Figure 1 of § 73.699.)

(2) Zone II consists of that portion of the United States which is not located in either Zone I or Zone III, and Puerto Rico, Alaska, Hawaiian Islands and the Virgin Islands.

(3) Zone III consists of that portion of the United States located south of a line, drawn on the United States Albers Equal Area Projection Map (based on standard parallels 29.50 and 45.50 North American datum), beginning at a point on the east coast of Georgia and the 31st parallel and ending at the United States-Mexican border, consisting of arcs drawn with a 241.4 kilometer (150 mile) radius to the north from the following specified points:

| | North latitude | West longitude |
|---|---|---|
| (a) | 29°40′00″ | 83°24′00″ |
| (b) | 30°07′00″ | 84°12′00″ |
| (c) | 30°31′00″ | 86°30′00″ |
| (d) | 30°48′00″ | 87°58′30″ |
| (e) | 30°00′00″ | 90°38′30″ |
| (f) | 30°04′30″ | 93°19′00″ |
| (g) | 29°46′00″ | 95°05′00″ |
| (h) | 28°43′00″ | 96°39′30″ |
| (i) | 27°52′30″ | 97°32′00″ |

When any of the above arcs pass through a city, the city shall be considered to be located in Zone II. (See Figure 2 of §73.699.)

[28 FR 13660, Dec. 14, 1963, as amended at 33 FR 15422, Oct. 17, 1968; 50 FR 23697, June 5, 1985; 51 FR 44070, Dec. 8, 1986]

### §73.610 Minimum distance separations between stations.

(a) The provisions of this section relate to allotment separations and station separations. Petitions to amend the Table of Allotments (§73.606(b)) (other than those also expressly requesting amendment of this section or §73.609) will be dismissed and all applications for new TV broadcast stations or for changes in the transmitter sites of existing stations will not be accepted for filing if they fail to comply with the requirements specified in paragraphs (b), (c) and (d) of this section.

NOTE: Licensees and permittees of television broadcast stations which were operating on April 14, 1952 pursuant to one or more separations below those set forth in §73.610 may continue to so operate, but in no event may they further reduce the separations below the minimum. As the existing separations of such stations are increased, the new separations will become the required minimum separations until separations are reached which comply with the requirements of §73.610. Thereafter, the provisions of said section shall be applicable.

(b) Minimum co-channel allotment and station separations:

(1)

| Zone | Kilometers | |
|---|---|---|
| | Channels 2–13 | Channels 14–69 |
| I | 272.7 (169.5 miles) | 248.6 (154.5 miles) |
| II | 304.9 (189.5 miles) | 280.8 (174.5 miles) |
| III | 353.2 (219.5 miles) | 329.0 (204.5 miles) |

(2) The minimum co-channel distance separation between a station in one zone and a station in another zone shall be that of the zone requiring the lower separation.

(c) Minimum allotment and station adjacent channel separations applicable to all zones:

(1) Channels 2–13 95.7 kilometers (59.5 miles). Channels 14–69 87.7 kilometers (54.5 miles).

(2) Due to the frequency spacing which exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum adjacent channel separations specified above shall not be applicable to these pairs of channels (see §73.603(a)).

(d) In addition to the requirements of paragraphs (a), (b) and (c) of this section, the minimum assignment and station separations between stations on Channels 14–69, inclusive, as set forth in Table II of §73.698 must be met in either rule-making proceedings looking towards the amendment of the Table of Assignments (§73.606(b)) or in licensing proceedings. No channel listed in column (1) of Table II of §73.698 will be assigned to any city, and no application for an authorization to operate on such a channel will be granted, unless the distance separations indicated at the top of columns (2) through (7), inclusive, are met with respect to each of the channels listed in those columns and parallel with the channel in column (1).

(e) The zone in which the transmitter of a television station is located or proposed to be located determines the applicable rules with respect to co-channel distance separations where the transmitter is located in a different zone from that in which the channel to be employed is located.

(f) The distances listed below apply only to allotments and assignments on Channel 6 (82–88 MHz). The Commission

will not accept petitions to amend the Table of Allotments, applications for new stations, or applications to change the channel or location of existing assignments where the following minimum distances (between transmitter sites, in kilometers) from any FM Channel 253 allotment or assignment are not met:

MINIMUM DISTANCE SEPARATION FROM FM CHANNEL 253 (98.5 MHz)

| Fm Class | TV Zone I | TV Zones II & III |
|---|---|---|
| A | 17 | 22 |
| B1 | 19 | 23 |
| B | 22 | 26 |
| C3 | 19 | 23 |
| C2 | 22 | 26 |
| C1 | 29 | 33 |
| C | 36 | 41 |

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[28 FR 13660, Dec. 14, 1963, as amended at 37 FR 25842, Dec. 5, 1972; 44 FR 65765, Nov. 15, 1979; 47 FR 35990, Aug. 18, 1982; 50 FR 23698, June 5, 1985; 51 FR 44070, Dec. 8, 1986; 54 FR 14964, Apr. 14, 1989; 54 FR 16368, Apr. 24, 1989; 54 FR 35340, Aug. 25, 1989]

### § 73.611 Reference points and distance computations.

(a) In considering petitions to amend the Table of Allotments (§ 73.606(b)), the following reference points shall be used by the Commission in determining assignment separations between communities:

(1) Where transmitter sites for the pertinent channels have been authorized in communities involved in a petition to amend the Table of Allotments, separations between such communities shall be determined by the distance between the coordinates of the authorized transmitter sites in the respective communities as set forth in the Commission's authorizations therefor.

(2) Where an authorized transmitter site is available for use as a reference point in one community but not in the other for the pertinent channels, separations shall be determined by the distance between the coordinates of the transmitter site as set forth in the FCC's authorization therefor and the coordinates of the other community as set forth in the publication of the United States Department of the Interior entitled, Index to *The National Atlas of the United States of America*. If this publication does not contain the coordinates for said other community, the coordinates of the main post office thereof shall be used.

(3) Where no authorized transmitter sites are available for use as reference points in both communities for the pertinent channels, the distance between the two communities listed in the above publication shall be used. If said publication does not contain such distance, the separation between the two communities shall be determined by the distance between the coordinates thereof as set forth in the publication. Where such coordinates are not contained in the publication, the coordinates of the main post offices of said communities shall be used.

(4) Where the distance between the reference point in a community to which a channel is proposed to be assigned and the reference point in another community or communities does not meet the minimum separation requirements of § 73.610, the channel may be assigned to such community upon a showing that a transmitter site is available that would meet the minimum separation requirements of § 73.610 and the minimum field strength requirements of § 73.685. In such cases, where a station is not authorized in the community or communities to which measurements from the proposed channel assignment must be made pursuant to § 73.610 a showing should also be made that the distance between suitable transmitter sites in such other community or communities and the proposed transmitter site for the new channel meet the Commission's minimum spacing and coverage requirements.

(b) Station separations in licensing proceedings shall be determined by the distance between the coordinates of the proposed transmitter site in one community and

(1) The coordinates of an authorized transmitter site for the pertinent channel in the other community; or, where such transmitter site is not available for use as a reference point,

(2) The coordinates of the other community as set forth in the Index to *The*

*National Atlas of the United States of America;* or if not contained therein,

(3) The coordinates of the main post office of such other community.

(4) In addition, where there are pending applications in other communities which, if granted, would have to be considered in determining station separations, the coordinates of the transmitter sites proposed in such applications must be used to determine whether the requirements with respect to minimum separations between the proposed stations in the respective cities have been met.

(c) In measuring assignment and station separations involving cities listed in the Table in combination, where there is no authorized transmitter site in any of the combination cities on the channel involved, separation measurements shall be made from the reference point which will result in the lowest separation.

(d) To calculate the distance between two reference points see paragraph (c), §73.208. However, distances shall be rounded to the nearest tenth of a kilometer.

[52 FR 11655, Apr. 10, 1987]

### §73.612 Protection from interference.

(a) Permittees and licensees of TV broadcast stations are not protected from any interference which may be caused by the grant of a new station or of authority to modify the facilities of an existing station in accordance with the provisions of this subpart. The nature and extent of the protection from interference accorded to TV broadcast stations is limited solely to the protection which results from the minimum allotment and station separation requirements and the rules and regulations with respect to maximum powers and antenna heights set forth in this subpart.

(b) When the Commission determines that grant of an application would serve the public interest, convenience, and necessity and the instrument of authorization specifies an antenna location in a designated antenna farm area which results in distance separation less than those specified in this subpart, TV broadcast station permittees and licensees shall be afforded protection from interference equivalent to the protection afforded under the minimum distance separations specified in this subpart.

NOTE: The nature and extent of the protection from interference accorded to TV broadcast stations which were authorized prior to April 14, 1952, and which were operating on said date is limited not only as specified above but is further limited by any smaller separations existing between such stations on said date. Where, as a result of the adoption of the Table of Allotments or of changes in transmitter sites made by such stations after said date, separations smaller than the required minimum are increased but still remain lower than the required minimum, protection accorded such stations will be limited to the new separations.

[28 FR 13660, Dec. 14, 1963, as amended at 32 FR 8814, June 21, 1967; 50 FR 23698, June 5, 1985; 51 FR 44070, Dec. 8, 1986]

### §73.614 Power and antenna height requirements.

(a) *Minimum requirements.* Applications will not be accepted for filing if they specify less than −10 dBk (100 watts) horizontally polarized visual effective radiated power in any horizontal direction. No minimum antenna height above average terrain is specified.

(b) *Maximum power.* Applications will not be accepted for filing if they specify a power which exceeds the maximum permitted boundaries specified in the following formulas:

(1) Channels 2–6 in Zone I:

$$ERP_{Max}=102.57–33.24*Log_{10}(HAAT)$$

And,

$$-10\ dBk \leq ERP_{Max} \leq \mathbf{20\ dBk}$$

(2) Channels 2–6 in Zones II and III:

$$ERP_{Max}=67.57–17.08*Log_{10}(HAAT)$$

And,

$$10\ dBk \leq ERP_{Max} \leq \mathbf{20\ dBk}$$

(3) Channels 7–13 in Zone I:

$$ERP_{Max}=107.57–33.24*Log_{10}(HAAT)$$

And,

$$-4.0\ dBk \leq ERP_{Max} \leq \mathbf{25\ dBk}$$

(4) Channels 7–13 in Zones II and III:

$$ERP_{Max}=72.57–17.08*Log_{10}(HAAT)$$

And,

$$15\ dBk \leq ERP_{Max} \leq \mathbf{25\ dBk}$$

(5) Channels 14–69 in Zones I, II, and III:

$ERP_{Max}$=84.57–17.08* $Log_{10}$ (HAAT)

And,

27 dBk ≤ $ERP_{Max}$≤**37 dBk**

Where:

$ERP_{Max}$=Maximum Effective Radiated Power measured in decibels above 1 kW (dBk).
HAAT=Height Above Average Terrain measured in meters.

The boundaries specified are to be used to determine the maximum possible combination of antenna height and $ERP_{dBk}$. When specifying an $ERP_{dBk}$ less than that permitted by the lower boundary, any antenna HAAT can be used. Also, for values of antenna HAAT greater than 2,300 meters the maximum ERP is the lower limit specified for each equation.

(6) The effective radiated power in any horizontal or vertical direction may not exceed the maximum values permitted by this section.

(7) The effective radiated power at any angle above the horizontal shall be as low as the state of the art permits, and in the same vertical plane may not exceed the effective radiated power in either the horizontal direction or below the horizontal, whichever is greater.

(c) *Determination of applicable rules.* The zone in which the transmitter of a television station is located or proposed to be located determines the applicable rules with respect to maximum antenna heights and powers for VHF stations when the transmitter is located in Zone I and the channel to be employed is located in Zone II, or the transmitter is located in Zone II and the channel to be employed is located in Zone I.

[28 FR 13660, Dec. 14, 1963, as amended at 42 FR 20823, Apr. 22, 1977; 42 FR 48881, Sept. 26, 1977; 47 FR 35990, Aug. 18, 1982; 50 FR 23698, June 5, 1985; 56 FR 49707, Oct. 1, 1991; 58 FR 51250, Oct. 1, 1993]

### § 73.615 Administrative changes in authorizations.

In the issuance of television broadcast station authorizations, the Commission will specify the transmitter output power and effective radiated power to the nearest 0.1 dBk. Power specified by kWs shall be obtained by converting dBk to kWs to 3 significant figures. Antenna heights above average terrain will be specified to the nearest meter. Midway figures will be authorized in the lower alternative.

[50 FR 23698, June 5, 1985]

### § 73.621 Noncommercial educational TV stations.

In addition to the other provisions of this subpart, the following shall be applicable to noncommercial educational television broadcast stations:

(a) Except as provided in paragraph (b) of this section, noncommercial educational broadcast stations will be licensed only to nonprofit educational organizations upon a showing that the proposed stations will be used primarily to serve the educational needs of the community; for the advancement of educational programs; and to furnish a nonprofit and noncommercial television broadcast service.

(1) In determining the eligibility of publicly supported educational organizations, the accreditation of their respective state departments of education shall be taken into consideration.

(2) In determining the eligibility of privately controlled educational organizations, the accreditation of state departments of education or recognized regional and national educational accrediting organizations shall be taken into consideration.

(b) Where a municipality or other political subdivision has no independently constituted educational organization such as, for example, a board of education having autonomy with respect to carrying out the municipality's educational program, such municipality shall be eligible for a noncommercial educational television broadcast station. In such circumstances, a full and detailed showing must be made that a grant of the application will be consistent with the intent and purpose of the Commission's rules and regulations relating to such stations.

(c) Noncommercial educational television broadcast stations may transmit educational, cultural and entertainment programs, and programs designed for use by schools and school systems in connection with regular school

courses, as well as routine and administrative material pertaining thereto.

(d) A noncommercial educational television station may broadcast programs produced by or at the expense of, or furnished by persons other than the licensee, if no other consideration than the furnishing of the program and the costs incidental to its production and broadcast are received by the licensee. The payment of line charges by another station, network, or someone other than the licensee of a noncommercial educational television station, or general contributions to the operating costs of a station, shall not be considered as being prohibited by this paragraph.

(e) Each station shall furnish a nonprofit and noncommercial broadcast service. Noncommercial educational television stations shall be subject to the provisions of §73.1212 to the extent that they are applicable to the broadcast of programs produced by, or at the expense of, or furnished by others. No *promotional* announcements *on behalf of for profit entities* shall be broadcast at any time in exchange for the receipt, in whole or in part, of consideration to the licensee, its principals, or employees. However, acknowledgements of contributions can be made. *The scheduling of any announcements and acknowledgements may not interrupt regular programming.*

NOTE: Commission interpretation of this rule, including the acceptable form of acknowledgements, may be found in the Second Report and Order in Docket No. 21136 (Commission Policy Concerning the Noncommercial Nature of Educational Broadcast Stations), 86 F.C.C. 2d 141 (1981); the Memorandum Opinion and Order in Docket No. 21136, 90 FCC 2d 895 (1982), and the Memorandum Opinion and Order in Docket 21136, 49 FR 13534, April 5, 1984.

(f) Telecommunications Service on the Vertical Blanking Interval and in the Visual Signal. The provisions governing VBI and visual signal telecommunications service in §73.646 are applicable to noncommercial educational TV stations.

(g) Non-program related data signals transmitted on Line 21 pursuant to §73.682(a)(22)(ii) may be used for remunerative purposes.

[28 FR 13660, Dec. 14, 1963, as amended at 35 FR 7558, May 15, 1970; 47 FR 36179, Aug. 19, 1982; 48 FR 27068, June 13, 1983; 49 FR 29069, July 18, 1984; 50 FR 4664, Feb. 1, 1985; 50 FR 4684, Feb. 1, 1985; 61 FR 36304, July 10, 1996]

### §73.622 Digital television table of allotments.

(a) *General.* The following table of allotments contains the digital television (DTV) channel allotments designated for the listed communities in the United States, its Territories, and possessions. The initial DTV Table of Allotments was established on April 3, 1997, to provide a second channel for DTV service for all eligible analog television broadcasters. Requests for addition of new DTV allotments, or requests to change the channels allotted to a community must be made in a petition for rule making to amend the DTV Table of Allotments. A request to amend the DTV table to change the channel of an allotment in the DTV table will be evaluated for technical acceptability using engineering criteria set forth in §73.623(c). A request to amend the DTV table to add a new allotment will be evaluated for technical acceptability using the geographic spacing criteria set forth in §73.623(d). DTV allotments designated with an asterisk are assigned for use by non-commercial educational broadcast stations only. Stations operating on DTV allotments designated with a ''c'' are required to comply with paragraph (g) of this section.

(1) Petitions requesting the addition of a new allotment must specify a channel in the range of channels 2–51.

(2) Petitions requesting a change in the channel of an initial allotment must specify a channel in the range of channels 2–59.

(b) *DTV Table of Allotments.*

ALABAMA

| Community | Channel No. |
|---|---|
| Anniston | 58 |
| Bessemer | 18c |
| Birmingham | 30, 36, 50, 52, *53 |
| Demopolis | *19 |
| Dothan | 21, 36 |
| Dozier | *59 |
| Florence | 14, 20, *22 |
| Gadsden | 26, 45c |

ALABAMA—Continued

| Community | Channel No. |
|---|---|
| Homewood | 28 |
| Huntsville | *24, 32c, 41, 49c, 59 |
| Louisville | *44c |
| Mobile | 9, 20, 27, *41, 47 |
| Montgomery | *14, 16, 46c, 51, 57 |
| Mount Cheaha | *56 |
| Opelika | 31 |
| Ozark | 33 |
| Selma | 55 |
| Troy | 48 |
| Tuscaloosa | 34c |
| Tuskegee | 24 |

ALASKA

| Community | Channel No. |
|---|---|
| Anchorage | 18, 20, 22, *24, *26, 28, 30, 32 |
| Bethel | *3 |
| Dillingham | *9 |
| Fairbanks | 18, 22, *24, 26, 28 |
| Juneau | *6, 11 |
| Ketchikan | *8, 13 |
| North Pole | 20 |
| Sitka | 2 |

ARIZONA

| Community | Channel No. |
|---|---|
| Flagstaff | 18, 22, 27, 32 |
| Green Valley | 47c |
| Kingman | 19 |
| Lake Havasu City | 32 |
| Mesa | 36 |
| Phoenix | 17, 20, 24, 26, *29, 31, 34c, 49, 56 |
| Prescott | 25 |
| Sierra Vista | 44 |
| Tolleson | 52c |
| Tucson | 19c, 23, 25, *28c, *30, 32, 35, 42 |
| Yuma | 16, 41 |

ARKANSAS

| Community | Channel No. |
|---|---|
| Arkadelphia | *46 |
| El Dorado | 27 |
| Fayetteville | 15, *45 |
| Fort Smith | 18, 21, 27 |
| Hot Springs | 14 |
| Jonesboro | 9c, *20c, 49c |
| Little Rock | 12c, 22, 30, 32, 43c, *47 |
| Mountain View | *35 |
| Newark | *27 |
| Pine Bluff | 24, 39c |
| Rogers | 50 |
| Springdale | 39 |

CALIFORNIA

| Community | Channel No. |
|---|---|
| Anaheim | 32 |
| Arcata | 22 |
| Bakersfield | 10, 25, 33, 55 |
| Barstow | 44 |
| Calipatria | 50 |
| Ceres | *15c |

CALIFORNIA—Continued

| Community | Channel No. |
|---|---|
| Chico | 36, 43 |
| Clovis | 44c |
| Concord | 63c |
| Corona | 39c |
| Cotati | *23c |
| El Centro | 22, 48 |
| Eureka | *11, 16, 17, 28 |
| Fort Bragg | 15 |
| Fresno | 7, 9, 14, 16, *40 |
| Hanford | 20 |
| Huntington Beach | *48 |
| Los Angeles | 31c, 35c, 36, *41c, 42, 43, 53c, *59c, 60, 65c, 66 |
| Merced | 38 |
| Modesto | 18 |
| Monterey | 31, 32 |
| Novato | 47 |
| Oakland | 56 |
| Ontario | 47c |
| Oxnard | 24 |
| Palm Springs | 46, 52 |
| Paradise | 20 |
| Porterville | 48c |
| Rancho Palos Verdes | 51c |
| Redding | 14, *18 |
| Riverside | 68 |
| Sacramento | 21c, 35c, 48, *53c, 55c, 61 |
| Salinas | 13, 43c |
| San Bernardino | *26, 38, 61c |
| San Diego | 18, 19, 25, *30, 40c, 55 |
| San Francisco | 19, 24, 27c, 29, *30, *33c, 39c, 45c, 51, 57 |
| San Jose | 12c, 41c, 49c, *50, 52 |
| San Luis Obispo | 15, 34c |
| San Mateo | *59 |
| Sanger | 36 |
| Santa Ana | 23c |
| Santa Barbara | 21, 27 |
| Santa Maria | 19 |
| Santa Rosa | 54 |
| Stockton | 25, 46, 62 |
| Twentynine Palms | 23 |
| Vallejo | 34 |
| Ventura | 49 |
| Visalia | 28, *50c |
| Watsonville | *58 |

COLORADO

| Community | Channel No. |
|---|---|
| Boulder | 15c |
| Broomfield | *38 |
| Castle Rock | 46 |
| Colorado Springs | 10, 22c, 24 |
| Denver | 16, 17, *18, 19, 32c, 34, 35, *40, 43, 51c |
| Durango | 15 |
| Fort Collins | 21 |
| Glenwood Springs | 23 |
| Grand Junction | 2, 7, 12c, 15, *17 |
| Longmont | 29 |
| Montrose | 13 |
| Pueblo | *26, 42 |
| Steamboat Springs | 10 |
| Sterling | 23 |

### CONNECTICUT

| Community | Channel No. |
|---|---|
| Bridgeport | 42, *52c |
| Hartford | 5, *32, 33, 46 |
| New Britain | 35 |
| New Haven | 6, 10, *39 |
| New London | 34 |
| Norwich | *45 |
| Waterbury | 12 |

### DELAWARE

| Community | Channel No. |
|---|---|
| Seaford | *44 |
| Wilmington | 31, *55 |

### DISTRICT OF COLUMBIA

| Community | Channel No. |
|---|---|
| Washington | *27c, *33c, 34, 35, 36, 39, 48, 51c |

### FLORIDA

| Community | Channel No. |
|---|---|
| Boca Raton | *44c |
| Bradenton | 42 |
| Cape Coral | 35 |
| Clearwater | 21 |
| Clermont | 17 |
| Cocoa | *30, 51 |
| Daytona Beach | 11, 49 |
| Fort Lauderdale | 52c |
| Fort Myers | 15, *31c, 53 |
| Fort Pierce | *38, 50 |
| Fort Walton Beach | 25, 40, 49 |
| Gainesville | 16, *36 |
| High Springs | 28 |
| Hollywood | 47 |
| Jacksonville | 13c, 19, 32, 34, *38, 42, *44 |
| Key West | 3, 12 |
| Lake Worth | 36 |
| Lakeland | 19 |
| Leesburg | 40, *46c |
| Live Oak | 48 |
| Melbourne | 20, 48 |
| Miami | 8c, 9, *18c, 19, *20, 22c, 24c, 26, 30, 32, 46c |
| Naples | 41, 45 |
| New Smyrna Beach | *33 |
| Ocala | 31 |
| Orange Park | 10 |
| Orlando | 14, 22, *23, 39, 41, 58 |
| Palm Beach | 49 |
| Panama City | 19, 29c, *38, 42 |
| Panama City Beach | 47c |
| Pensacola | 17, *31, 34c, 45c |
| Sarasota | 52 |
| St. Petersburg | 24, 57, 59 |
| Tallahassee | 2, 22, *32 |
| Tampa | 7, 12, 29c, *34, 47, *54 |
| Tequesta | 16 |
| Tice | 33 |
| Venice | 25 |
| West Palm Beach | 13c, *27, 28, 55 |

### GEORGIA

| Community | Channel No. |
|---|---|
| Albany | 17, 30 |
| Athens | *22, 48 |
| Atlanta | 10, 19, 20, *21, 25, 27, 39, *41, 43 |
| Augusta | 30, 31, 42, 51 |
| Bainbridge | 50c |
| Baxley | 35c |
| Brunswick | 24 |
| Chatsworth | *33 |
| Cochran | *7 |
| Columbus | 15, *23, 35, 47, 9 |
| Cordele | 51 |
| Dalton | 16 |
| Dawson | *26c |
| Macon | 16, 40, 45, 50 |
| Monroe | 44 |
| Pelham | *20 |
| Perry | 32 |
| Rome | 51 |
| Savannah | 15, 23c, 39, *46 |
| Thomasville | 52 |
| Toccoa | 24 |
| Valdosta | 43 |
| Waycross | *18 |
| Wrens | *36 |

### HAWAII

| Community | Channel No. |
|---|---|
| Hilo | 8, 18, *19, 21, 22, 23, *31, *39c |
| Honolulu | 8, *18, 19, 22, 23, 27c, 31c, 33c, 35, *39c, 40, *43 |
| Kailua Kona | 25 |
| Kaneohe | 41 |
| Lihue | *7c, *12, *28c, *45 |
| Wailuku | 16c, 20, 24, *28c, 29, *30, *34c, 36 |

### IDAHO

| Community | Channel No. |
|---|---|
| Boise | *21, 26, 28 |
| Caldwell | 10c |
| Coeur D'alene | *45 |
| Filer | *18 |
| Idaho Falls | 9c, 36 |
| Lewiston | 32 |
| Moscow | *35 |
| Nampa | 24, 44 |
| Pocaello | *17, 23 |
| Twin Falls | 16, *22, 34 |

### ILLINOIS

| Community | Channel No. |
|---|---|
| Aurora | 59 |
| Bloomington | 28 |
| Carbondale | *40 |
| Champaign | 41, 48 |
| Charleston | *50 |
| Chicago | 3c, 19c, *21c, 27c, 29, 31, 43c, 45c, *47, 52 |
| Decatur | 18c, 22 |
| East St. Louis | 47c |
| Freeport | 41 |
| Harrisburg | 34 |
| Jacksonville | *15c |
| Joliet | 53 |
| Lasalle | 10 |

ILLINOIS—Continued

| Community | Channel No. |
|---|---|
| Macomb | *21 |
| Marion | 17 |
| Moline | *23, 38 |
| Mount Vernon | 21 |
| Olney | *19 |
| Peoria | 30, 39, 40, *46, 57 |
| Quincy | 32, *34, 54 |
| Rock Island | 58 |
| Rockford | 16c, 42, 54 |
| Springfield | 42, 44, 53 |
| Urbana | 26, *33 |

INDIANA

| Community | Channel No. |
|---|---|
| Angola | 12 |
| Bloomington | *14, 27, 53, 56 |
| Elkhart | 58 |
| Evansville | 28, 45c, *54, 58, 59 |
| Fort Wayne | 4, 19, 24, 36, *40c |
| Gary | *17, 51c |
| Hammond | 36 |
| Indianapolis | 9c, 16, *21c, 25, *44, 45, 46 |
| Kokomo | 54 |
| Lafayette | 11 |
| Marion | 32 |
| Muncie | 52 |
| Richmond | 39 |
| Salem | 51c |
| South Bend | 30, *35c, 42, 48 |
| Terre Haute | 24, 36, 39c |
| Vincennes | *52 |

IOWA

| Community | Channel No. |
|---|---|
| Ames | 59 |
| Burlington | 41 |
| Cedar Rapids | 27, 47, 51, 52 |
| Council Bluffs | *33c |
| Davenport | *34, 49, 56 |
| Des Moines | 16, 19, 26, 31, *50 |
| Dubuque | 43 |
| Fort Dodge | *25 |
| Iowa City | 25, *45 |
| Mason City | *18, 42 |
| Ottumwa | 14 |
| Red Oak | *35 |
| Sioux City | *28c, 30, 39, 41, 49 |
| Waterloo | *35, 55 |

KANSAS

| Community | Channel No. |
|---|---|
| Colby | 17 |
| Ensign | 5 |
| Fort Scott | 40 |
| Garden City | 16, 18 |
| Goodland | 14 |
| Great Bend | 22 |
| Hays | *16, 20 |
| Hutchinson | 19, *29, 35 |
| Lakin | *23 |
| Lawrence | 36 |
| Pittsburg | 30 |
| Salina | 17 |
| Topeka | *23, 28c, 44, 48 |

KANSAS—Continued

| Community | Channel No. |
|---|---|
| Wichita | 21, 26, 31, 45 |

KENTUCKY

| Community | Channel No. |
|---|---|
| Ashland | *26c, 44 |
| Beattyville | 7 |
| Bowling Green | 16, *18, 33, *48 |
| Campbellsville | 19 |
| Covington | *24 |
| Danville | 4 |
| Elizabethtown | *43 |
| Harlan | 51 |
| Hazard | 12, *16 |
| Lexington | 22, 40, *42, 59 |
| Louisville | 8, *17, 26, *38, 47, 49, 55 |
| Madisonville | 20c, *42 |
| Morehead | *15, 21 |
| Murray | *36 |
| Newport | 29 |
| Owensboro | 30 |
| Owenton | *44 |
| Paducah | 32, 41, 50c |
| Pikeville | *24 |
| Somerset | *14 |

LOUISIANA

| Community | Channel No. |
|---|---|
| Alexandria | *26c, 32c, 35 |
| Baton Rouge | *25, 34c, 42, 45c, 46 |
| Columbia | 57 |
| Lafayette | 16c, *23, 28, 56 |
| Lake Charles | 8c,*20, 30c |
| Monroe | *19, 55 |
| New Orleans | *11, 14, 15, 29, 30, *31, 40, 43, 50c |
| Shreveport | 17, *25c, 28, 34c, 44 |
| Slidell | 24 |
| West Monroe | 36, 38 |

MAINE

| Community | Channel No. |
|---|---|
| Augusta | *17 |
| Bangor | 14, 19, 25 |
| Biddeford | *45 |
| Calais | *15 |
| Lewiston | 28 |
| Orono | *22 |
| Poland Spring | 46 |
| Portland | 4, 38, 44 |
| Presque Isle | 16, *20 |

MARYLAND

| Community | Channel No. |
|---|---|
| Annapolis | *42 |
| Baltimore | *29, 38, 40, 41, 46c, 52, 59 |
| Frederick | *28 |
| Hagerstown | 16, *44, 55 |
| Oakland | *54 |
| Salisbury | 21, 53, *56 |

MASSACHUSETTS

| Community | Channel No. |
|---|---|
| Adams | 36 |
| Boston | *19, 20, 30, 31, 32, 39c, 42, *43 |
| Cambridge | 41 |
| Lawrence | 18 |
| Marlborough | 23 |
| New Bedford | 22, 49 |
| Norwell | 52 |
| Springfield | 11, 55, *58c |
| Vineyard Haven | 40 |
| Worcester | 29c, *47 |

MICHIGAN

| Community | Channel No. |
|---|---|
| Alpena | 13, *57 |
| Ann Arbor | 33 |
| Bad Axe | *15 |
| Battle Creek | 20, 44c |
| Bay City | 22 |
| Cadillac | 40, 47, *58 |
| Calumet | 18 |
| Cheboygan | 14 |
| Detroit | 14, 21c, 41, *43, 44, 45, 58 |
| East Lansing | *55c |
| Escanaba | 48 |
| Flint | 16, 36, *52 |
| Grand Rapids | 7, *11, 19, 39 |
| Iron Mountain | 22 |
| Jackson | 34 |
| Kalamazoo | 2, *5, 45 |
| Lansing | 38, 51c, 59 |
| Manistee | *17 |
| Marquette | *33, 3 |
| Mount Clemens | 39c |
| Mount Pleasant | *56 |
| Muskegon | 24 |
| Onondaga | 57 |
| Saginaw | 30, 48 |
| Sault Ste. Marie | 49, 56 |
| Traverse City | 31, 50 |
| University Center | *18 |
| Vanderbilt | 59 |

MINNESOTA

| Community | Channel No. |
|---|---|
| Alexandria | 14, 24 |
| Appleton | *31 |
| Austin | *20, 33 |
| Bemidji | *18 |
| Brainerd | *28 |
| Crookston | *16 |
| Duluth | 17, 33, *38, 43 |
| Hibbing | 36 |
| Mankato | 38 |
| Minneapolis | 21, 22, *26, 32, 35, *44 |
| Redwood Falls | 27 |
| Rochester | 36, 46 |
| St. Cloud | 40 |
| St. Paul | *16, *34, 50 |
| Thief River Falls | 57 |
| Walker | 20 |
| Worthington | *15 |

MISSISSIPPI

| Community | Channel No. |
|---|---|
| Biloxi | *16, 39 |
| Booneville | *55 |
| Bude | *18c |
| Columbus | 35 |
| Greenville | 17 |
| Greenwood | *25, 54 |
| Gulfport | 48 |
| Hattiesburg | 58 |
| Holly Springs | 41c |
| Jackson | *20, 21, 41c, 51, 52 |
| Laurel | 28 |
| Meridian | 26, 31c, *44, 49 |
| Mississippi State | *38 |
| Natchez | 49c |
| Oxford | *36 |
| Tupelo | 57 |
| West Point | 16 |

MISSOURI

| Community | Channel No. |
|---|---|
| Cape Girardeau | 22, 57 |
| Columbia | 22, 36 |
| Hannibal | 29 |
| Jefferson City | 12, 20 |
| Joplin | *25, 43, 46 |
| Kansas City | 14, *18, 24, 31, 34, 42c, 47, 51c |
| Kirksville | 33 |
| Poplar Bluff | 18 |
| Sedalia | 15 |
| Springfield | 19, *23, 28c, 44, 52 |
| St. Joseph | 21, 53 |
| St. Louis | 14, 26, 31c, 35, *39, 43, 56 |

MONTANA

| Community | Channel No. |
|---|---|
| Billings | 11, 17, 18 |
| Bozeman | 16, *20 |
| Butte | 2, 15, 19c |
| Glendive | 15 |
| Great Falls | 39, 44, 45 |
| Hardin | 22 |
| Helena | 14, 29 |
| Kalispell | 38 |
| Miles City | 13 |
| Missoula | *27, 35, 36, 40 |

NEBRASKA

| Community | Channel No. |
|---|---|
| Albion | 23 |
| Alliance | *24 |
| Bassett | *15 |
| Grand Island | 19, 32 |
| Hastings | *14, 21 |
| Hayes Center | 18 |
| Kearney | 36 |
| Lexington | *26 |
| Lincoln | 25, 31, *40 |
| McCook | 12 |
| Merriman | *17 |
| Norfolk | *16 |
| North Platte | *16, 22 |
| Omaha | *17, 20, 22, 38, 43c, 45 |
| Scottsbluff | 20, 29 |

NEBRASKA—Continued

| Community | Channel No. |
|---|---|
| Superior | 34 |

NEVADA

| Community | Channel No. |
|---|---|
| Elko | 8 |
| Henderson | 24 |
| Las Vegas | 2, 7, *11c, 16c, 17, 22c, 29 |
| Paradise | 40c |
| Reno | *15, 22c, 23, 26, 32, 34, 44 |
| Winnemucca | 12 |

NEW HAMPSHIRE

| Community | Channel No. |
|---|---|
| Berlin | *15 |
| Concord | 33 |
| Derry | 35 |
| Durham | *57 |
| Keene | *49c |
| Littleton | *48 |
| Manchester | 59c |
| Merrimack | 34 |

NEW JERSEY

| Community | Channel No. |
|---|---|
| Atlantic City | 46, 49 |
| Burlington | 27 |
| Camden | *22 |
| Linden | 36 |
| Montclair | *51c |
| New Brunswick | *18c |
| Newark | 53c, 61 |
| Newton | 8c |
| Paterson | 40 |
| Secaucus | 38 |
| Trenton | *43 |
| Vineland | 66c |
| West Milford | *29 |
| Wildwood | 36 |

NEW MEXICO

| Community | Channel No. |
|---|---|
| Albuquerque | 16, *17, 21, 24c, *25, 26, 42c, 51c |
| Carlsbad | 19 |
| Clovis | 20 |
| Farmington | 8, 17 |
| Hobbs | 16 |
| Las Cruces | *23c, 36 |
| Portales | *32 |
| Roswell | 28c, 35, 41 |
| Santa Fe | 10, 27, 29 |
| Silver City | 12 |

NEW YORK

| Community | Channel No. |
|---|---|
| Albany | 4, 15, 26 |
| Amsterdam | 50 |
| Batavia | 53 |
| Binghamton | 4, 7, 8, *42c |

NEW YORK—Continued

| Community | Channel No. |
|---|---|
| Buffalo | 14, *32, 33, 34, 38, 39, *43 |
| Carthage | 35 |
| Corning | 50 |
| Elmira | 2, 55 |
| Garden City | *22c |
| Jamestown | 27c |
| Kingston | 21 |
| New York | *24, 28, 30, 33, 44, 45, 56c |
| North Pole | 14 |
| Norwood | *23 |
| Plattsburgh | *38 |
| Poughkeepsie | 27 |
| Riverhead | 57 |
| Rochester | *16, 28, 45, 58, 59 |
| Schenectady | *34, 39, 43 |
| Smithtown | 23 |
| Springville | 46 |
| Syracuse | 17, 19c, *25c, 44c, 47, 54 |
| Utica | 27, 29, 30 |
| Watertown | 21c, *41 |

NORTH CAROLINA

| Community | Channel No. |
|---|---|
| Asheville | *25, 45, 56, 57 |
| Belmont | 47c |
| Burlington | 14 |
| Chapel Hill | *59 |
| Charlotte | 22, 23, *24, 27, 34 |
| Columbia | *20 |
| Concord | *44 |
| Durham | 27, 52 |
| Fayetteville | 36, 38 |
| Goldsboro | 55 |
| Greensboro | 33, 43, 51 |
| Greenville | 10c, 21, *23 |
| Hickory | 40 |
| High Point | 35 |
| Jacksonville | 34, *44 |
| Kannapolis | 50 |
| Lexington | 19 |
| Linville | *54 |
| Lumberton | *25 |
| Morehead City | 24 |
| New Bern | 48 |
| Raleigh | 49, 53, 57 |
| Roanoke Rapids | *39 |
| Rocky Mount | 15 |
| Washington | 32 |
| Wilmington | *29, 30, 46, 54 |
| Wilson | 42 |
| Winston-Salem | 29, 31, *32 |

NORTH DAKOTA

| Community | Channel No. |
|---|---|
| Bismarck | 16, *22, 23, 31 |
| Devils Lake | *25, 59 |
| Dickinson | 18, 19, *20 |
| Ellendale | *20c |
| Fargo | 19, 21, *23, 58 |
| Grand Forks | *56 |
| Jamestown | 14 |
| Minot | 15c, 45, *57, 58 |
| Pembina | 15 |
| Valley City | 38 |
| Williston | 14, *51, 52 |

### OHIO

| Community | Channel No. |
|---|---|
| Akron | 30, *50c, 59 |
| Alliance | *46c |
| Athens | *27 |
| Bowling Green | *56 |
| Cambridge | *35 |
| Canton | 39, 47 |
| Chillicothe | 46 |
| Cincinnati | 10c, 31, 33, *34, 35 |
| Cleveland | 2, 15, *26c, 31, 34 |
| Columbus | 13, 14, 21, 36, *38 |
| Dayton | 30, 41, 50, 51, *58 |
| Lima | 20, 47 |
| Lorain | 28 |
| Mansfield | 12 |
| Newark | 24 |
| Oxford | *28 |
| Portsmouth | 17, *43c |
| Sandusky | 42c |
| Shaker Heights | 10 |
| Springfield | 18 |
| Steubenville | 57 |
| Toledo | 5, 17, 19c, *29, 46, 49c |
| Youngstown | 20c, 36, 41 |
| Zanesville | 40 |

### OKLAHOMA

| Community | Channel No. |
|---|---|
| Ada | 26 |
| Bartlesville | 15 |
| Cheyenne | *8 |
| Claremore | *36c |
| Enid | 18 |
| Eufaula | *31 |
| Lawton | 23 |
| Oklahoma City | 15c, 16, 24, 27, *32, 33, 39, 42, 50, 51 |
| Okmulgee | 28 |
| Shawnee | 29 |
| Tulsa | 22, *38, 42c, 48c, 49, 55, 56, 58 |

### OREGON

| Community | Channel No. |
|---|---|
| Bend | *11, 18 |
| Coos Bay | 21, 22 |
| Corvallis | *39 |
| Eugene | 14, 17c, 25, *29c, 31 |
| Klamath Falls | 29, *33, 40 |
| La Grande | *5 |
| Medford | 15, 27c, 35, 38, *42 |
| Pendleton | 8 |
| Portland | *27, 30, 40, 43, 45, 6 |
| Roseburg | 18, 19, 45 |
| Salem | 20, 33c |

### PENNSYLVANIA

| Community | Channel No. |
|---|---|
| Allentown | 46, *62c |
| Altoona | 24c, 32, 46 |
| Bethlehem | 59c |
| Clearfield | *15 |
| Erie | 16, 22, *50, 52, 58 |
| Greensburg | 50 |
| Harrisburg | 4, *36, 57 |
| Hazleton | 9 |

### PENNSYLVANIA—Continued

| Community | Channel No. |
|---|---|
| Johnstown | 29, 30, 34 |
| Lancaster | 23, 58 |
| Philadelphia | 26, 32, *34, 42, 54, 64c, 67 |
| Pittsburgh | 25c, *26c, *38, 42, 43, 48, 51 |
| Reading | 25 |
| Red Lion | 30 |
| Scranton | 13, 31, 32, *41, 49 |
| Wilkes-Barre | 11 |
| Williamsport | 29 |
| York | 47 |

### RHODE ISLAND

| Community | Channel No. |
|---|---|
| Block Island | 17c |
| Providence | 13c, *21, 51, 54c |

### SOUTH CAROLINA

| Community | Channel No. |
|---|---|
| Allendale | *33 |
| Anderson | 14 |
| Beaufort | *44 |
| Charleston | 35, 40, *49, 52, 53, 59 |
| Columbia | 8, 17, *32, 41, 48 |
| Conway | *58 |
| Florence | 16c, 20, *45, 56 |
| Greenville | *9, 35, 59 |
| Greenwood | *18 |
| Hardeeville | 27 |
| Myrtle Beach | 18 |
| Rock Hill | 15, 39 |
| Spartanburg | 43, 53 |
| Sumter | *28c, 38 |

### SOUTH DAKOTA

| Community | Channel No. |
|---|---|
| Aberdeen | *17c, 28 |
| Brookings | *18 |
| Eagle Butte | *25 |
| Florence | 25 |
| Huron | 22 |
| Lead | 29, 30 |
| Lowry | *15 |
| Martin | *23 |
| Mitchell | 26 |
| Pierre | 19, *21 |
| Rapid City | 16c, 18, 22, *26 |
| Reliance | 14 |
| Sioux Falls | 7, *24c, 29, 32, 40, 47c |
| Vermillion | *34 |

### TENNESSEE

| Community | Channel No. |
|---|---|
| Chattanooga | *29, 35, 40, 47, 55 |
| Cleveland | 42 |
| Cookeville | 36, *52 |
| Crossville | 50 |
| Greeneville | 38 |
| Hendersonville | 51c |
| Jackson | 39, 43 |
| Jellico | 23 |
| Johnson City | 58 |

TENNESSEE—Continued

| Community | Channel No. |
|---|---|
| Kingsport | 27 |
| Knoxville | *17, 26, 30, 31, 34 |
| Lebanon | 44 |
| Lexington | *47 |
| Memphis | 25c, 28, *29c, 31c, 51c, 52, 53 |
| Murfreesboro | 38 |
| Nashville | 10, 15, 21, 23, 27, *46, 56 |
| Sneedville | *41 |

TEXAS

| Community | Channel No. |
|---|---|
| Abilene | 24, 29 |
| Alvin | 36 |
| Amarillo | 9, 15c, 19, *21, 23 |
| Arlington | 42 |
| Austin | 21, *22, 33, 43c, 49, 56 |
| Baytown | 41 |
| Beaumont | 21, *33, 50 |
| Belton | 47c |
| Big Spring | 33 |
| Brownsville | 24c |
| Bryan | 29c, 59 |
| College Station | *12 |
| Conroe | 5, 42 |
| Corpus Christi | 18, *23, 27, 47, 50 |
| Dallas | 9c, *14, 32, 35, 36, 40c, 45 |
| Decatur | 30c |
| Del Rio | 28 |
| Denton | *43 |
| Eagle Pass | 18 |
| El Paso | 15c, 16, 17, 18, 25, *30, *39c, 51 |
| Fort Worth | 18, 19, 41, 51 |
| Galveston | *23c, 47 |
| Garland | 24c |
| Greenville | 46 |
| Harlingen | 31, *34, 38 |
| Houston | *9c, 19, *24, 27c, 31, 32, 35, 38, 44c |
| Irving | 48 |
| Jacksonville | 22 |
| Katy | 52c |
| Kerrville | 32 |
| Killeen | 23 |
| Lake Dallas | 54 |
| Laredo | 14, 15, 19 |
| Llano | 27 |
| Longview | 52c |
| Lubbock | 25, 27, 35c, 38, *39, 43 |
| Lufkin | 43 |
| McAllen | 46 |
| Midland | 26 |
| Nacogdoches | 18 |
| Odessa | 15, *22, 23, 31, 43c |
| Port Arthur | 40 |
| Rio Grande City | 20 |
| Rosenberg | 46c |
| San Angelo | 11, 16, 19 |
| San Antonio | *16, *20, 30c, 38, 39, 48, 55, 58 |
| Sherman | 20 |
| Snyder | 10 |
| Sweetwater | 20 |
| Temple | 50 |
| Texarkana | 15 |
| Tyler | 38 |
| Victoria | 15, 34 |
| Waco | *20, 26c, 53, 57 |
| Weslaco | 13 |
| Wichita Falls | 15, 22, 28 |

UTAH

| Community | Channel No. |
|---|---|
| Cedar City | 14 |
| Ogden | 29, *34 |
| Provo | 17c, *39 |
| Salt Lake City | 27, 28, 35, 38, 40, *42 |
| St. George | 9 |

VERMONT

| Community | Channel No. |
|---|---|
| Burlington | 16, *32, 43, 53 |
| Hartford | 25 |
| Rutland | *56 |
| St. Johnsbury | *18 |
| Windsor | *24 |

VIRGINIA

| Community | Channel No. |
|---|---|
| Arlington | 15c |
| Ashland | 47 |
| Bristol | 28 |
| Charlottesville | *14, 32 |
| Danville | 41 |
| Fairfax | *57c |
| Front Royal | *21 |
| Goldvein | *30 |
| Grundy | 49 |
| Hampton | 41 |
| Hampton-Norfolk | *16c |
| Harrisonburg | 49 |
| Lynchburg | 20, 56 |
| Manassas | 43c |
| Marion | *42 |
| Norfolk | 38, 46, 58 |
| Norton | *32 |
| Petersburg | 22c |
| Portsmouth | 19, 31 |
| Richmond | *24c, 25, 26, *44, 54 |
| Roanoke | *3, 17, 18, 30, 36 |
| Staunton | *11 |
| Virginia Beach | 29 |

WASHINGTON

| Community | Channel No. |
|---|---|
| Bellevue | 32, 50 |
| Bellingham | 19, 35 |
| Centralia | *19 |
| Everett | 31 |
| Kennewick | 44 |
| Pasco | 18 |
| Pullman | *17 |
| Richland | 26c, *38 |
| Seattle | 25, 38, 39, *41, 44, 48 |
| Spokane | 13, 15, 20, 30, 36, *39 |
| Tacoma | 14, 18, *27, 36, *42 |
| Vancouver | 48 |
| Wenatchee | 46c |
| Yakima | 14, 16, *21, 33 |

WEST VIRGINIA

| Community | Channel No. |
|---|---|
| Bluefield | 14, 46 |
| Charleston | 19, 39, 41 |

WEST VIRGINIA—Continued

| Community | Channel No. |
|---|---|
| Clarksburg | 28, 52 |
| Grandview | *53 |
| Huntington | 23, *34c, 54 |
| Lewisburg | 48 |
| Martinsburg | 12 |
| Morgantown | *33 |
| Oak Hill | 50 |
| Parkersburg | 49 |
| Weston | 58 |
| Wheeling | 32 |

WISCONSIN

| Community | Channel No. |
|---|---|
| Appleton | 59 |
| Chippewa Falls | 49c |
| Eagle River | 28 |
| Eau Claire | 15, 39 |
| Fond Du Lac | 44 |
| Green Bay | 23, 41, *42, 51, 56 |
| Janesville | 32 |
| Kenosha | 40 |
| La Crosse | 14, 17, *30, 53 |
| Madison | 11, 19, *20, 26, 50 |
| Manitowoc | 19 |
| Mayville | 43 |
| Menomonie | *27 |
| Milwaukee | *8, 22, 25c, 28, 33, 34, *35, 46, 61 |
| Park Falls | *47 |
| Racine | 48 |
| Rhinelander | 16 |
| Superior | 19 |
| Suring | 21 |
| Wausau | *24, 29, 40 |

WYOMING

| Community | Channel No. |
|---|---|
| Casper | 15c, 17, 18 |
| Cheyenne | 11, 28c, 30 |
| Jackson | 14 |
| Lander | 7, *8 |
| Rawlins | 9 |
| Riverton | 16 |
| Rock Springs | 21 |
| Sheridan | 21 |

GUAM

| Community | Channel No. |
|---|---|
| Agana | 2, 4, 5 |
| Tamuning | 17 |

PUERTO RICO

| Community | Channel No. |
|---|---|
| Aguada | 62 |
| Aguadilla | 17c, *34, 69 |
| Arecibo | 53, 61c |
| Bayamon | 59c |
| Caguas | 56, *57 |
| Carolina | 51 |
| Fajardo | *16c, 33 |
| Guayama | 45 |
| Humacao | 49 |

PUERTO RICO—Continued

| Community | Channel No. |
|---|---|
| Mayaguez | 23c, 29c, 35c, 63 |
| Naranjito | 65c |
| Ponce | 15c, 19, *25, 43c, 47, 66 |
| San Juan | 21, 27c, 28, 31c, 32, *55c |
| San Sebastian | 39c |
| Yauco | 41c |

VIRGIN ISLANDS

| Community | Channel No. |
|---|---|
| Charlotte Amalie | *44, 48, 50 |
| Christiansted | 5, 20 |

(c) *Availability of channels.* Applications may be filed to construct DTV broadcast stations only on the channels designated in the DTV Table of Allotments set forth in paragraph (b) of this section, and only in the communities listed therein. Applications that fail to comply with this requirement, whether or not accompanied by a petition to amend the DTV Table, will not be accepted for filing. However, applications specifying channels that accord with publicly announced FCC Orders changing the DTV Table of Allotments will be accepted for filing even if such applications are tendered before the effective dates of such channel change. An application for authority to construct a DTV station on an allotment in the initial DTV table may only be filed by the licensee or permittee of the analog TV station with which that initial allotment is paired, as set forth in Appendix B of the *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order* in MM Docket 87–268, FCC 98–24 (*Memorandum Opinion and Order*) adopted January 29, 1998. Copies of the *Memorandum Opinion and Order* may be inspected during normal business hours at the: Federal Communications Commission, 1919 M St., NW., Dockets Branch (Room 239), Washington, DC, 20554. This document is also available through the Internet on the *FCC Home Page* at http://www.fcc.gov. Applications may also be filed to implement an exchange of channel allotments between two or more licensees or permittees of analog TV stations in the same community, the same market, or in adjacent markets provided, however, that the other requirements

of this section and § 73.623 are met with respect to each such application.

(d) *Reference points and distance computations.* (1) The reference coordinates of a DTV allotment included in the initial DTV Table of Allotments are the coordinates of the authorized transmitting antenna site of the associated analog TV station, as set forth in Appendix B of the *Memorandum Opinion and Order* (referenced above). An application for authority to construct or modify DTV facilities on such an allotment may specify an alternate location for the DTV transmitting antenna that is within 5 kilometers of the DTV allotment reference coordinates without consideration of electromagnetic interference to other DTV or analog TV broadcast stations, allotments or applications, provided the application complies with paragraph (f)(2) of this section. Location of the transmitting antenna of such a station at a site more than 5 kilometers from the DTV allotment reference coordinates must comply with the provisions of section 73.623(c). In the case where a DTV station has been granted authority to construct more than 5 kilometers from its reference coordinates pursuant to section 73.623(c), and its authorized coverage area extends in any azimuthal direction beyond the DTV coverage area determined for the DTV allotment reference facilities, then the coordinates of such authorized site are to be used in addition to the coordinates of the DTV allotment to determine protection from new DTV allotments pursuant to § 73.623(d) and from subsequent DTV applications filed pursuant to § 73.623(c).

(2) The reference coordinates of a DTV allotment not included in the initial DTV Table of Allotments shall be the authorized transmitter site, or, where such a transmitter site is not available for use as a reference point, the coordinates as designated in the FCC order modifying the DTV Table of Allotments.

(e) *DTV Service Areas.* (1) The service area of a DTV station is the geographic area within the station's noise-limited F(50,90) contour where its signal strength is predicted to exceed the noise-limited service level. The noise-limited contour is the area in which the predicted F(50,90) field strength of the stations's signal, in dB above 1 microvolt per meter (dBu) as determined using the method in section 73.625(d), exceeds the following levels (these are the levels at which reception of DTV service is limited by noise):

| | dBu |
|---|---|
| Channels 2–6 | 28 |
| Channels 7–13 | 36 |
| Channels 14–69 | 41 |

Within this contour, service is considered available at locations where the station's signal strength, as predicted using the terrain dependent Longley-Rice point-to-point propagation model, exceeds the levels above. Guidance for evaluating coverage areas using the Longley-Rice methodology is provided in *OET Bulletin No. 69*. Copies of *OET Bulletin No. 69* may be inspected during normal business hours at the: Federal Communications Commission, 1919 M St., NW., Dockets Branch (Room 239), Washington, DC, 20554. This document is also available through the Internet on the *FCC Home Page* at http://www.fcc.gov.

NOTE TO PARAGRAPH (E)(1): During the transition, in cases where the assigned power of a UHF DTV station in the initial DTV Table is 1000 kW, the Grade B contour of the associated analog television station, as authorized on April 3, 1997, shall be used instead of the noise-limited contour of the DTV station in determining the DTV station's service area. In such cases, the DTV service area is the geographic area within the station's analog Grade B contour where its DTV signal strength is predicted to exceed the noise-limited service level, *i.e.* 41 dB, as determined using the Longley-Rice methodology.

(2) For purposes of determining whether interference is caused to a DTV station's service area, the maximum technical facilities, *i.e.*, antenna height above average terrain (antenna HAAT) and effective radiated power (ERP), specified for the station's allotment are to be used in determining its service area.

*(f) DTV maximum power and antenna heights.* (1) The maximum, or reference, effective radiated power (ERP) and antenna height above average terrain (antenna HAAT) for an allotment included in the initial DTV Table of Allotments are set forth in Appendix B of the

*Memorandum Opinion and Order* (referenced in paragraph (c) of this section). In each azimuthal direction, the reference ERP value is based on the antenna HAAT of the corresponding analog TV station and achieving predicted coverage equal to that analog TV station's predicted Grade B contour, as defined in section 73.683.

(2) An application for authority to construct or modify DTV facilities will not be subject to further consideration of electromagnetic interference to other DTV or analog TV broadcast stations, allotments or applications, provided that:

(i) The proposed ERP in each azimuthal direction is equal to or less than the reference ERP in that direction; and

(ii) The proposed antenna HAAT is equal to or less than the reference antenna HAAT or the proposed antenna HAAT exceeds the reference antenna HAAT by 10 meters or less and the reference ERP in paragraph (f)(2)(i) of this section is adjusted in accordance with paragraph (f)(3) of this section; and

(iii) The application complies with the location provisions in paragraph (d)(1) of this section.

(3)(i) A DTV station may increase its antenna HAAT by up to 10 meters from that specified in Appendix B if it reduces its DTV power to a level at or below the level of adjusted DTV power computed in the following formula:

ERP adjustment in dB = $20\log(H_1/H_2)$

Where $H_1$ = Reference antenna HAAT specified in the DTV Table, and $H_2$ = Actual antenna HAAT

(ii) Alternatively, a DTV application that specifies an antenna HAAT within 25 meters below that specified in Appendix B may adjust its power upward to a level at or below the adjusted DTV power in accordance with the formula in paragraph (f)(3)(i) of this section without an interference showing. For a proposed antenna more than 25 meters below the reference antenna HAAT, the DTV station may increase its ERP up to the level permitted for operation with an antenna that is 25 meters below the station's reference antenna HAAT.

(4) UHF DTV stations may request an increase in power, up to a maximum of 1000 kW ERP, to enhance service within their authorized service area through use of antenna beam tilting in excess of 1 degree, as follows:

(i) Field strengths at the outer edge of the station's service area shall be no greater than the levels that would exist if the station were operating at its assigned DTV power.

(ii) Where a station operates at higher power under the provisions of this paragraph, its field strengths at the edge of its service area are to be calculated assuming 1 dB of additional antenna gain over the antenna gain pattern specified by the manufacturer.

(iii) Where a first adjacent channel DTV station or allotment is located closer than 110 km or a first adjacent channel analog TV station is located closer than 106 km from the proposed transmitter site, the application must be accompanied by a technical showing that the proposed operation complies with the technical criteria in § 73.623(c) and thereby will not result in new interference exceeding the *de minimis* standard for new interference set forth in that section, or statements from affected stations agreeing to the proposed operation in accordance with § 73.623(f).

(iv) A licensee desiring to operate at higher power under these provisions shall submit, with its initial application for a DTV construction permit or subsequent application to modify its DTV facilities, an engineering analysis demonstrating that the predicted field strengths and predicted interference within its service area would comport with the requirements of this paragraph. The licensee also must notify, by certified mail, all stations that could potentially be affected by such operation at the time the station files its application for a construction permit or modification of facilities. Potentially affected stations to be notified include stations on co-channel and first-adjacent channel allotments that are located at distances less than the minimum geographic spacing requirements in § 73.623(d)(2). For example, in Zone I a co-channel DTV station within 196.3 km or a first-adjacent channel DTV station within 110 km must be notified. A station that believes that its service is being affected beyond the *de minimis* standard set forth in § 73.623(c)

may file an informal objection with the Commission. Such an informal objection shall include an engineering analysis demonstrating that additional impermissible interference would occur. The Commission may condition grant of authority to operate at increased power pursuant to this provision on validation of actual performance through field measurements.

(5) Licensees and permittees assigned a DTV channel in the initial DTV Table of Allotments may request an increase in either ERP in some azimuthal direction or antenna HAAT, or both, that exceed the initial technical facilities specified for the allotment in Appendix B of the *Memorandum Opinion and Order* (referenced in paragraph (c) of this section), up to the maximum permissible limits on DTV power and antenna height set forth in paragraph (f)(6), (f)(7), or (f)(8) of this section, as appropriate, or up to that needed to provide the same geographic coverage area as the largest station within their market, whichever would allow the largest service area. Such requests must be accompanied by a technical showing that the increase complies with the technical criteria in §73.623(c), and thereby will not result in new interference exceeding the *de minimis* standard set forth in that section, or statements agreeing to the change from any co-channel or adjacent channel stations that might be affected by potential new interference, in accordance with §73.623(f). In the case where a DTV station has been granted authority to construct pursuant to §73.623(c), and its authorized coverage area extends in any azimuthal direction beyond the DTV coverage area determined for the DTV allotment reference facilities, then the authorized DTV facilities are to be used in addition to the assumed facilities of the initial DTV allotment to determine protection from new DTV allotments pursuant to §73.623(d) and from subsequent DTV applications filed pursuant to §73.623(c). The provisions of this paragraph regarding increases in the ERP or antenna height of DTV stations on channels in the initial DTV Table of Allotments shall also apply in cases where the licensee or permittee seeks to change the station's channel as well as alter its ERP and antenna HAAT. Licensees and permittees are advised that where a channel change is requested, it may, in fact, be necessary in specific cases for the station to operate with reduced power, a lower antenna, or a directional antenna to avoid causing new interference to another station.

(6) A DTV station that operates on a channel 2–6 allotment created subsequent to the initial DTV Table will be allowed a maximum ERP of 10 kW if its antenna HAAT is at or below 305 meters and it is located in Zone I or a maximum ERP of 45 kW if its antenna HAAT is at or below 305 meters and it is located in Zone II or Zone III. A DTV station that operates on a channel 2–6 allotment included in the initial DTV Table of Allotments may request an increase in power and/or antenna HAAT up to these maximum levels, provided the increase also complies with the provisions of paragraph (f)(5) of this section.

(i) At higher HAAT levels, such DTV stations will be allowed to operate with lower maximum ERP levels in accordance with the following table and formulas (the allowable maximum ERP for intermediate values of HAAT is determined using linear interpolation based on the units employed in the table):

MAXIMUM ALLOWABLE ERP AND ANTENNA HEIGHT FOR DTV STATIONS IN ZONES II OR III ON CHANNELS 2–6

| Antenna HAAT (meters) | ERP (kW) |
|---|---|
| 610 | 10 |
| 580 | 11 |
| 550 | 12 |
| 520 | 14 |
| 490 | 16 |
| 460 | 19 |
| 425 | 22 |
| 395 | 26 |
| 365 | 31 |
| 335 | 37 |
| 305 | 45 |

(ii) For DTV stations located in Zone I that operate on channels 2–6 with an HAAT that exceeds 305 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:

$ERP_{max}=92.57–33.24*\log_{10}(HAAT)$

(iii) For DTV stations located in Zone II or III that operate on channels 2–6 with an HAAT that exceeds 610 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:

$ERP_{max}=57.57–17.08*\log_{10}(HAAT)$

(7) A DTV station that operates on a channel 7–13 allotment created subsequent to the initial DTV Table will be allowed a maximum ERP of 30 kW if its antenna HAAT is at or below 305 meters and it is located in Zone I or a maximum ERP of 160 kW if its antenna HAAT is at or below 305 meters and it is located in Zone II or Zone III. A DTV station that operates on a channel 7–13 allotment included in the initial DTV Table of Allotments may request an increase in power and/or antenna HAAT up to these maximum levels, provided the increase also complies with the provisions of paragraph (f)(5) of this section.

(i) At higher HAAT levels, such DTV stations will be allowed to operate with lower maximum ERP levels in accordance with the following table and formulas (the allowable maximum ERP for intermediate values of HAAT is determined using linear interpolation based on the units employed in the table):

MAXIMUM ALLOWABLE ERP AND ANTENNA HEIGHT FOR DTV STATIONS IN ZONES II OR III ON CHANNELS 7–13

| Antenna HAAT (meters) | ERP (kW) |
|---|---|
| 610 | 30 |
| 580 | 34 |
| 550 | 40 |
| 520 | 47 |
| 490 | 54 |
| 460 | 64 |
| 425 | 76 |
| 395 | 92 |
| 365 | 110 |
| 335 | 132 |
| 305 | 160 |

(ii) For DTV stations located in Zone I that operate on channels 7–13 with an HAAT that exceeds 305 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:

$ERP_{max}=97.35–33.24*\log_{10}(HAAT)$

(iii) For DTV stations located in Zone II or III that operate on channels 7–13 with an HAAT that exceeds 610 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:

$ERP_{max}=62.34–17.08*\log_{10}(HAAT)$

(8) A DTV station that operates on a channel 14–59 allotment created subsequent to the initial DTV Table will be allowed a maximum ERP of 1000 kW if their antenna HAAT is at or below 365 meters. A DTV station that operates on a channel 14–59 allotment included in the initial DTV Table of Allotments may request an increase in power and/or antenna HAAT up to these maximum levels, provided the increase also complies with the provisions of paragraph (f)(5) of this section.

(i) At higher HAAT levels, such DTV stations will be allowed to operates with lower maximum ERP levels in accordance with the following table and formulas (the allowable maximum ERP for intermediate values of HAAT is determined using linear interpolation based on the units employed in the table):

MAXIMUM ALLOWABLE ERP AND ANTENNA HEIGHT FOR DTV STATIONS ON CHANNELS 14–59, ALL ZONES

| Antenna HAAT (meters) | ERP (kW) |
|---|---|
| 610 | 316 |
| 580 | 350 |
| 550 | 400 |
| 520 | 460 |
| 490 | 540 |
| 460 | 630 |
| 425 | 750 |
| 395 | 900 |
| 365 | 1000 |

(ii) For DTV stations located in Zone I, II or III that operate on channels 14–59 with an HAAT that exceeds 610 meters, the allowable maximum ERP expressed in decibels above 1 kW (dBk) is determined using the following formula, with HAAT expressed in meters:

$ERP_{max}=72.57–17.08*\log_{10}(HAAT)$

(g) *DTV stations operating on channels above an analog TV station.* (1) DTV stations operating on a channel allotment designated with a ''c'' in paragraph (b) of this section must maintain the pilot carrier frequency of the DTV signal

5.082138 MHz above the visual carrier frequency of any analog TV broadcast station that operates on the lower adjacent channel and is located within 88 kilometers. This frequency difference must be maintained within a tolerance of ±*3 Hz*.

(2) Unless it conflicts with operation complying with paragraph (g)(1) of this section, where a low power television station or TV translator station is operating on the lower adjacent channel within 32 km of the DTV station and notifies the DTV station that it intends to minimize interference by precisely maintaining its carrier frequencies, the DTV station shall cooperate in locking its carrier frequency to a common reference frequency and shall be responsible for any costs relating to its own transmission system in complying with this provision.

(h)(1) The power level of emissions on frequencies outside the authorized channel of operation must be attenuated no less than the following amounts below the average transmitted power within the authorized channel. In the first 500 kHz from the channel edge the emissions must be attenuated no less than 47 dB. More than 6 MHz from the channel edge, emissions must be attenuated no less than 110 dB. At any frequency between 0.5 and 6 MHz from the channel edge, emissions must be attenuated no less than the value determined by the following formula:

Attenuation in dB = $-11.5(\Delta f + 3.6)$;
Where: $\Delta f$ = frequency difference in MHz from the edge of the channel.

(2) This attenuation is based on a measurement bandwidth of 500 kHz. Other measurement bandwidths may be used as long as appropriate correction factors are applied. Measurements need not be made any closer to the band edge than one half of the resolution bandwidth of the measuring instrument. Emissions include sidebands, spurious emissions and radio frequency harmonics. Attenuation is to be measured at the output terminals of the transmitter (including any filters that may be employed). In the event of interference caused to any service, greater attenuation may be required.

[62 FR 26712, May 14, 1997, as amended at 63 FR 13552, Mar. 20, 1998]

### § 73.623 DTV applications and changes to DTV allotments.

(a) *General.* This section contains the technical criteria for evaluating applications requesting DTV facilities that do not conform to the provisions of § 73.622 and petitions for rule making to amend the DTV Table of Allotments (§ 73.622(b)). Petitions to amend the DTV Table (other than those also expressly requesting amendment of this section) and applications for new DTV broadcast stations or for changes in authorized DTV stations filed pursuant to this section will not be accepted for filing if they fail to comply with the requirements of this section.

(b) In considering petitions to amend the DTV Table and applications filed pursuant to this section, the Commission will use geographic coordinates defined in § 73.622(d) as reference points in determining allotment separations and evaluating interference potential.

(c) *Minimum technical criteria for modification of DTV allotments included in the initial DTV Table of Allotments and for applications filed pursuant to this section.* No petition to modify a channel allotment included in the initial DTV Table of Allotments or application for authority to construct or modify a DTV station assigned to such an allotment, filed pursuant to this section, will be accepted unless it shows compliance with the requirements of this paragraph.

(1) Requests filed pursuant to this paragraph must demonstrate compliance with the principal community coverage requirements of section 73.625(a).

(2) Requests filed pursuant to this paragraph must demonstrate that the requested change would not result in more than an additional 2 percent the population served by another station being subject to interference; provided, however, that no new interference may be caused to any station that already experiences interference to 10 percent or more of its population or that would result in a station receiving interference in excess of 10 percent of its

population. The station population values for existing NTSC service and DTV service contained in Appendix B of the *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order* in MM Docket No. 87–268, FCC 98–24, adopted January 29, 1998, referenced in § 73.622(c), are to be used for the purposes of determining whether a power increase or other change is permissible under this de minimis standard. For evaluating compliance with this requirement, interference to populations served is to be predicted based on the procedure set forth in *OET Bulletin No. 69*, including population served within service areas determined in accordance with section 73.622(e), consideration of whether F(50,10) undesired signals will exceed the following desired-to-undesired (D/U) signal ratios, assumed use of a directional receiving antenna, and use of the terrain dependent Longley-Rice point-to-point propagation model. Copies of *OET Bulletin No. 69* may be inspected during normal business hours at the: Federal Communications Commission, 1919 M St., NW., Dockets Branch (Room 239), Washington, DC 20554. These documents are also available through the Internet on the *FCC Home Page* at http://www.fcc.gov. The threshold levels at which interference is considered to occur are:

| | D/U Ratio |
|---|---|
| Co-channel: | |
| DTV-into-analog TV | +34 |
| Analog TV-into-DTV | +2 |
| DTV-into-DTV | +15 |
| First Adjacent Channel: | |
| Lower DTV-into-analog TV | −14 |
| Upper DTV-into-analog TV | −17 |
| Lower analog TV-into-DTV | −48 |
| Upper analog TV-into-DTV | −49 |
| Lower DTV-into-DTV | −28 |
| Upper DTV-into-DTV | −26 |
| Other Adjacent Channel (Channels 14–69 only) | |
| DTV-into-analog TV, where N = analog TV channel and DTV Channel: | |
| N–2 | −24 |
| N+2 | −28 |
| N–3 | −30 |
| N+3 | −34 |
| N–4 | −34 |
| N+4 | −25 |
| N–7 | −35 |
| N+7 | −43 |
| N–8 | −32 |
| N+8 | −43 |
| N+14 | −33 |
| N+15 | −31 |

(3) The values in paragraph (c)(2) of this section for co-channel interference to DTV service are only valid at locations where the signal-to-noise ratio is 28 dB or greater for interference from DTV and 25 dB or greater for interference from analog TV service. At the edge of the noise-limited service area, where the signal-to-noise (S/N) ratio is 16 dB, these values are 21 dB and 23 dB for interference from analog TV and DTV, respectively. At locations where the S/N ratio is greater than 16 dB but less than 28 dB, D/U values for co-channel interference to DTV are as follows:

(i) For DTV-to-DTV interference, the minimum D/U ratios are computed from the following formula:

$D/U = 15+10\log_{10}[1.0/(1.0-10^{-x/10})]$

Where x = S/N–15.19 (minimum signal to noise ratio)

(ii) For analog-to-DTV interference, the minimum D/U ratios are found from the following Table (for values between measured values, linear interpolation can be used):

| Signal-to-noise ratio (dB) | Desired-to-undesired ratio (dB) |
|---|---|
| 16.00 | 21.00 |
| 16.35 | 19.94 |
| 17.35 | 17.69 |
| 18.35 | 16.44 |
| 19.35 | 7.19 |
| 20.35 | 4.69 |
| 21.35 | 3.69 |
| 22.35 | 2.94 |
| 23.35 | 2.44 |
| 25.00 | 2.00 |

(4) Due to the frequency spacing that exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum adjacent channel technical criteria specified in paragraph (c)(2) of this section shall not be applicable to these pairs of channels (see § 73.603(a)).

(d) *Minimum geographic spacing requirements for DTV allotments not included in the initial DTV Table of Allotments.* No petition to add a new channel to the DTV Table of Allotments or modify an allotment not included in the initial DTV Table will be accepted unless it shows compliance with the requirements of this paragraph.

(1) Requests filed pursuant to this paragraph must demonstrate compliance with the principle community

coverage requirements of section 73.625(a).

(2) Requests filed pursuant to this paragraph must meet the following requirements for geographic spacing with regard to all other DTV stations, DTV allotments and analog TV stations:

| Channel relationship | Separation requirement |
|---|---|
| VHF Channels 2–13: | |
| Co-channel, DTV to DTV | Zone I: 244.6 km.<br>Zones II & III: 273.6 km. |
| Co-channel, DTV to analog TV | Zone I: 244.6 km.<br>Zone II & III: 273.6 km. |
| Adjacent Channel: | |
| DTV to DTV | No allotments permitted between:<br>Zone I: 20 km and 110 km.<br>Zones II & III: 23 km and 110 km. |
| DTV to analog TV | No allotments permitted between:<br>Zone I: 9 km and 125 km.<br>Zone II & III: 11 km and 125 km. |
| UHF Channels: | |
| Co-channel, DTV to DTV | Zone I: 196.3 km.<br>Zone II & III: 223.7 km. |
| Co-channel, DTV to analog TV | Zone I: 217.3 km.<br>Zone II & III: 244.6 km. |
| Adjacent Channel: | |
| DTV to DTV | No allotments permitted between:<br>All Zones: 24 km and 110 km. |
| DTV to analog TV | No allotments permitted between:<br>All Zones: 12 km and 106 km. |
| Taboo Channels, DTV to analog TV only (DTV channels +/−2, +/−3, +/−4, +/−7, +/−8, and 14 or 15 channels above the analog TV channel). | No allotments permitted between:<br>Zone I: 24.1 km and 80.5 km.<br>Zone II & III: 24.1 km and 96.6 km. |

(3) Zones are defined in §73.609. The minimum distance separation between a DTV station in one zone and an analog TV or DTV station in another zone shall be that of the zone requiring the lower separation.

(4) Due to the frequency spacing that exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum geographic spacing requirements specified in paragraph (d)(3) of this section shall not be applicable to these pairs of channels (§73.603(a)).

(e) *Protection of land mobile operations on channels 14–20.* The Commission will not accept petitions to amend the DTV Table of Allotments, applications for new DTV stations, or applications to change the channel or location of authorized DTV stations that would use channels 14–20 where the distance between the DTV reference point as defined in section 73.622(d), would be located less than 250 km from the city center of a co-channel land mobile operation or 176 km from the city center of an adjacent channel land mobile operation. Petitions to amend the DTV Table, applications for new DTV stations, or requests to modify the DTV Table that do not meet the minimum DTV-to-land mobile spacing standards will, however, be considered where all affected land mobile licensees consent to the requested action. Land mobile operations are authorized on these channels in the following markets:

| City | Channels | Latitude | Longitude |
|---|---|---|---|
| Boston, MA | 14, 16 | 42°21′24″ | 71°03′25″ |
| Chicago, IL | 14, 15 | 41°52′28″ | 87°38′22″ |
| Dallas, TX | 16 | 32°47′09″ | 96°47′37″ |
| Houston, TX | 17 | 29°45′26″ | 95°21′37″ |
| Los Angeles, CA | 14, 16, 20 | 34°03′15″ | 118°14′28″ |
| Miami, FL | 14 | 25°46′37″ | 80°11′32″ |
| New York, NY | 14, 15 | 40°45′06″ | 73°59′39″ |
| Philadelphia, PA | 19, 20 | 39°56′58″ | 75°09′21″ |

| City | Channels | Latitude | Longitude |
|---|---|---|---|
| Pittsburgh, PA | 14, 18 | 40°26′19″ | 80°00′00″ |
| San Francisco, CA | 16, 17 | 37°46′39″ | 122°24′40″ |
| Washington, DC | 17, 18 | 38°53′51″ | 77°00′33″ |

(f) *Negotiated agreements on interference.* Notwithstanding the minimum technical criteria for DTV allotments specified above, DTV stations operating on allotments that are included in the initial DTV Table may: operate with increased ERP and/or antenna HAAT that would result in additional interference to another DTV station or an analog TV station if that station agrees, in writing, to accept the additional interference; and/or implement an exchange of channel allotments between two or more licensees or permittees of TV stations in the same community, the same market, or in adjacent markets provided, however, that the other requirements of this section and of section 73.622 are met with respect to each such application. Such agreements must be submitted with the application for authority to construct or modify the affected DTV station or stations. The larger service area resulting from a negotiated change in ERP and/or antenna HAAT will be protected in accordance with the provisions of paragraph (c) of this section. Negotiated agreements under this paragraph can include the exchange of money or other considerations from one station to another, including payments to and from noncommercial television stations assigned reserved channels. Applications submitted pursuant to the provisions of this paragraph will be granted only if the Commission finds that such action is consistent with the public interest.

[62 FR 26719, May 14, 1997, as amended at 63 FR 13560, Mar. 20, 1998]

### § 73.624 Digital television broadcast stations.

(a) Digital television (''DTV'') broadcast stations are assigned channels 6 MHz wide. Initial eligibility for licenses for DTV broadcast stations is limited to persons that, as of April 3, 1997, are licensed to operate a full power television broadcast station or hold a permit to construct such a station (or both).

(b) At any time that a DTV broadcast station permittee or licensee transmits a video program signal on its analog television channel, it must also transmit at least one over-the-air video program signal at no direct charge to viewers on the DTV channel that is licensed with the analog channel. The DTV program service provided pursuant to this paragraph must be at least comparable in resolution to the analog television station programming transmitted to viewers on the analog channel but, subject to paragraph (f) of this section, DTV broadcast stations are not required to simulcast the analog programming.

(c) Provided that DTV broadcast stations comply with paragraph (b) of this section, DTV broadcast stations are permitted to offer services of any nature, consistent with the public interest, convenience, and necessity, on an ancillary or supplementary basis. The kinds of services that may be provided include, but are not limited to computer software distribution, data transmissions, teletext, interactive materials, aural messages, paging services, audio signals, subscription video, and any other services that do not derogate DTV broadcast stations' obligations under paragraph (b) of this section. Such services may be provided on a broadcast, point-to-point or point-to-multipoint basis, provided, however, that any video broadcast signal provided at no direct charge to viewers shall be considered ancillary or supplementary.

(1) DTV licensees that provide ancillary or supplementary services that are analogous to other services subject to regulation by the Commission must comply with the Commission regulations that apply to those services, provided, however, that no ancillary or supplementary service shall have any rights to carriage under §§614 or 615 of the Communications Act of 1934, as amended, or be deemed a multichannel

video programming distributor for purposes of section 628 of the Communications Act of 1934, as amended.

(2) In all arrangements entered into with outside parties affecting service operation, the DTV licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material in the sole judgement of the permitte or licensee. The license or permittee is also responsible for all aspects of technical operation involving such telecommunications services.

(3) In any application for renewal of a broadcast license for a television station that provides ancillary or supplementary services, a licensee shall establish that all of its program services on the analog and the DTV spectrum are in the public interest. Any violation of the Commission's rules applicable to ancillary or supplementary services will reflect on the licensee's qualifications for renewal of its license.

(d) Digital television broadcast facilities that comply with the FCC DTV Standard (section 73.682(d)), shall be constructed in the following markets by the following dates:

(1)(i) May 1, 1999: all network-affiliated television stations in the top ten television markets;

(ii) November 1, 1999: all network-affiliated television stations not included in category (1)(i) and in the top 30 television markets;

(iii) May 1, 2002: all remaining commercial television stations;

(iv) May 1, 2003: all noncommercial television stations.

(2) For the purposes of paragraph (d)(1):

(i) The term, ''network,'' is defined to include the ABC, CBS, NBC, and Fox television networks;

(ii) The term, ''television market,'' is defined as the Designated Market Area or DMA as defined by Nielsen Media Research as of April 3, 1997; and

(iii) The terms, ''network-affiliated'' or ''network-affiliate,'' are defined to include those television stations affiliated with at least one of the four networks designated in paragraph (d)(2)(i) as of April 3, 1997. In those DMAs in which a network has more than one network affiliate, paragraphs (d)(1) (i) and (ii) of this section shall apply to its network affiliate with the largest audience share for the 9 a.m. to midnight time period as measured by Nielsen Media Research in its Nielsen Station Index, Viewers in Profile, as of February, 1997.

(3) *Authority delegated.* (i) Authority is delegated to the Chief, Mass Media Bureau to grant an extension of time of up to six months beyond the relevant construction deadline specified in paragraph (d)(1) of this section upon demonstration by the DTV licensee or permittee that failure to meet that construction deadline is due to circumstances that are either unforeseeable or beyond the licensee's control where the licensee has taken all reasonable steps to resolve the problem expeditiously.

(ii) Such circumstances shall include, but shall not be limited to: (a) inability to construct and place in operation a facility necessary for transmitting digital television, such as a tower, because of delays in obtaining zoning or FAA approvals, or similar constraints; or (b) the lack of equipment necessary to obtain a digital television signal.

(iii) The Bureau may grant no more than two extension requests upon delegated authority. Subsequent extension requests shall be referred to the Commission. The Bureau may not on delegated authority deny an extension request but must refer recommended denials to the Commission.

(iv) Applications for extension of time shall be filed at least 30 days prior to the relevant construction deadline, absent a showing of sufficient reasons for filing within less than 30 days of the relevant construction deadline.

(e) The application for construction permit must be filed on Form 301 (except for noncommercial stations, which must file on Form 340) on or before the date on which half of the construction period has elapsed. Thus, for example, for applicants in category (d)(1)(i), the application for construction period must be filed by May 1, 1998.

(f)(i) Commencing on April 1, 2003, DTV television licensees and permittees must simulcast 50 percent of the video programming of the analog channel on the DTV channel.

(ii) Commencing on April 1, 2004, DTV licensees and permittees must simulcast 75% of the video programming of the analog channel on the DTV channel.

(iii) Commencing on April 1, 2005, DTV licensees and permittees must simulcast 100% of the video programming of the analog channel on the DTV channel.

(iv) The simulcasting requirements imposed in paragraphs (f) (i)–(iii) of this section will terminate when the analog channel terminates operation and a 6 MHz channel is returned by the DTV licensee or permittee to the Commission.

[62 FR 26989, May 16, 1997, as amended at 63 FR 15784, Apr. 1, 1998]

### § 73.625 DTV coverage of principal community and antenna system.

(a) *Transmitter location.*

(1) The DTV transmitter location shall be chosen so that, on the basis of the effective radiated power and antenna height above average terrain employed, the following minimum F (50,90) field strength in dB above one uV/m will be provided over the entire principal community to be served:

| | |
|---|---|
| Channels 2–6 | L28 dBu |
| Channels 7–13 | 36 dBu |
| Channels 14–69 | 41 dBu |

(2) The location of the antenna must be so chosen that there is not a major obstruction in the path over the principal community to be served.

(3) For the purposes of this section, coverage is to be determined in accordance with paragraph (b) of this section. Under actual conditions, the true coverage may vary from these estimates because the terrain over any specific path is expected to be different from the average terrain on which the field strength charts were based. Further, the actual extent of service will usually be less than indicated by these estimates due to interference from other stations. Because of these factors, the predicted field strength contours give no assurance of service to any specific percentage of receiver locations within the distances indicated.

(b) *Determining coverage.* (1) In predicting the distance to the field strength contours, the F (50,50) field strength charts (Figures 9, 10 and 10b of § 73.699 of this part) and the F (50,10) field strength charts (Figures 9a, 10a and 10c of § 73.699 of this part) shall be used. To use the charts to predict the distance to a given F (50,90) contour, the following procedure is used: Convert the effective radiated power in kilowatts for the appropriate azimuth into decibel value referenced to 1 kW (dBk). Subtract the power value in dBk from the contour value in dBu. Note that for power less than 1 kW, the difference value will be greater than the contour value because the power in dBk is negative. Locate the difference value obtained on the vertical scale at the left edge of the appropriate F (50,50) chart for the DTV station's channel. Follow the horizontal line for that value into the chart to the point of intersection with the vertical line above the height of the antenna above average terrain for the appropriate azimuth located on the scale at the bottom of the chart. If the point of intersection does not fall exactly on a distance curve, interpolate betweenthe distance curves below and above the intersection point. The distance values for the curves are located along the right edge of the chart. Using the appropriate F (50,10) chart for the DTV station's channel, locate the point where the distance coincides with the vertical line above the height of the antenna above average terrain for the appropriate azimuth located on the scale at the bottom of the chart. Follow a horizontal line from that point to the left edge of the chart to determine the F (50,10) difference value. Add the power value in dBk to this difference value to determine the F (50,10) contour value in dBu. Subtract the F (50,50) contour value in dBu from this F (50,10) contour value in dBu. Subtract this difference from the F (50,50) contour value in dBu to determine the F (50,90) contour value in dBu at the pertinent distance along the pertinent radial.

(2) The effective radiated power to be used is that radiated at the vertical angle corresponding to the depression

angle between the transmitting antenna center of radiation and the radio horizon as determined individually for each azimuthal direction concerned. In cases where the relative field strength at this depression angle is 90% or more of the maximum field strength developed in the vertical plane containing the pertaining radial, the maximum radiation shall be used. The depression angle is based on the difference in elevation of the antenna center of radiation above the average terrain and the radio horizon, assuming a smooth spherical earth with a radius of 8,495.5 kilometers (5,280 miles) and shall be determined by the following equation:

A = 0.0277 square root of H
Where:
A is the depression angle in degrees.
H is the height in meters of the transmitting antenna radiation center above average terrain of the 3.2–16.1 kilometers (2–10 miles) sector of the pertinent radial.

This formula is empirically derived for the limited purpose specified here. Its use for any other purpose may be inappropriate.

(3) Applicants for new DTV stations or changes in the facilities of existing DTV stations must submit to the FCC a showing as to the location of their stations' or proposed stations' contour. This showing is to include a map showing this contour, except where applicants have previously submitted material to the FCC containing such information and it is found upon careful examination that the contour locations indicated therein would not change, on any radial, when the locations are determined under this section. In the latter cases, a statement by a qualified engineer to this effect will satisfy this requirement and no contour maps need be submitted.

(4) The antenna height to be used with these charts is the height of the radiation center of the antenna above the average terrain along the radial in question. In determining the average elevation of the terrain, the elevations between 3.2–16.1 kilometers (2–10 miles) from the antenna site are employed. Profile graphs shall be drawn for 8 radials beginning at the antenna site and extending 16.1 kilometers (10 miles) therefrom. The radials should be drawn for each 45 degrees of azimuth starting with True North. At least one radial must include the principal community to be served even though such community may be more than 16.1 kilometers (10 miles) from the antenna site. However, in the event none of the evenly spaced radials include the principal community to be served and one or more such radials are drawn in addition to the 8 evenly spaced radials, such additional radials shall not be employed in computing the antenna height above average terrain. Where the 3.2–16.1 kilometers (2–10 mile) portion of a radial extends in whole or in part over large bodies of water (such as ocean areas, gulfs, sounds, bays, large lakes, etc., but not rivers) or extends over foreign territory but the contour encompasses land area within the United States beyond the 16.1 kilometers (10 mile) portion of the radial, the entire 3.2–16.1 kilometers (2–10 mile) portion of the radial shall be included in the computation of antenna height above average terrain. However, where the contour does not so encompass United States land area and (1) the entire 3.2–16.1 kilometers (2–10 mile) portion of the radial extends over large bodies of water or foreign territory, such radial shall be completely omitted from the computation of antenna height above average terrain, and (2) where a part of the 3.2–16.1 kilometers (2–10 mile) portion of a radial extends over large bodies of water or over foreign territory, only that part of the radial extending from the 3.2 kilometer (2 mile) sector to the outermost portion of land area within the United States covered by the radial shall be employed in the computation of antenna height above average terrain. The profile graph for each radial should be plotted by contour intervals of from 12.2–30.5 meters (40–100 feet) and, where the data permits, at least 50 points of elevation (generally uniformly spaced) should be used for each radial. In instances of very rugged terrain where the use of contour intervals of 30.5 meters (100 feet) would result in several points in a short distance, 61.0–122.0 meter (200–400 foot) contour intervals may be used for such distances. On the other hand, where the terrain is uniform or gently sloping the smallest contour interval indicated on the topographic map (see paragraph (b)(5) of

this section) should be used, although only relatively few points may be available. The profile graphs should indicate the topography accurately for each radial, and the graphs should be plotted withthe distance in kilometers as the abscissa and the elevation in meters above mean sea level as the ordinate. The profile graphs should indicate the source of the topographical data employed. The graph should also show the elevation of the center of the radiating system. The graph may be plotted either on rectangular coordinate paper or on special paper which shows the curvature of the earth. It is not necessary to take the curvature of the earth into consideration in this procedure, as this factor is taken care of in the charts showing signal strengths. The average elevation of the 12.9 kilometer (8 miles) distance between 3.2–16.1 kilometers (2–10 miles) from the antenna site should then be determined from the profile graph for each radial. This may be obtained by averaging a large number of equally spaced points, by using a planimeter, or by obtaining the median elevation (that exceeded for 50% of the distance) in sectors and averaging those values. In directions where the terrain is such that negative antenna heights or heights below 30.5 meters (100 feet) for the 3.2 to 16.1 kilometers (2 to 10 mile) sector are obtained, an assumed height of 30.5 meters (100 feet) shall be used for the prediction of coverage. However, where the actual contour distances are critical factors, a supplemental showing of expected coverage must be included together with a description of the method employed in predicting such coverage. In special cases, the Commission may require additional information as to terrain and coverage.

(5) In the preparation of the profile graph previously described, and in determining the location and height above sea level of the antenna site, the elevation or contour intervals shall be taken from the United States Geological Survey Topographic Quadrangle Maps, United States Army Corps of Engineers' maps or Tennessee Valley Authority maps, whichever is the latest, for all areas for which such maps are available. If such maps are not published for the area in question, the next best topographic information should be used. Topographic data may sometimes be obtained from State and Municipal agencies. Data from Sectional Aeronautical Charts (including bench marks) or railroad depot elevations and highway elevations from road maps may be used where no better information is available. In cases where limited topographic data is available, use may be made of an altimeter in a car driven along roads extending generally radially from the transmitter site. United States Geological Survey Topographic Quadrangle Maps may be obtained from the United States Geological Survey, Department of the Interior, Washington, D.C. 20240. Sectional Aeronautical Charts are available from the United States Coast and Geodetic Survey, Department of Commerce, Washington, D.C. 20235. In lieu of maps, the average terrain elevation may be computer generated, except in the cases of dispute, using elevations from a 30 second point or better topographic data file. The file must be identified and the data processed for intermediate points along each radial using linear interpolation techniques.The height above mean sea level of the antenna site must be obtained manually using appropriate topographic maps.

(c) *Antenna system*. (1) The antenna system shall be designed so that the effective radiated power at any angle above the horizontal shall be as low as the state of the art permits, and in the same vertical plane may not exceed the effective radiated power in either the horizontal direction or below the horizontal, whichever is greater.

(2) An antenna designed or altered to produce a noncircular radiation pattern in the horizontal plane is considered to be a directional antenna. Antennas purposely installed in such a manner as to result in the mechanical beam tilting of the major vertical radiation lobe are included in this category.

(3) Applications proposing the use of directional antenna systems must be accompanied by the following:

(i) Complete description of the proposed antenna system, including the manufacturer and model number of the proposed directional antenna.

(ii) Relative field horizontal plane pattern (horizontal polarization only) of the proposed directional antenna. A value of 1.0 should be used for the maximum radiation. The plot of the pattern should be oriented so that 0 degrees corresponds to true North. Where mechanical beam tilt is intended, the amount of tilt in degrees of the antenna vertical axis and the orientation of the downward tilt with respect to true North must be specified, and the horizontal plane pattern must reflect the use of mechanical beam tilt.

(iii) A tabulation of the relative field pattern required in paragraph (c)(3)(ii) of this section. The tabulation should use the same zero degree reference as the plotted pattern, and be tabulated at least every 10 degrees. In addition, tabulated values of all maxima and minima, with their corresponding azimuths, should be submitted.

(iv) Horizontal and vertical plane radiation patterns showing the effective radiated power, in dBk, for each direction. Sufficient vertical plane patterns must be included to indicate clearly the radiation characteristics of the antenna above and below the horizontal plane. In cases where the angles at which the maximum vertical radiation varies with azimuth, a separate vertical radiation pattern must be provided for each pertinent radial direction.

(v) All horizontal plane patterns must be plotted to the largest scale possible on unglazed letter-size polar coordinate paper (main engraving approximately 18 cm×25 cm (7 inches×10 inches)) using only scale divisions and subdivisions of 1, 2, 2.5. or 5 times 10-nth. All vertical plane patterns must be plotted on unglazed letter-size rectangular coordinate paper. Values of field strength on any pattern less than 10 percent of the maximum field strength plotted on that pattern must be shown on an enlarged scale.

(vi) The horizontal and vertical plane patterns that are required are the patterns for the complete directional antenna system. In the case of a composite antenna composed of two or more individual antennas, this means that the patterns for the composite antenna, not the patterns for each of the individual antennas, must be submitted.

(4) Where simultaneous use of antennas or antenna structures is proposed, the following provisions shall apply:

(i) In cases where it is proposed to use a tower of an AM broadcast station as a supporting structure for a DTV broadcast antenna, an appropriate application for changes in the radiating system of the AM broadcast station must be filed by the licensee thereof. A formal application (FCC Form 301, or FCC Form 340 for a noncommercial educational station) will be required if the proposal involves substantial change in the physical height or radiation characteristics of the AM broadcast antennas; otherwise an informal application will be acceptable. (In case of doubt, an informal application (letter) together with complete engineering data should be submitted.) An application may be required for other classes of stations when the tower is to be used in connection with a DTV station.

(ii) When the proposed DTV antenna is to be mounted on a tower in the vicinity of an AM station directional antenna system and it appears that the operation of the directional antenna system may be affected, an engineering study must be filed with the DTV application concerning the effect of the DTV antenna on the AM directional radiation pattern. Field measurements of the AM stations may be required prior to and following construction of the DTV station antenna, and readjustments made as necessary.

(5) Applications proposing the use of electrical beam tilt pursuant to section 73.622(f)(4) must be accompanied by the following:

(i) Complete description of the proposed antenna system, including the manufacturer and model number. Vertical plane radiation patterns conforming with paragraphs (c)(3)(iv), (c)(3)(v) and (c)(3)(vi) of this section.

(ii) For at least 36 evenly spaced radials, including 0 degrees corresponding to true North, a determination of the depression angle between the transmitting antenna center of radiation and the radio horizon using the formula in paragraph (b)(2) of this section.

(iii) For each such radial direction, the ERP at the depression angle, taking into account the effect of the electrical beam tilt, mechanical beam tilt, if used, and directional antenna pattern if a directional antenna is specified.

(iv) The maximum ERP toward the radio horizon determined by this process must be clearly indicated. In addition, a tabulation of the relative fields representing the effective radiation pattern toward the radio horizon in the 36 radial directions must be submitted. A value of 1.0 should be used for the maximum radiation.

[62 FR 26990, May 16, 1997, as amended at 63 FR 13562, Mar. 20, 1998]

### § 73.635 Use of common antenna site.

No television license or renewal of a television license will be granted to any person who owns, leases, or controls a particular site which is peculiarly suitable for television broadcasting in a particular area and (a) which is not available for use by other television licensees; and (b) no other comparable site is available in the area; and (c) where the exclusive use of such site by the applicant or licensee would unduly limit the number of television stations that can be authorized in a particular area or would unduly restrict competition among television stations.

[28 FR 13660, Dec. 14, 1963]

### § 73.641 Subscription TV definitions.

(a) *Subscription television.* A system whereby subscription television programs are transmitted and received.

(b) *Subscription television program.* A television boadcast program intended to be received in intelligible form for a fee or charge.

[52 FR 6154, Mar. 2, 1987]

### § 73.642 Subscription TV service.

(a) Subscription TV service may be provided by:

(1) Licensees and permittees of commercial TV stations, and

(2) Licensees and permittees of low power TV stations.

(b) A licensee or permittee of a commercial TV station or a low power TV station may begin subscription TV service upon installation of encoding equipment having advance FCC approval. However, the licensee or permittee of a TV broadcast station (not applicable to low power TV stations) must send a letter to the FCC in Washington, DC, that subscription TV service will commence at least 30 days prior to commencement of such service. In that letter, to be entitled ''Notice of Commencement of STV Operations,'' the licensee or permittee is to state that it will comply with the provisions of paragraphs (e)(1) through (e)(3) and § 73.644(c) of this chapter and identify the make and type of encoding system to be used. A similar notice must be submitted if the licensee or permittee commences using another type of encoding system. (See section 644(h).) A notice must also be submitted to the FCC in Washington, DC, if encoded subscription TV service is to be discontinued, at least 30 days prior to such discontinuance.

(c) The station proof of system compliance measurement data (see § 73.644(c)) need not be submitted to the FCC, however, the measurement data must be available to the FCC upon request.

(d) The use of the visual vertical blanking interval or an aural subcarrier for transmitting subscriber decoder control code signals during periods of normal non-encoded programming may be used only upon specific FCC authorization. Letter requests to use either the video blanking intervals or aural subcarriers during periods of non-subscription programming are to be sent to the FCC in Washington, D.C.

(e) A licensee or permittee of a commercial TV broadcast or low power TV station may not transmit a subscription service if it has a contract, arrangement, or understanding, expressed or implied, that:

(1) Prevents or hinders it from rejecting or refusing any subscription TV broadcast program that it reasonably believes to be unsatisfactory or unsuitable or contrary to the public interests; or substituting a subscription or conventional program that, in its opinion, is of greater local or national importance; or

(2) Delegates to any other person the right to schedule the hours of transmission of subscription programs. However, this rule does not prevent a licensee or permittee from entering into an agreement or arrangement whereby it agrees to schedule a specific subscription TV broadcast program at a specific time or to schedule a specific number of hours of subscription programs during the broadcast day (or segments thereof) or weeks; or

(3) Deprives it of the right of ultimate decision concerning the maximum amount of any subscription program charge or fee.

(4) Has provisions that do not comply with the following policies of the FCC:

(i) Unless a satifactory signal is unavailable at the location where service is desired, subscription TV service must be provided to all persons desiring it within the Grade A contour of the station broadcasting subscription programs. Geographic or other reasonable patterns of installation for new subscription services is permitted and, for good cause, service may be terminated.

(ii) Charges, terms and conditions of service to subscribers must be applied uniformly. However, subscribers may be divided into reasonable classifications approved by the FCC, and the impositions of different sets of terms and conditions may be applied to subscribers in different classifications. Further, for good cause, within such classification, deposits may be required from some subscribers and not of others; and, also for good cause, if a subscription system generally uses a credit-type decoder, cash operated decoders may be installed for some subscribers.

[48 FR 56392, Dec. 21, 1983, as amended at 52 FR 6154, Mar. 2, 1987]

### § 73.643 Subscription TV operating requirements.

The non-technical rules and policies applicable to regular TV broadcast stations are applicable to subscription TV operations, except where specifically exempted in the provisions of those rules and policies.

[48 FR 56392, Dec. 21, 1983]

### § 73.644 Subscription TV transmission systems.

(a) Licensees and permittees of commercial TV broadcast and low power TV stations may conduct subscription operations only by using an encoding system that has been approved in advance by the FCC. Such advance approval may be applied for and granted in accordance with the procedures given in Subpart M Part 2 of the Rules.

(b) The criteria for advance approval of subscription TV transmitting systems by the FCC are as follows:

(1) Spectral energy in the transmitted signal must not exceed the limitations given in § 73.687(e).

(2) No increase in width of the television broadcast channel (6 MHz.) is permitted.

(3) The technical system must enable stations to transmit encoded subscription TV programs without increasing the RMS output power from either the video or audio transmitters over that required to transmit the same program material using normal transmission standards.

(4) Modification of a type accepted TV broadcast or low power TV transmitter for encoded transmissions must not render transmitter incapable of operating in accordance with the operating specifications upon which type acceptance was granted. (See § 2.1001 (b), (k))

(5) Interference to reception of conventional television either of co-channel or adjacent channel stations must not increase over that resulting from the transmission of programming with normal transmission standards.

(6) Subscriber decoder devices must meet the provisions, where required, of Subpart H of Part 15 of the FCC Rules for TV Interface Devices.

(c) Prior to commencing the transmission of encoded subscription programming, the licensee or permittee of a TV broadcast or low power TV station must perform such tests and measurements to determine that the transmitted encoded signal conforms to the radiated radio frequency and demodulated baseband and waveforms, transmitter operating power determination, and the occupied bandwidth limitations specified in the application for advance FCC approval of the system

being used. A copy of the measurement data is to be maintained in the station files and made available to the FCC upon request.

(d) The licensee of a station transmitting an encoded subscription service must have at the transmitter control point the technical specifications for the system being used of both the aural and visual baseband signals and the transmitted radiofrequency signals, and have the necessary measuring and monitoring equipment, including transmitter output power measuring equipment, to determine that the transmissions conform to the advance approval specifications on file with the FCC. Full operating specifications for the system must be available to representatives of the FCC upon request.

(e) The operating power of the transmitters during encoded operations must be determined and maintained according to the procedures given in the application for advance approval.

(f) A station using an encoding system in accordance with the specifications filed with the application for advance approval is deemed to be exempted from those technical regulations of this Subpart and Subpart H to the extent they are specifically detailed in the application.

(g) No protection from interference of any kind will be afforded to reception of encoded subscription programming over that afforded reception of non-encoded signals.

(h) A licensee or permittee may make no modifications on a subscription encoding system that would alter the characteristics of the transmitted aural or visual signal from those specified in the application for advance approval. A licensee or permittee of a station replacing its encoding system must perform the measurements required by paragraph (c) of this section. A TV broadcast station licensee or permittee must also send a letter advising the FCC of the new system being used as required by §73.642(b) of this chapter.

(i) The station licensee is fully responsible for all technical operations of the station during transmissions of encoded subscription programming, regardless of the supplier of the encoding equipment or subscription program service.

NOTE: Stations transmitting encoded subscription programming prior to October 1, 1983, must comply with all technical and operating requirements of this Section no later than April 1, 1984. Stations not having the information to comply with this Section must obtain such information from the manufacturer of the encoding system being used, and if necessary, by measurements of the station's transmission system.

(j) Upon request by an authorized representative of the FCC, the licensee of a TV station transmitting encoded programming must make available a receiving decoder to the Commission to carry out its regulatory responsibilities.

[48 FR 56392, Dec. 21, 1983, as amended at 57 FR 48333, Oct. 23, 1992]

### §73.646 Telecommunications Service on the Vertical Blanking Interval and in the Visual Signal.

(a) Telecommunications services permitted on the vertical blanking interval (VBI) and in the visual signal include the transmission of data, processed information, or any other communication in either a digital or analog mode.

(b) Telecommunications service on the VBI and in the visual signal is of an ancillary nature and as such is an elective, subsidiary activity. No service guidelines, limitations, or performance standards are applied to it. The kinds of service that may be provided include, but are not limited to, teletext, paging, computer software and bulk data distribution, and aural messages. Such services may be provided on a broadcast, point-to-point, or point to multipoint basis.

(c) Telecommunications services that are common carrier in nature are subject to common carrier regulation. Licensees operating such services are required to apply to the Commission for the appropriate authorization and to comply with all policies and rules applicable to the particular service.

(d) Television licensees are authorized to lease their VBI and visual signal telecommunications facilities to

outside parties. In all arrangements entered into with outside parties affecting telecommunications service operation, the licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material that it deems inappropriate or undesirable. The licensee or permittee is also responsible for all aspects of technical operation involving such telecommunications services.

(e) The grant or renewal of a TV station license or permit will not be furthered or promoted by proposed or past VBI or visual signal telecommunications service operation; the licensee must establish that its broadcast operation serves the public interest wholly apart from such telecommunications service activities. (Violation of rules applicable to VBI and visual signal telecommunications services could, of course, reflect on a licensee's qualifications to hold its license or permit.)

(f) TV broadcast stations are authorized to transmit VBI and visual telecommunications service signals during any time period, including portions of the day when normal programming is not broadcast. Such transmissions must be in accordance with the technical provisions of §73.682.

[50 FR 4663, Feb. 1, 1985, as amended at 50 FR 9035, Mar. 6, 1985; 61 FR 36304, July 10, 1996]

### §73.653 Operation of TV aural and visual transmitters.

The aural and visual transmitters may be operated independently of each other or, if operated simultaneously, may be used with different and unrelated program material.

[54 FR 9806, Mar. 8, 1989]

### §73.658 Affiliation agreements and network program practices; territorial exclusivity in non-network program arrangements.

(a) *Exclusive affiliation of station.* No license shall be granted to a television broadcast station having any contract, arrangement, or understanding, express or implied, with a network organization under which the station is prevented or hindered from, or penalized for, broadcasting the programs of any other network organization. (The term ''network organization'' as used in this section includes national and regional network organizations. See ch. VII, J, of Report on Chain Broadcasting.)

(b) *Territorial exclusively.* No license shall be granted to a television broadcast station having any contract, arrangement, or understanding, express or implied, with a network organization which prevents or hinders another broadcast station located in the same community from broadcasting the network's programs not taken by the former station, or which prevents or hinders another broadcast station located in a different community from broadcasting any program of the network organization. This section shall not be construed to prohibit any contract, arrangement, or understanding between a station and a network organization pursuant to which the station is granted the first call in its community upon the programs of the network organization. As employed in this paragraph, the term ''community'' is defined as the community specified in the instrument of authorization as the location of the station.

(c) [Reserved]

(d) *Station commitment of broadcast time.* No license shall be granted to a television broadcast station having any contract, arrangement, or understanding, express or implied, with any network organization, which provides for optioning of the station's time to the network organization, or which has the same restraining effect as time optioning. As used in this section, time optioning is any contract, arrangement, or understanding, express or implied, between a station and a network organization which prevents or hinders the station from scheduling programs before the network agrees to utilize the time during which such programs are scheduled, or which requires the station to clear time already scheduled when the network organization seeks to utilize the time.

(e) *Right to reject programs.* No license shall be granted to a television broadcast station having any contract, arrangement, or understanding, express or implied, with a network organization which, with respect to programs offered or already contracted for pursuant to an affiliation contract, prevents or hinders the station from:

(1) Rejecting or refusing network programs which the station reasonably believes to be unsatisfactory or unsuitable or contrary to the public interest, or

(2) Substituting a program which, in the station's opinion, is of greater local or national importance.

(f) [Reserved]

(g) *Dual network operation.* A television broadcast station may affiliate with a person or entity that maintains two or more networks of television broadcast stations *unless* such dual or multiple networks are composed of:

(1) Two or more persons or entities that, on February 8, 1996, were ''networks.'' For the purposes of this paragraph, the term network means any person, entity, or corporation which offers an interconnected program service on a regular basis for 15 or more hours per week to at least 25 affiliated television licensees in 10 or more states; and/or any person, entity, or corporation controlling, controlled by, or under common control with such person, entity, or corporation; or

(2) Any network described in paragraph (g)(1) of this section and an English-language program distribution service that, on February 8, 1996, provided four or more hours of programming per week on a national basis pursuant to network affiliation arrangements with local television broadcast stations in markets reaching more than 75 percent of television homes (as measured by a national ratings service).

(h) *Control by networks of station rates.* No license shall be granted to a television broadcast station having any contract, arrangement, or understanding, express or implied, with a network organization under which the station is prevented or hindered from, or penalized for, fixing or altering its rates for the sale of broadcast time for other than the network's programs.

(i) No license shall be granted to a television broadcast station which is represented for the sale of non-network time by a network organization or by an organization directly or indirectly controlled by or under common control with a network organization, if the station has any contract, arrangement or understanding, express or implied, which provides for the affiliation of the station with such network organization: *Provided, however,* That this rule shall not be applicable to stations licensed to a network organization or to a subsidiary of a network organization.

(j)—(l) [Reserved]

(m) *Territorial exclusivity in non-network arrangements.* (1) No television station shall enter into any contract, arrangement, or understanding, expressed or implied; with a non-network program producer, distributor, or supplier, or other person; which prevents or hinders another television station located in a community over 56.3 kilometers (35 miles) away, as determined by the reference points contained in §76.53 of this chapter, (if reference points for a community are not listed in §76.53, the location of the main post office will be used) from broadcasting any program purchased by the former station from such non-network program producer, distributor, supplier, or other person, except that a television station may secure exclusivity against a television station licensed to another designated community in a hyphenated market specified in the market listing as contained in §76.51 of this chapter for those 100 markets listed, and for markets not listed in §76.51 of this chapter, the listing as contained in the ARB Television Market Analysisfor the most recent year at the time that the exclusivity contract, arrangement or understanding is complete under practices of the industry. As used in this paragraph, the term ''community'' is defined as the community specified in the instrument of authorization as the location of the station.

(2) Notwithstanding paragraph (m)(1) of this section, a television station may enter into a contract, arrangement, or understanding with a producer, supplier, or distributor of a non-network program if that contract, arrangement, or understanding provides that the broadcast station has exclusive national rights such that no other television station in the United States may broadcast the program.

NOTE 1: Contracts, arrangements, or understandings that are complete under the practices of the industry prior to August 7, 1973, will not be disturbed. Extensions or renewals

of such agreements are not permitted because they would in effect be new agreements without competitive bidding. However, such agreements that were based on the broadcaster's advancing ''seed money'' for the production of a specific program or series that specify two time periods—a try-out period and period thereafter for general exhibition—may be extended or renewed as contemplated in the basic agreement.

NOTE 2: It is intended that the top 100 major television markets listed in §76.51 of this chapter shall be used for the purposes of this rule and that the listing of the top 100 television markets appearing in the ARB Television Market Analysis shall not be used. The reference in this rule to the listing of markets in the ARB Television Market Analysis refers to hyphenated markets below the top-100 markets contained in the ARB Television Market Analysis. If a community is listed in a hyphenated market in §76.51 and is also listed in one of the markets in the ARB listing, the listing in §76.51 shall govern.

NOTE 3: The provisions of this paragraph apply only to U.S. commercial television broadcast stations in the 50 states, and not to stations in Puerto Rico or the Virgin Islands, foreign stations or noncommercial educational television or ''public'' television stations (either by way of restrictions on their exclusivity or on exclusivity against them).

NOTE 4: New stations authorized in any community of a hyphenated market listed in §76.51 of this chapter or in any community of a hyphenated market listed in the ARB Television Market Analysis (for markets below the top-100 markets) are subject to the same rules as previously existing stations therein. New stations authorized in other communities are considered stations in separate markets unless and until §76.51 is amended by Commission action, or the ARB listing is changed.

(Sec. 5, 48 Stat. 1068 (47 U.S.C. 155))

[28 FR 13660, Dec. 14, 1963]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §73.658, see the List of CFR Sections Affected in the Finding Aids section of this volume.

### §§ 73.659—73.663 [Reserved]

### § 73.664 Determining operating power.

(a) The operating power of each TV visual transmitter shall normally be determined by the direct method.

(b) *Direct method, visual transmitter.* The direct method of power determination for a TV visual transmitter uses the indications of a calibrated transmission line meter (responsive to peak power) located at the RF output terminals of the transmitter. The indications of the calibrated meter are used to observe and maintain the authorized operating power of the visual transmitter. This meter must be calibrated whenever any component in the metering circuit is repaired or replaced and as often as necessary to ensure operation in accordance with the provisions of §73.1560 of this part. The following calibration procedures are to be used:

(1) The transmission line meter is calibrated by measuring the average power at the output terminals of the transmitter, including any vestigial sideband and harmonic filters which may be used in normal operation. For this determination the average power output is measured while operating into a dummy load of substantially zero reactance and a resistance equal to the transmission line characteristic impedance. During this measurement the transmitter is to be modulated only by a standard synchronizing signal with blanking level set at 75% of peak amplitude as observed in an output waveform monitor, and with this blanketing level amplitude maintained throughout the time interval between synchronizing pulses.

(2) If electrical devices are used to determine the output power, such devices must permit determination of this power to within an accuracy of ±5% of the power indicated by the full scale reading of the electrical indicating instrument of the device. If temperature and coolant flow indicating devices are used to determine the power output, such devices must permit determination of this power to within an accuracy of ±4% of measured average power output. The peak power output is the power so measured in the dummy load multiplied by the factor 1.68. During this measurement the input voltage and current to the final radio frequency amplifier stage and the transmission line meter are to be read and compared with similar readings taken with the dummy load replaced by the antenna. These readings must be in substantial agreement.

(3) The meter must be calibrated with the transmitter operating at 80%, 100%, and 110% of the authorized power

as often as may be necessary to maintain its accuracy and ensure correct transmitter operating power. In cases where the transmitter is incapable of operating at 110% of the authorized power output, the calibration may be made at a power output between 100% and 110% of the authorized power output. However, where this is done, the output meter must be marked at the point of calibration of maximum power output, and the station will be deemed to be in violation of this rule if that power is exceeded. The upper and lower limits of permissible power deviation as determined by the prescribed calibration, must be shown upon the meter either by means of adjustable red markers incorporated in the meter or by red marks placed upon the meter scale or glass face. These markings must be checked and changed, if necessary, each time the meter is calibrated.

(c) *Indirect method, visual transmitter.* The operating power is determined by the indirect method by applying an appropriate factor to the input power to the final radio-frequency amplifier stage of the transmitter using the following formula:

Transmitter output power=Ep x Ip x *F*

Where:

Ep=DC input voltage of the final radio-frequency amplifier stage.
Ip=DC input current of the final radio-frequency amplifier stage.
*F*=Efficiency factor.

(1) If the above formula is not appropriate for the design of the transmitter final amplifier, use a formula specified by the transmitter manufacturer with other appropriate operating parameters.

(2) The value of the efficiency factor, *F* established for the authorized transmitter output power is to be used for maintaining the operating power, even though there may be some variation in *F* over the power operating range of the transmitter.

(3) The value of *F* is to be determined and a record kept thereof by one of the following procedures listed in order of preference:

(i) Using the most recent measurement data for calibration of the transmission line meter according to the procedures described in paragraph (b) of this section or the most recent measurements made by the licensee establishing the value of F. In the case of composite transmitters or those in which the final amplifier stages have been modified pursuant to FCC approval, the licensee must furnish the FCC and also retain with the station records the measurement data used as a basis for determining the value of F.

(ii) Using measurement data shown on the transmitter manufacturer's test data supplied to the licensee, provided that measurements were made at the authorized carrier frequency and transmitter output power.

(iii) Using the transmitter manufacturer's measurement data submitted to the FCC for type acceptance as shown in the instruction book supplied to the licensee.

NOTE: Refer to § 73.1560 for aural transmitter output power levels.

[44 FR 58732, Oct. 11, 1979, as amended at 48 FR 44805, Sept. 30, 1983; 49 FR 4210, Feb. 3, 1984; 49 FR 22092, May 25, 1984; 49 FR 49851, Dec. 24, 1984; 50 FR 26568, June 27, 1985; 54 FR 9806, Mar. 8, 1989. Redesignated at 58 FR 62555, Nov. 29, 1993]

### § 73.665 Use of TV aural baseband subcarriers.

Licensees of TV broadcast stations may transmit, without further authorization from the FCC, subcarriers and signals within the composite baseband for the following purposes:

(a) Stereophonic (biphonic, quadraphonic, etc.) sound programs under the provisions of §§ 73.667 and 73.669.

(b) Transmission of signals relating to the operation of TV stations, such as relaying broadcast materials to other stations, remote cueing and order messages, and control and telemetry signals for the transmitting system.

(c) Transmission of pilot or control signals to enhance the station's program service such as (but not restricted to) activation of noise reduction decoders in receivers, for any other receiver control purpose, or for program alerting and program identification.

(d) Subsidiary communications services.

[49 FR 18105, Apr. 27, 1984]

### § 73.667 TV subsidiary communications services.

(a) Subsidiary communications services are those transmitted within the TV aural baseband signal, but do not include services which enhance the main program broadcast service or exclusively relate to station operations (see § 73.665(a), (b), and (c)). Subsidiary communications include, but are not limited to, services such as functional music, specialized foreign language programs, radio reading services, utility load management, market and financial data and news, paging and calling, traffic control signal switching, and point-to-point or multipoint messages.

(b) TV subsidiary communications services that are common carrier or private radio in nature are subject to common carrier or private radio regulation. Licensees operating such services are required to apply to the FCC for the appropriate authorization and to comply with all policies and rules applicable to the service. Responsibility for making the initial determinations of whether a particular activity requires separate authority rests with the TV station licensee or permittee. Initial determinations by licensees or permittees are subject to FCC examination and may be reviewed at the FCC's discretion.

(c) Subsidiary communications services are of a secondary nature under the authority of the TV station authorization, and the authority to provide such communications services may not be retained or transferred in any manner separate from the station's authorization. The grant or renewal of a TV station permit or license is not furthered or promoted by proposed or past subsidiary communications services. The permittee or licensee must establish that the broadcast operation is in the public interest wholly apart from the subsidiary communications services provided.

(d) The station identification, delayed recording, and sponsor identification announcement required by §§ 73.1201, 73.1208, and 73.1212 are not applicable to leased communications services transmitted via services that are not of a general broadcast nature.

(e) The licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material that it deems inappropriate or undesirable.

[49 FR 18105, Apr. 27, 1984, as amended at 49 FR 27147, July 2, 1984; 56 FR 49707, Oct. 1, 1991]

### § 73.669 TV stereophonic aural and multiplex subcarrier operation.

(a) A TV broadcast station may without specific authority from the FCC, transmit multichannel aural programs upon installation of multichannel sound equipment. Prior to commencement of multichannel broadcasting, the equipment shall be measured in accordance with § 73.1690(e).

(b) Multiplex subcarriers may be used by a TV station pursuant to the provisions of § 73.665 and may be transmitted on a secondary, non-interference basis to broadcast programming without specific authority from the FCC. Transmissions must be conducted in accordance with the technical standards given in § 73.682(c).

(c) In all arrangements entered into with outside parties affecting non-common carrier subcarrier operation, the licensee or permittee must retain control over all material transmitted over the station's facilities, with the right to reject any material which is deemed inappropriate or undesirable. Subchannel leasing arrangements must be kept in writing at the station and made available to the FCC upon request.

[49 FR 18106, Apr. 27, 1984]

### § 73.670 Commercial limits in children's programs.

No commercial television broadcast station licensee shall air more than 10.5 minutes of commercial matter per hour during children's programming on weekends, or more than 12 minutes of commercial matter per hour on weekdays.

NOTE 1: *Commerical matter* means air time sold for purposes of selling a product or service.

NOTE 2: For purposes of this section, *children's programming* refers to programs originally produced and broadcast primarily for an audience of children 12 years old and younger.

[56 FR 19616, Apr. 29, 1991; 56 FR 28825, June 25, 1991]

### §73.671 Educational and informational programming for children.

(a) Each commercial and noncommercial educational television broadcast station licensee has an obligation to serve, over the term of its license, the educational and informational needs of children through both the licensee's overall programming and programming specifically designed to serve such needs.

(b) Any special nonbroadcast efforts which enhance the value of children's educational and informational television programming, and any special effort to produce or support educational and informational television programming by another station in the licensee's marketplace, may also contribute to meeting the licensee's obligation to serve, over the term of its license, the educational and informational needs of children.

(c) For purposes of this section, educational and informational television programming is any television programming that furthers the educational and informational needs of children 16 years of age and under in any respect, including the child's intellectual/cognitive or social/emotional needs. Programming specifically designed to serve the educational and informational needs of children (''Core Programming'') is educational and informational programming that satisfies the following additional criteria:

(1) It has serving the educational and informational needs of children ages 16 and under as a significant purpose;

(2) It is aired between the hours of 7:00 a.m. and 10:00 p.m.;

(3) It is a regularly scheduled weekly program;

(4) It is at least 30 minutes in length;

(5) The educational and informational objective and the target child audience are specified in writing in the licensee's Children's Television Programming Report, as described in §73.3526(a)(8)(iii); and

(6) Instructions for listing the program as educational/informational, including an indication of the age group for which the program is intended, are provided by the licensee to publishers of program guides, as described in §73.673(b).

NOTE 1 TO §73.671: For purposes of determining under this section whether programming has a significant purpose of serving the educational and informational needs of children, the Commission will ordinarily rely on the good faith judgments of the licensee. Commission review of compliance with that element of the definition will be done only as a last resort.

NOTE 2 TO §73.671: The Commission will use the following processing guideline in assessing whether a television broadcast licensee has complied with the Children's Television Act of 1990 (''CTA''). A licensee that has aired at least three hours per week of Core Programming (as defined in paragraph (c) of this section and as averaged over a six month period) will be deemed to have satisfied its obligation to air such programming and shall have the CTA portion of its license renewal application approved by the Commission staff. A licensee will also be deemed to have satisfied this obligation and be eligible for such staff approval if the licensee demonstrates that it has aired a package of different types of educational and informational programming that, while containing somewhat less than three hours per week of Core Programming, demonstrates a level of commitment to educating and informing children that is at least equivalent to airing three hours per week of Core Programming. In this regard, specials, PSAs, short-form programs, and regularly scheduled non-weekly programs with a significant purpose of educating and informing children can count toward the three hour per week processing guideline. Licensees that do not meet these processing guidelines will be referred to the Commission, where they will have full opportunity to demonstrate compliance with the CTA (*e.g.*, by relying in part on sponsorship of core educational/informational programs on other stations in the market that increases the amount of core educational and informational programming on the station airing the sponsored program and/or on special nonbroadcast efforts which enhance the value of children's educational and informational television programming).

[56 FR 19616, Apr. 29, 1991. Redesignated at 56 FR 28825, June 25, 1991, as amended at 61 FR 43997, Aug. 27, 1996]

**§ 73.672 [Reserved]**

**§ 73.673 Public information initiatives regarding educational and informational programming for children.**

(a) Each commercial television broadcast licensee shall identify programs specifically designed to educate and inform children at the beginning of the program, in a form that is in the discretion of the licensee.

(b) Each commercial television broadcast station licensee shall provide information identifying programming specifically designed to educate and inform children to publishers of program guides. Such information shall include an indication of the age group for which the program is intended.

[61 FR 43998, Aug. 27, 1996]

EFFECTIVE DATE NOTE: At 61 FR 43998, Aug. 27, 1996, §73.673 was added, effective either Jan. 2, 1997 or after approval has been given by the Office of Management and Budget, whichever comes later.

**§ 73.681 Definitions.**

*Amplitude modulation* (*AM*). A system of modulation in which the envelope of the transmitted wave contains a component similar to the wave form of the signal to be transmitted.

*Antenna electrical beam tilt.* The shaping of the radiation pattern in the vertical plane of a transmitting antenna by electrical means so that maximum radiation occurs at an angle below the horizontal plane.

*Antenna height above average terrain*. The average of the antenna heights above the terrain from approximately 3.2 (2 miles) to 16.1 kilometers (10 miles) from the antenna for the eight directions spaced evenly for each 45 degrees of azimuth starting with True North. (In general, a different antenna height will be determined in each direction from the antenna. The average of these various heights is considered the antenna height above the average terrain. In some cases less than 8 directions may be used. See §73.684(d)). Where circular or elliptical polarization is employed, the antenna height above average terrain shall be based upon the height of the radiation center of the antenna which transmits the horizontal component of radiation.

*Antenna mechanical beam tilt.* The intentional installation of a transmitting antenna so that its axis is not vertical, in order to change the normal angle of maximum radiation in the vertical plane.

*Antenna power gain*. The square of the ratio of the root-mean-square free space field strength produced at 1 kilometer in the horizontal plane, in millivolts per meter for one kW antenna input power to 221.4 mV/m. This ratio should be expressed in decibels (dB). (If specified for a particular direction, antenna power gain is based on the field strength in that direction only.)

*Aspect ratio.* The ratio of picture width to picture height as transmitted.

*Aural center frequency*. (1) The average frequency of the emitted wave when modulated by a sinusoidal signal; (2) the frequency of the emitted wave without modulation.

*Aural transmitter.* The radio equipment for the transmission of the aural signal only.

*Auxiliary facility*. An auxiliary facility is an antenna separate a from the main facility's antenna, permanently installed on the same tower or at a different location, from which a station may broadcast for short periods without prior Commission authorization or notice to the Commission while the main facility is not in operation (*e.g.*, where tower work necessitates turning off the main antenna or where lightning has caused damage to the main antenna or transmission system) (*See* §73.1675).

*BTSC.* Broadcast Television systems committee recommendation for multichannel television sound transmission and audio processing as defined in FCC Bulletin OET 60.

*Baseband.* Aural transmitter input signals between 0 and 120 kHz.

*Blanking level.* The level of the signal during the blanking interval, except the interval during the scanning synchronizing pulse and the chrominance subcarrier synchronizing burst.

*Chrominance.* The colorimetric difference between any color and a reference color of equal luminance, the reference color having a specific chromaticity.

*Chrominance subcarrier.* The carrier which is modulated by the chrominance information.

*Color transmission.* The transmission of color television signals which can be reproduced with different values of hue, saturation, and luminance.

*Effective radiated power.* The product of the antenna input power and the antenna power gain. This product should be expressed in kW and in dB above 1 kW (dBk). (If specified for a particular direction, effective radiated power is based on the antenna power gain in that direction only. The licensed effective radiated power is based on the maximum antenna power gain. When a station is authorized to use a directional antenna or an antenna beam tilt, the direction of the maximum effective radiated power will be specified.) Where circular or elliptical polarization is employed, the term effective radiated power is applied separately to the horizontally and vertically polarized components of radiation. For assignment purposes, only the effective radiated power authorized for the horizontally polarized component will be considered.

*Equivalent isotropically radiated power (EIRP).* The term ''equivalent isotropically radiated power'' (also known as ''effective radiated power above isotropic'') means the product of the antenna input power and the antenna gain in a given direction relative to an isotropic antenna.

*Field.* Scanning through the picture area once in the chosen scanning pattern. In the line interlaced scanning pattern of two to one, the scanning of the alternate lines of the picture area once.

*Frame.* Scanning all of the picture area once. In the line interlaced scanning pattern of two to one, a frame consists of two fields.

*Free space field strength.* The field strength that would exist at a point in the absence of waves reflected from the earth or other reflecting objects.

*Frequency departure.* The amount of variation of a carrier frequency or center frequency from its assigned value.

*Frequency deviation.* The peak difference between the instantaneous frequency of the modulated wave and the carrier frequency.

*Frequency modulation (FM).* A system of modulation where the instantaneous radio frequency varies in proportion to the instantaneous amplitude of the modulating signal (amplitude of modulating signal to be measured after pre-emphasis, if used) and the instantaneous radio frequency is independent of the frequency of the modulating signal.

*Frequency swing.* The peak difference between the maximum and the minimum values of the instantaneous frequency of the carrier wave during modulation.

*Interlaced scanning.* A scanning process in which successively scanned lines are spaced an integral number of line widths, and in which the adjacent lines are scanned during successive cycles of the field frequency.

*IRE standard scale.* A linear scale for measuring, in IRE units, the relative amplitudes of the components of a television signal from a zero reference at blanking level, with picture information falling in the positive, and synchronizing information in the negative domain.

NOTE: When a carrier is amplitude modulated by a television signal in accordance with §73.682, the relationship of the IRE standard scale to the conventional measure of modulation is as follows:

| Level | IRE standard scale (units) | Modulation percentage |
|---|---|---|
| Zero carrier | 120 | 0 |
| Reference white | 100 | 12.5 |
| Blanking | 0 | 75 |
| Synchronizing peaks (maximum carrier level) | −40 | 100 |

*Luminance.* Luminous flux emitted, reflected, or transmitted per unit solid angle per unit projected area of the source.

*Main channel.* The band of frequencies from 50 to 15,000 Hertz which frequency modulate the main aural carrier.

*Monochrome transmission.* The transmission of television signals which can be reproduced in gradations of a single color only.

*Multichannel Television Sound (MTS).* Any system of aural transmission that

utilizes aural baseband operation between 15 kHz and 120 kHz to convey information or that encodes digital information in the video portion of the television signal that is intended to be decoded as audio information.

*Multiplex Transmission* (*Aural*). A subchannel added to the regular aural carrier of a television broadcast station by means of frequency modulated subcarriers.

*Negative transmission.* Where a decrease in initial light intensity causes an increase in the transmitted power.

*Peak power.* The power over a radio frequency cycle corresponding in amplitude to synchronizing peaks.

*Percentage modulation.* As applied to frequency modulation, the ratio of the actual frequency deviation to the frequency deviation defined as 100% modulation expressed in percentage. For the aural transmitter of TV broadcast stations, a frequency deviation of ±25 *kHz is defined as 100% modulation.*

*Pilot subcarrier.* A subcarrier used in the reception of TV stereophonic aural or other subchannel broadcasts.

*Polarization.* The direction of the electric field as radiated from the transmitting antenna.

*Program related data signal.* A signal, consisting of a series of pulses representing data, which is transmitted simultaneously with and directly related to the accompanying television program.

*Reference black level.* The level corresponding to the specified maximum excursion of the luminance signal in the black direction.

*Reference white level of the luminance signal.* The level corresponding to the specified maximum excursion of the luminance signal in the white direction.

*Scanning.* The process of analyzing successively, according to a predetermined method, the light values of picture elements constituting the total picture area.

*Scanning line.* A single continuous narrow strip of the picture area containing highlights, shadows, and halftones, determined by the process of scanning.

*Standard television signal.* A signal which conforms to the television transmission standards.

*Synchronization.* The maintenance of one operation in step with another.

*Television broadcast band.* The frequencies in the band extending from 54 to 806 megahertz which are assignable to television broadcast stations. These frequencies are 54 to 72 megahertz (channels 2 through 4), 76 to 88 megahertz (channels 5 and 6), 174 to 216 megahertz (channels 7 through 13), and 470 to 806 megahertz (channels 14 through 69).

*Television broadcast station.* A station in the television broadcast band transmitting simultaneous visual and aural signals intended to be received by the general public.

*Television channel.* A band of frequencies 6 MHz wide in the television broadcast band and designated either by number or by the extreme lower and upper frequencies.

*Television transmission standards.* The standards which determine the characteristics of a television signal as radiated by a television broadcast station.

*Television transmitter.* The radio transmitter or transmitters for the transmission of both visual and aural signals.

*Vestigial sideband transmission.* A system of transmission wherein one of the generated sidebands is partially attenuated at the transmitter and radiated only in part.

*Visual carrier frequency.* The frequency of the carrier which is modulated by the picture information.

*Visual transmitter.* The radio equipment for the transmission of the visual signal only.

*Visual transmitter power.* The peak power output when transmitting a standard television signal.

[28 FR 13660, Dec. 14, 1963, as amended at 35 FR 5692, Apr. 8, 1970; 36 FR 5505, Mar. 24, 1971; 36 FR 17429, Aug. 31, 1971; 41 FR 56325, Dec. 28, 1976; 42 FR 20823, Apr. 22, 1977; 44 FR 36039, June 20, 1979; 47 FR 35990, Aug. 18, 1982; 49 FR 18106, Apr. 27, 1984; 49 FR 38131, Sept. 27, 1984; 49 FR 50048, Dec. 26, 1984; 50 FR 23699, June 5, 1985; 51 FR 12616, Apr. 14, 1986; 56 FR 49707, Oct. 1, 1991; 58 FR 44951, Aug. 25, 1993; 62 FR 51059, Sept. 30, 1997]

### § 73.682 TV transmission standards.

(a) *Transmission standards.* (1) The width of the television broadcast channel shall be 6 MHz.

(2) The visual carrier frequency shall be nominally 1.25 MHz above the lower boundary of the channel.

(3) The aural center frequency shall be 4.5 MHz higher than the visual carrier frequency.

(4) The visual transmission amplitude characteristic shall be in accordance with the chart designated as Figure 5 of § 73.699: *Provided, however,* That for stations operating on Channel 15 through 69 and employing a transmitter with maximum peak visual power output of 1 kW or less the visual transmission amplitude characteristic may be in accordance with the chart designated as Figure 5a of § 73.699.

(5) The chrominance subcarrier frequency is 63/88 times precisely 5 MHz (3.57954545 . . . MHz). The tolerance is ± 10 Hz and the rate of frequency drift must not exceed 0.1 Hz per second (cycles per second squared).

(6) For monochrome and color transmissions the number of scanning lines per frame shall be 525, interlaced two to one in successive fields. The horizontal scanning frequency shall be 2/455 times the chrominance subcarrier frequency; this corresponds nominally to 15,750 Hz with an actual value of 15,734.264 ±0.044 Hz). The vertical scanning frequency is 2/525 times the horizontal scanning frequency; this corresponds nominally to 60 Hz (the actual value is 59.94 Hz). For monochrome transmissions only, the nominal values of line and field frequencies may be used.

(7) The aspect ratio of the transmitted television picture shall be 4 units horizontally to 3 units vertically.

(8) During active scanning intervals, the scene shall be scanned from left to right horizontally and from top to bottom vertically, at uniform velocities.

(9) A carrier shall be modulated within a single television channel for both picture and synchronizing signals. The two signals comprise different modulation ranges in amplitude in accordance with the following:

(i) Monochrome transmissions shall comply with synchronizing waveform specifications in Figure 7 of § 73.699.

(ii) Color transmissions shall comply with the synchronizing waveform specifications in Figure 6 of § 73.699.

(iii) All stations operating on Channels 2 through 14 and those stations operating on Channels 15 through 69 licensed for a peak visual transmitter output power greater than one kW shall comply with the picture transmission amplitude characteristics shown in Figure 5 of § 73.699.

(iv) Stations operating on Channels 15 through 69 licensed for a peak visual transmitter output power of one kW or less shall comply with the picture transmission amplitude characteristic shown in Figure 5 or 5a of § 73.699.

(10) A decrease in initial light intensity shall cause an increase in radiated power (negative transmission).

(11) The reference black level shall be represented by a definite carrier level, independent of light and shade in the picture.

(12) The blanking level shall be transmitted at 75±2.5 percent of the peak carrier level.

(13) The reference white level of the luminance signal shall be 12.5±2.5 percent of the peak carrier level.

(14) It shall be standard to employ horizontal polarization. However, circular or elliptical polarization may be employed if desired, in which case clockwise (right hand) rotation, as defined in the IEEE Standard Definition 42A65–3E2, and transmission of the horizontal and vertical components in time and space quadrature shall be used. For either omnidirectional or directional antennas the licensed effective radiated power of the vertically polarized component may not exceed the licensed effective radiated power of the horizontally polarized component. For directional antennas, the maximum effective radiated power of the vertically polarized component shall not exceed the maximum effective radiated power of the horizontally polarized component in any specified horizontal or vertical direction.

(15) The effective radiated power of the aural transmitter must not exceed 22% of the peak radiated power of the visual transmitter.

(16) The peak-to-peak variation of transmitter output within one frame of video signal due to all causes, including hum, noise, and low-frequency response, measured at both scanning synchronizing peak and blanking level,

shall not exceed 5 percent of the average scanning synchronizing peak signal amplitude. This provision is subject to change but is considered the best practice under the present state of the art. It will not be enforced pending a further determination thereof.

(17) The reference black level shall be separated from the blanking level by the setup interval, which shall be 7.5±2.5 percent of the video range from blanking level to the reference white level.

(18) For monochrome transmission, the transmitter output shall vary in substantially inverse logarithmic relation to the brightness of the subject. No tolerances are set at this time. This provision is subject to change but is considered the best practice under the present state of the art. It will not be enforced pending a further determination thereof.

(19) The color picture signal shall correspond to a luminance component transmitted as amplitude modulation of the picture carrier and a simultaneous pair of chrominance components transmitted as the amplitude modulation sidebands of a pair of suppressed subcarriers in quadrature.

(20) Equation of complete color signal.

(i) The color picture signal has the following composition:

$$E_M = E_Y' + [E_Q' \sin(\omega t + 33°) + E_I' \cos(\omega t + 33°)]$$

Where:

$E_Q' = 0.41(E_B' - E_Y') + 0.48(E_R' - E_Y')$.
$E_I' = -0.27(E_B' - E_Y') + 0.74(E_R' - E_Y')$.
$E_Y' = 0.30E_R' + 0.59E_G' + 0.—1E_B'$.

For color-difference frequencies below 500 kHz (see (iii) below), the signal can be represented by:

$$E_M = E_Y' + [(1/1.14)[(1/1.78)(E_B' - E_Y') \sin \omega t + (E_R' - E_Y') \cos \omega t]]$$

(ii) The symbols in paragraph (a)(20)(i) of this section have the following significance:

$E_M$ is the total video voltage, corresponding to the scanning of a particular picture element, applied to the modulator of the picture transmitter.

$E_Y'$ is the gamma-corrected voltage of the monochrome (black-and-white) portion of the color picture signal, corresponding to the given picture element.

NOTE: Forming of the high frequency portion of the monochrome signal in a different manner is permissible and may in fact be desirable in order to improve the sharpness on saturated colors.

$E_Q'$ and $E_I'$ are the amplitudes of two orthogonal components of the chrominance signal corresponding respectively to narrow-band and wide-band axes.

$E_R'$, $E_G'$, and $E_B'$ are the gamma-corrected voltages corresponding to red, green, and blue signals during the scanning of the given picture element.

$\omega$ is the angular frequency and is 2 times the frequency of the chrominance subcarrier.

The portion of each expression between brackets in (i) represents the chrominance subcarrier signal which carries the chrominance information.

The phase reference in the $E_M$ equation in (i) is the phase of the burst+180°, as shown in Figure 8 of §73.699. The burst corresponds to amplitude modulation of a continuous sine wave.

(iii) The equivalent bandwidth assigned prior to modulation to the color difference signals $E_Q'$ and $E_I'$ are as follows:

Q–channel bandwidth:
At 400 kHz less than 2 dB down.
At 500 kHz less than 6 dB down.
At 600 kHz at least 6 dB down.
I–channel bandwidth:
At 1.3 MHz less than 2 dB down.
At 3.6 MHz at least 20 dB down.

(iv) The gamma corrected voltages $E_R'$, $E_G'$, and $E_B'$ are suitable for a color picture tube having primary colors with the following chromaticities in the CIE system of specification:

| | x | y |
|---|---|---|
| Red (R) | 0.67 | 0.33 |
| Green (G) | 0.21 | 0.71 |
| Blue (B) | 0.14 | 0.08 |

and having a transfer gradient (gamma exponent) of 2.2 associated with each primary color. The voltages $E_R'$, $E_G'$, and $E_B'$ may be respectively of the form $E_R^{1/\gamma}$, $E_G^{1/\gamma}$, and $E_B^{1/\gamma}$ although other forms may be used with advances in the state of the art.

NOTE: At the present state of the art it is considered inadvisable to set a tolerance on the value of gamma and correspondingly this portion of the specification will not be enforced.

(v) The radiated chrominance subcarrier shall vanish on the reference white of the scene.

NOTE: The numerical values of the signal specification assume that this condition will

be reproduced as CIE Illuminant C ($x$=0.310, $y$=0.316).

(vi) $E_Y'$, $E_Q'$, $E_I'$, and the components of these signals shall match each other in time to 0.05 μ SECS.

(vii) The angles of the subcarrier measured with respect to the burst phase, when reproducing saturated primaries and their complements at 75 percent of full amplitude, shall be within ±10° and their amplitudes shall be within ±20 percent of the values specified above. The ratios of the measured amplitudes of the subcarrier to the luminance signal for the same saturated primaries and their complements shall fall between the limits of 0.8 and 1.2 of the values specified for their ratios. Closer tolerances may prove to be practicable and desirable with advance in the art.

(21) The interval beginning with line 17 and continuing through line 20 of the vertical blanking interval of each field may be used for the transmission of test signals, cue and control signals, and identification signals, subject to the conditions and restrictions set forth below. Test signals may include signals designed to check the performance of the overall transmission system or its individual components. Cue and control signals shall be related to the operation of the TV broadcast station. Identification signals may be transmitted to identify the broadcast material or its source, and the date and time of its origination. Figures 6 and 7 of § 73.699 identify the numbered lines referred to in this paragraph.

(i) Modulation of the television transmitter by such signals shall be confined to the area between the reference white level and the blanking level, except where test signals include chrominance subcarrier frequencies, in which case positive excursions of chrominance components may exceed reference white, and negative excursions may extend into the synchronizing area. In no case may the modulation excursions produced by test signals extend beyond peak-of-sync, or to zero carrier level.

(ii) The use of such signals shall not result in significant degradation of the program transmission of the television broadcast station, nor produce emission outside of the frequency band occupied for normal program transmissions.

(iii) Such signals may not be transmitted during that portion of each line devoted to horizontal blanking.

(iv) Regardless of other provisions of this paragraph, after June 30, 1994, Line 19, in each field, may be used only for the transmission of the ghost-canceling reference signal described in OET Bulletin No. 68, which is available from the Commission's Office of Engineering and Technology, Technical Standards Branch, 2025 M Street NW. Washington, DC 20554. Notwithstanding the modulation limits contained in paragraph (a)(23)(i) of this section, the vertical interval reference signal formerly permitted on Line 19 and described in Figure 16 of § 73.699, may be transmitted on any of lines 10 through 16 without specific Commission authorization, subject to the conditions contained in paragraphs (a)(21)(ii) and (a)(22)(ii) of this section.

(22)(i) Line 21, in each field, may be used for the transmission of a program-related data signal which, when decoded, provides a visual depiction of information simultaneously being presented on the aural channel (captions). Line 21, field 2 may be used for transmission of a program-related data signal which, when decoded, identifies a rating level associated with the current program. Such data signals shall conform to the format described in figure 17 of § 73.699 of this chapter, and may be transmitted during all periods of regular operation. On a space available basis, line 21 field 2 may also be used for text-mode data and extended data service information.

NOTE: The signals on Fields 1 and 2 shall be distinct data streams, for example, to supply captions in different languages or at different reading levels.

(ii) At times when Line 21 is not being used to transmit a program related data signal, data signals which are not program related may be transmitted, *Provided:* the same data format is used and the information to be displayed is of a broadcast nature.

(iii) The use of Line 21 for transmission of other data signals conforming to other formats may be used subject to prior authorization by the Commission.

(iv) The data signal shall cause no significant degradation to any portion of the visual signal nor produce emissions outside the authorized television channel.

(v) Transmission of visual emergency messages pursuant to §73.1250 shall take precedence and shall be cause for interrupting transmission of data signals permitted under this paragraph.

(23) Specific scanning lines in the vertical blanking interval may be used for the purpose of transmitting telecommunications signals in accordance with §73.646, subject to certain conditions:

(i) Telecommunications may be transmitted on Lines 10–18 and 20, all of Field 2 and Field 1. Modulation level shall not exceed 70 IRE on lines 10, 11, and 12; and, 80 IRE on lines 13–18 and 20.

(ii) No observable degradation may be caused to any portion of the visual or aural signals.

(iii) Telecommunications signals must not produce emissions outside the authorized television channel bandwidth. Digital data pulses must be shaped to limit spectral energy to the nominal video baseband.

(iv) Transmission of emergency visual messages pursuant to §73.1250 must take precedence over, and shall be cause for interrupting, a service such as teletext that provides a visual depiction of information simultaneously transmitted on the aural channel.

(v) A reference pulse for a decoder associated adaptive equalizer filter designed to improve the decoding of telecommunications signals may be inserted on any portion of the vertical blanking interval authorized for data service, in accordance with the signal levels set forth in paragraph (a)(23)(i) of this section.

(vi) All lines authorized for telecommunications transmissions may be used for other purposes upon prior approval by the Commission.

(24) Licensees and permittees of TV broadcast and low power TV stations may insert non-video data into the active video portion of their TV transmission, subject to certain conditions:

(i) The active video portion of the visual signal begins with line 22 and continues through the end of each field, except it does not include that portion of each line devoted to horizontal blanking. Figures 6 and 7 of §73.699 identify the numbered line referred to in this paragraph;

(ii) Inserted non-video data may be used for the purpose of transmitting a telecommunications service in accordance with §73.646. In addition to a telecommunications service, non-video data can be used to enhance the station's broadcast program service or for purposes related to station operations. Signals relating to the operation of TV stations include, but are not limited to program or source identification, relay of broadcast materials to other stations, remote cueing and order messages, and control and telemetry signals for the transmitting system; and

(iii) A station may only use systems for inserting non-video information that have been approved in advance by the Commission. The criteria for advance approval of systems are as follows:

(A) The use of such signals shall not result in significant degradation to any portion of the visual, aural, or program-related data signals of the television broadcast station;

(B) No increase in width of the television broadcast channel (6 MHz) is permitted. Emissions outside the authorized television channel must not exceed the limitations given in §73.687(e). Interference to reception of television service either of co-channel or adjacent channel stations must not increase over that resulting from the transmission of programming without inserted data; and

(C) Where required, system receiving or decoding devices must meet the TV interface device provisions of Part 15, Subpart H of this chapter.

(iv) No protection from interference of any kind will be afforded to reception of inserted non-video data.

(v) Upon request by an authorized representative of the Commission, the licensee of a TV station transmitting encoded programming must make available a receiving decoder to the Commission to carry out its regulatory responsibilities.

(b) *Subscription TV technical systems.* The FCC may specify, as part of the advance approval of the technical system

for transmitting encoded subscription programming, deviations from the power determination procedures, operating power levels, aural or video baseband signals, modulation levels or other characteristics of the transmitted signal as otherwise specified in this Subpart. Any decision to approve such operating deviations shall be solely at the discretion of the FCC.

(c) TV multiplex subcarrier/stereophonic aural transmission standards.

(1) The modulating signal for the main channel shall consist of the sum of the stereophonic (biphonic, quadraphonic, etc.) input signals.

(2) The instantaneous frequency of the baseband stereophonic subcarrier must at all times be within the range 15 kHz to 120 kHz. Either amplitude or frequency modulation of the stereophonic subcarrier may be used.

(3) One or more pilot subcarriers between 16 kHz and 120 kHz may be used to switch a TV receiver between the stereophonic and monophonic reception modes or to activate a stereophonic audio indicator light, and one or more subcarriers between 15 kHz and 120 kHz may be used for any other authorized purpose; except that stations employing the BTSC system of stereophonic sound transmission and audio processing may transmit a pilot subcarrier at 15,734 Hz, ± 2 Hz. Other methods of multiplex subcarrier or stereophonic aural transmission systems must limit energy at 15,734 Hz, ± 20 Hz, to no more than ± 0.125 kHz aural carrier deviation.

(4) Aural baseband information above 120 kHz must be attenuated 40 dB referenced to 25 kHz main channel deviation of the aural carrier.

(5) For required transmitter performance, all of the requirements of §73.687(b) shall apply to the main channel, with the transmitter in the multiplex subcarrier or stereophonic aural mode.

(6) For electrical performance standards of the transmitter, the requirements of §73.687(b) apply to the main channel.

(7) Multiplex subcarrier or stereophonic aural transmission systems must be capable of producing and must not exceed ± 25 kHz main channel deviation of the aural carrier.

(8) The arithmetic sum of non-multiphonic baseband signals between 15 kHz and 120 kHz must not exceed ±50 kHz deviation of the aural carrier.

(9) Total modulation of the aural carrier must not exced ± 75 kHz.standard; and adopting a standard for allocation and assignment purposes only. In addition, the Commission sought comment on requiring use of some layers of the ATSC DTV Standard but making others optional.

(1) The SBA defines affiliation in 13 C.F.R. 121.103. In this context, the SBA's definition of affiliate is analogous to our attribution rules. Generally, under the SBA's definition, concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both. 13 C.F.R. 121.103(a)(1). The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. 13 C.F.R. 121.103(a)(2). Instead of making an independent determination of whether television stations were affiliated based on SBA's definitions, we relied on the data bases available to us to provide us with that information.

(d) *Digital broadcast television transmission standard.* Transmission of digital broadcast television (DTV) signals shall comply with the standards for such transmissions set forth in Advanced Television Systems Committee (ATSC) Doc. A/52 (''ATSC Standard Digital Audio Compression (AC–3), 20 Dec 95'') and ATSC Doc A/53 (''ATSC Digital Television Standard, 16 Sep 95''), except for Section 5.1.2 (''Compression format constraints'') of Annex A (''Video Systems Characteristics'') and the phrase ''see Table 3'' in Section 5.1.1 Table 2 and Section 5.1.2 Table 4. Although not incorporated herein by reference, licensees may also consult ATSC Doc. A/54 (''Guide to the Use of the ATSC Digital Television Standard, 4 Oct 95'') for guidance. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected at the Federal Communications Commission, 1919 M Street, NW., Washington, DC

20554 or at the Office of the Federal Register, 800 N. Capitol Street, NW., Washington, DC. Copies of ATSC A/52, A/53, and A/54 can be obtained from the Commission's contract copier or from the Advanced Television Systems Committee, 1750 K Street, NW., suite 800, Washington, DC 20006. They are also available in their entirety on the Internet at http://www.atsc.org.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[28 FR 13660, Dec. 14, 1963]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §73.682, see the List of CFR Sections Affected appearing in the Finding Aids section of this volume.

### §73.683 Field strength contours.

(a) In the authorization of TV stations, two field strength contours are considered. These are specified as Grade A and Grade B and indicate the approximate extent of coverage over average terrain in the absence of interference from other television stations. Under actual conditions, the true coverage may vary greatly from these estimates because the terrain over any specific path is expected to be different from the average terrain on which the field strength charts were based. The required field strength, *F* (50,50), in dB above one micro-volt per meter (dBu) for the Grade A and Grade B contours are as follows:

| | Grade A (dBu) | Grade B (dBu) |
|---|---|---|
| Channels 2–6 | 68 | 47 |
| Channels 7–13 | 71 | 56 |
| Channels 14–69 | 74 | 64 |

(b) It should be realized that the F (50,50) curves when used for Channels 14–69 are not based on measured data at distances beyond about 48.3 kilometers (30 miles). Theory would indicate that the field strengths for Channels 14–69 should decrease more rapidly with distance beyond the horizon than for Channels 2–6, and modification of the curves for Channels 14–69 may be expected as a result of measurements to be made at a later date. For these reasons, the curves should be used with appreciation of their limitations in estimating levels of field strength. Further, the actual extent of service will usually be less than indicated by these estimates due to interference from other stations. Because of these factors, the predicted field strength contours give no assurance of service to any specific percentage of receiver locations within the distances indicated. In licensing proceedings these variations will not be considered.

(c) The field strength contours will be considered for the following purposes only:

(1) In the estimation of coverage resulting from the selection of a particular transmitter site by an applicant for a TV station.

(2) In connection with problems of coverage arising out of application of §73.3555.

(3) In determining compliance with §73.685(a) concerning the minimum field strength to be provided over the principal community to be served.

[44 FR 36039, June 20, 1979, as amended at 47 FR 35990, Aug. 18, 1982; 50 FR 23699, June 5, 1985; 50 FR 32416, Aug. 12, 1985]

### §73.684 Prediction of coverage.

(a) All predictions of coverage made pursuant to this section shall be made without regard to interference and shall be made only on the basis of estimated field strengths. The peak power of the visual signal is used in making predictions of coverage.

(b) Predictions of coverage shall be made only for the same purposes as relate to the use of field strength contours as specified in §73.683(c).

(c) In predicting the distance to the field strength contours, the F (50,50) field strength charts (Figures 9 and 10 of §73.699) shall be used. If the 50% field strength is defined as that value exceeded for 50% of the time, these F (50,50) charts give the estimated 50% field strengths exceeded at 50% of the locations in dB above 1 uV/m. The charts are based on an effective power of 1 kW radiated form a half-wave dipole in free space, which produces an unattenuated field strength at 1.61 kilometers (1 mile) of about 103 dB above 1 uV/m. To use the charts to predict the distance to a given contour, the following procedure is used: Convert the effective radiated power in kilowatts for the appropriate azimuth into decibel value referenced to 1 kW (dBu).

If necessary, convert the selected contour to the decibel value (dBu) above 1 microvolt per meter (1 uV/m). Subtract the power value in dBk from the contour value in dBu. Note that for power less than 1 kW, the difference value will be greater than the contour value because the power in dBk is negative. Locate the difference value obtained on the vertical scale at the left edge of the chart. Follow the horizontal line for that value into the chart to the point of intersection with the vertical line above the height of the antenna above average terrain for the appropriate azimuth located on the scale at the bottom of the chart. If the point of intersection does not fall exactly on a distance curve, interpolate between the distance curves below and above the intersection point. The distance values for the curves are located along the right edge of the chart.

(1) In predicting the distance to the Grade A and Grade B field strength contours, the effective radiated power to be used is that radiated at the vertical angle corresponding to the depression angle between the transmitting antenna center of radiation and the radio horizon as determined individually for each azimuthal direction concerned. The depression angle is based on the difference in elevation of the antenna center of radiation above the average terrain and the radio horizon, assuming a smooth sperical earth with a radius of 8,495.5 kilometers (5,280 miles) and shall be determined by the following equation:

$$A = 0.0277\sqrt{H}$$

Where:

A is the depression angle in degrees.
H is the height in meters of the transmitting antenna radiation center above average terrain of the 3.2—16.1 kilometers (2–10 miles) sector of the pertinent radial.

This formula is empirically derived for the limited purpose specified here. Its use for any other purpose may be inappropriate.

(2) In case where the relative field strength at the depression angle determined by the above formula is 90% or more of the maximum field strength developed in the vertical plane containing the pertaining radial, the maximum radiation shall be used.

(3) In predicting field strengths for other than the Grade A and Grade B contours, the effective radiated power to be used is to be based on the appropriate antenna vertical plane radiation pattern for the azimuthal direction concerned.

(4) Applicants for new TV stations or changes in the facilities of existing TV stations must submit to the FCC a showing as to the location of their stations' or proposed stations' predicted Grade A and Grade B contours, determined in accordance with § 73.684. This showing is to include maps showing these contours, except where applicants have previously submitted material to the FCC containing such information and it is found upon careful examination that the contour locations indicated therein would not change, on any radial, when the locations are determined under this Section. In the latter cases, a statement by a qualified engineer to this effect will satisfy this requirement and no contour maps need be submitted.

(d) The antenna height to be used with these charts is the height of the radiation center of the antenna above the average terrain along the radial in question. In determining the average elevation of the terrain, the elevations between 3.2–16.1 kilometers (2–10 miles) from the antenna site are employed. Profile graphs shall be drawn for 8 radials beginning at the antenna site and extending 16.1 kilometers (10 miles) therefrom. The radials should be drawn for each 45 degrees of azimuth starting with the True North. At least one radial must include the principal community to be served even though such community may be more than 16.1 kilometers (10 miles) from the antenna site. However, in the event none of the evenly spaced radials include the principal community to be served and one or more such radials are drawn in addition to the 8 evenly spaced radials, such additional radials shall not be employed in computing the antenna height above average terrain. Where the 3.2–16.1 kilometers (2–10 mile) portion of a radial extends in whole or in part over large bodies of water as specified in paragraph (e) of this section or extends over foreign territory but the Grade B strength contour encompasses

land area within the United States beyond the 16.1 kilometers (10 mile) portion of the radial, the entire 3.2–16.1 kilometers (2–10 mile) portion of the radial shall be included in the computation of antenna height above average terrian. However, where the Grade B contour does not so encompass United States land area and (1) the entire 3.2–16.1 kilometers (2–10 mile) portion of the radial extends over large bodies of water of foreign territory, such radial shall be completely omitted from the computation of antenna height above average terrain, and (2) where a part of the 3.2–16.1 kilometers (2–10 mile) portion of a radial extends over large bodies of water or over foreign territory, only that part of the radial extending from the 3.2 kilometer (2 mile) sector to the outermost portion of land area within the United States covered by the radial shall be employed in the computation of antenna height above average terrian. The profile graph for each radial should be plotted by contour intervals of from 12.2–30.5 meters (40–100 feet) and, where the data permits, at least 50 points of elevation (generally uniformly spaced) should be used for each radial. In instances of very rugged terrain where the use of contour intervals of 30.5 meters (100 feet) would result in several points in a short distance, 61.0–122.0 meter (200–400 foot) contour intervals may be used for such distances. On the other hand, where the terrain is uniform or gently sloping the smallest contour interval indicated on the topograhic may (see paragraph (g) of this section) should be used, although only relatively few points may be available. The profile graphs should indicate the topography accurately for each radial, and the graphs should be plotted with the distance in kilometers as the abscissa and the elevation in meters above mean sea level as the ordinate. The profile graphs should indicate the source of the topographical data employed. The graph should also show the elevation of the center of the radiating system. The graph may be plotted either on rectangular coordinate paper or on special paper which shows the curvature of the earth. It is not necessary to take the curvature of the earth into consideration in this procedure, as this factor is taken care of in the charts showing signal strengths. The average elevation of the 12.9 kilometer (8 miles) distance between 3.2–16.1 kilometers (2–10 miles) from the antenna site should then be determined from the profile graph for each radial. This may be obtained by averaging a large number of equally spaced points, by using a planimeter, or by obtaining the median elevation (that exceeded for 50% of the distance) in sectors and averaging those values.

NOTE: The Commission will, upon a proper showing by an existing station that the application of this rule will result in an unreasonable power reduction in relation to other stations in close proximity, consider requests for adjustment in power on the basis of a common average terrain figure for the stations in question as determined by the FCC.

(e) In instance where it is desired to determine the area in square kilometers within the Grade A and Grade B field strength contours, the area may be determined from the coverage map by planimeter or other approximate means; in computing such areas, exclued (1) areas beyond the borders of the United States, and (2) large bodies of water, such as ocean areas, gulfs sounds, bays, large lakes, etc., but not rivers.

(f) In cases where terrain in one or more directions from the antenna site departs widely from the average elevation of the 3.2 to 16.1 kilometers (2 to 10 mile) sector, the prediction method may indicate contour distances that are different from what may be expected in practice. For example, a mountain ridge may indicate the practical limit of service although the prediction method may indicate otherwise. In such case the prediction method should be followed, but a supplemental showing may be made concerning the contour distances as determined by other means. Such supplemental showing should describe the procedure employed and should include sample calculations. Maps of predicted coverage should include both the coverage as predicted by the regular method and as predicted by a supplemental method. When measurements of area are required, these should include the area obtained by the regular predicted method and the area obtained by the

supplemental method. In directions where the terrain is such that negative antenna heights or heights below 30.5 meters (100 feet) for the 3.2 to 16.1 kilometers (2 to 10 mile) sector are obtained, an assumed height of 30.5 meters (100 feet) shall be used for the prediction of coverage. However, where the actual contour distances are critical factors, a supplemental showing of expected coverage must be included together with a description of the method employed in predicting such coverage. In special cases, the Commission may require additional information as to terrain and coverage.

(g) In the preparation of the profile graph previously described, and in determining the location and height above sea level of the antenna site, the elevation or contour intervals shall be taken from the United States Geological Survey Topographic Quadrangle Maps, United States Army Corps of Engineers' maps or Tennessee Valley Authority maps, whichever is the latest, for all areas for which such maps are available. If such maps are not published for the area in question, the next best topographic information should be used. Topographic data may sometimes be obtained from State and Municipal agencies. Data from Sectional Aeronautical Charts (including bench marks) or railroad depot elevations and highway elevations from road maps may be used where no better information is available. In cases where limited topographic data is available, use may be made of an altimeter in a car driven along roads extending generally radially from the transmitter site. Ordinarily the Commission will not require the submission of topographical maps for areas beyond 24.1 kilometers (15 miles) from the antenna site, but the maps must include the principal community to be served. If it appears necessary, additional data may be requested. United States Geological Survey Topographic Quadrangle Maps may be obtained from the United States Geological Survey, Department of the Interior, Washington, DC 20240. Sectional Aeronautical Charts are available from the United States Coast and Geodetic Survey, Department of Commerce, Washington, DC 20235. In lieu of maps, the average terrain elevation may be computer generated, except in the cases of dispute, using elevations from a 30 second point or better topographic data file. The file must be identified and the data processed for intermediate points along each radial using linear interpolation techniques. The height above mean sea level of the antenna site must be obtained manually using appropriate topographic maps.

(h) The effect of terrain roughness on the predicted field strength of a signal at points distant from a television broadcast station is assumed to depend on the magnitude of a terrain roughness factor ($\Delta$ h) which, for a specific propagation path, is determined by the characteristics of a segment of the terrain profile for that path 40.2 kilometers (25 miles) in length, located between 9.7 and 49.9 kilometers (6 and 31 miles) from the transmitter. The terrain roughness factor has a value equal to the difference, in meters, between elevations exceeded by all points on the profile for 10 percent and 90 percent, respectively, of the length of the profile segment (see § 73.699, Fig. 10d).

(i) If the lowest field strength value of interest is initially predicted to occur over a particular propagation path at a distance which is less than 49.9 kilometers (31 miles) from the transmitter, the terrain profile segment used in the determination of the terrain roughness factor over that path shall be that included between points 9.7 kilometers (6 miles) from the transmitter and such lesser distance. No terrain roughness correction need be applied when all field strength values of interest are predicted to occur 9.7 kilometers (6 miles) or less from the transmitter.

(j) Profile segments prepared for terrain roughness factor determinations should be plotted in rectangular coordinates, with no less than 50 points evenly spaced within the segment, using data obtained from topographic maps, if available, with contour intervals of 15.2 meters (50 feet), or less.

(k) The field strength charts (§ 73.699, Figs. 9–10c) were developed assuming a terrain roughness factor of 50 meters, which is considered to be representative of average terrain in the United States. Where the roughness factor for a particular propagation path is found

to depart appreciably from this value, a terrain roughness correction ($\Delta F$) should be applied to field strength values along this path as predicted with the use of these charts. The magnitude and sign of this correction, for any value of $\Delta h$, may be determined from a chart included in §73.699 as Figure 10e, with linear interpolation as necessary, for the frequency of the UHF signal under consideration.

(l) Alternatively, the terrain roughness correction may be computed using the following formula:

$$\Delta F = C - 0.03(\Delta h)(1+f/300)$$

Where:

$\Delta F$=terrain roughness correction in dB

C=a constant having a specific value for use with each set of field strength charts:
1.9 for TV Channels 2–6
2.5 for TV Channels 7–13
4.8 for TV Channels 14–69

$\Delta h$=terrain roughness factor in meters

$f$=frequency of signal in megahertz (MHz)

[28 FR 13660, Dec. 13, 1963, as amended at 40 FR 27683, July 1, 1975; 44 FR 36039, June 20, 1979; 48 FR 44807, Sept. 30, 1983; 50 FR 23699, June 5, 1985; 51 FR 26251, July 22, 1986; 52 FR 36879, Oct. 1, 1987]

EFFECTIVE DATE NOTE: At 42 FR 25736, May 19, 1977, in §73.684, (k) and (l) are stayed indefinitely.

### §73.685 Transmitter location and antenna system.

(a) The transmitter location shall be chosen so that, on the basis of the effective radiated power and antenna height above average terrain employed, the following minimum field strength in dB above one uV/m will be provided over the entire principal community to be served:

| Channels 2–6 | Channels 7–13 | Channels 14–69 |
|---|---|---|
| 74 dBu | 77 dBu | 80 dBu |

(b) Location of the antenna at a point of high elevation is necessary to reduce to a minimum the shadow effect on propagation due to hills and buildings which may reduce materially the strength of the station's signals. In general, the transmitting antenna of a station should be located at the most central point at the highest elevation available. To provide the best degree of service to an area, it is usually preferable to use a high antenna rather than a low antenna with increased transmitter power. The location should be so chosen that line-of-sight can be obtained from the antenna over the principal community to be served; in no event should there be a major obstruction in this path. The antenna must be constructed so that it is as clear as possible of surrounding buildings or objects that would cause shadow problems. It is recognized that topography, shape of the desired service area, and population distribution may make the choice of a transmitter location difficult. In such cases, consideration may be given to the use of a directional antenna system, although it is generally preferable to choose a site where a nondirectional antenna may be employed.

(c) In cases of questionable antenna locations it is desirable to conduct propagation tests to indicate the field strength expected in the principal community to be served and in other areas, particularly where severe shadow problems may be expected. In considering applications proposing the use of such locations, the Commission may require site tests to be made. Such tests should be made in accordance with the measurement procedure in §73.686, and full data thereon must be supplied to the Commission. Test transmitters should employ an antenna having a height as close as possible to the proposed antenna height, using a balloon or other support if necessary and feasible. Information concerning the authorization of site tests may be obtained from the Commission upon request.

(d) Present information is not sufficiently complete to establish ''blanket areas'' of television broadcast stations. A ''blanket area'' is that area adjacent to a transmitter in which the reception of other stations is subject to interference due to the strong signal from this station. The authorization of station construction in areas where blanketing is found to be excessive will be on the basis that the applicant will assume full responsibility for the adjustment of reasonable complaints arising from excessively strong signals of the applicant's station or take other corrective action.

(e) An antenna designed or altered to produce a noncircular radiation pattern in the horizontal plane is considered to be a directional antenna. Antennas purposely installed in such a manner as to result in the mechanical beam tilting of the major vertical radiation lobe are included in this category. Directional antennas may be employed for the purpose of improving service upon an appropriate showing of need. Stations operating on Channels 2–13 will not be permitted to employ a directional antenna having a ratio of maximum to minimum radiation in the horizontal plane in excess of 10 dB. Stations operating on Channels 14–69 with transmitters delivering a peak visual power output of more than 1 kW may employ directive transmitting antennas with a maximum to minimum radiation in the horizontal plane of not more than 15 dB. Stations operating on Channels 14–69 and employing transmitters delivering a peak visual power output of 1 kW or less are not limited as to the ratio of maximum to minimum radiation.

(f) Applications proposing the use of directional antenna systems must be accompanied by the following:

(1) Complete description of the proposed antenna system, including the manufacturer and model number of the proposed directional antenna.

(2) Relative field horizontal plane pattern (horizontal polarization only) of the proposed directional antenna. A value of 1.0 should be used for the maximum radiation. The plot of the pattern should be oriented so that 0° corresponds to true North. Where mechanical beam tilt is intended, the amount of tilt in degrees of the antenna vertical axis and the orientation of the downward tilt with respect to true North must be specified, and the horizontal plane pattern must reflect the use of mechanical beam tilt.

(3) A tabulation of the relative field pattern required in paragraph (b)(2), of this section. The tabulation should use the same zero degree reference as the plotted pattern, and be tabulated at least every 10°. In addition, tabulated values of all maxima and minima, with their corresponding azimuths, should be submitted.

(4) Horizontal and vertical plane radiation patterns showing the effective radiated power, in dBk, for each direction. Sufficient vertical plane patterns must be included to indicate clearly the radiation characteristics of the antenna above and below the horizontal plane. In cases where the angles at which the maximum vertical radiation varies with azimuth, a separate vertical radiation pattern must be provided for each pertinent radial direction.

(5) All horizontal plane patterns must be plotted to the largest scale possible on unglazed letter-size polar coordinate paper (main engraving approximately 18 cm x 25 cm (7 inches x 10 inches)) using only scale divisions and subdivisions of 1, 2, 2.5 or 5 times 10-nth. All vertical plane patterns must be plotted on unglazed letter-size rectangular coordinate paper. Values of field strength on any pattern less than 10% of the maximum field strength plotted on that pattern must be shown on an enlarged scale.

(6) The horizontal and vertical plane patterns that are required are the patterns for the complete directional antenna system. In the case of a composite antenna composed of two or more individual antennas, this means that the patterns for the composite antenna, not the patterns for each of the individual antennas, must be submitted.

(g) Applications proposing the use of television broadcast antennas within 61.0 meters (200 feet) of other television broadcast antennas operating on a channel within 20 percent in frequency of the proposed channel, or proposing the use of television broadcast antennas on Channels 5 or 6 within 61.0 meters (200 feet) of FM broadcast antennas, must include a showing as to the expected effect, if any, of such proximate operation.

(h) Where a TV licensee or permittee proposes to mount an antenna on an AM antenna tower, or locate within 3.2

km of an AM antenna tower, the TV licensee or permittee must comply with § 73.1692.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[28 FR 13660, Dec. 14, 1963, as amended at 35 FR 5693, Apr. 8, 1970; 40 FR 25461, June 16, 1975; 43 FR 53740, Nov. 17, 1978; 44 FR 22740, Apr. 17, 1979; 45 FR 26065, Apr. 17, 1980; 47 FR 35990, Aug. 18, 1982; 48 FR 21486, May 12, 1983; 50 FR 23701, June 5, 1985; 58 FR 44951, Aug. 25, 1993; 62 FR 51059, Sept. 30, 1997]

### § 73.686 Field strength measurements.

(a) Except as provided for in § 73.612, television broadcast stations shall not be protected from any type of interference or propagation effect. Persons desiring to submit testimony, evidence or data to the Commission for the purpose of showing that the technical standards contained in this subpart do not properly reflect the levels of any given type of interference or propagation effect may do so only in appropriate rulemaking proceedings concerning the amendment of such technical standards. Persons making field strength measurements for formal submission to the Commission in rulemaking proceedings, or making such measurements upon the request of the Commission, shall follow the procedure for making and reporting such measurements outlined in paragraph (b) of this section. In instances where a showing of the measured level of a signal prevailing over a specific community is appropriate, the procedure for making and reporting field strength measurements for this purpose is set forth in paragraph (c) of this section.

(b) Collection of field strength data for propagation analysis.

(1) *Preparation for measurements.* (i) On large scale topographic maps, eight or more radials are drawn from the transmitter location to the maximum distance at which measurements are to be made, with the angles included between adjacent radials of approximately equal size. Radials should be oriented so as to traverse representative types of terrain. The specific number of radials and their orientation should be such as to accomplish this objective.

(ii) At a point exactly 16.1 kilometers (10 miles) from the transmitter, each radial is marked, and at greater distances at successive 3.2 kilometer (2 mile) intervals. Where measurements are to be conducted at UHF, or over extremely rugged terrain, shorter intervals may be employed, but all such intervals shall be of equal length. Accessible roads intersecting each radial as nearly as possible at each 3.2 kilometer (2 mile) marker are selected. These intersections are the points on the radial at which measurements are to be made, and are referred to subsequently as measuring locations. The elevation of each measuring location should approach the elevation at the corresponding 3.2 kilometer (2 mile) marker as nearly as possible.

(2) *Measurement procedure.* The field strength of the visual carrier shall be measured with a voltmeter capable of indicating accurately the peak amplitude of the synchronizing signal. All measurements shall be made utilizing a receiving antenna designed for reception of the horizontally polarized signal component, elevated 9.1 meters (30 feet) above the roadbed. At each measuring location, the following procedure shall be employed.

(i) The instrument calibration is checked.

(ii) The antenna is elevated to a height of 30 feet.

(iii) The receiving antenna is rotated to determine if the strongest signal is arriving from the direction of the transmitter.

(iv) The antenna is oriented so that the sector of its response pattern over which maximum gain is realized is in the direction of the transmitter.

(v) A mobile run of at least 30.5 meters (100 feet) is made, which is centered on the intersection of the radial and the road, and the measured field strength is continuously recorded on a chart recorder over the length of the run.

(vi) The actual measuring location is marked exactly on the topographic map, and a written record, keyed to the specific location, is made of all factors which may affect the recorded field, such as topography, height and types of vegetation, buildings, obstacles, weather, and other local features.

(vii) If, during the test conducted as described in paragraph (b)(2)(iii) of this

section, the strongest signal is found to come from a direction other than from the transmitter, after the mobile run prescribed in paragraph (b)(2)(v) of this section is concluded, additional measurements shall be made in a ''cluster'' of at least five fixed points. At each such point, the field strengths with the antenna oriented toward the transmitter, and with the antenna oriented so as to receive the strongest field, are measured and recorded. Generally, all points should be within 61.0 meters (200 feet) of the center point of the mobile run.

(viii) If overhead obstacles preclude a mobile run of at leat 30.5 meters (100 feet), a ''cluster'' of five spot measurements may be made in lieu of this run. The first measurement in the cluster is identified. Generally, the locations for other measurements shall be within 61.0 meters (200 feet) of the location of the first.

(3) *Method of reporting measurements.* A report of measurements to the Commission shall be submitted in affidavit form, in triplicate, and should contain the following information:

(i) Tables of field strength measurements, which, for each measuring location, set forth the following data:

(A) Distance from the transmitting antenna.

(B) Ground elevation at measuring location.

(C) Date, time of day, and weather.

(D) Median field in dBu for 0 dBk, for mobile run or for cluster, as well as maximum and minimum measured field strengths.

(E) Notes describing each measuring location.

(ii) U.S. Geological Survey topographic maps, on which is shown the exact location at which each measurement was made. The original plots shall be made on maps of the largest available scale. Copies may be reduced in size for convenient submission to the Commission, but not to the extent that important detail is lost. The original maps shall be made available, if requested. If a large number of maps is involved, an index map should be submitted.

(iii) All information necessary to determine the pertinent characteristics of the transmitting installation, including frequency, geographical coordinates of antenna site, rated and actual power output of transmitter, measured transmission line loss, antenna power gain, height of antenna above ground, above mean sea level, and above average terrain. The effective radiated power should be computed, and horizontal and vertical plane patterns of the transmitting antenna should be submitted.

(iv) A list of calibrated equipment used in the field strength survey, which, for each instrument, specifies its manufacturer, type, serial number and rated accuracy, and the date of its most recent calibration by the manufacturer, or by a laboratory. Complete details of any instrument not of standard manufacture shall be submitted.

(v) A detailed description of the calibration of the measuring equipment, including field strength meters, measuring antenna, and connecting cable.

(vi) Terrain profiles in each direction in which measurements were made, drawn on curved earth paper for equivalent 4/3 earth radius, of the largest available scale.

(c) Collection of field strength data to determine television service in specific communities.

(1) *Preparation for measurement.* (i) The population (P) of the community, and its suburbs, if any, is determined by reference to an appropriate source, e.g., the 1970 U.S. Census tables of population of cities and urbanized areas.

(ii) The number of locations at which measurements are to be made shall be at least 15, and shall be approximately equal to 0.1 (P) ½, if this product is a number greater than 15.

(iii) A rectangular grid, of such size and shape as to encompass the boundaries of the community is drawn on an accurate map of the community. The number of line intersections on the grid included within the boundaries of the community shall be at least equal to the required number of measuring locations. The position of each intersection on the community map determines the location at which a measurement shall be made.

(2) *Measurement procedure.* The field strength of the visual carrier shall be measured, with a voltmeter capable of

indicating accurately the peak amplitude of the synchronizing signal. All measurements shall be made utilizing a receiving antenna designed for reception of the horizontally polarized signal component, elevated 9.1 meter (30 feet) above street level.

(i) Each measuring location shall be chosen as close as feasible to a point indicated on the map, as previously prepared, and at as nearly the same elevation as that point as possible.

(ii) At each measuring location, after equipment calibration and elevation of the antenna, a check is made to determine whether the strongest signal arrives from a direction other than from the transmitter.

(iii) At 20 percent or more of the measuring locations, mobile runs, as described in paragraph (b)(2) of this section shall be made, with no less than three such mobile runs in any case. The points at which mobile measurements are made shall be well separated. Spot measurements may be made at other measuring points.

(iv) Each actual measuring location is marked exactly on the map of the community, and suitably keyed. A written record shall be maintained, describing, for each location, factors which may affect the recorded field, such as the approximate time of measurement, weather, topography, overhead wiring, heights and types of vegetation, buildings and other structures. The orientation, with respect to the measuring location shall be indicated of objects of such shape and size as to be capable of causing shadows or reflections. If the strongest signal received was found to arrive from a direction other than that of the transmitter, this fact shall be recorded.

(3) *Method of reporting measurements.* A report of measurements to the Commission shall be submitted in affidavit form, in triplicate, and should contain the following information:

(i) A map of the community showing each actual measuring location, specifically identifying the points at which mobile runs were made.

(ii) A table keyed to the above map, showing the field strength at each measuring point, reduced to dBu for the actual effective radiated power of the station. Weather, date, and time of each measurement shall be indicated.

(iii) Notes describing each measuring location.

(iv) A topographic map of the largest available scale on which are marked the community and the transmitter site of the station whose signals have been measured, which includes all areas on or near the direct path of signal propagation.

(v) Computations of the mean and standard deviation of all measured field strengths, or a graph on which the distribution of measured field strength values is plotted.

(vi) A list of calibrated equipment used for the measurements, which for each instrument, specifies its manufacturer, type, serial number and rated accuracy, and the date of its most recent calibration by the manufacturer, or by a laboratory. Complete details of any instrument not of standard manufacture shall be submitted.

(vii) A detailed description of the procedure employed in the calibration of the measuring equipment, including field strength meters measuring antenna, and connecting cable.

[40 FR 27683, July 1, 1975, as amended at 50 FR 23701, June 5, 1985]

### § 73.687 Transmission system requirements.

(a) *Visual transmitter.* (1) The field strength or voltage of the lower sideband, as radiated or dissipated and measured as described in paragraph (a)(2) of this section, shall not be greater than −20 dB for a modulating frequency of 1.25 MHz or greater and in addition, for color, shall not be greater than −42 dB for a modulating frequency of 3.579545 MHz (the color subcarrier frequency). For both monochrome and color, the field strength or voltage of the upper sideband as radiated or dissipated and measured as described in paragraph (a)(2) of this section shall not be greater than −20 dB for a modulating frequency of 4.75 MHz or greater. For stations operating on Channels 15–69 and employing a transmitter delivering maximum peak visual power output of 1 kW or less, the field strength or voltage of the upper and lower sidebands, as radiated or dissipated and measured as described in

paragraph (a)(2) of this section, shall depart from the visual amplitude characteristic (Figure 5a of § 73.699) by no more than the following amounts:

−2 dB at 0.5 MHz below visual carrier frequency;
−2 dB at 0.5 MHz above visual carrier frequency;
−2 dB at 1.25 MHz above visual carrier frequency;
−3 dB at 2.0 MHz above visual carrier frequency;
−6 dB at 3.0 MHz above visual carrier frequency;
−12 dB at 3.5 MHz above visual carrier frequency;
−8 dB at 3.58 MHz above visual carrier frequency (for color transmission only).

The field strength or voltage of the upper and lower sidebands, as radiated or dissipated and measured as described in paragraph (a)(2) of this section, shall not exceed a level of −20 dB for a modulating frequency of 4.75 MHz or greater. If interference to the reception of other stations is caused by out-of-channel lower sideband emission, the technical requirements applicable to stations operating on Channels 2–13 shall be met.

(2) The attenuation characteristics of a visual transmitter shall be measured by application of a modulating signal to the transmitter input terminals in place of the normal composite television video signal. The signal applied shall be a composite signal composed of a synchronizing signal to establish peak output voltage plus a variable frequency sine wave voltage occupying the interval between synchronizing pulses. (The ''synchronizing signal'' referred to in this section means either a standard synchronizing wave form or any pulse that will properly set the peak.) The axis of the sine wave in the composite signal observed in the output monitor shall be maintained at an amplitude 0.5 of the voltage at synchronizing peaks. The amplitude of the sine wave input shall be held at a constant value. This constant value should be such that at no modulating frequency does the maximum excursion of the sine wave, observed in the composite output signal monitor, exceed the value 0.75 of peak output voltage. The amplitude of the 200 kHz sideband shall be measured and designated zero dB as a basis for comparison. The modulation signal frequency shall then be varied over the desired range and the field strength or signal voltage of the corresponding sidebands measured. As an alternate method of measuring, in those cases in which the automatic d-c insertion can be replaced by manual control, the above characteristic may be taken by the use of a video sweep generator and without the use of pedestal synchronizing pulses. The d-c level shall be set for midcharacteristic operation.

(3) A sine wave, introduced at those terminals of the transmitter which are normally fed the composite color picture signal, shall produce a radiated signal having an envelope delay, relative to the average envelope delay between 0.05 and 0.20 MHz, of zero microseconds up to a frequency of 3.0 MHz; and then linearly decreasing to 4.18 MHz so as to be equal to −0.17 μ secs at 3.58 MHz. The tolerance on the envelope delay shall be ±0.05 μ secs at 3.58 MHz. The tolerance shall increase linearly to ±0.1 μ sec down to 2.1 MHz, and remain at ±0.1 μ sec down to 0.2 MHz. (Tolerances for the interval of 0.0 to 0.2 MHz are not specified at the present time.) The tolerance shall also increase linearly to ±0.1 μ sec at 4.18 MHz.

(4) The radio frequency signal, as radiated, shall have an envelope as would be produced by a modulating signal in conformity with § 73.682 and Figure 6 or 7 of § 73.699, as modified by vestigial sideband operation specified in Figure 5 of § 73.699. For stations operating on Channels 15–69 the radio frequency signal as radiated, shall have an envelope as would be produced by a modulating signal in conformity with § 73.682 and Figure 6 or 7 of § 73.699.

(5) The time interval between the leading edges of successive horizontal pulses shall vary less than one half of one percent of the average interval. However, for color transmissions, § 73.682(a) (5) and (6) shall be controlling.

(6) The rate of change of the frequency of recurrence of the leading edges of the horizontal synchronizing signals shall be not greater than 0.15 percent per second, the frequency to be determined by an averaging process carried out over a period of not less than 20, nor more than 100 lines, such

lines not to include any portion of the blanking interval. However, for color transmissions, § 73.682(a) (5) and (6) shall be controlling.

(b) *Aural transmitter.* (1) Pre-emphasis shall be employed as closely as practicable in accordance with the impedance-frequency characteristic of a series inductance-resistance network having a time constant of 75 microseconds. (See upper curve of Figure 12 § 73.699.)

(2) If a limiting or compression amplifier is employed, precaution should be maintained in its connection in the circuit due to the use of pre-emphasis in the transmitting system.

(3) Aural modulation levels are specified in § 73.1570.

(c) *Requirements applicable to both visual and aural transmitters.* (1) Automatic means shall be provided in the visual transmitter to maintain the carrier frequency within *±1 kHz of the authorized frequency; automatic means shall be provided in the aural transmitter to maintain the carrier frequency 4.5 MHz above the actual visual carrier frequency within ±1 kHz.*

(2) The transmitters shall be equipped with suitable indicating instruments for the determination of operating power and with other instruments necessary for proper adjustment, operation, and maintenance of the equipment.

(3) Adequate provision shall be made for varying the output power of the transmitters to compensate for excessive variations in line voltage or for other factors affecting the output power.

(4) Adequate provisions shall be provided in all component parts to avoid overheating at the rated maximum output powers.

(d) The construction, installation, and operation of broadcast equipment is expected to conform with all applicable local, state, and federally imposed safety regulations and standards, enforcement of which is the responsibility of the issuing regulatory agency.

(e) *Operation.* (1) Spurious emissions, including radio frequency harmonics, shall be maintained at as low a level as the state of the art permits. As measured at the output terminals of the transmitter (including harmonic filters, if required) all emissions removed in frequency in excess of 3 MHz above or below the respective channel edge shall be attenuated no less than 60 dB. below the visual transmitted power. (The 60 dB. value for television transmitters specified in this rule should be considered as a temporary requirement which may be increased at a later date, especially when more higher-powered equipment is utilized. Stations should, therefore, give consideration to the installation of equipment with greater attenuation than 60 dB.) In the event of interference caused to any service greater attenuation will be required.

(2) If a limiting or compression amplifier is used in conjunction with the aural transmitter, due operating precautions should be maintained because of pre-emphasis in the transmitting system.

(3) TV broadcast stations operating on Channel 14 and Channel 69 must take special precautions to avoid interference to adjacent spectrum land mobile radio service facilities. Where a TV station is authorized and operating prior to the authorization and operation of the land mobile facility, a Channel 14 station must attenuate its emissions within the frequency range 467 to 470 MHz and a Channel 69 station must attentuate its emissions within the frequency range 806 to 809 MHz if necessary to permit reasonable use of the adjacent frequencies by land mobile licensees.

(4) The requirements listed below apply to permittees authorized to construct a new station on TV Channel 14 or TV Channel 69, and to licensees authorized to change the channel of an existing station to Channel 14 or to Channel 69, to increase effective radiated power (ERP) (including any change in directional antenna characteristics that results in an increase in ERP in any direction), or to change the transmitting location of an existing station.

(i) For the purposes of this paragraph, a protected land mobile facility is a receiver that is intended to receive transmissions from licensed land mobile stations within the frequency band below 470 MHz (as relates to Channel 14) or above 806 MHz (as relates to Channel 69), and is associated with one

or more land mobile stations for which a license has been issued by the Commission, or a proper application has been received by the Commission prior to the date of the filing of the TV construction permit application. However, a land mobile facility will not be protected if it is proposed in an application that is denied or dismissed and that action is no longer subject to Commission review. Further, if the land mobile station is not operating when the TV facility commences operation and it does not commence operation within the time permitted by its authorization in accordance with part 90 of this chapter, it will not be protected.

(ii) A TV permittee must take steps before construction to identify potential interference to normal land mobile operation that could be caused by TV emissions outside the authorized channel, land mobile receiver desensitization or intermodulation. It must install filters and take other precautions as necessary, and submit evidence that no interference is being caused before it will be permitted to transmit programming on the new facilities pursuant to the provisions of §73.1615 or §73.1620 of this part. A TV permittee must reduce its emissions within the land mobile channel of a protected land mobile facility that is receiving interference caused by the TV emission producing a vertically polarized signal and a field strength in excess of 17 dBu at the land mobile receiver site on the land mobile frequency. The TV emission should be measured with equipment set to a 30 kHz measurement bandwidth including the entire applicable land mobile channel. A TV permittee must correct a desensitization problem if its occurrence can be directly linked to the start of the TVoperation and the land mobile station is using facilities with typical desensitization rejection characteristics. A TV permittee must identify the source of an intermodulation product that is generated when the TV operation commences. If the intermodulation source is under its control, the TV permittee must correct the problem. If the intermodulation source is beyond the TV permittee's control, it must cooperate in the resolution of the problem and should provide whatever technical assistance it can.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[28 FR 13660, Dec. 14, 1963]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §73.687, see the List of CFR Sections Affected in the Finding Aids section of this volume.

### §73.688 Indicating instruments.

(a) Each TV broadcast station shall be equipped with indicating instruments which conform with the specifications described in §73.1215 for measuring the operating parameters of the last radio stage of the visual transmitter, and with such other instruments as are necessary for the proper adjustment, operation, and maintenance of the visual transmitting system.

(b) The function of each instrument shall be clearly and permanently shown on the instrument itself or on the panel immediately adjacent thereto.

(c) In the event that any one of these indicating instruments becomes defective, when no substitute which conforms with the required specifications is available, the station may be operated without the defective instrument pending its repair or replacement for a period not in excess of 60 days without further authority of the FCC, provided that:

(1) If the defective instrument is the transmission line meter used for determining the output power by the direct method, the operating power shall be determined or maintained by the indirect method whenever possible or by using the operating parameters of the last radio stage of the transmitter during the time the station is operated without the transmission line meter.

(2) If conditions beyond the control of the licensee prevent the restoration of the meter to service within the above allowed period, informal request in accordance with §73.3549 may be filed with the Engineer in Charge of the radio district in which the station is located for such additional time as

may be required to complete repairs of the defective instrument.

[41 FR 36818, Sept. 1, 1976, as amended at 48 FR 38480, Aug. 24, 1983; 49 FR 50048, Dec. 26, 1984; 50 FR 26568, June 27, 1985]

### § 73.691 Visual modulation monitoring.

(a) Each TV station must have measuring equipment for determining that the transmitted visual signal conforms to the provisions of this subpart. The licensee shall decide the monitoring and measurement methods or procedures for indicating and controlling the visual signal.

(b) In the event technical problems make it impossible to operate in accordance with the timing and carrier level tolerance requirements of § 73.682 (a)(9)(i), (a)(9)(ii), (a)(12), (a)(13), and (a)(17), a TV broadcast station may operate at variance for a period of not more than 30 days without specific authority from the FCC: *provided that*, the date and time of the initial out-of-tolerance condition has been entered in the station log. If the operation at variance will exceed 10 consecutive days, a notification must be sent to the FCC in Washington, D.C., not later than the 10th day of such operation. In the event normal operation is resumed prior to the end of the 30 day period, the licensee must notify the FCC upon restoration of normal operation. If causes beyond the control of the licensee prevent restoration of normal operation within 30 days, a written request must be made to the FCC in Washington, D.C., no later than the 30th day for such additional time as may be necessary.

[60 FR 55480, Nov. 1, 1995]

### § 73.698 Tables.

TABLE I—[RESERVED]

TABLE II

| (1)—Channel | (2)—31.4 kilometers (19.5 miles) If beat | (3)—31.4 kilometers (19.5 miles) intermodulation | (4)—87.7 kilometers (54.5 miles) adjacent channel | (5)—95.7 kilometers (59.5 miles) oscillator | (6)—95.7 kilometers (59.5 miles) sound image | (7)—119.9 kilometers (74.5 miles) picture image |
|---|---|---|---|---|---|---|
| 14 | 22 | 16–19 | 15 | 21 | 28 | 29 |
| 15 | 23 | 17–20 | 14, 16 | 22 | 29 | 30 |
| 16 | 24 | 14, 18–21 | 15, 17 | 23 | 30 | 31 |
| 17 | 25 | 14–15, 19–22 | 16, 18 | 24 | 31 | 32 |
| 18 | 26 | 14–16, 20–23 | 17, 19 | 25 | 32 | 33 |
| 19 | 27 | 14–17, 21–24 | 18, 20 | 26 | 33 | 34 |
| 20 | 28 | 15–18, 22–25 | 19, 21 | 27 | 34 | 35 |
| 21 | 29 | 16–19, 23–26 | 20, 22 | 28, 14 | 35 | 36 |
| 22 | 30, 14 | 17–20, 24–27 | 21, 23 | 29, 15 | 36 | 37 |
| 23 | 31, 15 | 18–21, 25–28 | 22, 24 | 30, 16 | 37 | 38 |
| 24 | 32, 16 | 19–22, 26–29 | 23, 25 | 31, 17 | 38 | 39 |
| 25 | 33, 17 | 20–23, 27–30 | 24, 26 | 32, 18 | 39 | 40 |
| 26 | 34, 18 | 21–24, 28–31 | 25, 27 | 33, 19 | 40 | 41 |
| 27 | 35, 19 | 22–25, 29–32 | 26, 28 | 34, 20 | 41 | 42 |
| 28 | 36, 20 | 23–26, 30–33 | 27, 29 | 35, 21 | 42, 14 | 43 |
| 29 | 37, 21 | 24–27, 31–34 | 28, 30 | 36, 22 | 43, 15 | 44, 14 |
| 30 | 38, 22 | 25–28, 32–35 | 29, 31 | 37, 23 | 44, 16 | 45, 15 |
| 31 | 39, 23 | 26–29, 33–36 | 30, 32 | 38, 24 | 45, 17 | 46, 16 |
| 32 | 40, 24 | 27–30, 34–37 | 31, 33 | 39, 25 | 46, 18 | 47, 17 |
| 33 | 41, 25 | 28–31, 35–38 | 32, 34 | 40, 26 | 47, 19 | 48, 18 |
| 34 | 42, 26 | 29–32, 36–39 | 33, 35 | 41, 27 | 48, 20 | 49, 19 |
| 35 | 43, 27 | 30–33, 37–40 | 34, 36 | 42, 28 | 49, 21 | 50, 20 |
| 36 | 44, 28 | 31–34, 38–41 | 35, 37 | 43, 29 | 50, 22 | 51, 21 |
| 37 | 45, 29 | 32–35, 39–42 | 36, 38 | 44, 30 | 51, 23 | 52, 22 |
| 38 | 46, 30 | 33–36, 40–43 | 37, 39 | 45, 31 | 52, 24 | 53, 23 |
| 39 | 47, 31 | 34–37, 41–44 | 38, 40 | 46, 32 | 53, 25 | 54, 24 |
| 40 | 48, 32 | 35–38, 42–45 | 39, 41 | 47, 33 | 54, 26 | 55, 25 |
| 41 | 49, 33 | 36–39, 43–46 | 40, 42 | 48, 34 | 55, 27 | 56, 26 |
| 42 | 50, 34 | 37–40, 44–47 | 41, 43 | 49, 35 | 56, 28 | 57, 27 |
| 43 | 51, 35 | 38–41, 45–48 | 42, 44 | 50, 36 | 57, 29 | 58, 28 |
| 44 | 52, 36 | 39–42, 46–49 | 43, 45 | 51, 37 | 58, 30 | 59, 29 |
| 45 | 53, 37 | 40–43, 47–50 | 44, 46 | 52, 38 | 59, 31 | 60, 30 |
| 46 | 54, 38 | 41–44, 48–51 | 45, 47 | 53, 39 | 60, 32 | 61, 31 |
| 47 | 55, 39 | 42–45, 49–52 | 46, 48 | 54, 40 | 61, 33 | 62, 32 |
| 48 | 56, 40 | 43–46, 50–53 | 47, 49 | 55, 41 | 62, 34 | 63, 33 |
| 49 | 57, 41 | 44–47, 51–54 | 48, 50 | 56, 42 | 63, 35 | 64, 34 |

TABLE II—Continued

| (1)—Channel | (2)—31.4 kilometers (19.5 miles) If beat | (3)—31.4 kilometers (19.5 miles) intermodulation | (4)—87.7 kilometers (54.5 miles) adjacent channel | (5)—95.7 kilometers (59.5 miles) oscillator | (6)—95.7 kilometers (59.5 miles) sound image | (7)—119.9 kilometers (74.5 miles) picture image |
|---|---|---|---|---|---|---|
| 50 | 58, 42 | 45–48, 52–55 | 49, 51 | 57, 43 | 64, 36 | 65, 35 |
| 51 | 59, 43 | 46–49, 53–56 | 50, 52 | 58, 44 | 65, 37 | 66, 36 |
| 52 | 60, 44 | 47–50, 54–57 | 51, 53 | 59, 45 | 66, 38 | 67, 37 |
| 53 | 61, 45 | 48–51, 55–58 | 52, 54 | 60, 46 | 67, 39 | 68, 38 |
| 54 | 62, 46 | 49–52, 56–59 | 53, 55 | 61, 47 | 68, 40 | 69, 39 |
| 55 | 63, 47 | 50–53, 57–60 | 54, 56 | 62, 48 | 69, 41 | 70, 40 |
| 56 | 64, 48 | 51–54, 58–61 | 55, 57 | 63, 49 | 70, 42 | 71, 41 |
| 57 | 65, 49 | 52–55, 59–62 | 56, 58 | 64, 50 | 71, 43 | 72, 42 |
| 58 | 66, 50 | 53–56, 60–63 | 57, 59 | 65, 51 | 72, 44 | 73, 43 |
| 59 | 67, 51 | 54–57, 61–64 | 58, 60 | 66, 52 | 73, 45 | 74, 44 |
| 60 | 68, 52 | 55–58, 62–65 | 59, 61 | 67, 53 | 74, 46 | 75, 45 |
| 61 | 69, 53 | 56–59, 63–66 | 60, 62 | 68, 54 | 75, 47 | 76, 46 |
| 62 | 70, 54 | 57–60, 64–67 | 61, 63 | 69, 55 | 76, 48 | 77, 47 |
| 63 | 71, 55 | 58–61, 65–68 | 62, 64 | 70, 56 | 77, 49 | 78, 48 |
| 64 | 72, 56 | 59–62, 66–69 | 63, 65 | 71, 57 | 78, 50 | 79, 49 |
| 65 | 73, 57 | 60–63, 67–70 | 64, 66 | 72, 58 | 79, 51 | 80, 50 |
| 66 | 74, 58 | 61–64, 68–71 | 65, 67 | 73, 59 | 80, 52 | 81, 51 |
| 67 | 75, 59 | 62–65, 69–72 | 66, 68 | 74, 60 | 81, 53 | 82, 52 |
| 68 | 76, 60 | 63–66, 70–73 | 67, 69 | 75, 61 | 82, 54 | 83, 53 |
| 69 | 77, 61 | 64–67, 71–74 | 68, 70 | 76, 62 | 83, 55 | 54 |

NOTE: The parenthetical reference beneath the mileage figures in columns 2 through 7, inclusive, indicate, in abbreviated form, the bases for the required mileage separations. For a discussion of these bases, see the ''Sixth Report and Order'' of the Commission (FCC 52–294; 17 FR 3905, May 2, 1952). The hyphenated numbers listed in column (3) are both inclusive.

[28 FR 13660, Dec. 14, 1963, as amended at 39 FR 20377, June 10, 1974; 47 FR 35990, Aug. 18, 1982; 50 FR 23701, June 5, 1985; 54 FR 9807, Mar. 8, 1989]

### § 73.699 TV engineering charts.

This section consists of the following Figures 1–5, 5a, 6–10, 10a–10e, 11–12, 13–16.

NOTE: The charts as reproduced herein, due to their small scale, are not to be used in connection with material submitted to the F.C.C.

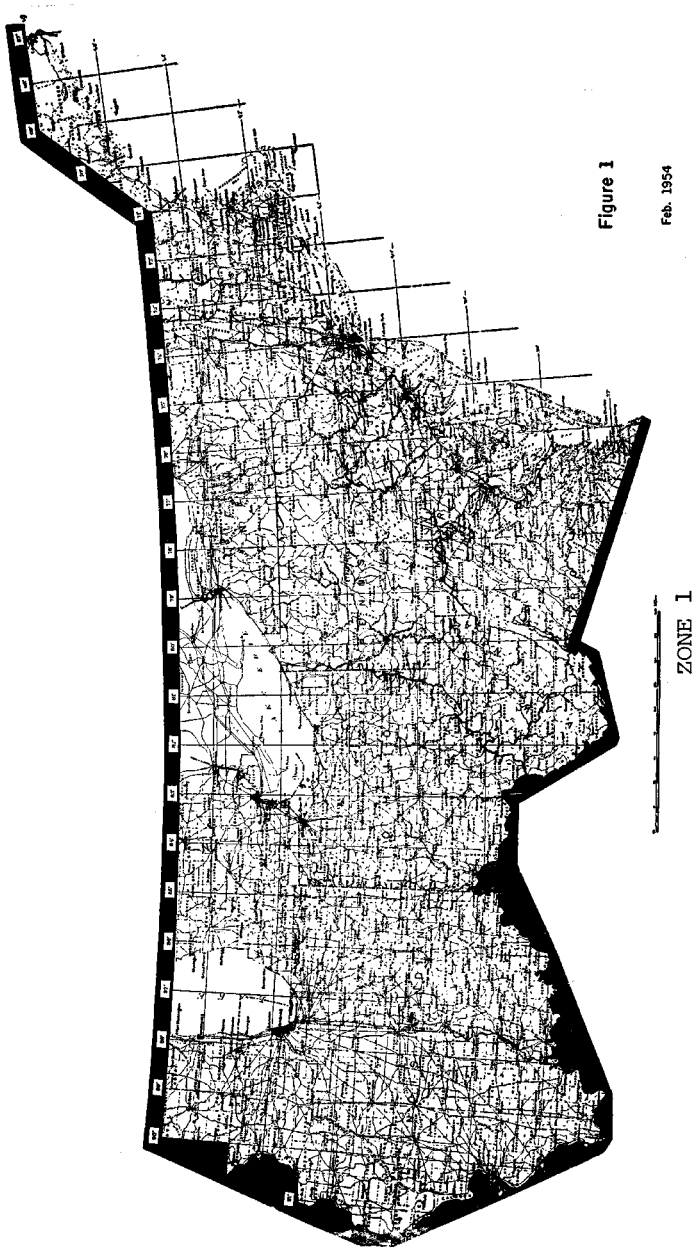
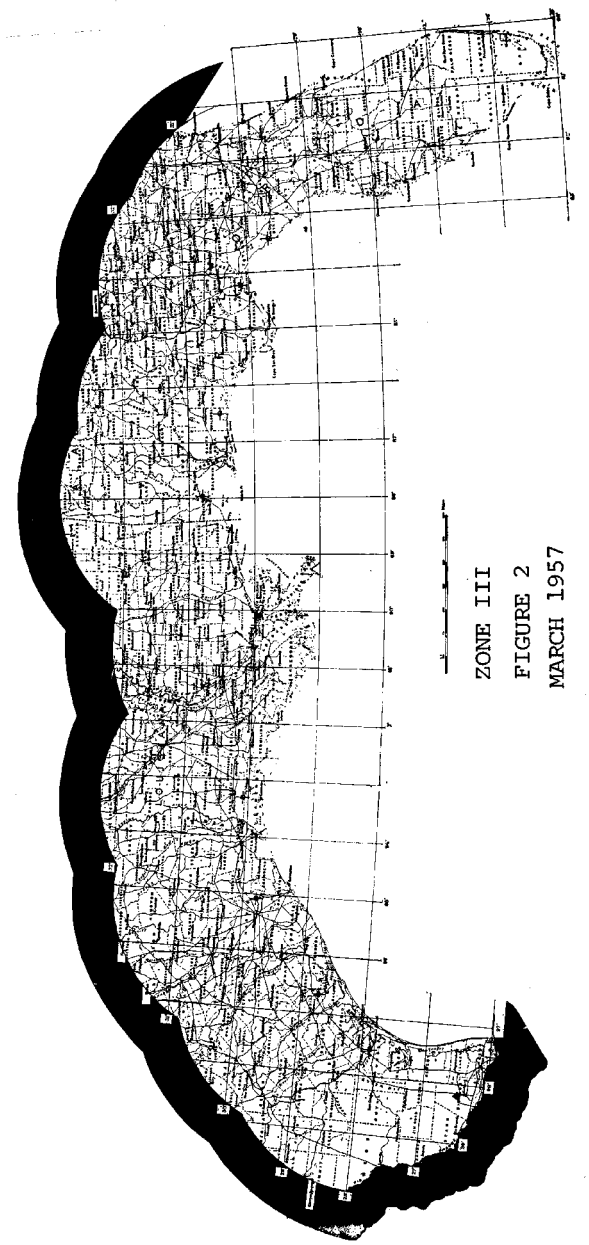


Figure 1
Feb. 1954
ZONE 1


ZONE III
FIGURE 2
MARCH 1957

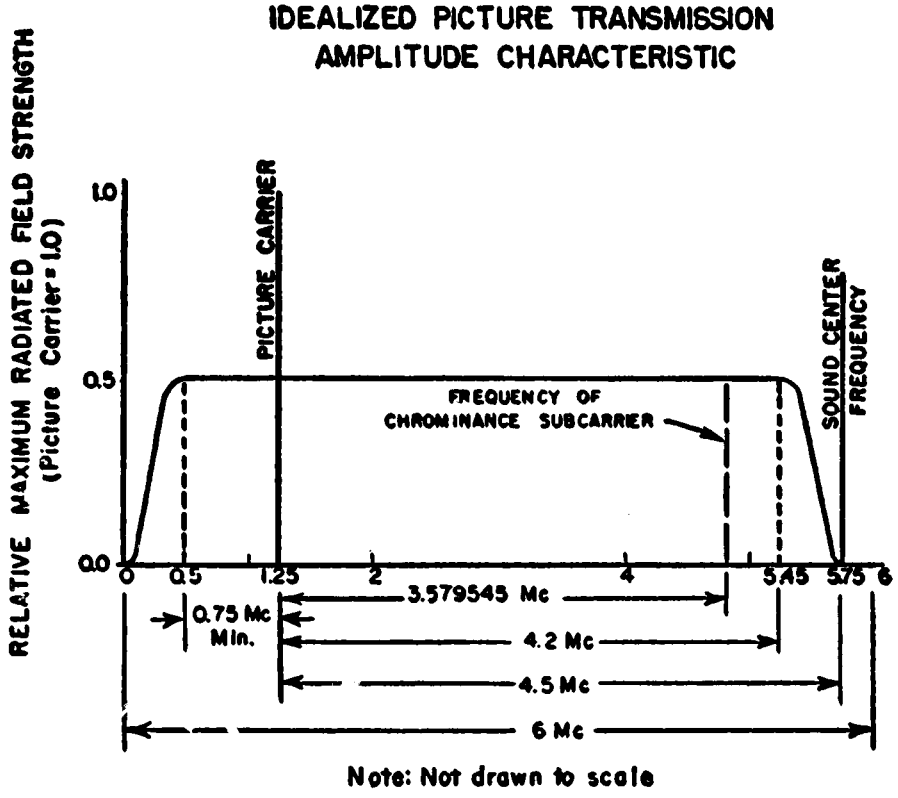

IDEALIZED PICTURE TRANSMISSION
AMPLITUDE CHARACTERISTIC
RELATIVE MAXIMUM RADIATED FIELD STRENGTH
(Picture Carrier = 1.0)
1.0
0.5
0.0
PICTURE CARRIER
SOUND CENTER FREQUENCY
FREQUENCY OF
CHROMINANCE SUBCARRIER
0
0.5
1.25
2
4
5.45
5.75
6
3.579545 Mc
0.75 Mc
Min.
4.2 Mc
4.5 Mc
6 Mc
Note: Not drawn to scale

FIGURE 5

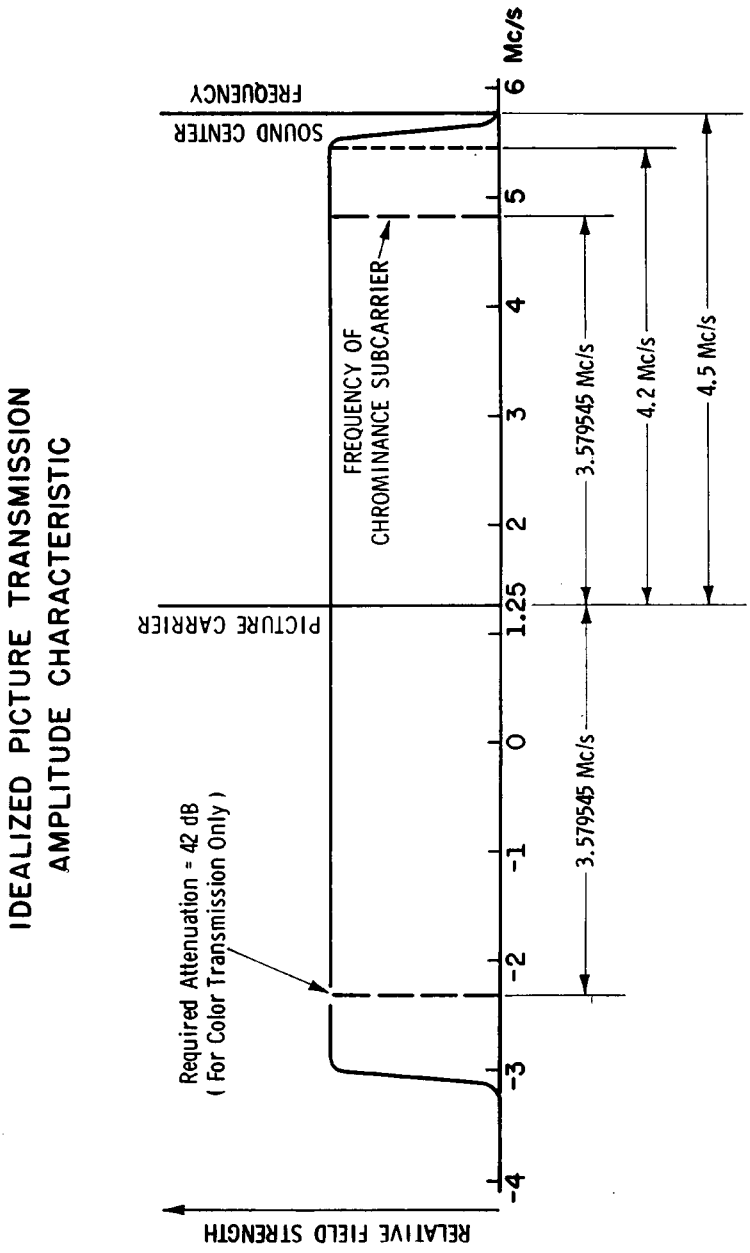
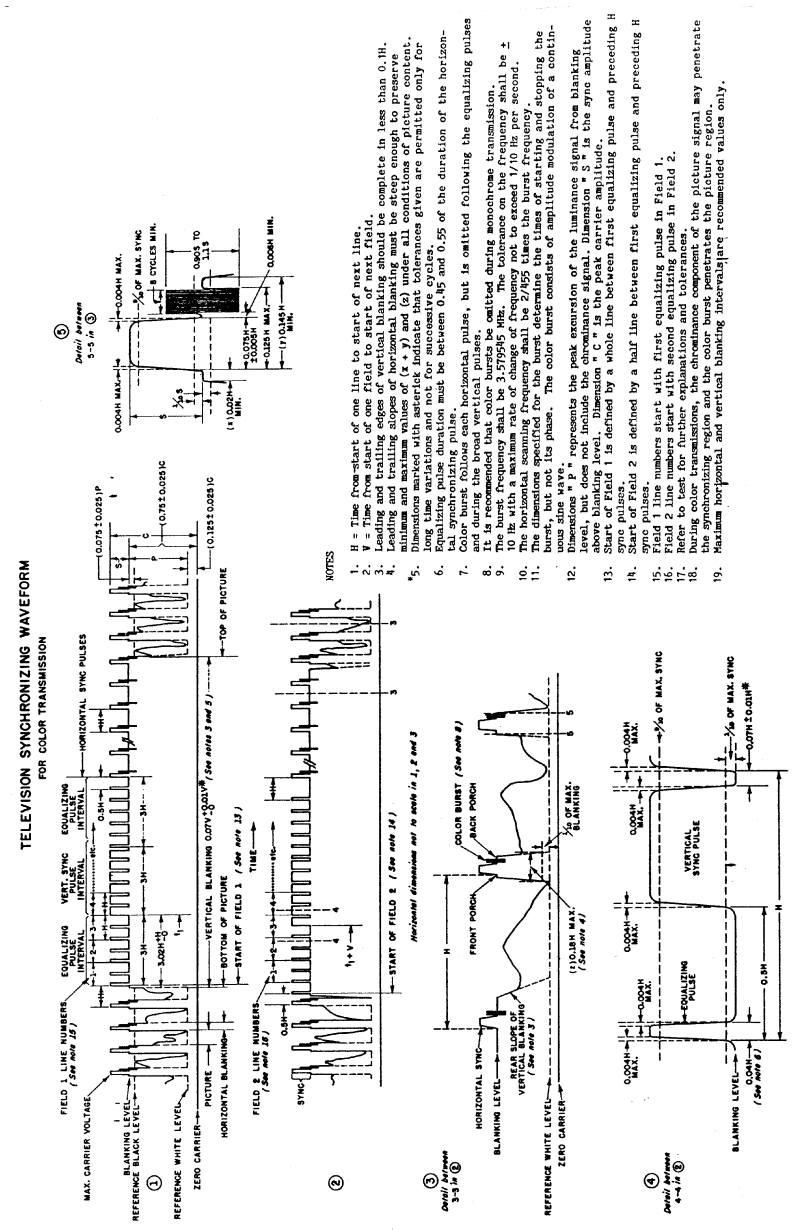

IDEALIZED PICTURE TRANSMISSION
AMPLITUDE CHARACTERISTIC
RELATIVE FIELD STRENGTH
FREQUENCY
Mc/s
6
5
4
3
2
1.25
0
-1
-2
-3
-4
SOUND CENTER
PICTURE CARRIER
FREQUENCY OF
CHROMINANCE SUBCARRIER
3.579545 Mc/s
4.2 Mc/s
4.5 Mc/s
3.579545 Mc/s
Required Attenuation = 42 dB
( For Color Transmission Only )

FIGURE 5(a)




FCC § 73.699, FIGURE 6

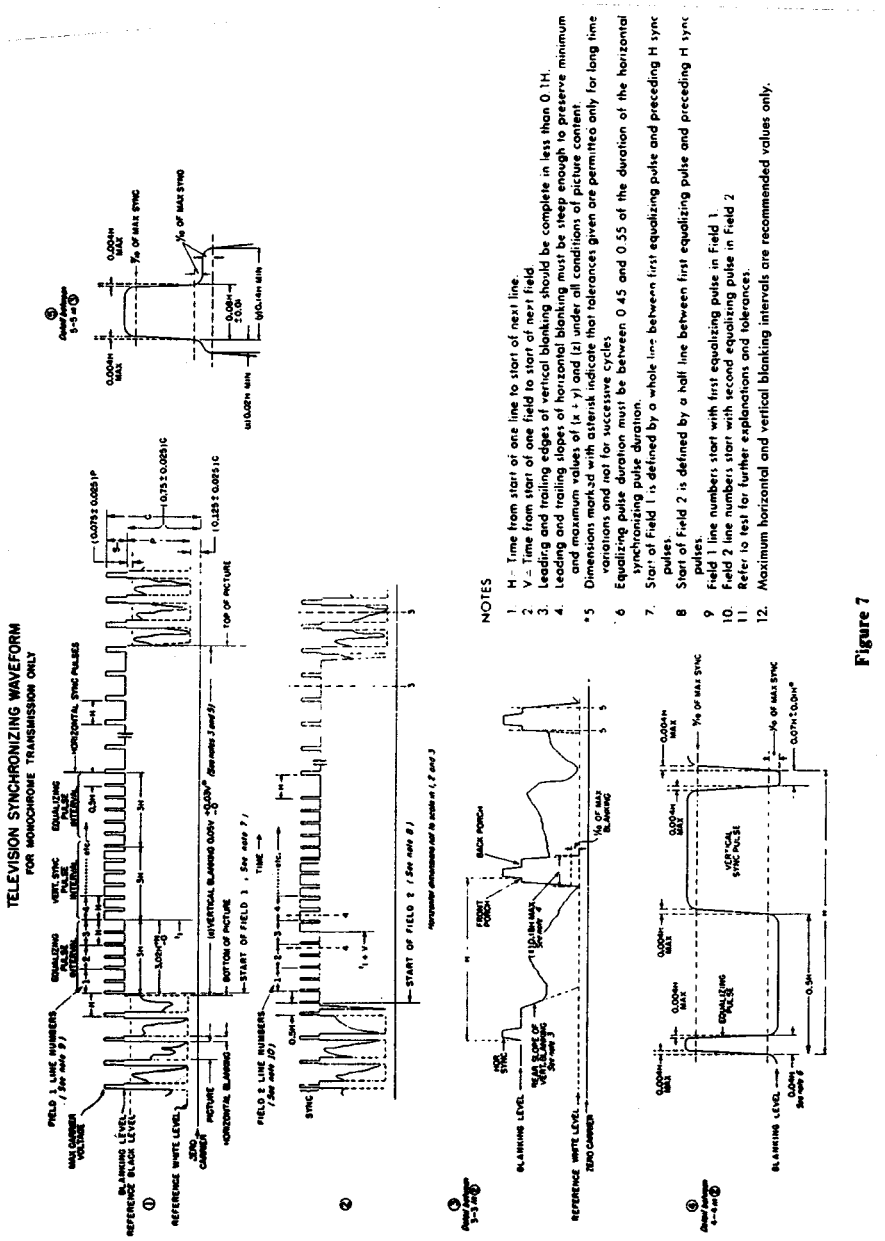

TELEVISION SYNCHRONIZING WAVEFORM
FOR MONOCHROME TRANSMISSION ONLY
NOTES
1. H – Time from start of one line to start of next line.
2. V – Time from start of one field to start of next field.
3. Leading and trailing edges of vertical blanking should be complete in less than 0.1H.
4. Leading and trailing slopes of horizontal blanking must be steep enough to preserve minimum and maximum values of (x + y) and (z) under all conditions of picture content.
*5 Dimensions marked with asterisk indicate that tolerances given are permitted only for long time variations and not for successive cycles.
6. Equalizing pulse duration must be between 0.45 and 0.55 of the duration of the horizontal synchronizing pulse duration.
7. Start of Field 1 is defined by a whole line between first equalizing pulse and preceding H sync pulses.
8. Start of Field 2 is defined by a half line between first equalizing pulse and preceding H sync pulses.
9. Field 1 line numbers start with first equalizing pulse in Field 1.
10. Field 2 line numbers start with second equalizing pulse in Field 2.
11. Refer to text for further explanations and tolerances.
12. Maximum horizontal and vertical blanking intervals are recommended values only.

Figure 7

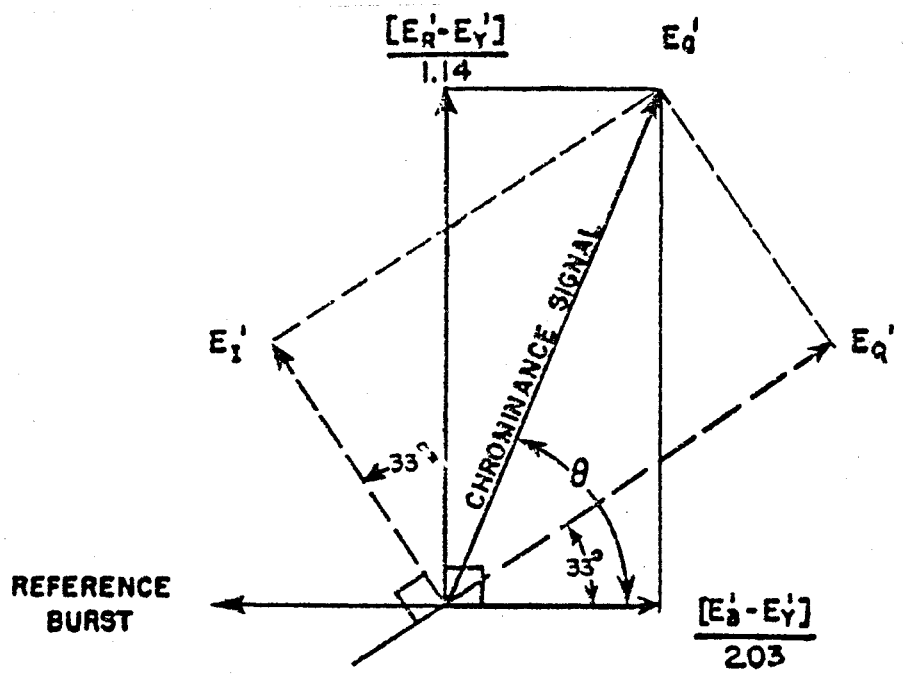
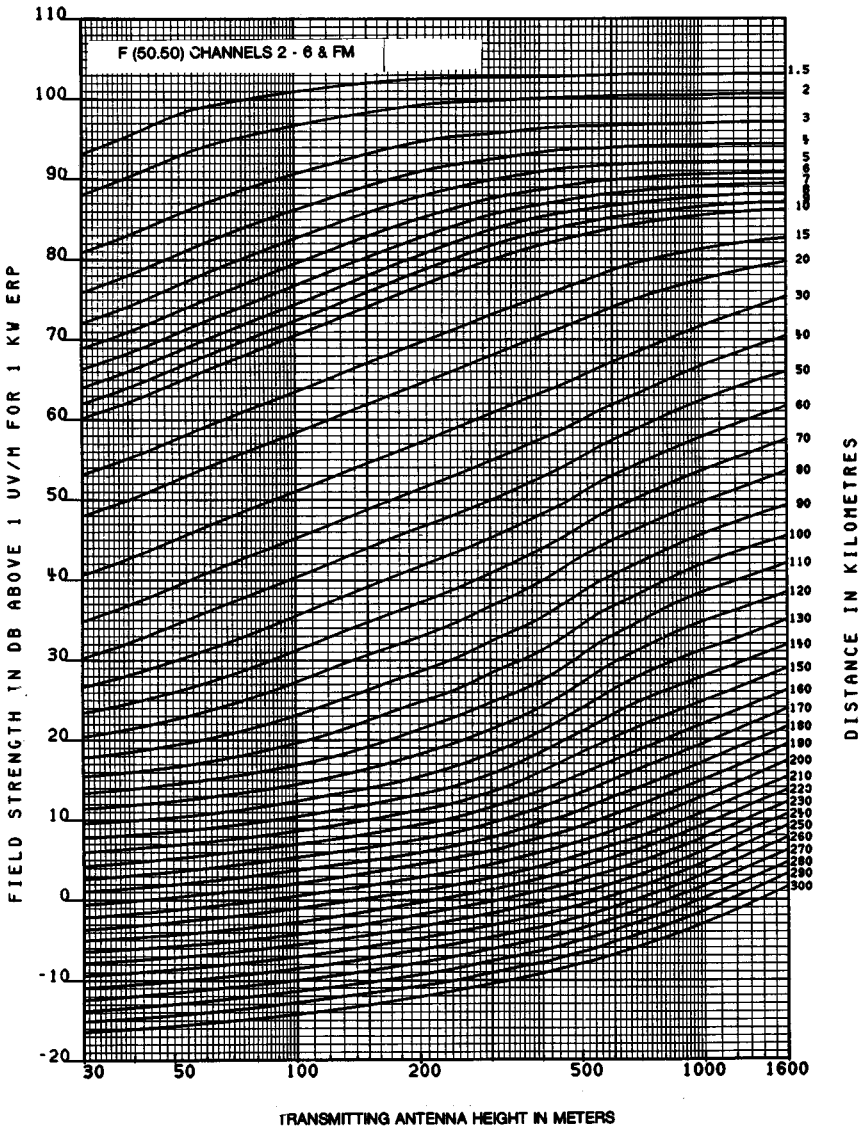
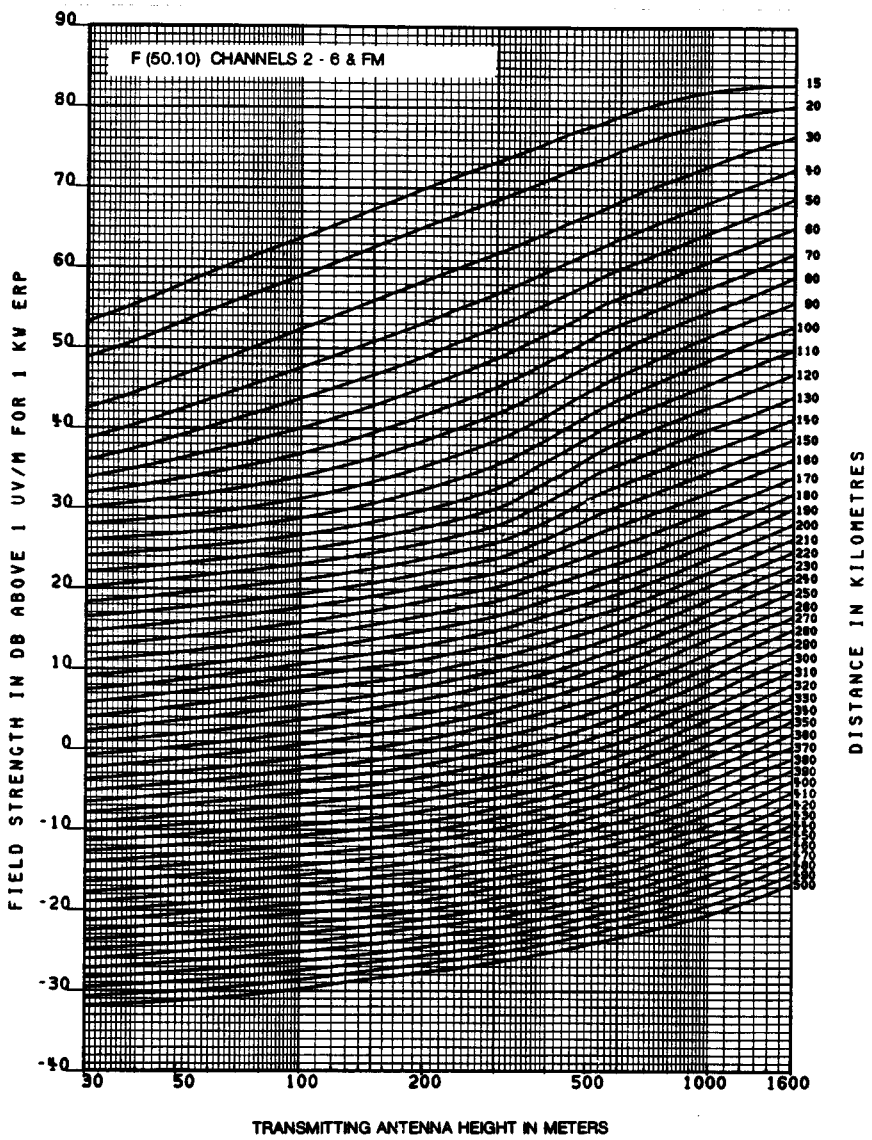

[E'R-E'Y']
1.14
E'Q
E'I
E'Q
CHROMINANCE SIGNAL
33°
θ
33°
REFERENCE
BURST
[E'B-E'Y']
2.03

FIGURE 8



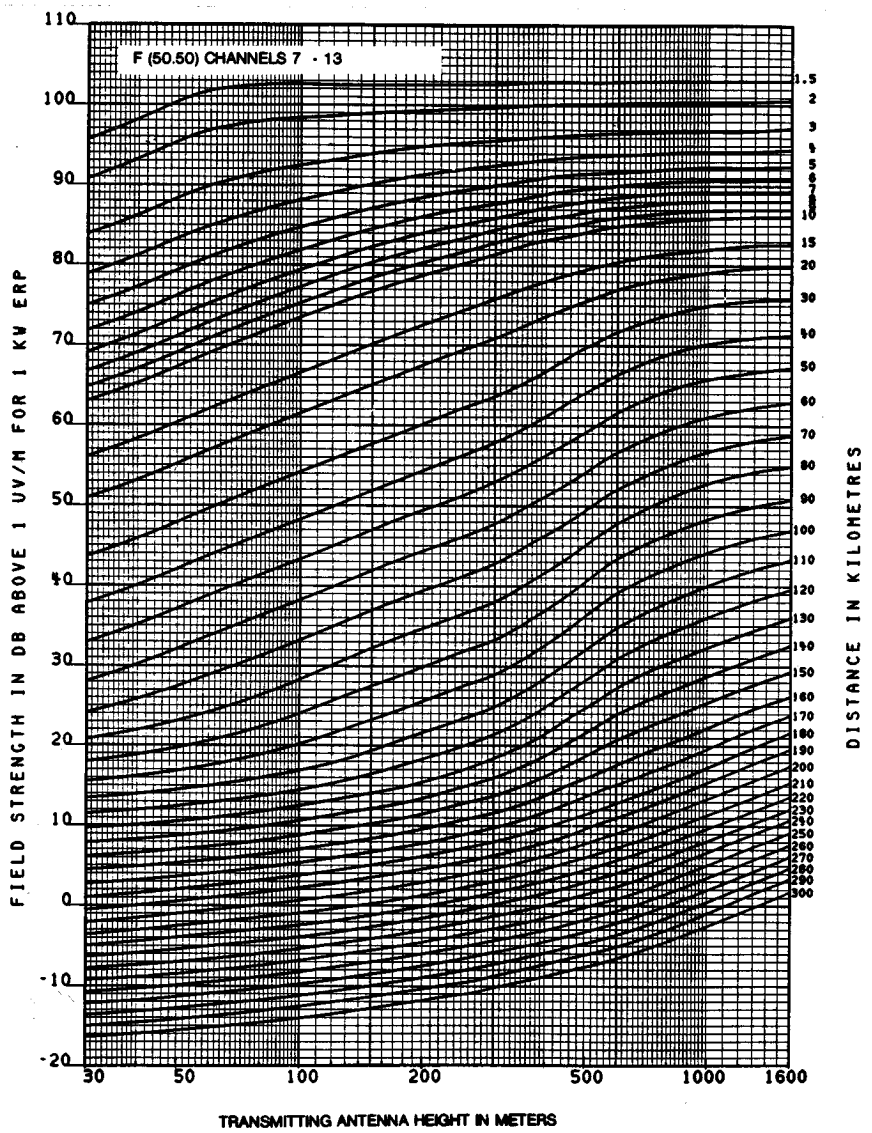

FCC 73.699 Figure 9

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9 METERS



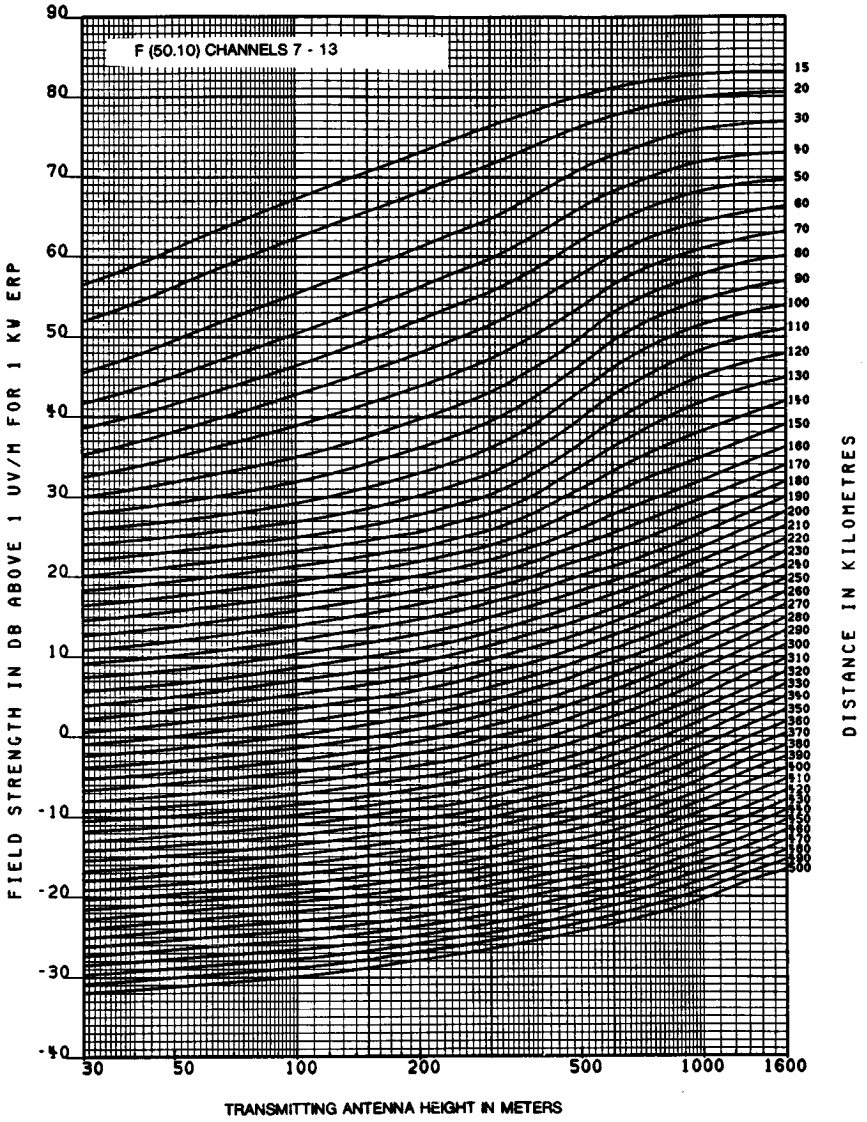

FCC 73.699 Figure 9a

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9 METERS



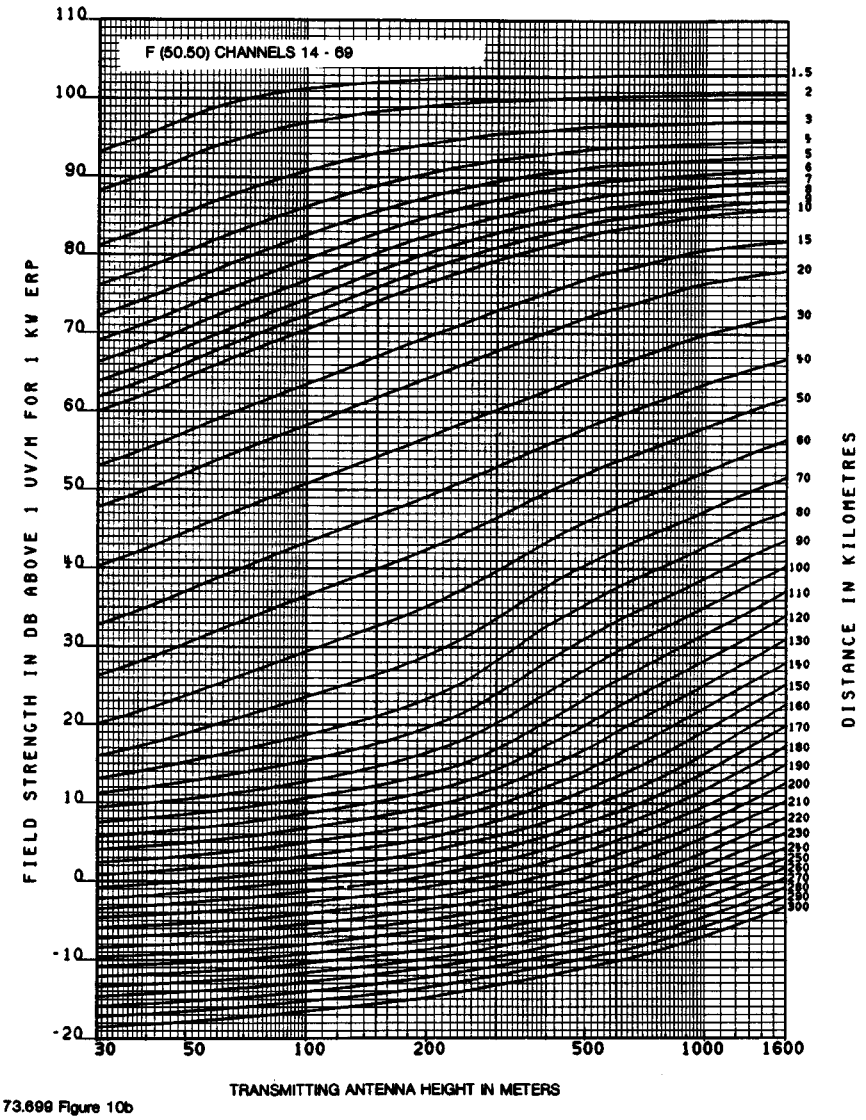

FCC 73.699 Figure 10

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9 METERS



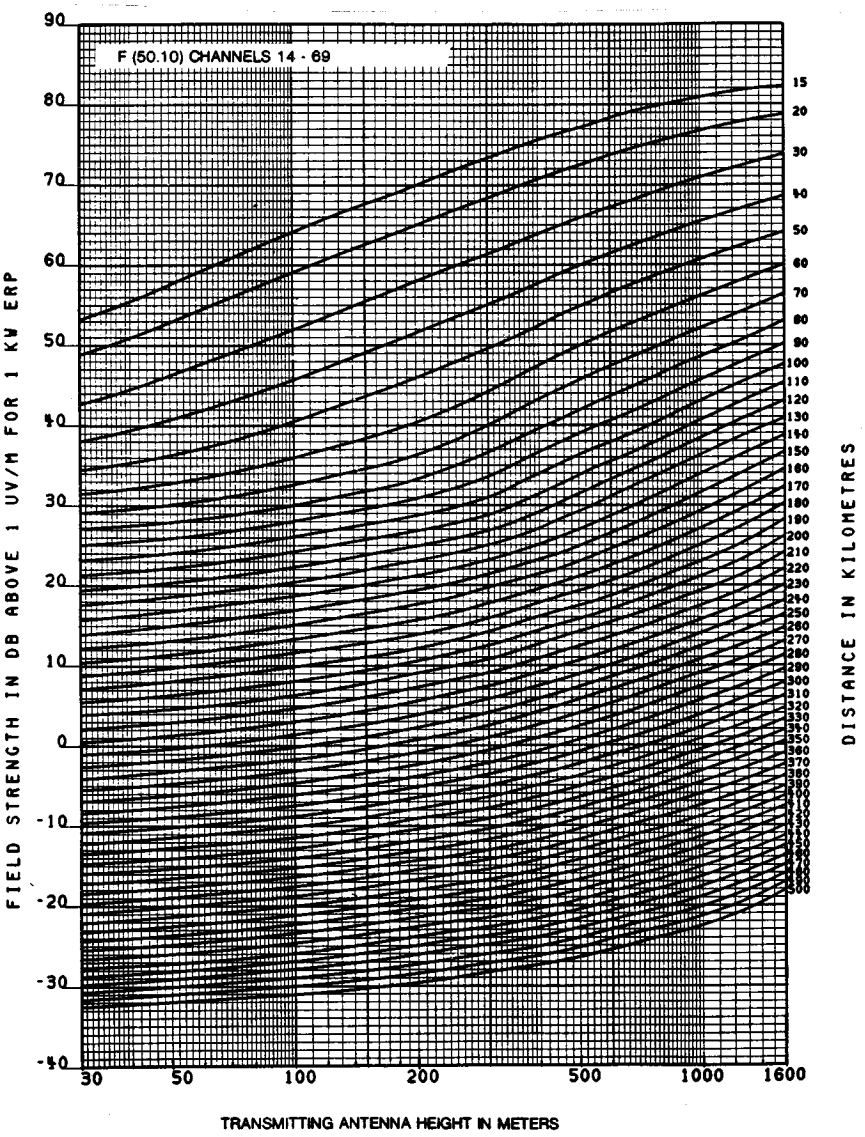

FCC 73.699 Figure 10a

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 PERCENT OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9 METERS



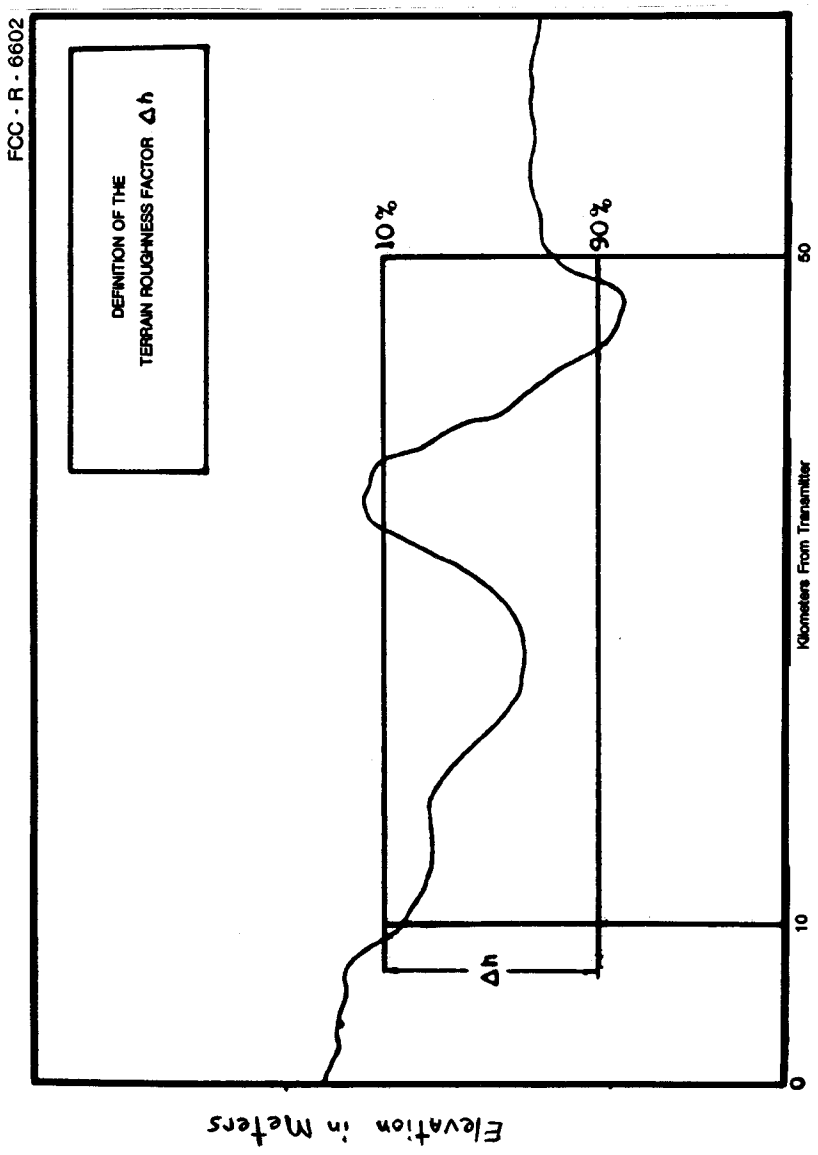

FCC 73.699 Figure 10b

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9 METERS

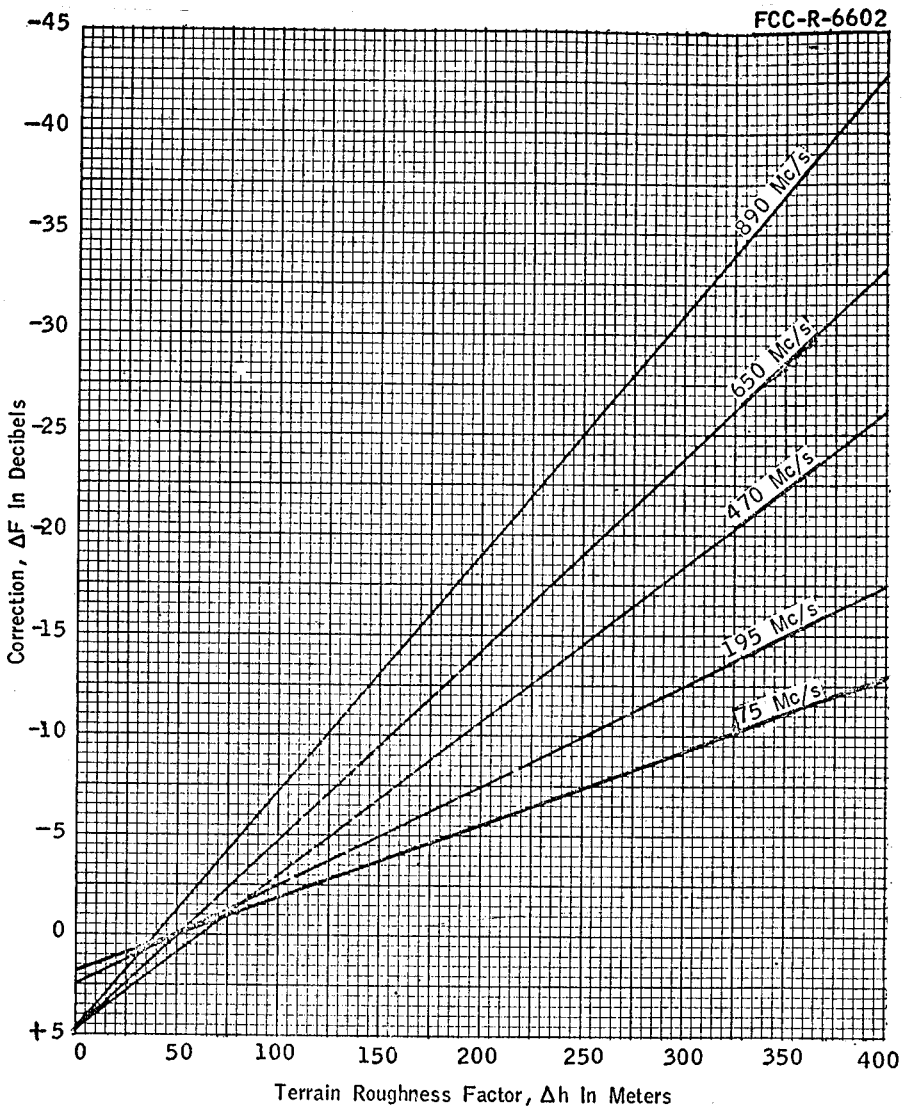



FCC 73.699 Figure 10c

ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 9 METERS




FCC §73.699 FIGURE 10d




TERRAIN ROUGHNESS CORRECTION
for use with estimated F(50,50) and F(50,10) field strength curves

FCC §73.699 FIGURE 10e

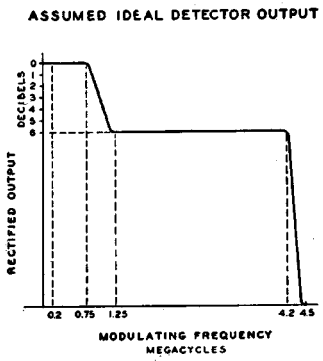



FIGURE 11

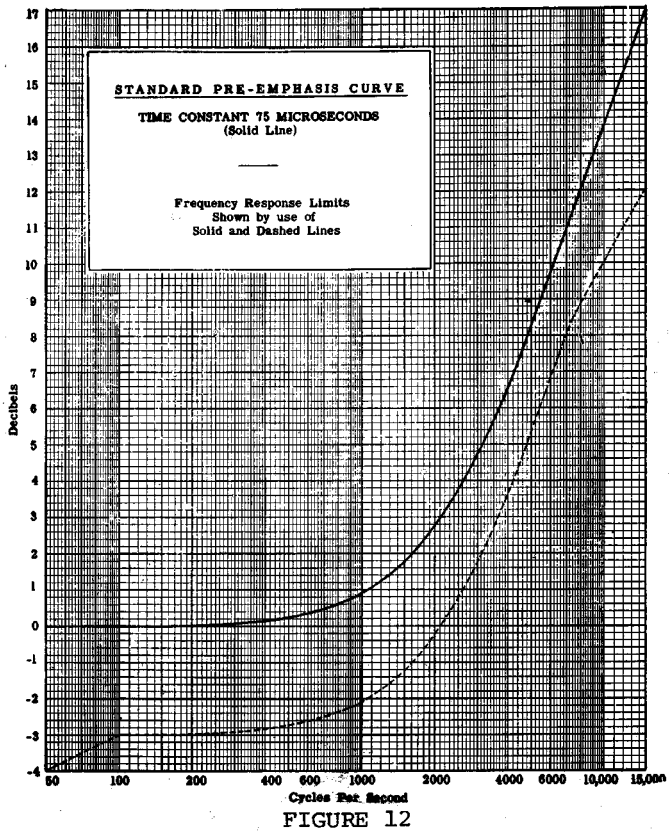
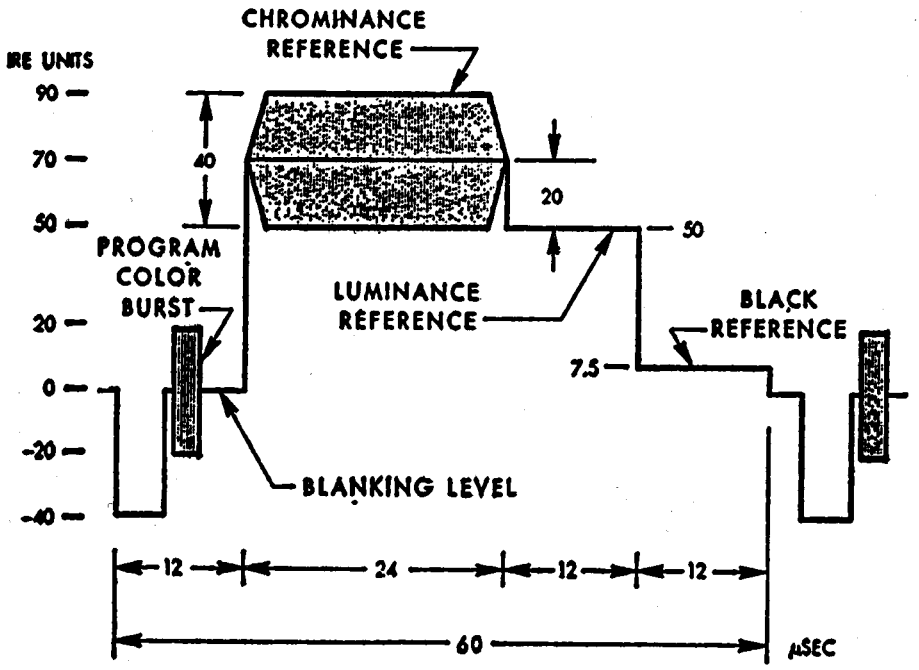



FIGURE 12




NOTE: THE CHROMINANCE REFERENCE AND THE PROGRAM COLOR BURST HAVE THE SAME PHASE.

FIGURE 16

Figures 13 through 15 [Reserved]

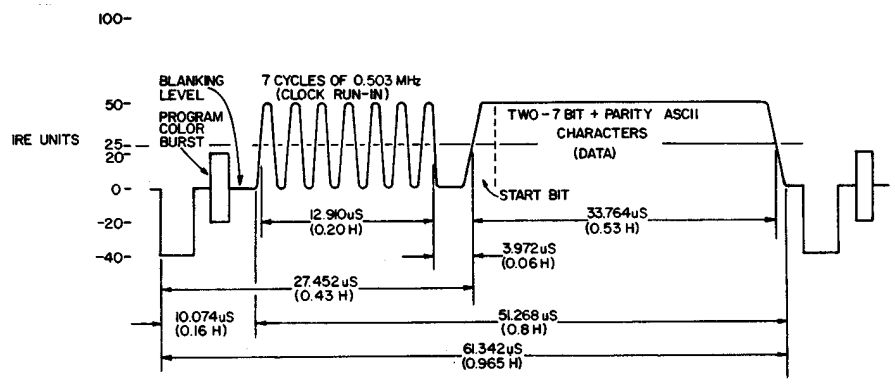



FIGURE 17 LINE 21 FIELD DATA SIGNAL FORMAT

1. DATA "1" = 50 IRE UNITS, DATA "0" = 0.
2. DATA PULSE RISE TIME = 2 T BAR RISE TIME.
3. DATA TIME BASE = 32 $f_H$ (0.50349650 MHz.)
4. DATA BIT INTERVAL = H/32 (1.986uS)
5. NEGATIVE GOING ZERO CROSSINGS OF CLOCK ARE COHERENT WITH DATA TRANSITIONS.
6. DATA AND CLOCK RUN-IN COHERENT WITH H.

HORIZONTAL DIMENSIONS NOT TO SCALE

**FCC § 73.699, Figure 17**

[28 FR 13660, Dec. 14, 1963, as amended at 36 FR 17429, Aug. 31, 1971; 39 FR 40957, Nov. 22, 1974; 40 FR 27684, July 1, 1975; 41 FR 56326, Dec. 28, 1976; 44 FR 36040, June 20, 1979; 47 FR 3790, Jan. 27, 1982; 47 FR 35990, Aug. 18, 1982; 50 FR 13972, Apr. 9, 1985; 50 FR 23701, June 5, 1985; 50 FR 32205, Aug. 9, 1985; 52 FR 11656, Apr. 10, 1987; 54 FR 9807, Mar. 8, 1989; 58 FR 29983, May 25, 1993]

EFFECTIVE DATE NOTE: At 42 FR 25736, May 19, 1977, the effective date of § 73.699 Figure 10e was stayed indefinitely.

## Subpart F—International Broadcast Stations

### § 73.701 Definitions.

The following definitions apply to terminology employed in this subpart:

(a) *International broadcasting stations.* A broadcasting station employing frequencies allocated to the broadcasting service between 5,950 and 26,100 kHz, the transmissions of which are intended to be received directly by the general public in foreign countries. (A station may be authorized more than one transmitter.) There are both government and non-government international broadcasting stations; only the latter are licensed by the Commission and are subject to the rules of this subpart.

(b) *Transmitter-hour.* One frequency used on one transmitter for one hour.

(c) *Frequency-hour.* One frequency used for one hour regardless of the number of transmitters over which it is simultaneously broadcast by a station during that hour.

(d) *Multiple operation.* Broadcasting by a station on one frequency over two or more transmitters simultaneously. If a station uses the same frequency simultaneously on each of two (three, etc.) transmitters for an hour, it uses one frequency-hour and two (three, etc.) transmitter-hours.

(e) *Day.* Any twenty-four hour period beginning 0100 g.m.t. and ending 0100 g.m.t.

(f) *Sunspot number.* The 12–month running average of the number of sunspots for any month as indicated in the

U.S. Department of Commerce Telecommunications Research and Engineering Report No. 13—available from the Superintendent of Documents, Washington, DC 20402. The sunspot number varies in an approximate 11–year cycle.

(g) *March season.* That portion of any year commencing 0100 g.m.t. on the first Sunday in March and ending at 0100 g.m.t. on the first Sunday in May.

(h) *May season.* That portion of any year commencing at 0100 G.M.T. on the first Sunday in May and ending at 0100 g.m.t. on the first Sunday in September.

(i) *September season.* That portion of any year commencing at 0100 g.m.t. on the first Sunday in September and ending at 0100 g.m.t. on the first Sunday in November.

(j) *November season.* That portion of any year commencing at 0100 g.m.t. on the first Sunday in November and ending at 0100 g.m.t. on the first Sunday in March.

(k) *Seasonal schedule.* An assignment, for a season, of a frequency or frequencies, and other technical parameters, to be used by a station for transmission to particular zones or areas of reception during specified hours.

(l) *Reference month.* That month of a season which is used for determining predicted propagation characteristics for the season. The reference month is January, April, July, or October, as related to the season in which it occurs.

(m) *Maximum usable frequency* (*MUF*). The highest frequency which is returned by ionospheric radio propagation to the surface of the earth for a particular path and time of day for 50 percent of the days of the reference month.

(n) *Optimum working frequency* (*FOT*). The highest frequency which is returned by ionospheric radio propagation to the surface of the earth for a particular path and time of day for 90 percent of the days of the reference month.

NOTE: The international abbreviation for optimum working frequency, FOT, is formed with the initial letters of the French words for ''optimum working frequency'' which are ''frequence optimum de travail.''

(o) *Zone of reception.* Any geographic zone indicated in § 73.703 in which the reception of particular programs is specifically intended and in which broadcast coverage is contemplated.

(p) *Area of reception.* Any geographic area smaller than a zone of reception in which the reception of particular programs is specifically intended and in which broadcast coverage is contemplated, such areas being indicated by countries or parts of countries.

(q) *Delivered median field strength, or field strength.* The field strength incident upon the zone or area of reception expressed in microvolts per meter, or decibels above one microvolt per meter, which is exceeded by the hourly median value for 50 percent of the days of the reference month.

(r) *Carrier power.* The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle under conditions of no modulation.

[38 FR 18892, July 16, 1973]

### § 73.702 Assignment and use of frequencies.

(a) Frequencies will be assigned by the Commission prior to the start of each season to authorized international broadcasting stations for use during the season at specified hours and for transmission to specified zones or areas of reception, with specified power and antenna bearing. Six months prior to the start of each season, licensees and permittees shall by informal written request, submitted to the Commission in triplicate, indicate for the season the frequency or frequencies desired for transmission to each zone or area of reception specified in the license or permit, the specific hours during which it desires to transmit to such zones or areas on each frequency, and the power, antenna gain, and antenna bearing it desires to use. Requests will be honored to the extent that interference and propagation conditions permit and that they are otherwise in accordance with the provisions of this section.

(b) After necessary processing of the requests required by paragraph (a) of this section, the Commission will notify each licensee and permittee of the frequencies, hours of use thereof to specified zones or areas of reception, power, and antenna bearing which it

intends to authorize for the season in question. After receipt of such notification, the licensee or permittee shall, in writing, not later than two months before the start of the season in question, inform the Commission either that it plans to operate in accordance with the authorization which the Commission intends to issue, or that it plans to operate in another manner. If the licensee or permittee indicates that it plans to operate in another manner, it shall furnish explanatory details.

(c) If after submitting the request required under the provisions of paragraph (a) of this section, but before receipt of the Commission's notification referred to in paragraph (b) of this section, the licensee or permittee submits a request for changes of its original request, such requests will be accepted for consideration only if accompanied by statements showing good cause therefor and will be honored only if conditions permit. If the information required to be submitted by the licensee or permittee under the provisions of paragraph (b) of this section indicates that operation in another manner is contemplated, and the explanatory details contain a request for change in the originally proposed manner of operation, such requests will be accepted for consideration only if accompanied by statements showing good cause therefor and will be honored only if conditions permit. If after the licensee or permittee submits the information required under the provisions of paragraph (b) of this section, but before the start of the season in question, the licensee or permittee submits a request for changes in its manner of operation for the season in question, the request will be accepted for consideration only if accompanied by statements showing good cause therefor and will be honored only if conditions permit. If after the start of a season the licensee or permittee submits a request for changes in the manner of operation as authorized, the request will be considered only if accompanied by statements showing good cause therefor, and will be honored only if conditions permit.

(d) The provisions of paragraphs (a), (b), and (c) of the section shall apply to licensees, to permittees operating under program test authority, and to permittees who anticipate applying for and receiving program test authority for operation during the specified season.

NOTE: Permittees who during the process of construction wish to engage in equipment tests shall by informal written request, submitted to the Commission in triplicate not less than 30 days before they desire to begin such testing, indicate the frequencies they desire to use for testing and the hours they desire to use those frequencies. No equipment testing shall occur until the Commission has authorized frequencies and hours for such testing. Such authorizations shall be only for one season, and if it is desired to continue equipment testing in a following season, new requests for frequencies and hours must be submitted at least 30 days before it is desired to begin testing in the following season.

(e) Within 14 days after the end of each season, a report shall be filed with the Commission by each licensee or permittee operating under program test authority who has been issued a seasonal schedule for that season. The report shall state whether the licensee or permittee has operated the number of frequency-hours authorized by the seasonal schedule to each of the zones or areas of reception specified in the schedule. If such operation has not occurred, a detailed explanation of that fact shall also be submitted which includes specific dates, frequency-hours not used, and reasons for the failure to operate as authorized. The report shall also contain information that has been received by the licensee or permittee as to reception or interference, and conclusions with regard to propagation characteristics of frequencies that were assigned for the season in question.

(f) Frequencies assigned by the FCC shall be within the following bands which are allocated exclusively to the international broadcast service;

(1) 5,950–6,200 kHz; 9,500–9,775 kHz; 11,700–11,975 kHz; 15,100–15,450 kHz; 17,700–17,900 kHz; 21,450–21,750 kHz; 25,600–26,100 kHz.

(2) In addition, the following band is allocated exclusively to the international broadcast service in Region 3:

7,100–7,300 kHz. Assignments in this frequency band will be limited to international broadcast stations located in the area designated as Region 3 by No.

395 of the International Radio Regulations and authorized only to transmit to zones and areas of reception situated outside Region 2 as defined in No. 394 of the International Radio Regulations. In addition, during the hours of 0800–1600 UTC (Coordinated Universal Time) antenna gain with reference to an isotropic radiator in any easterly direction that would intersect any area in Region 2 shall not exceed 2.15 dBi, except in the case where a transmitter power of less than 100 kW is used. In this case, antenna gain on restricted azimuths shall not exceed that which is determined in accordance with equation below. Stations desiring to operate in this band must submit sufficient antenna performance information to ensure compliance with these restrictions. Permitted Gain for Transmitter powers less than 100 kW:

$$Gi = 2.15 + 10 \log\left(\frac{100}{Pa}\right) dBi$$

Where:

Gi=maximum gain permitted with reference to an isotropic radiator.

Pa=Transmitter power employed in kW.

(3) The carrier frequencies assignable shall begin 5 kHz above the frequency specified above for the beginning of each band and shall be in sucessive steps of 5 kHz to and including 5 kHz below the frequency specified as the end of each band.

(g) Frequencies requested for assignment must be as near as practicable to the optimum working frequency (unless otherwise justified) for the zone or area of reception for the period and path of transmission, and should be chosen so that a given frequency will provide the largest period of reliable transmission to the selected zone or area of reception. Moreover, at the zone or area of reception frequencies shall provide protection to the transmissions of other broadcasting stations which, in the opinion of the Commission, have priority of assignment.

NOTE 1: Requests for frequency-hours shall be accompanied by all pertinent technical data with reference to the frequencies and hours of operation, including calculated field strengths delivered to the zones or areas of reception.

NOTE 2: It is preferable that calculated field strengths delivered to zones or areas of reception be equal to or greater than those required by I.F.R.B. Technical Standards, Series A (and supplements thereto), in order for the I.F.R.B. to afford the notified assignment protection from interference. Nevertheless, calculated field strengths less than those required by the I.F.R.B. standards for protection will be acceptable to the Commission. However, licensees should note that if such lesser field strengths are submitted no protection from interference will be provided by the I.F.R.B. if their technical examination of such notifications show incompatibilities with other notified assignments fully complying with I.F.R.B. technical standards.

NOTE 3: Licensees are permitted to engage in multiple operation as defined in §73.701(d).

NOTE 4: Seasonal requests for frequency-hours will be only for transmissions to zones or areas of reception specified in the basic instrument of authorization. Changes in such zones or areas will be made only on separate application for modification of such instruments.

(h) Not more than one frequency will be assigned for use at any one time for any one program transmission except in instances where a program is intended for reception in more than one zone or area of reception and the intended zones or areas cannot be served by a single frequency: *Provided, however,* That on a showing of good cause a licensee may be authorized to operate on more than one frequency at any one time to transmit any one program to a single zone or area of reception.

(i) Any frequency assigned to a licensee or permittee shall also be available for assignment to other licensees or permittees.

(j) All assignments of frequencies and the hours during which they will be used will be made with the express understanding that they are subject to immediate cancellation or change without hearing whenever the Commission determines that interference or propagation conditions so require and that each frequency-hour assignment for a given seasonal schedule is unique unto itself and not necessarily available for use during a subsequent season.

(k) The total maximum number of frequency-hours which will be authorized to all licensees of international broadcasting stations during any one day for any season is 100. The number

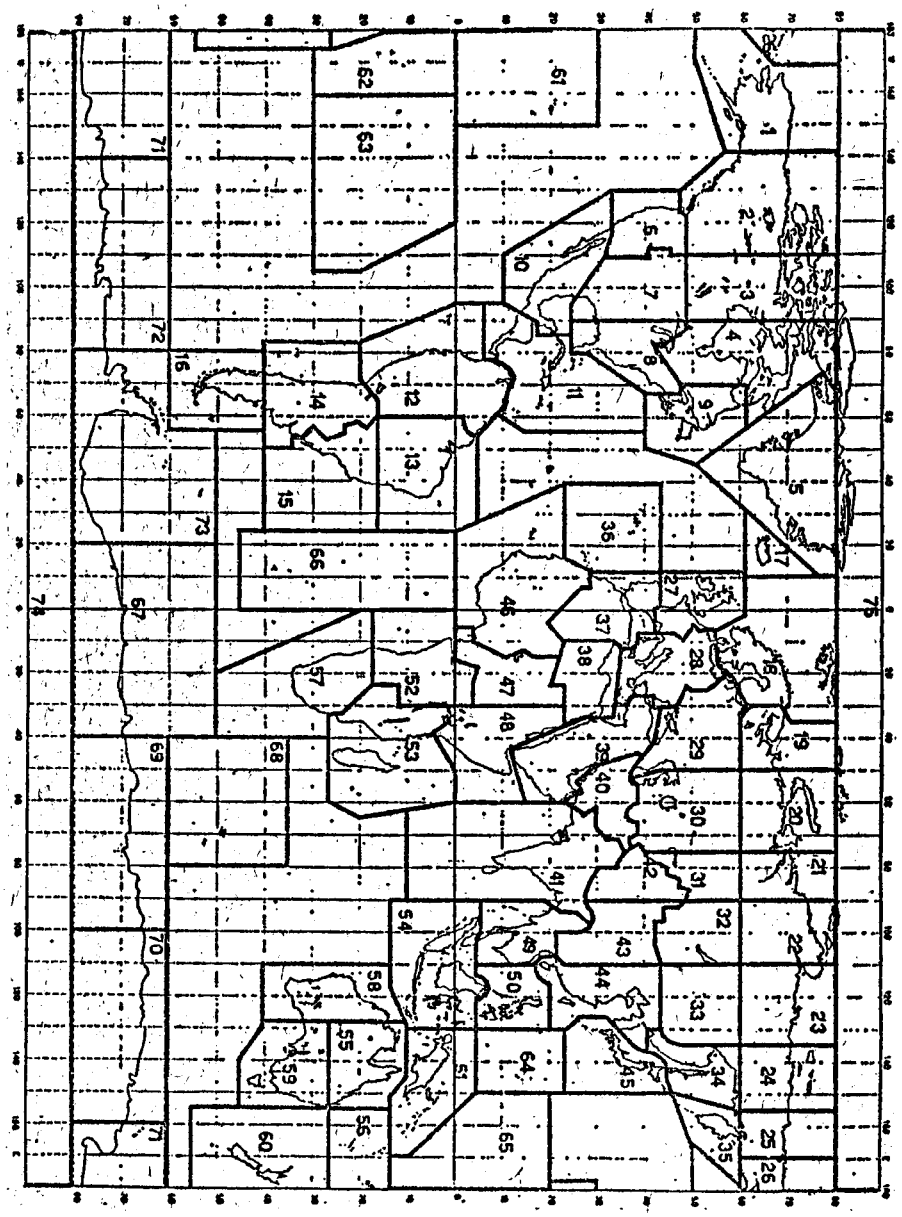
of frequency-hours allocated to any licensee will depend on past usage, availability, and need. If for a forthcoming season the total of the requests for daily frequency-hours of all licensees exceeds 100, all licensees will be notified and each licensee that makes an adequate showing that good cause exists for not having its requested number of frequency-hours reduced and that operation of its station without such reduction would be consistent with the public interest may be authorized the frequency-hours requested.

NOTE: The provisions of this paragraph are not to be construed to mean that a total of 100 (or more) frequency-hours per day is assured licensees. Frequency-hours will only be assigned to the extent that they are available. It is the responsibility of each licensee to make all technical studies to show that frequency-hours requested by it are available and suitable for use as proposed.

[38 FR 18892, July 16, 1973, as amended at 51 FR 9965, Mar. 24, 1986]

### § 73.703 Geographical zones and areas of reception.

The zones or areas of reception to be served by international broadcasting stations shall be based on the following map, and directive antennas shall be employed to direct transmissions thereto:



[38 FR 18893, July 16, 1973]

### §73.712 Equipment tests.

(a) During the process of construction of an international broadcasting station, the permittee, having obtained authorization for frequencies and hours as set forth in the Note to §73.702(d) may, without further authority of the FCC, conduct equipment tests for the purpose of such adjustments and measurements as may be necessary to assure compliance with the terms of the construction permit, the technical provisions of the application therefor and the rules and regulations. Such tests shall use voice identification and test tones only. No programming shall be conducted during equipment tests.

(b) The Commission may notify the permittee to conduct no tests or may cancel, suspend, or change the date for the beginning of equipment tests when and if such action may appear to be in the public interest, convenience, and necessity.

(c) Equipment tests may be continued so long as the construction permit shall remain valid: *Provided, however,* That the procedure set forth in paragraph (a) of this section must be repeated prior to the conducting of such tests in each season after the season in which the testing began.

(d) The authorization for tests embodied in this section shall not be construed as constituting a license to operate but as a necessary part of construction.

[28 FR 13696, Dec. 14, 1963, as amended at 37 FR 25842, Dec. 5, 1972. Redesignated and amended at 38 FR 18894, July 16, 1973; 47 FR 40174, Sept. 13, 1982]

### §73.713 Program tests.

(a) Upon completion of construction of an international broadcasting station in accordance with the terms of the construction permit, the technical provisions of the application therefor, and the rules and regulations and the applicable engineering standards, and when an application for station license has been filed showing the station to be in satisfactory operating condition, the permittee may request authority to conduct program tests. Such request shall be filed with the FCC at least 10 days prior to the date on which it is desired to begin such operation. All data necessary to show compliance with the terms and conditions of the construction permit must be filed with the license application.

(b) Program tests shall not commence until specific Commission authority is received. The Commission reserves the right to change the date of the beginning of such tests or to suspend or revoke the authority for program tests as and when such action may appear to be in the public interest, convenience, and necessity.

(c) Unless sooner suspended or revoked, program test authority continues valid during Commission consideration of the application for license and during this period further extension of the construction permit is not required. Program test authority shall be automatically terminated by final determination upon the application for station license.

(d) All operation under program test authority shall be in strict compliance with the rules governing international broadcasting stations and in strict accordance with representations made in the application for license pursuant to which the tests were authorized.

(e) The granting of program test authority shall not be construed as approval by the Commission of the application for station license.

[38 FR 18894, July 16, 1973, as amended at 47 FR 40174, Sept. 13, 1982]

### §73.731 Licensing requirements.

(a) A license for an international broadcasting station will be issued only after a satisfactory showing has been made in regard to the following, among others:

(1) That there is a need for the international broadcasting service proposed to be rendered.

(2) That the necessary program sources are available to the applicant to render the international service proposed.

(3) That the production of the program service and the technical operation of the proposed station will be conducted by qualified persons.

(4) That the applicant is legally, technically and financially qualified and possesses adequate technical facilities to carry forward the service proposed.

(5) That the public interest, convenience and necessity will be served through the operation of the proposed station.

[38 FR 18895, July 16, 1973]

### § 73.732 Authorizations.

Authorizations issued to international broadcasting stations by the Commission will be authorizations to permit the construction or use of a particular transmitting equipment combination and related antenna systems for international broadcasting, and to permit broadcasting to zones or areas of reception specified on the instrument of authorization. The authorizations will not specify the frequencies to be used or the hours of use. Requests for frequencies and hours of use will be made as provided in §73.702. Seasonal schedules, when issued pursuant to the provisions of §73.702, will become attachments to and part of the instrument of authorization, replacing any such prior attachments.

[38 FR 18895, July 16, 1973]

### § 73.733 Normal license period.

All international broadcast station licenses will be issued so as to expire at the hour of 3 a.m. local time and will be issued for a normal period of 8 years expiring November 1.

[62 FR 5347, Feb. 5, 1997]

### § 73.751 Operating power .

No international broadcasting station will be authorized to install, or be licensed for operation of, transmitter equipment with a rated carrier power of less than 50 kilowatts.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[38 FR 18895, July 16, 1973, as amended at 44 FR 65765, Nov. 15, 1979]

### § 73.753 Antenna systems.

All international broadcasting stations shall operate with directional antennas. Such antennas shall be designed and operated so that the radiated power in the maximum lobe toward the specific zone or area of reception intended to be served shall be at least 10 times the average power from the antenna in the horizontal plane. Radiation in all other directions shall be suppressed to the maximum extent technically feasible. In order to eliminate or mitigate harmful interference, the direction of the maximum lobe may be adjusted upon approval of the Commission.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[38 FR 18895, July 16, 1973, as amended at 44 FR 65765, Nov. 15, 1979]

### § 73.754 Frequency monitors.

(a) The licensee of each international broadcast station shall operate a frequency monitor at the transmitter independent of the frequency control of the transmitter.

(b) The frequency monitor shall be designed and constructed in accordance with good engineering practice. It shall have an accuracy sufficient to determine that the operating frequency is within one-half of the allowed tolerance.

[37 FR 25842, Dec. 5, 1972]

### § 73.755 Modulation monitors.

The licensee of each international broadcast station shall have a modulation monitor in operation at the transmitter.

[37 FR 25842, Dec. 5, 1972]

### § 73.756 Transmission system requirements.

(a) *Design*. The construction, installation, operation, and performance of the international broadcasting transmitter system shall be in accordance with good engineering practice.

(b) *Spurious emission*. (1) Any emission appearing on a frequency removed from the carrier frequency by between 6.4 kHz and 10 kHz, inclusive, shall be attenuated at least 25 dB below the level of the unmodulated carrier. Compliance with the specification will be deemed to show the occupied bandwidth to be 10 kHz or less.

(2) Any emission appearing on a frequency removed from the carrier frequency by more than 10 kHz and up to and including 25 kHz shall be attenuated at least 35 dB below the level of the unmodulated carrier.

(3) Any emission appearing on a frequency removed from the carrier frequency by more than 25 kHz shall be attenuated at least 80 dB below the level of the unmodulated carrier.

(4) In the event spurious emissions cause harmful interference to other stations or services, such additional steps as may be necessary to eliminate the interference must be taken immediately by the licensee.

(c) *Frequency control.* The transmitter shall be equipped with automatic frequency control apparatus so designed and constructed that it is capable of maintaining the operating frequency within 0.0015 percent of the assigned frequency.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[38 FR 18895, July 16, 1973, as amended at 44 FR 65765, Nov. 15, 1979]

### § 73.757 Auxiliary transmitters.

Upon showing that a need exists for the use of auxiliary transmitters, a license may be issued provided that:

(a) Auxiliary transmitters may be installed either at the same location as the main transmitters or at another location.

(b) [Reserved]

(c) The auxiliary transmitters shall be maintained so that they may be put into immediate operation at any time for the following purposes:

(1) The transmission of the regular programs upon the failure of the main transmitters.

(2) The transmission of regular programs during maintenance or modification work on the main transmitter, necessitating discontinuance of its operation for a period not to exceed 5 days. (This includes the equipment changes which may be made without authority as set forth elsewhere in the rules and regulations or as authorized by the Commission by letter or by construction permit. Where such operation is required for periods in excess of 5 days, request therefor shall be in accordance with § 73.3542 of this chapter.)

(3) Upon request by a duly authorized representative of the Commission.

(d) The auxiliary transmitters shall be tested at least once each week to determine that they are in proper operating condition and that they are adjusted to the proper frequency except that in the case of operation in accordance with paragraph (c) of this section during any week, the test in that week may be omitted provided the operation under paragraph (c) of this section is satisfactory. A record shall be kept of the time and result of each test. Such records shall be retained for a period of two years.

(e) The auxiliary transmitters shall be equipped with satisfactory control equipment which will enable the maintenance of the frequency emitted by the station within the limits prescribed by the regulations in this part.

(f) The operating power of an auxiliary transmitter may be less but not greater than the authorized power of the main transmitters.

[28 FR 13696, Dec. 14, 1963, as amended at 37 FR 25843, Dec. 5, 1972; 60 FR 55480, Nov. 1, 1995]

### § 73.758 Alternate main transmitters.

The licensee of an international broadcast station may be licensed for alternate main transmitters provided that a technical need for such alternate transmitters is shown and that the following conditions are met: Both transmitters:

(a) Are located at the same place;

(b) Shall have the same power rating; and

(c) Shall meet the construction, installation, operation, and performance requirements of good engineering practice.

[37 FR 25843, Dec. 5, 1972]

### § 73.759 Modification of transmission systems.

Specific authority, upon filing formal application (FCC Form 309) therefor, is required for any of the following changes:

(a) Change involving an increase or decrease in the power rating of the transmitters.

(b) A replacement of the transmitters as a whole.

(c) Change in the location of the transmitting antenna.

(d) Change in location of main studio, if it is proposed to move the main studio to a different city from that specified in the license.

(e) Change in the power delivered to the antenna.

(f) Change in frequency control and/or modulation system.

(g) Change in direction or gain of antenna system.

Other changes, not specified above in this section, may be made at any time without the authority of the Commission: *Provided,* That the Commission shall be immediately notified thereof and such changes shall be shown in the next application for renewal of license.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[38 FR 18895, July 16, 1973, as amended at 44 FR 65765, Nov. 15, 1979]

### § 73.761 Time of operation.

(a) All international broadcasting stations shall operate in accordance with the times indicated on their seasonal schedules.

(b) In the event that causes beyond a licensee's control make it impossible to adhere to the seasonal schedule or to continue operating, the station may limit or discontinue operation for a period of not more than 10 days, without further authority from the FCC. However, in such cases, the FCC shall be immediately notified in writing of such limitation or discontinuance of operation and shall subsequently be notified when the station resumes regular operation.

(c) In the event that causes beyond a licensee's control make it impossible to adhere to the seasonal schedule or to continue operating for a temporary period of more than 10 days, the station may not limit or discontinue operation until it requests and receives specific authority to do so from the FCC. When the station subsequently resumes regular operation after such limited operation or discontinuance of operation, it shall notify the FCC in Washington, DC. The license of a broadcasting station that fails to transmit broadcast signals for any consecutive 12-month period expires as a matter of law at the end of that period, notwithstanding any provision, term, or condition of the license to the contrary.

[38 FR 18895, July 16, 1973, as amended at 47 FR 40174, Sept. 13, 1982; 61 FR 28767, June 6, 1996]

### § 73.765 Determining operating power.

The operating power specified in § 73.751 shall be determined by use of a calibrated dummy load or by any other method specified by the licensee and accepted by the Commission. Such method may subsequently be used by the licensee to maintain the authorized operating power.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[38 FR 18895, July 16, 1973, as amended at 44 FR 65765, Nov. 15, 1979]

### § 73.766 Modulation and bandwidth.

The percentage of modulation shall be maintained as high as possible consistent with good quality of transmission and good broadcast practice. In no case shall it exceed 100 percent on positive or negative peaks of frequent recurrence. It should not be less than 85 percent on peaks of frequent recurrence. The range of modulation frequencies shall be so controlled that the authorized bandwidth of the emission shall not be exceeded under all conditions of modulation. The highest modulating frequency shall not exceed 5 kHz.

[38 FR 18896, July 16, 1973]

### § 73.781 Logs.

The licensee or permittee of each international broadcast station must maintain the station log in the following manner:

(a) In the program log:

(1) An entry of the time each station identification announcement (call letters and location) is made.

(2) An entry briefly describing each program broadcast, such as ''music'', ''drama'', ''speech'', etc., together with the name or title thereof, language, and the sponsor's name, with the time of the beginning and ending of the complete program.

(3) For each program of network origin, an entry showing the name of the network originating the program.

[28 FR 13696, Dec. 14, 1963, as amended at 37 FR 25843, Dec. 5, 1972; 48 FR 38480, Aug. 24, 1983]

### § 73.782 Retention of logs.

Logs of international broadcast stations shall be retained by the licensee or permittee for a period of two years: *Provided, however,* That logs involving communications incident to a disaster or which include communications incident to or involved in an investigation by the Commission and concerning which the licensee or permittee has been notified, shall be retained by the licensee or permittee until he is specifically authorized in writing by the Commission to destroy them: *Provided, further,* That logs incident to or involved in any claim or complaint of which the licensee or permittee has notice shall be retained by the licensee or permittee until such claim or complaint has been fully satisfied or until the same has been barred by statute limiting the time for the filing of suits upon such claims.

[28 FR 13696, Dec. 14, 1963]

### § 73.787 Station identification.

(a) A licensee of an international broadcast station shall make station identification announcement (call letters and location), at the beginning and ending of each time of operation and during the operation on the hour.

(b) Station identification, program announcements, and oral continuity shall be made with international significance (language particularly) which is designed for the foreign country or countries for which the service is primarily intended.

[28 FR 13696, Dec. 14, 1963, as amended at 34 FR 19762, Dec. 17, 1969; 38 FR 18896, July 16, 1973]

### § 73.788 Service; commercial or sponsored programs.

(a) A licensee of an international broadcast station shall render only an international broadcast service which will reflect the culture of this country and which will promote international goodwill, understanding, and cooperation. Any program solely intended for and directed to an audience in the continental United States does not meet the requirements for this service.

(b) Such international broadcast service may include commercial or sponsored programs: *Provided,* That:

(1) Commercial program continuities give no more than the name of the sponsor of the program and the name and general character of the commodity, utility or service, or attraction advertised.

(2) In case of advertising a commodity, the commodity is regularly sold or is being promoted for sale on the open market in the foreign country or countries to which the program is directed in accordance with paragraph (c) of this section.

(3) In case of advertising an American utility or service to prospective tourists or visitors to the United States, the advertisement continuity is particularly directed to such persons in the foreign country or countries where they reside and to which the program is directed in accordance with paragraph (c) of this section.

(4) In case of advertising an international attraction (such as a world fair, resort, spa, etc.) to prospective tourists or visitors to the United States, the oral continuity concerning such attraction is consistent with the purpose and intent of this section.

(5) In case of any other type of advertising, such advertising is directed to the foreign country or countries to which the program is directed and is consistent with the purpose and intent of this section.

(c) The geographic areas to be served by international broadcasting stations are the zones and areas of reception shown in § 73.703.

(d) An international broadcast station may transmit the program of a AM broadcast station or network system: *Provided,* That the conditions in paragraph (b) of this section as to any commercial continuities are observed and when station identifications are made, only the call letter designation of the international station is given and its assigned frequency: *And provided further,* That in the case of chain broadcasting the program is not carried simultaneously by another international station (except another station owned by the same licensee operated on a frequency in a different group to obtain continuity of signal service), the signals from which are directed to the same area. (See section 3(p) of the

Communications Act of 1934 for the definition of ''chain broadcasting.'')

[28 FR 13696, Dec. 14, 1963, as amended at 37 FR 25843, Dec. 5, 1972; 38 FR 18896, July 16, 1973]

## Subpart G—Emergency Broadcast System

AUTHORITY: Secs. 1, 4 (i) and (o), and 303 (r), Communications Act of 1934, as amended.

### § 73.900 Cross references.

The Emergency Broadcast System (EBS) rules have been renamed the Emergency Alert System (EAS) and revised. The new EAS rules are contained in a new Part 11. Equipment type accepted for EBS use under the old Subpart G rules may continue to be used at broadcast stations until January 1, 1998, provided that it meets all applicable requirements of Part 11 of this chapter.

| Old section | New section |
|---|---|
| 73.901 | 11.1 |
| 73.902 | 11.1 |
| 73.903 | 11.11 |
| 73.904 | Removed |
| 73.905 | 11.13 |
| 73.906 | 11.12 |
| 73.907 | 11.13 |
| 73.908 | 11.15 |
| 73.909 | 11.16 |
| 73.910 | 11.17 |
| 73.912 | 11.43 |
| 73.913 | 11.18 |
| 73.914 | 11.19 |
| 73.915 | 11.19 |
| 73.916 | 11.19 |
| 73.917 | 11.19 |
| 73.918 | 11.19 |
| 73.919 | 11.20 |
| 73.920 | 11.21(b) |
| 73.921 | 11.21 |
| 73.922 | 11.44 |
| 73.926 | 11.41 |
| 73.927 | 11.42 |
| 73.931 | 11.14, 11.53 |
| 73.932 | 11.35, 11.51, 11.52 |
| 73.933 | 11.54 |
| 73.935 | 11.55 |
| 73.936 | 11.55 |
| 73.937 | 11.55 |
| 73.940 | 11.32 |
| 73.941 | 11.33 |
| 73.942 | 11.34 |
| 73.943 | 11.34 |
| 73.961 | 11.61 |
| 73.962 | 11.62 |

[59 FR 67102, Dec. 28, 1994, as amended at 60 FR 56000, Nov. 6, 1995]

## Subpart H—Rules Applicable to All Broadcast Stations

### § 73.1001 Scope.

(a) The rules in this subpart are common to all AM, FM, and TV broadcast services, commercial and noncommercial.

(b) Rules in part 73 applying exclusively to a particular broadcast service are contained in the following: AM, subpart A; FM, subpart B; Noncommercial Educational FM, subpart C; and TV, subpart E.

(c) Certain provisions of this subpart apply to International Broadcast Stations (subpart F, part 73), Low Power TV, TV Translator and TV Booster Stations (subpart G, part 74) where the rules for those services so provide.

(d) The provisions of this part applying to licensees also apply to holders of construction permits (permittees).

[43 FR 32781, July 28, 1978, as amended at 52 FR 31399, Aug. 20, 1987]

### § 73.1010 Cross reference to rules in other parts.

Certain rules applicable to broadcast services, some of which are also applicable to other services, are set forth in the following Parts of the FCC Rules and Regulations.

(a) Part 1, ''Practice and Procedure.''

(1) Subpart A, ''General Rules of Practice and Procedure''. (§§1.1 to 1.120).

(2) Subpart B, ''Hearing Proceedings''. (§§1.201 to 1.364)

(3) Subpart C, ''Rulemaking Proceedings''. (§§1.399 to 1.430).

(4) Subpart G, ''Schedule of Statutory Charges and Procedures for Payment''. (§§1.1101 to 1.1117.)

(5) Subpart H, ''Ex Parte Communications''. (§§1.1200 to 1.1216).

(6) Subpart I, ''Procedures Implementing the National Environmental Policy Act of 1969''. (§§1.1301 to 1.1319).

(7) Subpart P, ''Implementation of the Anti-Drug Abuse Act of 1988''. (§§1.2001–1.2003.)

(8) Subpart Q, ''Competitive Bidding Proceedings'' (§§1.2101–1.2112).

(b) Part 2, ''Frequency Allocations and Radio Treaty Matters, General Rules and Regulations'', including Subparts A, ''Terminology''; B, ''Allocation, Assignments and Use of Radio

Frequencies''; C, ''Emissions''; D, ''Call Signs and Other Forms of Identifying Radio Transmissions''; and J, ''Equipment Authorization Procedures''.

(c) [Reserved]

(d) Part 17, ''Construction, Marking and Lighting of Antenna Structures''.

(e) Part 74, ''Experimental, Auxiliary and Special Broadcast and Other Program Distributional Services'' including:

(1) Subpart A, ''Experimental Broadcast Stations'';

(2) Subpart D, ''Remote Pickup Broadcast Stations'';

(3) Subpart E, ''Aural Broadcast Auxiliary Stations'';

(4) Subpart F, ''Television Broadcast Auxiliary Stations'';

(5) Subpart G, ''Low Power TV, TV Translator and TV Booster Stations'';

(6) Subpart H, ''Low Power Auxiliary Stations'';

(7) Subpart I, ''Instructional TV Fixed Service''; and

(8) Subpart L, ''FM Broadcast Translator Stations and FM Broadcast Booster Stations''.

[53 FR 2498, Jan. 28, 1988, as amended at 57 FR 48333, Oct. 23, 1992; 60 FR 55480, Nov. 1, 1995; 63 FR 48622, Sept. 11, 1998]

EFFECTIVE DATE NOTE: At 63 FR 48622, Sept. 11, 1998, § 73.1010 was amended by adding paragraph (a)(8), effective Nov. 10, 1998.

### § 73.1015 Truthful written statements and responses to Commission inquiries and correspondence.

The Commission or its representatives may, in writing, require from any applicant, permittee, or licensee written statements of fact relevant to a determination whether an application should be granted or denied, or to a determination whether a license should be revoked, or to any other matter within the jurisdiction of the Commission, or, in the case of a proceeding to amend the FM or Television Table of Allotments, require from any person filing an expression of interest, written statements of fact relevant to that allotment proceeding. No applicant, permittee, licensee, or person who files an expression of interest shall in any response to Commission correspondence or inquiry or in any application, pleading, report or any other written statement submitted to the Commission, make any misrepresentation or willful material omission bearing on any matter within the jurisdiction of the Commission.

NOTE: Section 73.1015 is limited in application to written matter. It implies no change in the Commissions existing policies respecting the obligation of applicants, permittees and licensees in all instances to respond truthfully to requests for information deemed necessary to the proper execution of the Commission's functions.

[51 FR 3069, Jan. 23, 1986, as amended at 55 FR 28914, July 16, 1990]

### § 73.1020 Station license period.

(a) Initial licenses for broadcast stations will ordinarily be issued for a period running until the date specified in this section for the State or Territory in which the station is located. If issued after such date, it will run to the next renewal date determined in accordance with this section. Both radio and TV broadcasting stations will ordinarily be renewed for 8 years. However, if the FCC finds that the public interest, convenience and necessity will be served thereby, it may issue either an initial license or a renewal thereof for a lesser term. The time of expiration of normally issued initial and renewal licenses will be 3 a.m., local time, on the following dates and thereafter at 8-year intervals for radio and TV broadcast stations located in:

(1) Maryland, District of Columbia, Virginia and West Virginia:

(i) Radio stations, October 1, 1995.

(ii) Television stations, October 1, 1996.

(2) North Carolina and South Carolina:

(i) Radio stations, December 1, 1995.

(ii) Television stations, December 1, 1996.

(3) Florida, Puerto Rico and the Virgin Islands:

(i) Radio stations, February 1, 1996.

(ii) Television stations, February 1, 1997.

(4) Alabama and Georgia:

(i) Radio stations, April 1, 1996.

(ii) Television stations, April 1, 1997.

(5) Arkansas, Louisiana and Mississippi:

(i) Radio stations, June 1, 1996.

(ii) Television stations, June 1, 1997.

(6) Tennessee, Kentucky and Indiana:

(i) Radio stations, August 1, 1996.
(ii) Television stations, August 1, 1997.
(7) Ohio and Michigan:
(i) Radio stations, October 1, 1996.
(ii) Television stations, October 1, 1997.
(8) Illinois and Wisconsin:
(i) Radio stations, December 1, 1996.
(ii) Television stations, December 1, 1997.
(9) Iowa and Missouri:
(i) Radio stations, February 1, 1997.
(ii) Television stations, February 1, 1998.
(10) Minnesota, North Dakota, South Dakota, Montana and Colorado:
(i) Radio stations, April 1, 1997.
(ii) Television stations, April 1, 1998.
(11) Kansas, Oklahoma and Nebraska:
(i) Radio stations, June 1, 1997.
(ii) Television stations, June 1, 1998.
(12) Texas:
(i) Radio stations, August 1, 1997.
(ii) Television stations, August 1, 1998.
(13) Wyoming, Nevada, Arizona, Utah, New Mexico and Idaho:
(i) Radio stations, October 1, 1997.
(ii) Television stations, October 1, 1998.
(14) California:
(i) Radio stations, December 1, 1997.
(ii) Television stations, December 1, 1998.
(15) Alaska, American Samoa, Guam, Hawaii, Mariana Islands, Oregon and Washington:
(i) Radio stations, February 1, 1998.
(ii) Television stations, February 1, 1999.
(16) Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont:
(i) Radio stations, April 1, 1998.
(ii) Television stations, April 1, 1999.
(17) New Jersey and New York:
(i) Radio stations, June 1, 1998.
(ii) Television stations, June 1, 1999.
(18) Delaware and Pennsylvania:
(i) Radio stations, August 1, 1998.
(ii) Television stations, August 1, 1999.

(b) For the cutoff date for the filing of applications mutually exclusive with renewal applications that are filed on or before May 1, 1995 and for the deadline for filing petitions to deny renewal applications, see § 73.3516(e).

(c) The license of a broadcasting station that fails to transmit broadcast signals for any consecutive 12-month period expires as a matter of law at the end of that period, notwithstanding any provision, term, or condition of the license to the contrary.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[49 FR 4382, Feb. 6, 1984, as amended at 52 FR 25604, July 8, 1987; 59 FR 63051, Dec. 7, 1994; 61 FR 18291, Apr. 25, 1996; 61 FR 28767, June 6, 1996; 62 FR 5347, Feb. 5, 1997]

### § 73.1030 Notifications concerning interference to radio astronomy, research and receiving installations.

(a)(1) *Radio astronomy and radio research installations.* In order to minimize harmful interference at the National Radio Astronomy Observatory site located at Green, Pocahontas County, West Virginia, and at the Naval Radio Research Observatory at Sugar Grove, Pendleton County, West Virginia, a licensee proposing to operate a short-term broadcast auxiliary station pursuant to § 74.24, or an applicant for authority to construct a new broadcast station or for authority to make changes in the frequency, power, antenna height, or antenna directivity of an existing 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 FCC, simultaneously notify the following:

Interference Office, National Radio Astronomy Observatory, P.O. Box 2, Green Bank, West Virginia 24944, Telephone: 304–456–2011.

The notification shall be in writing and set forth the particulars of the proposed station, including 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 FCC the date notification was made to the observatory. After receipt of such applications, the FCC 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 FCC will consider all aspects of the problem and take whatever action is deemed appropriate.

(2) Any applicant for a new permanent base or fixed 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 a station on these islands and would increase the likelihood of the authorized facility causing interference, shall notify the Interference Office, Arecibo Observatory, Post Office Box 995, Arecibo, Puerto Rico 00613, in writing or electronically, of the technical parameters of the proposal. Applicants may wish to consult interference guidelines, which will be provided by Cornell University. Applicants who choose to transmit information electronically should e-mail to: prcz@naic.edu

(i) The notification to the Interference Office, Arecibo Observatory shall be made prior to, or simultaneously with, the filing of the application with the Commission. The notification shall state the geographical coordinates of the antenna (NAD–83 datum), antenna height above ground, ground elevation at the antenna, antenna directivity and gain, proposed frequency and FCC Rule Part, type of emission, and effective radiated power. 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.

(ii) 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.

(b) *Radio receiving installations.* Protection for Table Mountain Radio Receiving Zone, Boulder County, Colorado: Applicants for a station authorization to operate in the vicinity of Boulder County, Colorado under this Part are advised to give due consideration, prior to filing applications, to the need to protect the Table Mountain Radio Receiving Zone from harmful interference. These are the research laboratories of the Department of Commerce, Boulder County, Colorado. To prevent degradation of the present ambient radio signal level at the site, the Department of Commerce seeks to ensure that the field strengths of any radiated signals (excluding reflected signals) received on this 1800 acre site (within the area bounded by 40°09′10″ N Latitude on the north, 105°13′31″ W Longitude on the east, 40°07′05″ N Latitude on the south, and 105°15′13″ W Longitude on the west) resulting from new assignments (other than mobile stations) or from the modification of relocation of existing facilities do not exceed the following values:

| Frequency range | Field strength in authorized bandwidth of service (mV/m) | Power flux density in authorized bandwidth of service (dBW/m$^2$) [1] |
|---|---|---|
| Below 540 kHz | 10 | −65.8 |
| 540 to 1700 kHz | 20 | −59.8 |
| 1.7 to 470 MHz | 10 | [2] −65.8 |
| 470 to 890 MHz | 30 | [2] −56.2 |
| Above 890 MHz | 1 | [2] −85.8 |

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

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

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

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

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

(iii) Stations within 16 km (10 statute miles) with 1 kW or more ERP in the primary plane of polarization in the azimuthal direction of Table Mountain Receiving Zone;

(iv) Stations within 80 km (50 statute miles) with 25 kW or more ERP in the primary plane polarization in the azimuthal direction of Table Mountain Receiving Zone.

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

(3) The Commission will not screen applications to determine whether advance consultation has taken place. However, applicants are advised that such consultation can avoid objectimns from the Department of Commerce or proceedings to modify any authorization which may be granted which, in fact, delivers a signal at the site in excess of the field strength specified herein.

(c) *Protection for Federal Communications Commission monitoring stations.* (1) Applicants in the vicinity of a 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 in excess of 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 FCC rules. Applications for stations (except mobile stations) which will produce on any frequency a direct wave fundamental field strength of *greater than 10 mV/m* in the authorized bandwidth of service ($-65.8$ dBW/m$^2$ power flux density assuming a free space characteristic impedance of 120 $\pi$ *ohms) at the referenced coordinates, may be examined to determine extent of possible interference. Depending on the theoretical field strength value and existing root-sum-square or other ambient radio field signal levels at the indicated coordinates, a clause protecting the monitoring station may be added to the station authorization.*

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

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

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

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

(iii) Stations within 16 kilometers (10 statute miles) with 1 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station;

(iv) Stations within 80 kilometers (50 statute miles) with 25 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station;

(4) Advance coordination for stations operating above 1000 MHz is recommended only where the proposed station is in the vicinity of a monitoring station designated as a satellite monitoring facility in §0.121(c) of the

Commission's Rules and also meets the criteria outlined in paragraphs (b) (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.

[43 FR 32782, July 28, 1978, as amended at 44 FR 77167, Dec. 31, 1979; 47 FR 9221, Mar. 4, 1982; 50 FR 39003, Sept. 26, 1985; 52 FR 25867, July 9, 1987; 52 FR 36879, Oct. 1, 1987; 52 FR 37789, Oct. 9, 1987; 56 FR 64872, Dec. 12, 1991; 61 FR 8477, Mar. 5, 1996; 62 FR 55532, Oct. 27, 1997]

### § 73.1120 Station location.

(a) Each AM, FM and TV broadcast station will be licensed to the principal community or other political subdivision which it primarily serves. This principal community (city, town or other political subdivision) will be considered to be the geographical station location.

[44 FR 69934, Dec. 5, 1979, as amended at 52 FR 21685, June 9, 1987]

### § 73.1125 Station main studio location.

(a) Except for those stations described in paragraph (b) of this section, each AM, FM, and TV broadcast station shall maintain a main studio at one of the following locations:

(1) within the station's community of license;

(2) at any location within the principal community contour of any AM, FM, or TV broadcast station licensed to the station's community of license; or

(3) within twenty-five miles from the reference coordinates of the center of its community of license as described in § 73.208(a)(1).

NOTE TO PARAGRAPH (A): The principal community contour of AM stations that simulcast on a frequency in the 535–1605 kHz band and on a frequency in the 1605–1705 kHz band shall be the 5 mV/m contour of the lower band operation during the term of the simultaneous operating authority. Upon termination of the 535–1605 kHz band portion of the dual frequency operation, the principal community contour shall become the 5 mV/m of the remaining operation in the 1605–1705 kHz band.

(b) The following stations are not required to maintain their main studio at the locations described in paragraph (a) of this section.

(1) AM stations licensed as synchronous amplifier transmitters (''AM boosters'') or,

(2) AM, FM, or TV stations, when good cause exists for locating the main studio at a location other than that described in paragraph (a) of this section, and when so doing would be consistent with the operation of the station in the public interest.

(c) Relocation of the main studio may be made:

(1) From one point to another within the locations described in paragraph (a) this section or from a point outside the locations specified in paragraph (a) to one within those locations, without specific FCC authority, but notification to the FCC in Washington shall be made promptly.

(2) Written authority to locate a main studio outside the locations specified in paragraph (a) of this section for the first time must be obtained from the Audio Services Division, Mass Media Bureau for AM and FM stations, or the Television Branch, Video Services Division, Mass Media Bureau for television stations before the studio may be moved to that location. Where the main studio is already authorized at a location outside those specified in paragraph (a), and the licensee or permittee desires to specify a new location also located outside those locations, written authority must also be received from the Commission prior to the relocation of the main studio. Authority for these changes may be requested by filing a letter with an explanation of the proposed changes with the appropriate division. Licensees or permittees should be aware that the filing of such a letter request does not imply approval of the relocation request, because each request is addressed on a case-by-case basis. A filing fee is required for commercial AM, FM, or TV licensees or permittees filing a letter request under this section (*see* § 1.1104).

(d) Each AM, FM, and TV broadcast station shall maintain a local telephone number in its community of license or a toll-free number.

[63 FR 49497, Sept. 16, 1998]

EFFECTIVE DATE NOTE: At 63 FR 49497, Sept. 16, 1998, §73.1125 was revised. This section contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

### § 73.1150 Transferring a station.

(a) In transferring a broadcast station, the licensee may retain no right of reversion of the license, no right to reassignment of the license in the future, and may not reserve the right to use the facilities of the station for any period whatsoever.

(b) No license, renewal of license, assignment of license or transfer of control of a corporate licensee will be granted or authorized if there is a contract, arrangement or understanding, express or implied, pursuant to which, as consideration or partial consideration for the assignment or transfer, such rights, as stated in paragraph (a) of this section, are retained.

(c) Licensees and/or permittees authorized to operate in the 535–1605 kHz and in the 1605–1705 kHz band pursuant to the Report and Order in MM Docket No. 87–267 will not be permitted to assign or transfer control of the license or permit for a single frequency during the period that joint operation is authorized.

[44 FR 58720, Oct. 11, 1979, as amended at 56 FR 64872, Dec. 12, 1991]

### § 73.1201 Station identification.

(a) *When regularly required.* Broadcast station identification announcements shall be made: (1) At the beginning and ending of each time of operation, and (2) hourly, as close to the hour as feasible, at a natural break in program offerings. Television broadcast stations may make these announcements visually or aurally.

(b) *Content.* (1) Official station identification shall consist of the station's call letters immediately followed by the community or communities specified in its license as the station's location: *Provided,* That the name of the licensee or the station's frequency or channel number, or both, as stated on the station's license may be inserted between the call letters and station location. No other insertion is permissible.

(2) A station may include in its official station identification the name of any additional community or communities, but the community to which the station is licensed must be named first.

(c) *Channel*—(1) *General.* Except as otherwise provided in this paragraph, in making the identification announcement the call letters shall be given only on the channel identified thereby.

(2) *Simultaneous AM (535–1605 kHz) and AM (1605–1705 kHz broadcasts.* If the same licensee operates an AM broadcast station in the 535–1605 kHz band and an AM broadcast station in the 1605–1705 kHz band with both stations licensed to the same community and simultaneously broadcasts the same programs over the facilities of both such stations, station identification announcements may be made jointly for both stations for periods of such simultaneous operations.

(3) *Satellite operation.* When programming of a broadcast station is rebroadcast simultaneously over the facilities of a satellite station, the originating station may make identification announcements for the satellite station for periods of such simultaneous operation.

(i) In the case of a television broadcast station, such announcements, in addition to the information required by paragraph (b)(1) of this section, shall include the number of the channel on which each station is operating.

(ii) In the case of aural broadcast stations, such announcements, in addition to the information required by paragraph (b)(1) of this section, shall include the frequency on which each station is operating.

(d) *Subscription television stations (STV).* The requirements for official station identification applicable to TV stations will apply to Subscription TV stations except, during STV-encoded programming such station identification is not required. However, a station identification announcement will be

made immediately prior to and following the encoded Subscription TV program period.

[34 FR 19762, Dec. 17, 1969, as amended at 37 FR 23726, Nov. 8, 1972; 39 FR 6707, Feb. 22, 1974; 39 FR 9442, Mar. 11, 1974; 41 FR 29394, July 16, 1976; 47 FR 3791, Jan. 27, 1982; 48 FR 51308, Nov. 8, 1983; 56 FR 64872, Dec. 12, 1991]

### § 73.1202 Retention of letters received from the public.

(a) All written comments and suggestions received from the public by licensees of commercial AM, FM, and TV broadcast stations regarding operation of their station shall be maintained in the local public inspection file, unless the letter writer has requested that the letter not be made public or when the licensee feels that it should be excluded from public inspection because of the nature of its content, such as a defamatory or obscene letter.

(1) Letters shall be retained in the local public inspection file for three years from the date on which they are received by the licensee.

(2) Letters received by TV licensees only shall be placed in one of the following separated subject categories: programming or non-programming. If comments in a letter relate to both categories, the licensee shall file it under the category to which the writer has given the greater attention.

[44 FR 38846, July 3, 1979, as amended at 46 FR 26247, May 11, 1981; 52 FR 25867, July 9, 1987]

EFFECTIVE DATE NOTE: At 63 FR 49501, Sept. 16, 1998, § 73.1202 was removed. This section contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

### § 73.1206 Broadcast of telephone conversations.

Before recording a telephone conversation for broadcast, or broadcasting such a conversation simultaneously with its occurrence, a licensee shall inform any party to the call of the licensee's intention to broadcast the conversation, except where such party is aware, or may be presumed to be aware from the circumstances of the conversation, that it is being or likely will be broadcast. Such awareness is presumed to exist only when the other party to the call is associated with the station (such as as employee or part-time reporter), or where the other party originates the call and it is obvious that it is in connection with a program in which the station customarily broadcasts telephone conversations.

[35 FR 7733, May 20, 1970]

### § 73.1207 Rebroadcasts.

(a) The term *rebroadcast* means reception by radio of the programs or other transmissions of a broadcast or any other type of radio station, and the simultaneous or subsequent retransmission of such programs or transmissions by a broadcast station.

(1) As used in this section, ''program'' includes any complete programs or part thereof.

(2) The transmission of a program from its point of origin to a broadcast station entirely by common carrier facilities, whether by wire line or radio, is not considered a rebroadcast.

(3) The broadcasting of a program relayed by a remote pickup broadcast station is not considered a rebroadcast.

(b) No broadcast station may retransmit the program, or any part thereof, of another U.S. broadcast station without the express authority of the originating station. A copy of the written consent of the licensee originating the program must be kept by the licensee of the station retransmitting such program and made available to the FCC upon request.

(1) Stations originating emergency communications under a State EAS plan are considered to have conferred rebroadcast authority to other participating stations.

(2) Permission must be obtained from the originating station to rebroadcast any subsidiary communications transmitted by means of a multiplex subcarrier or telecommunications service on the vertical blanking interval or in the visual signal of a television signal.

(3) Programs originated by the Voice of America (VOA) and the Armed Forces Radio and Television Services (AFRTS) cannot, in general, be cleared for domestic rebroadcast, and may therefore be retransmitted only by special arrangements among the parties concerned.

(4) Except as otherwise provided by international agreement, programs originated by foreign broadcast stations may be retransmitted without the consent of the originating station.

(c) The transmissions of non-broadcast stations may be rebroadcast under the following conditions:

(1) Messages originated by privately-owned non-broadcast stations other than those in the Amateur and Citizens Band (CB) Radio Services may be broadcast only upon receipt of prior permission from the non-broadcast licensee. Additionally, messages transmitted by common carrier stations may be rebroadcast only upon prior permission of the originator of the message as well as the station licensee.

(2) Except as provided in paragraph (d) of this section, messages originated entirely by non-broadcast stations owned and operated by the Federal Government may be rebroadcast only upon receipt of prior permission from the government agency originating the messages.

(3) Messages originated by stations in the amateur and Citizens Band (CB) radio services may be rebroadcast at the discretion of broadcast station licensees.

(4) Emergency communications originated under a State EAS plan.

(d) The rebroadcasting of time signals originated by the Naval Observatory and the National Bureau of Standards and messages from the National Weather Service stations is permitted without specific authorization under the following procedures:

(1) *Naval Observatory Time Signals.* (i) The time signals rebroadcast must be obtained by direct radio reception from a naval radio station, or by land line circuits.

(ii) Announcement of the time signal must be made without reference to any commercial activity.

(iii) Identification of the Naval Observatory as the source of the time signal must be made by an announcement, substantially as follows: ''With the signal, the time will be . . . courtesy of the U.S. Naval Observatory.''

(iv) Schedules of time signal broadcasts may be obtained upon request from the Superintendent, U.S. Naval Observatory, Washington, DC 20390.

(2) *National Bureau of Standards Time Signals.* (i) Time signals for rebroadcast must be obtained by direct radio reception from a National Bureau of Standards (NBS) station.

(ii) Use of receiving and rebroadcasting equipment must not delay the signals by more than 0.05 second.

(iii) Signals must be rebroadcast live, not from tape or other recording.

(iv) Voice or code announcements of the call signs of NBS stations are not to be rebroadcast.

(v) Identification of the origin of the service and the source of the signals must be made by an announcement substantially as follows: ''At the tone, 11 hours 25 minutes *Coordinated Universal Time.* This is a rebroadcast of a continous service furnished by the National Bureau of Standards, Ft. Collins, Colo.'' No commercial sponsorship of this announcement is permitted and none may be implied.

(vi) Schedules of time signal broadcasts may be obtained from, and notice of use of NBS time signals for rebroadcast must be forwarded semiannually to:

National Bureau of Standards, Radio Stations WWV/WWVB, 2000 East County Road 58, Ft. Collins, Colorado 80524.

(vii) In the rebroadcasting of NBS time signals, announcements will not state that they are standard frequency transmissions. Voice announcements of *Coordinated Universal Time* are given in voice every minute. Each minute, except the first of the hour, begins with an 0.8 second long tone of 1000 hertz at WWV and 1200 hertz tone at WWVH. The first minute of every hour begins with an 0.8 second long tone of 1500 hertz at both stations. This tone is followed by a 3-second pause, than the announcement, ''National Bureau of Standards Time.'' This is followed by another 3-second pause before station identification. This arrangement allows broadcast stations sufficient time to retransmit the hour time tone and the words ''National Bureau of Standards Time'' either by manual or automatic switching.

(viii) Time signals or scales made up from integration of standard frequency signals broadcast from NBS stations may not be designated as national standard scales of time or attributed to

the NBS as originator. For example, if a broadcasting station transmits time signals obtained from a studio clock which is periodically calibrated against the NBS time signals from WWV or WWVH, such signals may not be announced as NBS standard time or as having been originated by the NBS.

(3) *National Weather Service Messages.* (i) Messages of the National Weather Service must be rebroadcast within 1 hour of receipt.

(ii) If advertisements are given in connection with weather rebroadcast, these advertisements must not directly or indirectly convey an endorsement by the U.S. Government of the products or services so advertised.

(iii) Credit must be given to indicate that the rebroadcast message originates with the National Weather Service.

[44 FR 36040, June 20, 1979, as amended at 45 FR 26065, Apr. 17, 1980; 48 FR 28456, June 22, 1983; 50 FR 25246, June 18, 1985; 59 FR 67102, Dec. 28, 1994; 61 FR 36305, July 10, 1996]

### § 73.1208 Broadcast of taped, filmed, or recorded material.

(a) Any taped, filmed or recorded program material in which time is of special significance, or by which an affirmative attempt is made to create the impression that it is occurring simultaneously with the broadcast, shall be announced at the beginning as taped, filmed or recorded. The language of the announcement shall be clear and in terms commonly understood by the public. For television stations, the announcement may be made visually or aurally.

(b) Taped, filmed, or recorded announcements which are of a commercial, promotional or public service nature need not be identified as taped, filmed or recorded.

[37 FR 23726, Nov. 8, 1972]

### § 73.1209 References to time.

Unless specifically designated as ''standard (non-advanced)'' or ''advanced,'' all references to time contained in this part, and in license documents and other authorizations issued thereunder shall be understood to mean local time; i.e., the time legally observed in the community.

[39 FR 26736, July 23, 1974]

### § 73.1210 TV/FM dual-language broadcasting in Puerto Rico.

(a) For the purpose of this section, dual-language broadcasting shall be understood to mean the telecasting of a program in one language with the simultaneous transmission, on the main channel of a participating FM broadcast station, of companion sound track information in a different language.

(b) Television broadcast licensees in Puerto Rico may enter into dual-language time purchase agreements with FM broadcast licensees, subject to the following conditions:

(1) All such agreements shall be reduced to writing and retained by the licensee for possible Commission inspection, in accordance with § 73.3613 of this chapter.

(2) All such agreements shall specify that the FM licensee will monitor sound track material with a view to rejecting any material deemed to be inappropriate or objectionable for broadcast exposure.

(3) No television or FM broadcast station may devote more than 15 hours per week to dual-language broadcasting, nor may more than three (3) hours of such programming be presented on any given day.

(4) Noncommercial educational television broadcast stations shall take all necessary precautions to assure that the entire operation is conducted on a noncommercial basis and otherwise in accordance with § 73.621 of this part.

[40 FR 17259, Apr. 18, 1975, as amended at 49 FR 33663, Aug. 24, 1984; 50 FR 40016, Oct. 1, 1985]

### § 73.1211 Broadcast of lottery information.

(a) No licensee of an AM, FM, or television broadcast station, except as in paragraph (c) of this section, shall broadcast any advertisement of or information concerning any lottery, gift enterprise, or similar scheme, offering prizes dependent in whole or in part upon lot or chance, or any list of the prizes drawn or awarded by means of any such lottery, gift enterprise or scheme, whether said list contains any

part or all of such prizes. (18 U.S.C. 1304, 62 Stat. 763).

(b) The determination whether a particular program comes within the provisions of paragraph (a) of this section depends on the facts of each case. However, the Commission will in any event consider that a program comes within the provisions of paragraph (a) of this section if in connection with such program a prize consisting of money or other thing of value is awarded to any person whose selection is dependent in whole or in part upon lot or chance, if as a condition of winning or competing for such prize, such winner or winners are required to furnish any money or other thing of value or are required to have in their possession any product sold, manufactured, furnished or distributed by a sponsor of a program broadcast on the station in question. (See 21 FCC 2d 846).

(c) The provisions of paragraphs (a) and (b) of this section shall not apply to an advertisement, list of prizes or other information concerning:

(1) A lottery conducted by a State acting under the authority of State law which is broadcast by a radio or television station licensed to a location in that State or any other State which conducts such a lottery. (18 U.S.C. 1307(a); 102 Stat. 3205).

(2) Fishing contests exempted under 18 U.S. Code 1305 (not conducted for profit, *i.e.*, all receipts fully consumed in defraying the actual costs of operation).

(3) Any gaming conducted by an Indian Tribe pursuant to the Indian Gaming Regulatory Act (25 U.S.C. 2701 *et seq.*)

(4) A lottery, gift enterprise or similar scheme, other than one described in paragraph (c)(1) of this section, that is authorized or not otherwise prohibited by the State in which it is conducted and which is:

(i) Conducted by a not-for-profit organization or a governmental organization (18 U.S.C. 1307(a); 102 Stat. 3205); or

(ii) Conducted as a promotional activity by a commercial organization and is clearly occasional and ancillary to the primary business of that organization. (18 U.S.C. 1307(a); 102 Stat. 3205).

(d)(1) For purposes of paragraph (c) of this section, ''lottery'' means the pooling of proceeds derived from the sale of tickets or chances and allotting those proceeds or parts thereof by chance to one or more chance takers or ticket purchasers. It does not include the placing or accepting of bets or wagers on sporting events or contests.

(2) For purposes of paragraph (c)(4)(i) of this section, the term ''not-for-profit organization'' means any organization that would qualify as tax exempt under section 501 of the Internal Revenue Code of 1986.

[40 FR 6210, Feb. 10, 1975, as amended at 45 FR 6401, Jan. 28, 1980; 54 FR 20856, May 15, 1989; 55 FR 18888, May 7, 1990]

### § 73.1212 Sponsorship identification; list retention; related requirements.

(a) When a broadcast station transmits any matter for which money, service, or other valuable consideration is either directly or indirectly paid or promised to, or charged or accepted by such station, the station, at the time of the broadcast, shall announce:

(1) That such matter is sponsored, paid for, or furnished, either in whole or in part, and

(2) By whom or on whose behalf such consideration was supplied: *Provided, however,* That ''service or other valuable consideration'' shall not include any service or property furnished either without or at a nominal charge for use on, or in connection with, a broadcast unless it is so furnished in consideration for an identification of any person, product, service, trademark, or brand name beyond an identification reasonably related to the use of such service or property on the broadcast.

(i) For the purposes of this section, the term ''sponsored'' shall be deemed to have the same meaning as ''paid for.''

(ii) In the case of any television political advertisement concerning candidates for public office, the sponsor shall be identified with letters equal to or greater than four percent of the vertical picture height that air for not less than four seconds.

(b) The licensee of each broadcast station shall exercise reasonable diligence to obtain from its employees, and from other persons with whom it deals directly in connection with any

matter for broadcast, information to enable such licensee to make the announcement required by this section.

(c) In any case where a report has been made to a broadcast station as required by section 507 of the Communications Act of 1934, as amended, of circumstances which would have required an announcement under this section had the consideration been received by such broadcast station, an appropriate announcement shall be made by such station.

(d) In the case of any political broadcast matter or any broadcast matter involving the discussion of a controversial issue of public importance for which any film, record, transcription, talent, script, or other material or service of any kind is furnished, either directly or indirectly, to a station as an inducement for broadcasting such matter, an announcement shall be made both at the beginning and conclusion of such broadcast on which such material or service is used that such film, record, transcription, talent, script, or other material or service has been furnished to such station in connection with the transmission of such broadcast matter: *Provided, however,* That in the case of any broadcast of 5 minutes' duration or less, only one such announcement need be made either at the beginning or conclusion of the broadcast.

(e) The announcement required by this section shall, in addition to stating the fact that the broadcast matter was sponsored, paid for or furnished, fully and fairly disclose the true identity of the person or persons, or corporation, committee, association or other unincorporated group, or other entity by whom or on whose behalf such payment is made or promised, or from whom or on whose behalf such services or other valuable consideration is received, or by whom the material or services referred to in paragraph (d) of this section are furnished. Where an agent or other person or entity contracts or otherwise makes arrangements with a station on behalf of another, and such fact is known or by the exercise of reasonable diligence, as specified in paragraph (b) of this section, could be known to the station, the announcement shall disclose the identity of the person or persons or entity on whose behalf such agent is acting instead of the name of such agent. Where the material broadcast is political matter or matter involving the discussion of a controversial issue of public importance and a corporation, committee, association or other unincorporated group, or other entity is paying for or furnishing the broadcast matter, the station shall, in addition to making the announcement required by this section, require that a list of the chief executive officers or members of the executive committee or of the board of directors of the corporation, committee, association or other unincorporated group, or other entity shall be made available for public inspection at the location specified by the licensee under § 73.3526 of this chapter. If the broadcast is originated by a network, the list may, instead, be retained at the headquarters office of the network or at the location where the originating station maintains its public inspection file under § 73.3526 of this chapter. Such lists shall be kept and made available for a period of two years.

(f) In the case of broadcast matter advertising commercial products or services, an announcement stating the sponsor's corporate or trade name, or the name of the sponsor's product, when it is clear that the mention of the name of the product constitutes a sponsorship identification, shall be deemed sufficient for the purpose of this section and only one such announcement need be made at any time during the course of the broadcast.

(g) The announcement otherwise required by section 317 of the Communications Act of 1934, as amended, is waived with respect to the broadcast of ''want ad'' or classified advertisements sponsored by an individual. The waiver granted in this paragraph shall not extend to a classified advertisement or want ad sponsorship by any form of business enterprise, corporate or otherwise. Whenever sponsorship announcements are omitted pursuant to this paragraph, the licensee shall observe the following conditions:

(1) Maintain a list showing the name, address, and (where available) the telephone number of each advertiser;

(2) Make this list available to members of the public who have a legitimate interest in obtaining the information contained in the list. Such list must be retained for a period of two years after broadcast.

(h) Any announcement required by section 317(b) of the Communications Act of 1934, as amended, is waived with respect to feature motion picture film produced initially and primarily for theatre exhibition.

NOTE: The waiver heretofore granted by the Commission in its Report and Order adopted November 16, 1960 (FCC 60–1369; 40 F.C.C. 95), continues to apply to programs filmed or recorded on or before June 20, 1963, when §73.654, the predecessor television rule, went into effect.

(i) Commission interpretations in connection with the provisions of the sponsorship identification rules are contained in the Commission's Public Notice, entitled ''Applicability of Sponsorship Identification Rules,'' dated May 6, 1963 (40 F.C.C. 141), as modified by Public Notice, dated April 21, 1975 (FCC 75–418). Further interpretations are printed in full in various volumes of the Federal Communications Commission Reports.

[40 FR 18400, Apr. 28, 1975, as amended at 46 FR 13907, Feb. 24, 1981; 49 FR 4211, Feb. 3, 1984; 49 FR 33663, Aug. 24, 1984; 50 FR 32417, Aug. 12, 1985; 57 FR 8279, Mar. 9, 1992]

### §73.1213 Antenna structure, marking and lighting.

(a) The provisions of part 17 of this chapter (Construction, Marking, and Lighting of Antenna Structures), requires certain antenna structures to be painted and/or lighted in accordance with part 17.

(b) The owner of each antenna structure is responsible for ensuring that the structure, if required, is painted and/or illuminated in accordance with part 17 of this chapter. In the event of default by the owner, each licensee or permittee shall be responsible for ensuring that the structure complies with applicable painting and lighting requirements.

[61 FR 4367, Feb. 6, 1996]

### §73.1215 Specifications for indicating instruments.

The following requirements and specifications shall apply to indicating instruments used by broadcast stations:

(a) Linear scale instruments:

(1) Length of scale shall not be less than 2.3 inches (5.8 cm).

(2) Accuracy shall be at least 2 percent of the full scale reading.

(3) The maximum rating of the meter shall be such that it does not read off scale during modulation or normal operation.

(4) Scale shall have at least 40 divisions.

(5) Full scale reading shall not be greater than five times the minimum normal indication.

(b) Instruments having square-law scales:

(1) Meet the requirements of paragraphs (a) (1), (2), and (3) of this section for linear scale instruments.

(2) Full scale reading shall not be greater than three times the minimum normal indication.

(3) No scale division above one-third full scale reading shall be greater than one-thirtieth of the full scale reading. (Example: An ammeter meeting requirement (1) having full scale reading of 6 amperes is acceptable for reading currents from 2 to 6 amperes, provided no scale division between 2 and 6 amperes is greater than one-thirtieth of 6 amperes, 0.2 ampere.)

(c) Instruments having logarithmic scales:

(1) Meet the requirements of paragraphs (a) (1), (2), and (3) of this section for linear scale instruments.

(2) Full scale reading shall not be greater than five times the minimum normal indication.

(3) No scale division above one-fifth full scale reading (in watts) shall be greater than one-thirtieth of the full scale reading. (Example: A wattmeter meeting requirement (3) having full scale reading of 1,500 watts is acceptable for reading power from 300 to 1,500 watts, provided no scale division between 300 and 1,500 watts is greater than one-thirtieth of 1,500 watts or 50 watts.)

(d) Instruments having expanded scales:

(1) Shall meet the requirements of paragraphs (a) (1), (2), and (3) of this section for linear scale instruments.

(2) Full scale reading shall not be greater than five times the minimum normal indication.

(3) No scale division above one-fifth full scale reading shall be greater than one-fiftieth of the full scale reading. (Example: An ammeter meeting the requirement (1) is acceptable for indicating current from 1 to 5 amperes, provided no division between 1 and 5 amperes is greater than one-fiftieth of 5 amperes, 0.1 ampere.)

(e) Digital meters, printers, or other numerical readout devices may be used in addition to or in lieu of indicating instruments meeting the specifications of paragraphs (a), (b), (c), and (d) of this section. The readout of the device must include at least three digits and must indicate the value of the parameter being read to an accuracy of 2%. The multiplier, if any, to be applied to the reading of each parameter must be indicated at the operating position.

(f) No instrument which has been broken or appears to be damaged or defective, or the accuracy of which is questionable shall be used, until it has been checked, and if necessary repaired and recalibrated by the manufacturer or qualified instrument repair service. Repaired instruments shall not be used unless a certificate of calibration has been provided showing that the instrument conforms to the manufacturer's specifications for accuracy.

[41 FR 36818, Sept. 1, 1976; 41 FR 43152, Sept. 30, 1976, as amended at 51 FR 2707, Jan. 21, 1986]

### § 73.1216 Licensee-conducted contests.

A licensee that broadcasts or advertises information about a contest it conducts shall fully and accurately disclose the material terms of the contest, and shall conduct the contest substantially as announced or advertised. No contest description shall be false, misleading or deceptive with respect to any material term.

NOTE 1: For the purposes of this rule:

(a) A contest is a scheme in which a prize is offered or awarded, based upon chance, diligence, knowledge or skill, to members of the public.

(b) Material terms include those factors which define the operation of the contest and which affect participation therein. Although the material terms may vary widely depending upon the exact nature of the contest, they will generally include: how to enter or participate; eligibility restrictions; entry deadline dates; whether prizes can be won; when prizes can be won; the extent, nature and value of prizes; basis for valuation of prizes; time and means of selection of winners; and/or tie-breaking procedures.

NOTE 2: In general, the time and manner of disclosure of the material terms of a contest are within the licensee's discretion. However, the obligation to disclose the material terms arises at the time the audience is first told how to enter or participate and continues thereafter. The material terms should be disclosed periodically by announcements broadcast on the station conducting the contest, but need not be enumerated each time an announcement promoting the contest is broadcast. Disclosure of material terms in a reasonable number of announcements is sufficient. In addition to the required broadcast announcements, disclosure of the material terms may be made in a non-broadcast manner.

NOTE 3: This rule is not applicable to licensee-conducted contests not broadcast or advertised to the general public or to a substantial segment thereof, to contests in which the general public is not requested or permitted to participate, to the commercial advertisement of non-licensee-conducted contests, or to a contest conducted by a non-broadcast division of the licensee or by a non-broadcast company related to the licensee.

[41 FR 43152, Sept. 30, 1976]

### § 73.1217 Broadcast hoaxes.

No licensee or permittee of any broadcast station shall broadcast false information concerning a crime or a catastrophe if:

(a) The licensee knows this information is false;

(b) It is forseeable that broadcast of the information will cause substantial public harm, and

(c) Broadcast of the information does in fact directly cause substantial public harm.

Any programming accompanied by a disclaimer will be presumed not to pose foreseeable harm if the disclaimer clearly characterizes the program as a fiction and is presented in a way that is reasonable under the circumstances.

NOTE: For purposes of this rule, ''public harm'' must begin immediately, and cause direct and actual damage to property or to the health or safety of the general public, or diversion of law enforcement or other public health and safety authorities from their duties. The public harm will be deemed foreseeable if the licensee could expect with a significant degree of certainty that public harm would occur. A ''crime'' is any act or omission that makes the offender subject to criminal punishment by law. A ''catastrophe'' is a disaster or imminent disaster involving violent or sudden event affecting the public.

[57 FR 28640, June 26, 1992]

### § 73.1225 Station inspections by FCC.

(a) The licensee of a broadcast station shall make the station available for inspection by representatives of the FCC during the station's business hours, or at any time it is in operation.

(b) In the course of an inspection or investigation, an FCC representative may require special equipment tests, program tests or operation with nighttime or presunrise facilities during daytime hours pursuant to §0.314, part 0, of the FCC rules.

(c) The following records shall be made available by all broadcast stations upon request by representatives of the FCC.

(1) Equipment performance measurements required by §§73.1590 and 73.1690.

(2) The written designations for chief operators and, when applicable, the contracts for chief operators engaged on a contract basis.

(3) Application for modification of the transmission system made pursuant to §73.1690(c).

(4) Informal statements or drawings depicting any transmitter modification made pursuant to §73.1690(e).

(5) Station logs and special technical records.

(d) Commercial and noncommercial AM stations must make the following information also available upon request by representatives of the FCC.

(1) Copy of the most recent antenna or common-point impedance measurements.

(2) Copy of the most recent field strength measurements made to establish performance of directional antennas required by §73.151.

(3) Copy of the partial directional antenna proofs of performance made in accordance with §73.154 and made pursuant to the following requirements:

(i) Section 73.68, Sampling systems for antenna monitors.

(ii) Section 73.69, Antenna monitors.

(iii) Section 73.61, AM direction antenna field strength measurements.

[43 FR 45846, Oct. 4, 1978; 43 FR 50683, Oct. 31, 1978, as amended at 51 FR 41629, Nov. 18, 1986; 51 FR 44478, Dec. 10, 1986; 57 FR 48333, Oct. 23, 1992]

### § 73.1226 Availability to FCC of station logs and records.

The following shall be made available to any authorized representative of the FCC upon request:

(a) Station records and logs shall be made available for inspection or duplication at the request of the FCC or its representative. Such logs or records may be removed from the licensee's possession by an FCC representative or, upon request, shall be mailed by the licensee to the FCC by either registered mail, return receipt requested, or certified mail, return receipt requested. The return receipt shall be retained by the licensee as part of the station records until such records or logs are returned to the licensee. A receipt shall be furnished when the logs or records are removed from the licensee's possession by an FCC representative and this receipt shall be retained by the licensee as part of the station records until such records or logs are returned to the licensee. When the FCC has no further need for such records or logs, they shall be returned to the licensee. The provisions of this rule shall apply solely to those station logs and records which are required to be maintained by the provisions of this chapter.

(1) Logs and records stored on microfilm, microfiche or other data-storage systems are subject to the requirements pertaining thereto found in §73.1840(b).

(b) Where records or logs are maintained as the official records of a recognized law enforcement agency and the removal of the records from the possession of the law enforcement agency will hinder its law enforcement

activities, such records will not be removed pursuant to this section if the chief of the law enforcement agency promptly certifies in writing to the FCC that removal of the logs or records will hinder law enforcement activities of the agency, stating insofar as feasible the basis for his decision and the date when it can reasonably be expected that such records will be released to the FCC.

(c) The following contracts, agreements, or understandings, which need not be filed with the FCC (per § 73.3613, Filing of contracts), must be kept at the station and made available for inspection by any authorized representative of the FCC upon request:

(1) Contracts relating to the sale of broadcast time to ''time brokers'' for resale.

(2) FM subchannel leasing agreements for subsidiary communications.

(3) Time sales contracts with the same sponsor for 4 or more hours per day, except where the length of the events (such as athletic contests, musical programs, and special events) broadcast pursuant to the contract is not under control of the station.

(4) Contracts with chief operators or other engineering personnel.

[43 FR 45847, Oct. 4, 1978; 43 FR 50683, Oct. 31, 1978, as amended at 45 FR 41151, June 18, 1980; 48 FR 28457, June 22, 1983]

### § 73.1230 Posting of station license.

(a) The station license and any other instrument of station authorization shall be posted in a conspicuous place and in such a manner that all terms are visible at the place the licensee considers to be the principal control point of the transmitter.

(b) Posting of the station license and any other instruments of authorization shall be done by affixing them to the wall at thee posting location, or by enclosing them in a binder or folder which is retained at the posting location so that the documents will be readily available and easily accessible.

[60 FR 55480, Nov. 1, 1995]

### § 73.1250 Broadcasting emergency information.

(a) Emergency situations in which the broadcasting of information is considered as furthering the safety of life and property include, but are not limited to the following: Tornadoes, hurricanes, floods, tidal waves, earthquakes, icing conditions, heavy snows, widespread fires, discharge of toxic gasses, widspread power failures, industrial explosions, civil disorders and school closing and changes in school bus schedules resulting from such conditions. See also § 73.3542, Application for Emergency Authorization, for requirements involving emergency situations not covered by this section for which prior operating authority must be requested.

(b) If requested by responsible public officials, a station may, at its discretion, and without further FCC authority, transmit emergency point-to-point messages for the purpose of requesting or dispatching aid and assisting in rescue operations.

(c) If the Emergency Alert System (EAS) is activated for a national emergency while a Local Area or State emergency operation is in progress, the national level EAS operation must take precedence. If, during the broadcasting of Local Area or State emergency information, the EAS codes or Attention Signal described in § 11.12 of this chapter are used, the broadcasts are considered as being carried out under a Local Area or State EAS plan.

(d) Any emergency operation undertaken in accordance with this section may be terminated by the FCC if required in the public interest.

(e) Immediately upon cessation of an emergency during which broadcast facilities were used for the transmission of point-to-point messages under paragraph (b) of this section, or when daytime facilities were used during nighttime hours by an AM station in accordance with paragraph (f) of this section, a report in letter form shall be forwarded to the FCC in Washington, DC, setting forth the nature of the emergency, the dates and hours of the broadcasting of emergency information, and a brief description of the material carried during the emergency. A certification of compliance with the noncommercialization provision of paragraph (f) of this section must accompany the report where daytime facilities are used during nighttime

hours by an AM station, together with a detailed showing, under the provisisons of that paragraph, that no other broadcast service existed or was adequate.

(f) AM stations may, without further FCC authority, use their full daytime facilities during nighttime hours to broadcast emergency information (examples listed in paragraph (a) of this section), when necessary to the safety of life and property, in dangerous conditions of a general nature and when adequate advance warning cannot be given with the facilities authorized. Because of skywave interference impact on other stations assigned to the same channel, such operation may be undertaken only if regular, unlimited-time service, is non-existent, inadequate from the standpoint of coverage, or not serving the public need. All operation under this paragraph must be conducted on a noncommercial basis. Recorded music may be used to the extent necessary to provide program continuity.

(g) Broadcasting of emergency information shall be confined to the hours, frequencies, powers and modes of operation specified in the station license, except as otherwise provided for AM stations in paragraph (f) of this section.

(h) Any emergency information transmitted by a TV station in accordance with this section shall be transmitted both aurally and visually or only visually. TV stations may use any method of visual presentation which results in a legible message conveying the essential emergency information. Methods which may be used include, but are not necessarily limited to, slides, electronic captioning, manual methods (e.g., hand printing) or mechanical printing processes. However, when an emergency operation is being conducted under a national, State or Local Area Emergency Alert System (EAS) plan, emergency information shall be transmitted both aurally and visually unless only the EAS codes are transmitted as specified in §11.51(b) of this chapter.

[43 FR 45847, Oct. 4, 1978, as amended at 50 FR 30947, July 31, 1985; 59 FR 67102, Dec. 28, 1994; 60 FR 56000, Nov. 6, 1995]

### §73.1300 Unattended station operation.

Broadcast stations may be operated as either attended (where a designated person is responsible for the proper operation of the transmitting apparatus either at the transmitter site, a remote control point or an ATS control point) or unattended (where highly stable equipment or automated monitoring of station operating parameters is employed). No prior FCC approval is required to operate a station in the unattended mode. Regardless of which method of station operation is employed, licensees must employ procedures which will ensure compliance with Part 11 of this chapter, the rules governing the Emergency Alert System (EAS).

[60 FR 55481, Nov. 1, 1995]

### §73.1350 Transmission system operation.

(a) Each licensee is responsible for maintaining and operating its broadcast station in a manner which complies with the technical rules set forth elsewhere in this part and in accordance with the terms of the station authorization.

(b) The licensee must designate a chief operator in accordance with §73.1870. The licensee may designate one or more technically competent persons to adjust the transmitter operating parameters for compliance with the technical rules and the station authorization.

(1) Persons so authorized by the licensee may make such adjustments directly at the transmitter site or by using control equipment at an off-site location.

(2) The transmitter control personnel must have the capability to turn the transmitter off at all times. If the personnel are at a remote location, the control system must provide this capability continuously or must include an alternate method of acquiring control that can satisfy the requirement of paragraph (d) of this section that operation be terminated within 3 minutes.

(c) The licensee must establish monitoring procedures and schedules for

the station and the indicating instruments employed must comply with § 73.1215.

(1) Monitoring procedures and schedules must enable the licensee to determine compliance with § 73.1560 regarding operating power and AM station mode of operation, § 73.1570 regarding modulation levels, and, where applicable, § 73.1213 regarding antenna tower lighting, and § 73.69 regarding the parameters of an AM directional antenna system.

(2) Monitoring equipment must be periodically calibrated so as to provide reliable indications of transmitter operating parameters with a known degree of accuracy. Errors inherent in monitoring equipment and the calibration procedure must be taken into account when adjusting operating parameters to ensure that the limits imposed by the technical rules and the station authorization are not exceeded.

(d) In the event that a broadcast station is operating in a manner that is not in compliance with the technical rules set forth elsewhere in this part or the terms of the station authorization, and the condition is not listed in paragraph (e) of this section, broadcast operation must be terminated within three hours.

(1) Examples of conditions that require termination of operation include excessive power or excessive modulation.

(2) Additional examples for AM stations are any mode of operation not specified by the station license for the pertinent time of day or hours of operation and any condition of antenna parameters or monitoring points out of the tolerances specified elsewhere in this part or by the station's instrument of authorization. For these conditions, operation must be terminated within three minutes unless antenna input power is reduced sufficiently to eliminate any excess radiation.

(3) For AM stations using directional arrays, additional procedures apply when array operating parameters are at variance, monitoring points exceed specified limits, or authorized directional mode capability is lost. See § 73.62, Directional antenna system tolerances; § 73.158, Directional antenna monitoring points; and § 73.1680(b), Emergency antennas.

(e) If a broadcast station is operating in a manner that is not in compliance with one of the following technical rules, operation may continue if the station complies with relevant alternative provisions in the specified rule section.

(1) AM directional antenna system tolerances, *see* § 73.62;

(2) AM directional antenna monitoring points, *see* § 73.158;

(3) TV visual waveform, *see* § 73.691(b);

(4) Reduced power operation, *see* § 73.1560(d);

(5) Reduced modulation level, *see* § 73.1570(a);

(6) Emergency antennas, *see* § 73.1680.

(f) The transmission system must be maintained and inspected in accordance with § 73.1580.

(g) Whenever a transmission system control point is established at a location other than the main studio or transmitter, a letter of notification of that location must be sent to the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, within 3 days of the initial use of that point. The letter should include a list of all control points in use, for clarity. This notification is not required if responsible station personnel can be contacted at the transmitter or studio site during hours of operation.

(h) The licensee must ensure that the station is operated in compliance with Part 11 of this chapter, the rules governing the Emergency Alert System (EAS).

[60 FR 55481, Nov. 1, 1995, as amended at 63 FR 33877, June 22, 1998]

### § 73.1400 Transmission system monitoring and control.

The licensee of an AM, FM or TV station is responsible for assuring that at all times the station operates within tolerances specified by applicable technical rules contained in this part and in accordance with the terms of the station authorization. Any method of complying with applicable tolerances is permissible. The following are typical methods of transmission system operation:

(a) *Attended operation.* (1) Attended operation consists of ongoing supervision of the transmission facilities by a station employee or other person designated by the licensee. Such supervision may be accomplished by either:

(i) Direct supervision and control of transmission system parameters by a person at the transmitter site; or

(ii) Remote control of the transmission system by a person at the main studio or other location. The remote control system must provide sufficient transmission system monitoring and control capability so as to ensure compliance with § 73.1350.

(2) A station may also be monitored and controlled by an automatic transmission system (ATS) that is configured to contact a person designated by the licensee in the event of a technical malfunction. An automatic transmission system consists of monitoring devices, control and alarm circuitry, arranged so that they interact automatically to operate the station's transmitter and maintain technical parameters within licensed values.

(3) A hybrid system containing some remote control and some ATS features is also permissible.

(4) In the case of remote control or ATS operation, not every station parameter need be monitored or controlled if the licensee has good reason to believe that its stability is so great that its monitoring and control are unnecessary.

(b) *Unattended operation.* Unattended operation is either the absence of human supervision or the substitution of automated supervision of a station's transmission system for human supervision. In the former case, equipment is employed which is expected to operate within assigned tolerances for extended periods of time. The latter consists of the use of a self-monitoring or ATS-monitored and controlled transmission system that, in lieu of contacting a person designated by the licensee, automatically takes the station off the air within three hours of any technical malfunction which is capable of causing interference.

[60 FR 55481, Nov. 1, 1995]

### § 73.1510 Experimental authorizations.

(a) Licensees of broadcast stations may obtain experimental authorizations to conduct technical experimentation directed toward improvement of the technical phases of operation and service, and for such purposes may use a signal other than the normal broadcast program signal.

(b) Experimental authorizations may be requested by filing an informal application with the FCC in Washington, DC, describing the nature and purpose of the experimentation to be conducted, the nature of the experimental signal to be transmitted, and the proposed schedule of hours and duration of the experimentation. Experimental authorizations shall be posted with the station license.

(c) Experimental operations are subject to the following conditions:

(1) The authorized power of the station may not be exceeded, except as specifically authorized for the experimental operations.

(2) Emissions outside the authorized bandwidth must be attenuated to the degree required for the particular type of station.

(3) The experimental operations may be conducted at any time the station is authorized to operate, but the minimum required schedule of programming for the class and type of station must be met. AM stations also may conduct experimental operations during the experimental period (12 midnight local time to local sunrise) and at additional hours if permitted by the experimental authorization provided no interference is caused to other stations maintaining a regular operating schedule within such period(s).

(4) If an experimental authorization permits the use of additional facilities or hours of operation for experimental purposes, no sponsored programs or commercial announcements may be transmitted during such experimentation.

(5) The licensee may transmit regularly scheduled programming concurrently with the experimental transmission if there is no significant impairment of service.

(6) No charges may be made, either directly or indirectly, for the experimentation; however, normal charges

may be made for regularly scheduled programming transmitted concurrently with the experimental transmissions.

(d) The FCC may request a report of the research, experimentation and results at the conclusion of the experimental operation.

[43 FR 32783, July 28, 1978]

### § 73.1515 Special field test authorizations.

(a) A special field test authorization may be issued to conduct field strength surveys to aid in the selection of suitable sites for broadcast transmission facilities, determine coverage areas, or to study other factors influencing broadcast signal propagation. The applicant for the authorization must be qualified to hold a license under section 303(1)(l) of the Communications Act.

(b) Requests for authorizations to operate a transmitter under a Special field test authorization must be in writing using an informal application in letter form, signed by the applicant and including the following information:

(1) Purpose, duration and need for the survey.

(2) Frequency, transmitter output powers and time of operation.

(3) A brief description of the test antenna system, its estimated effective radiated field and height above ground or average terrain, and the geographic coordinates of its proposed location(s).

(c) Operation under a special field test authorization is subject to the following conditions:

(1) No objectionable interference will result to the operation of other authorized radio services; in this connection, the power requested shall not exceed that necessary for the purposes of the test.

(2) The carriers will be unmodulated except for the transmission of a test-pattern on a visual TV transmitter, and for hourly voice station identification on aural AM, FM and TV transmitters.

(3) The transmitter output power or antenna input power may not exceed those specified in the test authorization and the operating power must be maintained at a constant value for each phase of the tests.

(4) The input power to the final amplifier stage, and the AM antenna current or the FM or TV transmitter output power must be observed and recorded at half hour intervals and at any time that the power is adjusted or changed. Copies of these records must be submitted to the FCC with the required report.

(5) The test equipment may not be permanently installed, unless such installation has been separately authorized. Mobile units are not deemed permanent installations.

(6) Test transmitters must be operated by or under the immediate direction of an operator holding a commercial radio operator license (any class, unless otherwise endorsed).

(7) A report, containing the measurements, their analysis and other results of the survey shall be filed with the FCC in Washington, DC within sixty (60) days following the termination of the test authorization.

(8) The test transmission equipment, installation and operation thereof need not comply with the requirements of FCC rules and standards except as specified in this section if the equipment, installation and operation are consistent with good engineering principles and practices.

(d) A special field test authorization may be modified or terminated by notification from the FCC if in its judgment such action will promote the public interest, convenience and necessity.

[44 FR 58734, Oct. 11, 1979, as amended at 46 FR 35463, July 8, 1981; 49 FR 4211, Feb. 3, 1984; 49 FR 20670, May 16, 1984]

### § 73.1520 Operation for tests and maintenance.

(a) Broadcast stations may be operated for tests and maintenance of their transmitting systems on their assigned frequencies using their licensed operating power and antennas during their authorized hours of operation without specific authorization from the FCC.

(b) Licensees of AM stations may operate for tests and maintenance during the hours from 12 midnight local time to local sunrise, if no interference is caused to other stations maintaining a regular operating schedule within such

period. No AM station licensed for ''daytime'' or ''specified hours'' of operation may broadcast any regular or scheduled programs during this period of test and maintenance operation.

(c) Licensees of AM stations may obtain special antenna test authorizations, and operate under the provisions described in §73.157, to operate with nighttime facilities during daytime hours in conducting directional antenna field strength and antenna proof of performance measurements.

[43 FR 32783, July 28, 1978, as amended at 45 FR 6401, Jan. 28, 1980]

### §73.1530 Portable test stations [Definition].

A portable test station is one that is moved from place to place for making field strength and ground conductivity measurements, for selecting station transmitter sites, and conducting other specialized propagation tests. Portable test stations are not normally used while in motion, and may not be used for the transmission of programs intended to be received by the public.

[43 FR 32783, July 28, 1978]

### §73.1540 Carrier frequency measurements.

(a) The carrier frequency of each AM and FM station and the visual carrier frequency and the difference between the visual carrier and the aural carrier or center frequency of each TV station shall be measured or determined as often as necessary to ensure that they are maintained within the prescribed tolerances.

(b) In measuring the carrier frequency, the licensee may use any method or procedure that has sufficient precision to establish that the carrier frequency is within the prescribed departure limits.

(c) The primary standard of frequency for radio frequency measurements is the standard frequency maintained by the National Bureau of Standards or the standard signals of Stations WWV, WWVB, and WWVH of the National Bureau of Standards.

[43 FR 32783, July 28, 1978, as amended at 48 FR 44805, Sept. 30, 1983]

### §73.1545 Carrier frequency departure tolerances.

(a) *AM stations.* The departure of the carrier frequency for monophonic transmissions or center frequency for stereophonic transmissions may not exceed ± *20 Hz from the assigned frequency*.

(b) *FM stations.* (1) The departure of the carrier or center frequency of an FM station with an authorized transmitter output power more than 10 watts may not exceed ±*2000 Hz from the assigned frequency*.

(2) The departure of the carrier or center frequency of an FM station with an authorized transmitter output power of 10 watts or less may not exceed ±3000 Hz from the assigned frequency.

(c) *TV stations.* (1) The departure of the visual carrier frequency of a TV station may not exceed ±*1000 Hz from the assigned visual carrier frequency*.

(2) The departure of the aural carrier frequency of a TV station may not exceed ±1000 Hz from the actual visual carrier frequency plus exactly 4.5 MHz.

(d) *International broadcast stations.* The departure of the carrier frequency of an International broadcast station may not exceed 0.0015% of the assigned frequency on which the station is transmitting.

[44 FR 58734, Oct. 11, 1979; 44 FR 64408, Nov. 7, 1979, as amended at 47 FR 13165, Mar. 29, 1982]

### §73.1560 Operating power and mode tolerances.

(a) *AM stations.* (1) Except as provided for in paragraph (d) of this section, the antenna input power of an AM station as determined by the procedures specified in §73.51 must be maintained as near as is practicable to the authorized antenna input power and may not be less than 90% nor more than 105% of the authorized power.

(2) Whenever the transmitter of an AM station cannot be placed into the specified operating mode at the time required, transmissions of the station must be immediately terminated. However, if the radiated field at any bearing or elevation does not exceed that

permitted for that time of day, operation in the mode with the lesser radiated field may continue under the notification procedures of paragraph (d) of this section.

(b) *FM stations.* Except as provided in paragraph (d) of this section, the transmitter output power of an FM station, with power output as determined by the procedures specified in § 73.267, which is authorized for output power more than 10 watts must be maintained as near as practicable to the authorized transmitter output power and may not be less than 90% nor more than 105% of the authorized power. FM stations operating with authorized transmitter output power of 10 watts or less, may operate at less than the authorized power, but not more than 105% of the authorized power.

(c) *TV stations.* (1) Except as provided in paragraph (d) of this section, the visual output power of a TV transmitter, as determined by the procedures specified in § 73.663, must be maintained as near as is practicable to the authorized transmitter output power and may not be less than 80% nor more than 110% of the authorized power.

(2) The output power of the aural transmitter shall be maintained to provide an aural carrier ERP not to exceed 22% of the peak authorized visual ERP.

(3) The FCC may specify deviation from the power of tolerance requirements for subscription television operations to the extent it deems necessary to permit proper operation.

(d) *Reduced power operation.* In the event it becomes technically impossible to operate at authorized power, a broadcast station may operate at reduced power for a period of not more than 30 days without specific authority from the FCC. If operation at reduced power will exceed 10 consecutive days, notification must be made to the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, not later than the 10th day of the lower power operation. In the event that normal power is restored within the 30 day period, the licensee must notify the FCC of the date that normal operation was restored. If causes beyond the control of the licensee prevent restoration of the authorized power within 30 days, a request for Special Temporary Authority (*see* § 73.1635) must be made to the FCC in Washington, DC for additional time as may be necessary.

[44 FR 58734, Oct. 11, 1979, as amended at 49 FR 22093, May 25, 1984; 49 FR 29069, July 18, 1984; 49 FR 47610, Dec. 6, 1984; 50 FR 26568, June 27, 1985; 50 FR 40015, Oct. 1, 1985; 63 FR 33877, June 22, 1998]

### § 73.1570 Modulation levels: AM, FM, and TV aural.

(a) The percentage of modulation is to be maintained at as high a level as is consistent with good quality of transmission and good broadcast service, with maximum levels not to exceed the values specified in paragraph (b). Generally, the modulation should not be less than 85% on peaks of frequent recurrence, but where lower modulation levels may be required to avoid objectionable loudness or to maintain the dynamic range of the program material, the degree of modulation may be reduced to whatever level is necessary for this purpose, even though under such circumstances, the level may be substantially less than that which produces peaks of frequent recurrence at a level of 85%.

(b) Maximum modulation levels must meet the following limitations:

(1) *AM stations.* In no case shall the amplitude modulation of the carrier wave exceed 100% on negative peaks of frequent recurrence, or 125% on positive peaks at any time.

(i) AM stations transmitting stereophonic programs not exceed the AM maximum stereophonic transmission signal modulation specifications of stereophonic system in use.

(ii) For AM stations transmitting telemetry signals for remote control or automatic transmission system operation, the amplitude of modulation of the carrier by the use of subaudible tones must not be higher than necessary to effect reliable and accurate data transmission and may not, in any case, exceed 6%.

(2) *FM stations.* The total modulation must not exceed 100 percent on peaks of frequent reoccurrence referenced to 75 kHz deviation. However, stations providing subsidiary communications

services using subcarriers under provisions of § 73.319 concurrently with the broadcasting of stereophonic or monophonic programs may increase the peak modulation deviation as follows:

(i) The total peak modulation may be increased 0.5 percent for each 1.0 percent subcarrier injection modulation.

(ii) In no event may the modulation of the carrier exceed 110 percent (82.5 kHz peak deviation).

(3) *TV station.* In no case shall the total modulation of the aural carrier exceed 100% on peaks of frequent recurrence, unless some other peak modulation level is specified in an instrument of authorization. For monophonic transmissions, 100% modulation is defined as ±25 *kHz.*

(c) If a limiting or compression amplifier is employed to maintain modulation levels, precaution must be taken so as not to substantially alter the dynamic characteristics of programs.

[44 FR 58735, Oct. 11, 1979, as amended at 47 FR 13165, Mar. 29, 1982; 49 FR 14508, Apr. 12, 1984; 49 FR 15081, Apr. 17, 1984; 49 FR 27147, July 2, 1984; 49 FR 47610, Dec. 6, 1984; 49 FR 48312, Dec. 12, 1984; 51 FR 26251, July 22, 1986; 56 FR 64872, Dec. 12, 1991]

### § 73.1580 Transmission system inspections.

Each AM, FM, and TV station licensee or permittee must conduct periodic complete inspections of the transmitting system and all required monitors to ensure proper station operation.

[60 FR 55482, Nov. 1, 1995]

### § 73.1590 Equipment performance measurements.

(a) The licensee of each AM, FM and TV station, except licensees of Class D non-commercial educational FM stations authorized to operate with 10 watts or less output power, must make equipment performance measurements for each main transmitter as follows:

(1) Upon initial installation of a new or replacement main transmitter.

(2) Upon modification of an existing transmitter made under the provisions of § 73.1690, Modification of transmission systems, and specified therein.

(3) Installation of AM stereophonic transmission equipment pursuant to § 73.128.

(4) Installation of FM subcarrier or stereophonic transmission equipment pursuant to § 73.295, § 73.297, § 73.593 or § 73.597.

(5) Installation of TV stereophonic or subcarrier transmission equipment pursuant to §§ 73.669 and 73.1690.

(6) Annually, for AM stations, with not more than 14 months between measurements.

(7) When required by other provisions of the rules or the station license.

(b) Measurements for spurious and harmonic emissions must be made to show compliance with the transmission system requirements of § 73.44 for AM stations; § 73.317 for FM stations and § 73.687 for TV stations. Measurements must be made under all conditions of modulation expected to be encountered by the station whether transmitting monophonic or stereophonic programs and providing subsidiary communications services.

(c) TV visual equipment performance measurements must be made with the equipment adjusted for normal program operation at the transmitter antenna sampling port to yield the following information:

(1) Field strength or voltage of the lower side-band for a modulating frequency of 1.25 MHz or greater, (including 3.58 MHz for color), and of the upper side-band for a modulating frequency of 4.75 MHz or greater.

(2) Data showing that the waveform of the transmitted signal conforms to that specified by the standards for TV transmissions.

(3) Photographs of a test pattern taken from a receiver or monitor connected to the transmitter output.

(4) Data showing envelope delay characteristics of the radiated signal.

(5) Data showing the attenuation of spurious and harmonic radiation, if, after type acceptance, any changes have been made in the transmitter or associated equipment (filters, multiplexer, etc.) which could cause changes in its radiation products.

(d) The data required by paragraphs (b) and (c) of this section, together with a description of the equipment and procedure used in making the

measurements, signed and dated by the qualified person(s) making the measurements, must be kept on file at the transmitter or remote control point for a period of 2 years, and on request must be made available during that time to duly authorized representatives of the FCC.

[47 FR 8589, Mar. 1, 1982, as amended at 51 FR 18450, May 20, 1986]

### § 73.1610 Equipment tests.

(a) During the process of construction of a new broadcast station, the permittee, after notifying the FCC in Washington, D.C. may, without further authority from the FCC, conduct equipment tests for the purpose of making such adjustments and measurements as may be necessary to assure compliance with the terms of the construction permit, the technical provisions of the application therefore, the rules and regulations and the applicable engineering standards. For AM stations, equipment tests, including either a directional or nondirectional proof of performance required by the construction permit, may be conducted during daytime hours provided that the antenna system is first substantially tuned during the experimental period. The nondirectional proof shall be conducted with power adjusted to 25% of that specified in the permit for the authorized directional facilities or, if applicable, to such higher power as is specified in the same permit for authorized nondirectional facilities. For licensed stations, see §73.1615, Operation During Modification of Facilities; and §73.157, Antenna Testing During Daytime.

(b) The FCC may notify the permittee not to conduct equipment tests or may modify, cancel, suspend, or change the modes of testing or the dates and times for such tests in order to resolve interference complaints or when such action may appear to be in the public interest, convenience, and necessity.

(c) Equipment tests may be continued so long as the construction permit shall remain valid.

(d) The authorization for tests embodied in this section shall not be construed as constituting a license to operate but as a necessary part of construction.

[43 FR 32783, July 28, 1978, as amended at 47 FR 40174, Sept. 13, 1982; 50 FR 30947, July 31, 1985]

### § 73.1615 Operation during modification of facilities.

When the licensee of an existing AM, FM or TV station is in the process of modifying existing facilities as authorized by a construction permit and determines it is necessary to either discontinue operation or to operate with temporary facilities to continue program service, the following procedures apply:

(a) Licensees holding a construction permit for modification of directional or nondirectional FM and TV or nondirectional AM station facilities may, without specific FCC authority, for a period not exceeding 30 days:

(1) Discontinue operation, or

(2) Operate with temporary facilities to maintain, as nearly as possible, but not exceed, the size of the presently licensed coverage area.

(b) Licensees of an AM station holding a construction permit which involves directional facilities and which does not involve a change in operating frequency may, without specific FCC authority, for a period not exceeding 30 days:

(1) Discontinue operation, or

(2) Operate with reduced power or with parameters at variance from licensed tolerances while maintaining monitoring point field strengths within licensed limits during the period subsequent to the commencement of modifications authorized by the construction permit, or

(3) Operate in a nondirectional mode during the presently licensed hours of directional operation with power reduced to 25% or less of the nominal licensed power, or whatever higher power, not exceeding licensed power, will insure that the radiated field strength specified by the license is not exceeded at any given asimuth for the corresponding hours of directional operation, or

(4) Operate in a nondirectional mode during daytime hours, if not already so licensed, only as necessary to conduct

a required nondirectional proof of performance with a power not to exceed 25% of the maximum power authorized by the construction permit for directional operation, or

(5) Operate during daytime hours with either the daytime or nighttime directional pattern and with the power authorized by the construction permit only as necessary to take proof of performance measurements. Operating power shall be promptly reduced to presently licensed level during any significant period of time that these measurements are not being taken. No daytime operation of construction permit directional patterns authorized by this paragraph shall be conducted before such patterns have been substantially tuned during the experimental period.

(6) In the event the directional pattern authorized by the construction permit replaces a licensed directional pattern, the licensee may operate with the substantially adjusted construction permit pattern during the corresponding licensed hours of directional operation with power not exceeding that specified for the licensed pattern.

(c) Such operation or discontinuance of operation in accordance with the provisions of paragraph (a) or (b) of this section may begin upon notification to the FCC in Washington, DC.

(1) Should it be necessary to continue the procedures in either paragraph (a) or (b) of this section beyond 30 days, an informal letter request signed by the licensee or the licensee's representative must be sent to the FCC in Washington, DC. prior to the 30th day.

(2) The license of a broadcasting station that fails to transmit broadcast signals for any consecutive 12-month period expires as a matter of law at the end of that period, notwithstanding any provision, term, or condition of the license or construction permit to the contrary.

(d) Licensees of an AM station holding a construction permit which authorizes both a change in frequency and directional facilities must request and obtain authority from the FCC in Washington, DC. prior to using any new installation authorized by the permit, or using temporary facilities.

(1) The request is to be made at least 10 days prior to the date on which the temporary operation is to commence. The request is to be made by letter which shall describe the operating modes and facilities to be used. Such letter requests shall be signed by the licensee or the licensee's representative.

(2) Discontinuance of operation is permitted upon notification to the FCC In Washington, DC. Should it be necessary to discontinue operation longer than 30 days, an informal letter request, signed by the licensee or the licensee's representatives, must be sent to the FCC in Washington, DC prior to the 30th day.

(e) The FCC may modify or cancel the temporary operation permitted under the provisions of paragraph (a), (b), (c) or (d) of this section without prior notice or right to hearing.

[50 FR 30947, July 31, 1985, as amended at 61 FR 28767, June 6, 1996]

### § 73.1620 Program tests.

(a) Upon completion of construction of an AM, FM or TV station in accordance with the terms of the construction permit, the technical provisions of the application, the rules and regulations and the applicable engineering standards, program tests may be conducted in accordance with the following:

(1) The permittee of a nondirectional AM or FM station, or a nondirectional or directional TV station, may begin program tests upon notification to the FCC in Washington, DC provided that within 10 days thereafter, an application for a license is filed with the FCC in Washington, DC.

(2) The permittee of an FM station with a directional antenna system must file an application for license on FCC Form 302–FM requesting authority to commence program test operations at full power with the FCC in Washington, D.C. This license application must be filed at least 10 days prior to the date on which full power operations are desired to commence. The application for license must contain any exhibits called for by conditions on the construction permit. The staff will review the license application and the request for program test authority and issue a

letter notifying the applicant whether full power operation has been approved. Upon filing of the license application and related exhibits, and while awaiting approval of full power operation, the FM permittee may operate the directional antenna at one half (50%) of the authorized effective radiated power. Alternatively, the permittee may continue operation with its existing licensed facilities pending the issuance of program test authority at the full effective radiated power by the staff.

(3) FM licensees replacing a directional antenna pursuant to §73.1690 (c)(2) without changes which require a construction permit (*see* §73.1690(b)) may immediately commence program test operations with the new antenna at one half (50%) of the authorized ERP upon installation. If the directional antenna replacement is an EXACT duplicate of the antenna being replaced (i.e., same manufacturer, antenna model number, and measured composite pattern), program tests may commence with the new antenna at the full authorized power upon installation. The licensee must file a modification of license application on FCC Form 302–FM within 10 days of commencing operations with the newly installed antenna, and the license application must contain all of the exhibits required by §73.1690(c)(2). After review of the modification-of-license application to cover the antenna change, the Commission will issue a letter notifying the applicant whether program test operation at the full authorized power has been approved for the replacement directional antenna.

(4) The permittee of an AM station with a directional antenna system must file an application for license on FCC Form 302–AM requesting program test authority with the FCC in Washington, DC at least ten (10) days prior to the date on which it desires to commence program test operations. The application must provide an AM directional antenna proof of performance, containing the exhibits required by §73.186. After review of the application to cover the construction permit, the Commission will issue a letter notifying the applicant whether program test operations may commence. Program test operations may not commence prior to issuance of staff approval.

(b) The Commission reserves the right to revoke, suspend, or modify program tests by any station without right of hearing for failure to comply adequately with all terms of the construction permit or the provisions of §73.1690(c) for a modification of license application, or in order to resolve instances of interference. The Commission may, at its discretion, also require the filing of a construction permit application to bring the station into compliance the Commission's rules and policies.

(c) Unless sooner suspended or revoked, the program test authority continues valid during FCC consideration of the application for license, and during this period further extension of the construction permit is not required. Program test authority shall be automatically terminated by final determination upon the application for station license.

(d) All operation under program test authority shall be in strict compliance with the rules governing broadcast stations and in strict accordance with representations made in the application for license pursuant to which the tests were authorized.

(e) Acceptance by the FCC of notification of the station of program tests, or the granting of program test authority by the FCC, is not to be construed by the permittee as approval by the FCC of the application for station license.

(f) The licensee of a UHF TV station which is not in operation on, but assigned to, the same allocated channel which a 1000 watt UHF translator station is authorized to use (see §73.3516, ''Specification of facilities''), shall notify the licensee of the translator station, in writing, at least 10 days prior to commencing or resuming operation. The TV station licensee shall also certify to the FCC in Washington, DC that such advance notice has been given to the translator station licensee.

(g) *Reports required.* In their application for a license to cover a construction permit and on the first anniversary of the commencement of program

tests, applicants for new broadcast facilities that were granted after designation for a comparative hearing as a result of a post designation settlement or a decision favoring them after comparative consideration must report.

(1) Any deviations from comparative proposals relating to integration of ownership and management and diversification of the media of mass communciation contained in their application for a construction permit at the time such application was granted; and

(2) Any deviations from an active/passive ownership structure proposed in their application for a construction permit at the time such application was granted.

(3) The reports referred to in paragraphs (g)(1) and (2) of this section shall not be required in any case in which the order granting the application relieved the applicant of the obligation to adhere to such proposals.

[43 FR 32784, July 28, 1978, as amended at 45 FR 6401, Jan. 28, 1980; 47 FR 28388, June 30, 1982; 49 FR 38132, Sept. 27, 1984; 56 FR 795, Jan. 9, 1991; 56 FR 25639, June 5, 1991; 57 FR 48333, Oct. 23, 1992; 62 FR 51059, Sept. 30, 1997]

### § 73.1635 Special temporary authorizations (STA).

(a) A special temporary authorization (STA) is the authority granted to a permittee or licensee to permit the operation of a broadcast facility for a limited period at a specified variance from the terms of the station authorization or requirements of the FCC rules applicable to the particular class of station.

(1) A request for a STA should be filed with FCC in Washington, DC at least 10 days prior to the date of the proposed operation.

(2) The request is to be made by letter and shall fully describe the proposed operation and the necessity for the requested STA. Such letter requests shall be signed by the licensee or the licensee's representative.

(3) A request for a STA necessitated by unforeseen equipment damage or failure may be made without regard to the procedural requirements of this section (e.g. via telegram or telephone). Any request made pursuant to this paragraph shall be followed by a written confirmation request conforming to the requirements of paragraph (a)(2) of this section. Confirmation requests shall be submitted within 24 hours. (See also § 73.1680 Emergency Antennas).

(4) An STA may be granted for an initial period not to exceed 180 days. A limited number of extensions of such authorizations may be granted for additional periods not exceeding 180 days per extension. An STA necessitated by technical or equipment problems, however, may, in practice, be granted for an initial period not to exceed 90 days with a limited number of extensions not to exceed 90 days per extension. The permittee or licensee must demonstrate that any further extensions requested are necessary and that all steps to resume normal operation are being undertaken in an expeditions and timely fashion. The license of a broadcasting station that fails to transmit broadcast signals for any consecutive 12-month period expires as a matter of law at the end of that period, notwithstanding any STA or provision, term, or condition of the license to the contrary.

(5) Certain rules specify special considerations and procedures in situations requiring an STA or permit temporary operation at variance without prior authorization from the FCC when notification is filed as prescribed in the particular rules. See § 73.62, Directional antenna system tolerances; § 73.157, Antenna testing during daytime; § 73.158, Directional antenna monitoring points; § 73.691, Visual modulation monitoring; § 73.1250, Broadcasting emergency information; § 73.1350, Transmission system operation; § 73.1560, Operating power and mode tolerances; § 73.1570, Modulation levels: AM, FM, and TV aural; § 73.1615, Operation during modification of facilities; § 73.1680, Emergency antennas; and § 73.1740, Minimum operating schedule.

(b) An STA may be modified or cancelled by the FCC without prior notice or right to hearing.

(c) No request by an AM station for temporary authority to extend its hours of operation beyond those authorized by its regular authorization will be accepted or granted by the FCC

except in emergency situations conforming with the requirements of § 73.3542, Application for Emergency Authorization. See also § 73.1250, Broadcasting Emergency Information.

[50 FR 30948, July 31, 1985, as amended at 58 FR 51250, Oct. 1, 1993; 60 FR 55482, Nov. 1, 1995; 61 FR 28767, June 6, 1996]

### § 73.1650 International agreements.

(a) The rules in this part 73, and authorizations for which they provide, are subject to compliance with the international obligations and undertakings of the United States. Accordingly, all provisions in this part 73 are subject to compliance with applicable requirements, restrictions, and procedures accepted by the United States that have been established by or pursuant to treaties or other international agreements, arrangements, or understandings to which the United States is a signatory, including applicable annexes, protocols, resolutions, recommendations and other supplementing documents associated with such international instruments.

(b) The United States is a signatory to the following treaties and other international agreements that relate, in whole or in part, to AM, FM or TV broadcasting:

(1) The following instruments of the International Telecommunication Union:

(i) Constitution.

(ii) Convention.

(iii) Radio Regulations.

(2) Regional Agreements for the Broadcasting Service in Region 2:

(i) MF Broadcasting 535–1605 kHz, Rio de Janeiro, 1981.

(ii) MF Broadcasting 1605–1705 kHz, Rio de Janeiro, 1988.

(3) Bi-lateral Agreements between the United States and Canada relating to:

(i) AM Broadcasting.

(ii) FM Broadcasting.

(iii) TV Broadcasting.

(4) Bi-lateral Agreements between the United States and Mexico relating to:

(i) AM Broadcasting.

(ii) FM Broadcasting.

(iii) TV Broadcasting.

(5) Bi-lateral Agreement between the United States and the Bahama Islands relating to presunrise operations by AM stations.

(6) North American Regional Broadcasting Agreement (NARBA), which, for the United States, remains in effect with respect to the Dominican Republic and the Bahama Islands.

The documents listed in this paragraph are available for inspection in the office of the Chief, Planning and Negotiations Division, International Bureau, FCC, Washington, DC. Copies may be purchased from the FCC Copy Contractor, whose name may be obtained from the FCC Consumer Assistance Office.

[54 FR 39737, Sept. 28, 1989, as amended at 56 FR 64872, Dec. 12, 1991; 60 FR 5333, Jan. 27, 1995]

### § 73.1660 Acceptability of broadcast transmitters.

(a) An AM, FM or TV transmitter shall be verified for compliance with the requirements of this part following the procedures described in part 2 of the FCC rules.

(b) A permittee or licensee planning to modify a transmitter which has been approved by the FCC or verified for compliance must follow the requirements contained in § 73.1690.

(c) A transmitter which was in use prior to January 30, 1955, may continue to be used by the licensee, and successors or assignees, if it continues to comply with the technical requirements for the type of station at which it is used.

(d) AM stereophonic exciter-generators for interfacing with approved or verified AM transmitters may be certified upon request from any manufacturer in accordance with the procedures described in part 2 of the FCC rules. Broadcast licensees may modify their certified AM stereophonic exciter-generators in accordance with § 73.1690.

(e) Additional rules covering certification and verification, modification of authorized transmitters, and withdrawal of a grant of authorization are contained in part 2 of the FCC rules.

[63 FR 36604, July 7, 1998]

EFFECTIVE DATE NOTE: At 63 FR 36604, July 7, 1998, § 73.1660 was revised, effective Oct. 5, 1998. For the convenience of the user, the superseded text is set forth as follows:

**§ 73.1660 Acceptability of broadcast transmitters.**

(a) An AM, FM or TV transmitter may be type accepted or notified upon the request of any manufacturer of transmitters following the procedures described in Part 2 of the FCC Rules. If acceptable, the transmitter will be included in the FCC's ''Radio Equipment List, Equipment Acceptable for Licensing.'' Since March 5, 1984, these transmitters have been authorized under notification.

(b) A permittee or licensee planning to install and use as a main transmitter one not included on the FCC's ''Radio Equipment List'' must obtain authority to use such a transmitter by filing for a construction permit on FCC Form 301 (FCC Form 340 for noncommercial educational stations). The application must include a complete description and circuit diagram of the transmitter, description of the carrier frequency determining circuits, complete operating parameters, and measurement data as would be requlred for a grant of type acceptance. A permittee or licensee planning to modify a transmitter which is included on the FCC's ''Radio Equipment List'' or for which an FCC Form 301 has been submitted and approved, must follow the requirements contained in § 73.1690.

(c) A transmitter which was in use prior to January 30, 1955, may continue to be used by the licensee, and successors or assignees, if it continues to comply with the technical requirements for the type of station at which it is used.

(d) AM stereophonic exciter-generators for interfacing with type accepted or notified AM transmitters may be type accepted upon request from any manufacturer by the procedures described in part 2 of the FCC Rules. Broadcast licensees may modify their type accepted AM stereophonic exciter-generators in accordance with § 73.1690.

(e) Additional rules covering type acceptance and notification, modification of authorized transmitters, and withdrawal of a grant of authorization are contained in part 2 of the FCC Rules.

[43 FR 53740, Nov. 17, 1978, as amended at 49 FR 4000, Feb. 1, 1984; 51 FR 18451, May 20, 1986; 51 FR 41629, Nov. 18, 1986; 51 FR 44478, Dec. 10, 1986]

**§ 73.1665 Main transmitters.**

(a) Each AM, FM and TV broadcast station must have at least one main transmitter which complies with the provisions of the transmitter technical requirements for the type and class of station. A main transmitter is one which is used for regular program service having power ratings appropriate for the authorized operating power(s).

(b) There is no maximum power rating limit for FM or TV station transmitters, however, the maximum rated transmitter power of a main transmitter installed at an AM station shall be as follows:

| Authorized power | Maximum rated transmitter power (kW) |
|---|---|
| 0.25, 0.5, or 1 kW | 1 |
| 2.5 kW | 5 |
| 5 or 10 kW | 10 |
| 25 or 50 kW | 50 |

(c) A licensee may, without further authority or notification to the FCC, replace an existing main transmitter or install additional main transmitter(s) for use with the authorized antenna if the replacement or additional transmitter(s) has been verified for compliance. Within 10 days after commencement of regular use of the replacement or additional transmitter(s), equipment performance measurements, as prescribed for the type of station are to be completed.

NOTE TO PARAGRAPH (C): Pending the availability of AM broadcast transmitters that are approved or verified for use in the 1605–1705 kHz band, transmitters that are approved or verified for use in the 535–1605 kHz band may be utilized in the 1605–1705 kHz band if it is shown that the requirements of § 73.44 have been met. Verification or FCC approval of the transmitter will supersede the applicability of this note.

[43 FR 53741, Nov. 17, 1978, as amended at 47 FR 8590, Mar. 1, 1982; 47 FR 28388, June 30, 1982; 49 FR 4000, Feb. 1, 1984; 51 FR 18451, May 20, 1986; 56 FR 64872, Dec. 12, 1991; 63 FR 36604, July 7, 1998]

EFFECTIVE DATE NOTE: At 63 FR 36604, July 7, 1998, § 73.1665 was amended by revising paragraph (c) and the note at the end of the section. For the convenience of the user, the superseded text is set forth as follows:

**§ 73.1665 Main transmitters.**

* * * * *

(c) A licensee may, without further authority or notification to the FCC, replace an existing main transmitter or install additional main transmitter(s) for use with the authorized antenna if the replacement or additional transmitter(s) is type accepted or notified as shown in the FCC's ''Radio Equipment List''. Within 10 days after commencement of regular use of the replacement or additional transmitter(s), equipment performance

measurements, as prescribed for the type of station are to be completed.

NOTE: Pending the availability of AM broadcast transmitters that are type-accepted for use in the 1605–1705 kHz band, transmitters that are type-accepted for use in the 535–1605 kHz band as shown on the FCC's Radio Equipment List may be utilized in the 1605–1705 kHz band if it is shown that the requirements of §73.44 have been met. FCC approval of the manufacturer's application for type-acceptance will supersede the applicability of this note.

### § 73.1670 Auxiliary transmitters.

(a) A licensee of a broadcast station may, without further authority from the FCC, install and use with the main antenna system one or more auxiliary transmitters for the following purposes:

(1) The transmission of regular programs upon failure of the main transmitter.

(2) The transmission of regular programs during maintenance or modification of the main transmitter.

(3) Emergency broadcast system operation.

(4) The transmission of regular programs by an AM station authorized for Presunrise (PSRA) and/or Postsunset (PSSA) operation.

(5) The transmission of tests to determine the operating condition of the auxiliary transmitter or auxiliary antenna.

(6) For testing, upon the request of representatives of the FCC.

(b) Authorization to install an auxiliary transmitter for use with other than the main antenna or authorized auxiliary antenna must be obtained by filing an application for a construction permit on FCC form 301 (FCC form 340 for noncommercial educational stations).

(c) The following technical and operating standards apply to auxiliary transmitters:

(1) The auxiliary transmitter may be operated on only the station's authorized frequency and within the required carrier frequency departure tolerance for the type of station.

(2) The carrier frequency of the auxiliary transmitter must be measured as often as necessary to ensure that it is maintained within the prescribed tolerance.

(3) When using an auxiliary transmitter, the operating power may be less than the authorized power but may not exceed the authorized power within the permitted tolerance for the type of station. If operation with an auxiliary transmitter at reduced power continues for a period exceeding 10 days, the FCC in Washington, DC must be notified. (See §73.51, AM; §73.267, FM; §73.567, NCE–FM; and §73.663, TV).

(4) Normal operator requirements apply to the operation of the auxiliary transmitter.

NOTE: After January 1, 1979, new licenses will not be issued nor will existing licenses be renewed for auxiliary transmitters that are operated into the main antenna system.

[43 FR 53741, Nov. 17, 1978, as amended at 44 FR 22740, Apr. 17, 1979; 48 FR 36463, Aug. 11, 1983; 48 FR 42960, Sept. 20, 1983; 48 FR 44806, Sept. 30, 1983; 50 FR 32417, Aug. 12, 1985; 51 FR 32088, Sept. 9, 1986]

### § 73.1675 Auxiliary antennas.

(a) An auxiliary antenna is one that is permanently installed and available for use when the main antenna is out of service for repairs or replacement. An auxiliary antenna may be located at the same transmitter site as the station's main antenna or at a separate site. In either case, however, the coverage area when operating with the auxiliary antenna may not extend beyond the coverage area of the main antenna. An application for an auxiliary antenna authorization filed under the procedures given in paragraph (b) or (c) of this section must contain a map showing the following contours for both the main and auxiliary antenna radiation:

(1) *AM stations:* The 0.5 mv/m field strength contours.

(2) *FM stations:* The 1.0 mv/m field strength contours.

(3) *TV stations:* The Grade B coverage contours.

(b) An application for a construction permit to install a new auxiliary antenna, or to make changes in an existing auxiliary antenna for which prior FCC authorization is required (see §73.1690), must be filed on FCC Form 301 (FCC Form 340 for noncommercial educational stations).

(c)(1) Where an FM or TV licensee proposes to use a formerly licensed

main facility as an auxiliary facility, or proposes to modify a presently authorized auxiliary facility, and no changes in the height of the antenna radiation center are required in excess of the limits in § 73.1690(c)(1), the FM or TV licensee may apply for the proposed auxiliary facility by filing a modification of license application. The modified auxiliary facility must operate on the same channel as the licensed main facility. An exhibit must be provided with this license application to demonstrate compliance with § 73.1675(a). All FM and TV licensees may request a decrease from the authorized facility's ERP in the license application. An FM or TV licensee may also increase the ERP of the auxiliary facility in a license modification application, provided the application contains an analysis demonstrating compliance with the Commission's radiofrequency radiation guidelines, and an analysis showing that the auxiliary facility will comply with § 73.1675(a). Auxiliary facilities mounted on an AM antenna tower must also demonstrate compliance with § 73.1692 in the license application.

(2) Where an AM licensee proposes to use a former licensed main facility as an auxiliary facility with an ERP less than or equal to the ERP specified on the former main license, the AM station may apply to license the proposed auxiliary facility by filing a modification of license application on Form 302-AM. The proposed auxiliary facilities must have been previously licensed on the same frequency as the present main facility. The license application must contain an exhibit to demonstrate compliance with § 73.1675(a).

[43 FR 53741, Nov. 17, 1978, as amended at 44 FR 22740, Apr. 17, 1979; 45 FR 26066, Apr. 17, 1980; 50 FR 13974, Apr. 9, 1985; 51 FR 32088, Sept. 9, 1986; 62 FR 51060, Sept. 30, 1997]

### § 73.1680 Emergency antennas.

(a) An emergency antenna is one that is erected for temporary use after the authorized main and auxiliary antennas are damaged and cannot be used.

(b) Prior authority from the FCC is not required by licensees and permittees to erect and commence operations using an emergency antenna to restore program service to the public. However, an informal letter request to continue operation with the emergency antenna must be made within 24 hours to the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, within 24 hours after commencement of its use. The request is to include a description of the damage to the authorized antenna, a description of the emergency antenna, and the station operating power with the emergency antenna.

(1) *AM stations.* AM stations may use a horizontal or vertical wire or a nondirectional vertical element of a directional antenna as an emergency antenna. AM stations using an emergency nondirectional antenna or a horizontal or vertical wire pursuant to this section, in lieu or authorized directional facilities, shall operate with power reduced to 25% or less of the nominal licensed power, or, a higher power, not exceeding licensed power, while insuring that the radiated filed strength does not exceed that authorized in any given azimuth for the corresponding hours of directional operation.

(2) *FM and TV stations.* FM and TV stations may erect any suitable radiator, or use operable sections of the authorized antenna(s) as an emergency antenna.

(c) The FCC may prescribe the output power, radiation limits, or other operating conditions when using an emergency antenna, and emergency antenna authorizations may be modified or terminated in the event harmful interference is caused to other stations or services by the use of an emergency antenna.

[43 FR 53741, Nov. 17, 1978, as amended at 44 FR 22740, Apr. 17, 1979; 50 FR 30948, July 31, 1985; 63 FR 33878, June 22, 1998]

### § 73.1690 Modification of transmission systems.

The following procedures and restrictions apply to licensee modifications of authorized broadcast transmission system facilities.

(a) The following changes are prohibited:

(1) Those that would result in the emission of signals outside of the authorized channel exceeding limits prescribed for the class of service.

(2) Those that would cause the transmission system to exceed the equipment performance measurements prescribed for the class of service, (AM, § 73.44; FM, §§ 73.317, 73.319, and 73.322; TV, §§ 73.682 and 73.687).

(b) The following changes may be made only after the grant of a construction permit application on FCC Form 301 for commercial stations or Form 340 for noncommercial educational stations:

(1) Any construction of a new tower structure for broadcast purposes, except for replacement of an existing tower with a new tower of identical height and geographic coordinates.

(2) Any change in station geographic coordinates, including coordinate corrections. FM and TV directional stations must also file a construction permit application for any move of the antenna to another tower structure located at the same coordinates.

(3) Any change which would require an increase along any azimuth in the composite directional antenna pattern of an FM station from the composite directional antenna pattern authorized (*see* § 73.316), or any increase from the authorized directional antenna pattern for a TV station (*see* § 73.685).

(4) Any change in the directional radiation characteristics of an AM directional antenna system. *See* § 73.45 and § 73.150.

(5) Any decrease in the authorized power of an AM station or the ERP of a TV station, or any decrease or increase in the ERP of an FM commercial station, which is intended for compliance with the multiple ownership rules in § 73.3555.

(6) For FM noncommercial educational stations, any of the following:

(i) Any increase in the authorized maximum ERP, whether horizontally or vertically polarized, for a noncommercial educational FM station operating on Channels 201 through 220, or a Class D FM station operating on Channel 200.

(ii) For those FM noncommercial educational stations on Channels 201 to 220, or a Class D FM station operating on Channel 200, which are within the separation distances specified in Table A of § 73.525 with respect to a Channel 6 television station, any increase in the horizontally or vertically polarized ERP from the presently authorized ERP.

(iii) For those FM noncommercial educational stations on Channels 201 through 220 which are located within the separation distances in § 73.525 with respect to a Channel 6 television station, or a Class D FM station operating on Channel 200, any decrease in the presently authorized horizontal effective radiated power which would eliminate the horizontal ERP to result in use of vertical ERP only.

(iv) For those FM noncommercial educational stations which employ separate antennas for the horizontal ERP and the vertical ERP, mounted at different heights, the station may not increase or decrease either the horizontal ERP or the vertical ERP without a construction permit.

(7) Any increase in the authorized ERP of a television station, FM commercial station, or noncommercial educational FM station, except as provided for in §§ 73.1690(c)(4), (c)(5), or (c)(7), or § 73.1675(c)(1) in the case of auxiliary facilities.

(8) A commercial TV or noncommercial educational TV station operating on Channels 14 or Channel 69 may increase its horizontally or vertically polarized ERP only after the grant of a construction permit. A television station on Channels 15 through 21 within 341 km of a cochannel land mobile operation, or 225 km of a first-adjacent channel land mobile operation, must also obtain a construction permit before increasing the horizontally or vertically polarized ERP (*see* part 74, § 74.709(a) and (b) for tables of urban areas and corresponding reference coordinates of potentially affected land mobile operations).

(c) The following FM and TV station modifications may be made without prior authorization from the Commission. A modification of license application must be submitted to the Commission within 10 days of commencing program test operations pursuant to § 73.1620. With the exception of applications filed solely pursuant to Sections (c)(6), (c)(9), or (c)(10), the modification of license application must contain an exhibit demonstrating compliance with

the Commission's radiofrequency radiation guidelines. In addition, except for applications solely filed pursuant to Sections (c)(6) or (c)(9), where the installation is located within 3.2 km of an AM tower or is located on an AM tower, an exhibit demonstrating compliance with §73.1692 is also required.

(1) Replacement of an omnidirectional antenna with one of the same or different number of antenna bays, provided that the height of the antenna radiation center is not more than 2 meters above or 4 meters below the authorized values. Any concurrent change in ERP must comply with §73.1675(c)(1), 73.1690(4), (c)(5), or (c)(7). Program test operations at the full authorized ERP may commence immediately upon installation pursuant to §73.1620(a)(1).

(2) Replacement of a directional FM antenna, where the measured composite directional antenna pattern does not exceed the licensed composite directional pattern at any azimuth, where no change in effective radiated power will result, and where compliance with the principal coverage requirements of §73.315(a) will be maintained by the measured directional pattern. The antenna must be mounted not more than 2 meters above or 4 meters below the authorized values. The modification of license application on Form 302-FM to cover the antenna replacement must contain all of the data in the following sections (i) through (v). Program test operations at one half (50%) power may commence immediately upon installation pursuant to §73.1620(a)(3). However, if the replacement directional antenna is an exact replacement (i.e., no change in manufacturer, antenna model number, AND measured composite antenna pattern), program test operations may commence immediately upon installation at the full authorized power.

(i) A measured directional antenna pattern and tabulation on the antenna manufacturer's letterhead showing both the horizontally and vertically polarized radiation components and demonstrating that neither of the components exceeds the authorized composite antenna pattern along any azimuth.

(ii) Contour protection stations authorized pursuant to §73.215 or §73.509 must attach a showing that the RMS (root mean square) of the composite measured directional antenna pattern is 85% or more of the RMS of the authorized composite antenna pattern. *See* §73.316(c)(9). If this requirement cannot be met, the licensee may include new relative field values with the license application to reduce the authorized composite antenna pattern so as to bring the measured composite antenna pattern into compliance with the 85 percent requirement.

(iii) A description from the manufacturer as to the procedures used to measure the directional antenna pattern. The antenna measurements must be performed with the antenna mounted on a tower, tower section, or scale model equivalent to that on which the antenna will be permanently mounted, and the tower or tower section must include transmission lines, ladders, conduits, other antennas, and any other installations which may affect the measured directional pattern.

(iv) A certification from a licensed surveyor that the antenna has been oriented to the proper azimuth.

(v) A certification from a qualified engineer who oversaw installation of the directional antenna that the antenna was installed pursuant to the manufacturer's instructions.

(3) A directional TV station on Channels 2 through 13 or 22 through 68, or a directional TV station on Channels 15 through 21 which is in excess of 341 km (212 miles) from a cochannel land mobile operation or in excess of 225 km (140 miles) from a first-adjacent channel land mobile operation (*see* Part 74, §74.709(a) and (b) for tables of urban areas and reference coordinates of potentially affected land mobile operations), may replace a directional TV antenna by a license modification application, if the proposed horizontal theoretical directional antenna pattern does not exceed the licensed horizontal directional antenna pattern at any azimuth and where no change in effective radiated power will result. The modification of license application on Form 302–TV must contain all of the data set forth in §73.685(f).

(4) Commercial and noncommercial educational FM stations operating on Channels 221 through 300 (except Class D), NTSC TV stations operating on Channels 2 through 13 and 22 through 68, and TV stations operating on Channels 15 through 21 that are in excess of 341 km (212 miles) from a cochannel land mobile operation or in excess of 225 km (140 miles) from a first-adjacent channel land mobile operation [*see* Part 74, § 74.709(a) and (b) for tables of urban areas and reference coordinates of potentially affected land mobile operations], which operate omnidirectionally, may increase the vertically polarized effective radiated power up to the authorized horizontally polarized effective radiated power in a license modification application. Noncommercial educational FM licensees and permittees on Channels 201 through 220, that do not use separate antennas mounted at different heights for the horizontally polarized ERP and the vertically polarized ERP, and are located in excess of the separations from a Channel 6 television station listed in Table A of § 73.525(a)(1), may also increase the vertical ERP, up to (but not exceeding) the authorized horizontally polarized ERP via a license modification application. Program test operations may commence at full power pursuant to § 73.1620(a)(1).

(5) Those Class A FM commercial stations which were permitted to increase ERP pursuant to MM Docket No. 88–375 by a modification of license application remain eligible to do so, provided that the station meets the requirements of § 73.1690 (c)(1) and is listed on one of the Public Notices as authorized to increase ERP, or by a letter from the Commission's staff authorizing the change. These Public Notices were released on November 3, 1989; November 17, 1989; December 8, 1989; March 2, 1990; and February 11, 1991. The increased ERP must comply with the multiple ownership requirements of § 73.3555. Program test operations may commence at full power pursuant to § 73.1620(a)(1).

(6) FM contour protection stations authorized pursuant to § 73.215 which have become fully spaced under § 73.207 may file a modification of license application to delete the § 73.215 contour protection designation with an exhibit to demonstrate that the station is fully spaced in accordance with § 73.207. The contour protection designation will be removed upon grant of the license application. Applications filed under this rule section will be processed on a first come / first served basis with respect to conflicting FM commercial minor change applications and modification of license applications (including those filed pursuant to § 73.1690 (b) and (c)(6) and (c)(7)).

(7) FM omnidirectional commercial stations, and omnidirectional noncommercial educational FM stations operating on Channels 221 through 300 (except Class D), which are not designated as contour protection stations pursuant to § 73.215 and which meet the spacing requirements of § 73.207, may file a license modification application to increase ERP to the maximum permitted for the station class, provided that any change in the height of the antenna radiation center remains in accordance with § 73.1690(c)(1). Program test operations may commence at full power pursuant to § 73.1620(a)(1). All of the following conditions also must be met before a station may apply pursuant to this section:

(i) The station may not be a ''grandfathered'' short-spaced station authorized pursuant to § 73.213 or short-spaced by a granted waiver of § 73.207;

(ii) If the station is located in or near a radio quiet zone, radio coordination zone, or a Commission monitoring station (*see* § 73.1030 and § 0.121(c)), the licensee or permittee must have secured written concurrence from the affected radio quiet zone, radio coordination zone, or the Commission's Compliance and Information Bureau in the case of a monitoring station, to increase effective radiated power PRIOR to implementation. A copy of that concurrence must be submitted with the license application to document that concurrence has been received;

(iii) The station does not require international coordination as the station does not lie within the border zones, or clearance has been obtained from Canada or Mexico for the higher power operation within the station's specified domestic class and the station complies with § 73.207(b)(2) and (3)

with respect to foreign allotments and allocations;

(iv) The increased ERP will not cause the station to violate the multiple ownership requirements of § 73.3555.

(8) FM commercial stations and FM noncommercial educational stations may decrease ERP on a modification of license application provided that exhibits are included to demonstrate that all six of the following requirements are met:

(i) Commercial FM stations must continue to provide a 70 dBu principal community contour over the community of license, as required by § 73.315(a). Noncommercial educational FM stations must continue to provide a 60 dBu contour over at least a portion of the community of license. The 60 and 70 dBu contours must be predicted by use of the standard contour prediction method in § 73.313(b), (c), and (d).

(ii) For both commercial FM and noncommercial educational FM stations, the location of the main studio remains within the 70 dBu principal community contour, as required by § 73.1125, or otherwise complies with that rule. The 70 dBu contour must be predicted by use of the standard contour prediction method in § 73.313(b), (c), and (d).

(iii) For commercial FM stations only, there is no change in the authorized station class as defined in § 73.211.

(iv) For commercial FM stations only, the power decrease is not necessary to achieve compliance with the multiple ownership rule, § 73.3555.

(v) Commercial FM stations, noncommercial educational FM stations on Channels 221 through 300, and noncommercial educational FM stations on Channels 200 through 220 which are located in excess of the distances in Table A of § 73.525 with respect to a Channel 6 TV station, may not use this rule to decrease the horizontally polarized ERP below the value of the vertically polarized ERP.

(vi) Noncommercial educational FM stations on Channels 201 through 220 which are within the Table A distance separations of § 73.525, or Class D stations on Channel 200, may not use the license modification process to eliminate an authorized horizontally polarized component in favor of vertically polarized-only operation. In addition, noncommercial educational stations operating on Channels 201 through 220, or Class D stations on Channel 200, which employ separate horizontally and vertically polarized antennas mounted at different heights, may not use the license modification process to increase or decrease either the horizontal ERP or vertical ERP without a construction permit.

(9) The licensee of an AM, FM, or TV commercial station may propose to change from commercial to noncommercial educational on a modification of license application, provided that the application contains completed Sections II and IV of FCC Form 340. In addition, a noncommercial educational AM licensee, a TV licensee on a channel not reserved for noncommercial educational use, or an FM licensee on Channels 221 to 300 (except Class D FM) on a channel not reserved for noncommercial educational use, may apply to change from educational to commercial via a modification of license application, and no exhibits are required with the application. The change will become effective upon grant of the license application.

(10) Replacement of a transmission line with one of a different type or length which changes the transmitter operating power (TPO) from the authorized value, but not the ERP, must be reported in a license modification application to the Commission.

(d) The following changes may be made without authorization from the FCC, however informal notification of the changes must be made according to the rule sections specified:

(1) Change in studio location within the principal community contour. See § 73.1125.

(2) Commencement of remote control operation pursuant to §§ 73.1400 and 73.1410.

(3) Modification of an AM directional antenna sampling system. See § 73.68.

(e) Any electrical and mechanical modification to authorized transmitting equipment that is not otherwise restricted by the preceding provisions of this section, may be made without FCC notification or authorization. Equipment performance measurements

must be made within ten days after completing the modifications (See § 73.1590). An informal statement, diagram, etc., describing the modification must be retained at the transmitter site for as long as the equipment is in use.

[47 FR 8590, Mar. 1, 1982]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 73.1690, see the List of CFR Sections Affected in the Finding Aids section of this volume.

### § 73.1692 Broadcast station construction near or installation on an AM broadcast tower.

Where a broadcast licensee or permittee proposes to mount a broadcast antenna on an AM station tower, or where construction is proposed within 0.8 km of an AM nondirectional tower or within 3.2 km of an AM directional station, the broadcast licensee or permittee is responsible for ensuring that the construction does not adversely affect the AM station, as follows:

(a) *Installations on an AM nondirectional tower.* During installation of the broadcast antenna and related equipment, the AM station shall determine operating power by the indirect method (*see* § 73.51). Upon the completion of the installation, antenna impedance measurements on the AM antenna shall be made, and, prior to or simultaneously with the filing of the license application covering the broadcast station installation, an application on FCC Form 302–AM (including a tower sketch of the installation) shall be filed with the Commission for the AM station to return to direct power measurement.

(b) *Installations on an AM directional array.* Prior to commencing construction, the broadcast permittee or licensee shall notify the AM station so that, if necessary, the AM station may determine operating power by the indirect method (*see* § 73.51) and request special temporary authority pursuant to § 73.1635 to operate with parameters at variance in order to maintain monitoring point field strengths within authorized limits. Both prior to the commencement of construction and upon completion of construction, a partial proof of performance (as defined by § 73.154) shall be conducted to establish that the AM array has not been adversely affected. Prior to or simultaneously with filing of the license application to cover the broadcast station construction, the results of the partial proof of performance shall be filed with the Commission on Form 302–AM.

(c) *Tower erections or modifications within 0.8 km of an AM nondirectional tower.* Prior to commencing the construction of tower modifications, or the erection of a new tower, within 0.8 km of an AM nondirectional tower, the broadcast permittee or licensee is required to notify the AM station so that the AM station may commence determining operating power by the indirect method (*see* § 73.51). The broadcast licensee or permittee shall be responsible for the installation and continued maintenance of detuning apparatus necessary to prevent adverse effects on the radiation pattern of the AM station. Both prior to construction of the tower modifications and upon completion of construction, antenna impedance measurements of the AM station shall be made. In addition, sufficient field strength measurements taken at a minimum of 10 locations along each of 8 equally spaced radials, shall be made to establish that the AM radiation pattern is essentially omnidirectional. Prior or simultaneously with the filing of the application for license to cover this permit, the results of the impedance measurements and the field strength measurements shall be filed with the Commission on FCC Form 302–AM for the AM station to return to the direct method of power determination.

(d) *Tower erections or modifications within 3.2 km of an AM directional station.* Prior to commencing construction of tower modifications, or the erection of a new tower structure, within 3.2 km of an AM directional array, the broadcast permittee or licensee shall notify the AM station so that, if necessary, the AM station may determine operating power by the indirect method (*see* § 73.51) and request special temporary authority pursuant to § 73.1635 to operate with parameters at variance in order to maintain monitoring point field strengths within authorized limits. The broadcast licensee or permittee shall be responsible for the installation and continued maintenance of

detuning apparatus necessary to prevent adverse effects upon the radiation pattern of the AM station. Both prior to the commencement of construction and upon completion of construction, a partial proof of performance (as defined by § 73.154) shall be conducted to establish that the AM array has not been adversely affected. Prior to or simultaneously with filing of the license application to cover the broadcast station construction, the results of the partial proof of performance shall be filed with the Commission on Form 302–AM.

[62 FR 51062, Sept. 30, 1997]

### § 73.1695 Changes in transmission standards.

The FCC will consider the question whether a proposed change or modification of transmission standards adopted for broadcast stations would be in the public interest, convenience, and necessity, upon petition being filed by the person proposing such change or modification, setting forth the following:

(a) The exact character of the change or modification proposed;

(b) The effect of the proposed change or modification upon all other transmission standards that have been adopted by the FCC for broadcast stations;

(c) The experimentation and field tests that have been made to show that the proposed change or modification accomplishes an improvement and is technically feasible;

(d) The effect of the proposed change or modification in the adopted standards upon operation and obsolescence of receivers;

(1) Should a change of modification in the transmission standards be adopted by the FCC, the effective date thereof will be determined in the light of the considerations mentioned in this paragraph (d);

(2) [Reserved]

(e) The change in equipment required in existing broadcast stations for incorporating the proposed change or modification in the adopted standards; and

(f) The facts and reasons upon which the petitioner bases the conclusion that the proposed change or modification would be in the public interest, convenience, and necessity.

[49 FR 4211, Feb. 3, 1984]

### § 73.1700 Broadcast day.

The term *broadcast day* means that period of time between the station's sign-on and its sign-off.

[43 FR 45849, Oct. 4, 1978]

### § 73.1705 Time of operation.

(a) Commercial and noncommercial educational TV and commercial FM stations will be licensed for unlimited time operation. Application may be made for voluntary share-time operation.

(b) Noncommercial educational FM stations will be licensed for unlimited and share time operation according to the provisions of § 73.561.

(c) AM stations in the 535–1705 kHz band will be licensed for unlimited time. In the 535–1605 kHz band, stations that apply for share time and specified hours operations may also be licensed. AM stations licensed to operate daytime-only and limited-time may continue to do so; however, no new such stations will be authorized, except for fulltime stations that reduce operating hours to daytime-only for interference reduction purposes.

[43 FR 45849, Oct. 4, 1978, as amended at 56 FR 64872, Dec. 12, 1991]

### § 73.1710 Unlimited time.

Operation is permitted 24 hours a day.

[43 FR 45849, Oct. 4, 1978]

### § 73.1715 Share time.

Operation is permitted by two or more broadcast stations using the same channel in accordance with a division of hours mutually agreed upon and considered part of their licenses.

(a) If the licenses of stations authorized to share time do not specify hours of operation, the licensees shall endeavor to reach an agreement for a definite schedule of periods of time to be used by each. Such agreement shall be in writing and each licensee shall file it in duplicate original with each application to the FCC in Washington, DC for renewal of license. If and when

such written agreements are properly filed in conformity with this Section, the file mark of the FCC will be affixed thereto, one copy will be retained by the FCC, and one copy returned to the licensee to be posted with the station license and considered as a part thereof. If the license specifies a proportionate time division, the agreement shall maintain this proportion. If no proportionate time division is specified in the license, the licensees shall agree upon a division of time. Such division of time shall not include simultaneous operation of the stations unless specifically authorized by the terms of the license.

(b) If the licensees of stations authorized to share time are unable to agree on a division of time, the FCC in Washington, DC shall be so notified by a statement filed with the applications for renewal of licenses. Upon receipt of such statement, the FCC will designate the applications for a hearing and, pending such hearing, the operating schedule previously adhered to shall remain in full force and effect.

(c) A departure from the regular schedule in a time-sharing agreement will be permitted only in cases where an agreement to that effect is put in writing, is signed by the licensees of the stations affected thereby and filed in triplicate by each licensee with the FCC in Washington, DC prior to the time of the time of the proposed change. If time is of the essence, the actual departure in operating schedule may precede the actual filing of written agreement, provided appropriate notice is sent to the FCC.

(d) If the license of an AM station authorized to share time does not specify the hours of operation, the station may be operated for the transmission of regular programs during the experimental period provided an agreement thereto is reached with the other stations with which the broadcast day is shared: *And further provided,* Such operation is not in conflict with §73.72 (Operating during the experimental period). Time-sharing agreements for operation during the experimental period need not be submitted to the FCC.

(e) Noncommercial educational FM stations are authorized for share time operation according to the provisions of §73.561.

[43 FR 45849, Oct. 4, 1978, as amended at 47 FR 40174, Sept. 13, 1982]

### §73.1720 Daytime.

Operation is permitted during the hours between average monthly local sunrise and average monthly local sunset.

(a) The controlling times for each month of the year are stated in the station's instrument of authorization. Uniform sunrise and sunset times are specified for all of the days of each month, based upon the actual times of sunrise and sunset for the fifteenth day of the month adjusted to the nearest quarter hour. Sunrise and sunset times are derived by using the standardized procedure and the tables in the 1946 American Nautical Almanac issued by the United States Naval Observatory.

(b) [Reserved]

[43 FR 45849, Oct. 4, 1978]

### §73.1725 Limited time.

(a) Operation is applicable only to Class B (secondary) AM stations on a clear channel with facilities authorized before November 30, 1959. Operation of the secondary station is permitted during daytime and until local sunset if located west of the Class A station on the channel, or until local sunset at the Class A station if located east of that station. Operation is also permitted during nighttime hours not used by the Class A station or other stations on the channel.

(b) No authorization will be granted for:

(1) A new limited time station;

(2) A limited time station operating on a changed frequency;

(3) A limited time station with a new transmitter site materially closer to the 0.1 mV/m contour of a co-channel U.S. Class A station; or

(4) Modification of the operating facilities of a limited time station resulting in increased radiation toward any point on the 0.1 mV/m contour of a co-channel U.S. Class A station during the hours after local sunset in which the limited time station is permitted to operate by reason of location east of the Class A station.

(c) The licensee of a secondary station which is authorized to operate limited time and which may resume operation at the time the Class A station (or stations) on the same channel ceases operation shall, with each application for renewal of license, file in triplicate a copy of its regular operating schedule. It shall bear a signed notation by the licensee of the Class A station of its objection or lack of objection thereto. Upon approval of such operating schedule, the FCC will affix its file mark and return one copy to the licensee authorized to operate limited time. This shall be posted with the station license and considered as a part thereof. Departure from said operating schedule will be permitted only pursuant to §73.1715 (Share time).

[56 FR 64872, Dec. 12, 1991]

### §73.1730 Specified hours.

(a) Specified hours stations must operate in accordance with the exact hours specified in their license. However, such stations, operating on local channels, unless sharing time with other stations, may operate at hours beyond those specified in their licenses to carry special events programing. When such programs are carried during nighttime hours, the station's authorized nighttime facilities must be used.

(b) Other exceptions to the adherence to the schedule of specified hours of operation are provided in §73.72 (Operating during the experimental period), §73.1250 (Broadcasting emergency information) and §73.1740 (Minimum operating schedule).

[43 FR 45850, Oct. 4, 1978]

### §73.1735 AM station operation pre-sunrise and post-sunset.

Certain classes of AM stations are eligible to operate pre-sunrise and/or post-sunset for specified periods with facilities other than those specified on their basic instruments of authorization. Such pre-sunrise and post-sunset operation is authorized pursuant to the provisions of §73.99 of the Rules.

[49 FR 41249, Oct. 22, 1984]

### §73.1740 Minimum operating schedule.

(a) All commercial broadcast stations are required to operate not less than the following minimum hours:

(1) *AM and FM stations.* Two-thirds of the total hours they are authorized to operate between 6 a.m. and 6 p.m. local time and two-thirds of the total hours they are authorized to operate between 6 p.m. and midnight, local time, each day of the week except Sunday.

(i) Class D stations which have been authorized nighttime operations need comply only with the minimum requirements for operation between 6 a.m. and 6 p.m., local time.

(2) *TV stations.* (i) During the first 36 months of operation, not less than 2 hours daily in any 5 broadcast days per calendar week and not less than a total of:

(A) 12 hours per week during the first 18 months.

(B) 16 hours per week during the 19th through 24th months.

(C) 20 hours per week during the 25th through 30th months.

(D) 24 hours per week during the 31st through 36th months.

(ii) After 36 months of operation, not less than 2 hours in each day of the week and not less than a total of 28 hours per calendar week.

(iii) Visual transmissions of test patterns, slides, or still pictures accompanied by unrelated aural transmissions may not be counted in computing program service (see §73.653).

(3) ''Operation'' includes the period during which the station is operated pursuant to temporary authorization or program tests, as well as during the license period.

(4) In the event that causes beyond the control of a licensee make it impossible to adhere to the operating schedule of this section or to continue operating, the station may limit or discontinue operation for a period of not more than 30 days without further authority from the FCC. Notification must be sent to the FCC in Washington, D.C. not later than the 10th day of limited or discontinued operation. During such period, the licensee shall continue to adhere to the requirements in the station license pertaining to the lighting of antenna structures. In the

event normal operation is restored prior to the expiration of the 30 day period, the licensee will so notify the FCC of this date. If the causes beyond the control of the licensee make it impossible to comply within the allowed period, informal written request shall be made to the FCC no later than the 30th day for such additional time as may be deemed necessary.

(b) Noncommercial educational AM and TV stations are not required to operate on a regular schedule and no minimum hours of operation are specified; but the hours of actual operation during a license period shall be taken into consideration in the renewal of noncommercial educational AM and TV broadcast licenses. Noncommercial educational FM stations are subject to the operating schedule requirements according to the provisions of § 73.561.

(c) The license of any broadcasting station that fails to transmit broadcast signals for any consecutive 12-month period expires as a matter of law at the end of that period, notwithstanding any provision, term, or condition of the license to the contrary.

[43 FR 45850, Oct. 4, 1978, as amended at 53 FR 1032, Jan. 15, 1988; 56 FR 64873, Dec. 12, 1991; 61 FR 28767, June 6, 1996]

### § 73.1745 Unauthorized operation.

(a) No broadcast station shall operate at times, or with modes or power, other than those specified and made a part of the license, unless otherwise provided in this part.

(b) Any unauthorized departure from an operating schedule which is required to be filed with the FCC in Washington, DC, will be considered as a violation of a material term of the license.

[43 FR 45850, Oct. 4, 1978]

### § 73.1750 Discontinuance of operation.

The licensee of each station shall notify by letter the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, of the permanent discontinuance of operation at least two days before operation is discontinued. Immediately after discontinuance of operation, the licensee shall forward the station license and other instruments of authorization to the FCC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, for cancellation. The license of any station that fails to transmit broadcast signals for any consecutive 12 month period expires as a matter of law at the end of that period, notwithstanding any provision, term, or condition of the license to the contrary. If a licensee surrenders its license pursuant to an interference reduction agreement, and its surrender is contingent on the grant of another application, the licensee must identify in its notification the contingencies involved.

[63 FR 33878, June 22, 1998]

### § 73.1800 General requirements related to the station log.

(a) The licensee of each station must maintain a station log as required by § 73.1820. This log shall be kept by station employees competent to do so, having actual knowledge of the facts required. All entries, whether required or not by the provisions of this part, must accurately reflect the station operation. Any employee making a log entry shall sign the log, thereby attesting to the fact that the entry, or any correction or addition made thereto, is an accurate representation of what transpired.

(b) The logs shall be kept in an orderly and legible manner, in suitable form and in such detail that the data required for the particular class of station concerned are readily available. Key letters or abbreviations may be used if the proper meaning or explanation is contained elsewhere in the log. Each sheet must be numbered and dated. Time entries must be made in local time and must be indicated as advanced (*e.g.*, EDT) or non-advanced (*e.g.*, EST) time.

(c) Any necessary corrections of a manually kept log after it has been signed in accordance with paragraph (a) of this section shall be made only by striking out the erroneous portion and making a corrective explanation on the log or attachment to it. Such corrections shall be dated and signed by the person who kept the log or the station chief operator, the station manager or an officer of the licensee.

(d) No automatically kept log shall be altered in any way after entries have been recorded. When automatic logging processes fail or malfunction, the log must be kept manually for that period and in accordance with the requirements of this section.

(e) No log, or portion thereof, shall be erased, obliterated or willfully destroyed during the period in which it is required to be retained. (Section 73.1840, Retention of logs.)

(f) Application forms for licenses and other authorizations may require that certain technical operating data be supplied. These application forms should be kept in mind in connection with the maintenance of the station log.

[43 FR 45850, Oct. 4, 1978, as amended at 48 FR 38481, Aug. 24, 1983; 48 FR 44806, Sept. 30, 1983; 49 FR 14509, Apr. 12, 1984; 49 FR 33663, Aug. 24, 1984; 50 FR 40016, Oct. 1, 1985]

### § 73.1820 Station log.

(a) Entries must be made in the station log either manually by a person designated by the licensee who is in actual charge of the transmitting apparatus, or by automatic devices meeting the requirements of paragraph (b) of this section. Indications of operating parameters that are required to be logged must be logged prior to any adjustment of the equipment. Where adjustments are made to restore parameters to their proper operating values, the corrected indications must be logged and accompanied, if any parameter deviation was beyond a prescribed tolerance, by a notation describing the nature of the corrective action. Indications of all parameters whose values are affected by the modulation of the carrier must be read without modulation. The actual time of observation must be included in each log entry. The following information must be entered:

(1) *All stations.* (i) Entries required by §17.49 of this chapter concerning any observed or otherwise known extinguishment or improper functioning of a tower light:

(A) The nature of such extinguishment or improper functioning.

(B) The date and time the extinguishment or improper operation was observed or otherwise noted.

(C) The date, time and nature of adjustments, repairs or replacements made.

(ii) Any entries not specifically required in this section, but required by the instrument of authorization or elsewhere in this part.

(iii) An entry of each test and activation of the Emergency Alert System (EAS) pursuant to the requirement of part 11 of this chapter and the EAS Operating Handbook. Stations may keep EAS data in a special EAS log which shall be maintained at a convenient location; however, this log is considered a part of the station log.

(2) *Directional AM stations without an FCC–approved antenna sampling system* (See §73.68). (i) An entry at the beginning of operations in each mode of operation, and thereafter at intervals not exceeding 3 hours, of the following (actual readings observed prior to making any adjustments to the equipment and an indication of any corrections to restore parameters to normal operating values):

(A) Common point current.

(B) When the operating power is determined by the indirect method, the efficiency factor F and either the product of the final amplifier input voltage and current or the calculated antenna input power. See §73.51(e).

(C) Antenna monitor phase or phase deviation indications.

(D) Antenna monitor sample currents, current ratios, or ratio deviation indications.

(ii) Entries required by §73.61 performed in accordance with the schedule specified therein.

(iii) Entries of the results of calibration of automatic logging devices (see paragraph (b) of this section) or indicating instruments (see §73.67), whenever performed.

(b) Automatic devices accurately calibrated and with appropriate time, date and circuit functions may be utilized to record entries in the station log *Provided:*

(1) The recording devices do not affect the operation of circuits or accuracy of indicating instruments of the equipment being recorded;

(2) The recording devices have an accuracy equivalent to the accuracy of the indicating instruments;

(3) The calibration is checked against the original indicators as often as necessary to ensure recording accuracy;

(4) In the event of failure or malfunctioning of the automatic equipment, the person designated by the licensee as being responsible for the log small make the required entries in the log manually at that time;

(5) The indicating equipment conforms to the requirements of § 73.1215 (Indicating instruments—specifications) except that the scales need not exceed 5 cm (2 inches) in length. Arbitrary scales may not be used.

(c) In preparing the station log, original data may be recorded in rough form and later transcribed into the log.

[43 FR 45854, Oct. 4, 1978, as amended at 44 FR 58735, Oct. 11, 1979; 47 FR 24580, June 7, 1982; 48 FR 38481, Aug. 24, 1983; 48 FR 44806, Sept. 30, 1983; 49 FR 33603, Aug. 23, 1984; 58 FR 44951, Aug. 25, 1993; 59 FR 67102, Dec. 28, 1994; 60 FR 55482, Nov. 1, 1995]

### § 73.1835 Special technical records.

The FCC may require a broadcast station licensee to keep operating and maintenance records as necessary to resolve conditions of actual or potential interference, rule violations, or deficient technical operation.

[48 FR 38482, Aug. 24, 1983]

### § 73.1840 Retention of logs.

(a) Any log required to be kept by station licensees shall be retained by them for a period of 2 years. However, logs involving communications incident to a disaster or which include communications incident to or involved in an investigation by the FCC and about which the licensee has been notified, shall be retained by the licensee until specifically authorized in writing by the FCC to destroy them. Logs incident to or involved in any claim or complaint of which the licensee has notice shall be retained by the licensee until such claim or complaint has been fully satisfied or until the same has been barred by statute limiting the time for filing of suits upon such claims.

(b) Logs may be retained on microfilm, microfiche or other data-storage systems subject to the following conditions:

(1) Suitable viewing—reading devices shall be available to permit FCC inspection of logs pursuant to § 73.1226, availability to FCC of station logs and records.

(2) Reproduction of logs, stored on data-storage systems, to full-size copies, is required of licensees if requested by the FCC or the public as authorized by FCC rules. Such reproductions must be completed within 2 full work days of the time of the request.

(3) Corrections to logs shall be made:

(i) Prior to converting to a data-storage system pursuant to the requirements of § 73.1800 (c) and (d), (§ 73.1800, General requirements relating to logs).

(ii) After converting to a data-storage system, by separately making such corrections and then associating with the related data-stored logs. Such corrections shall contain sufficient information to allow those reviewing the logs to identify where corrections have been made, and when and by whom the corrections were made.

(4) Copies of any log required to be filed with any application; or placed in the station's local public inspection file as part of an application; or filed with reports to the FCC must be reproduced in fullsize form when complying with these requirements.

[45 FR 41151, June 18, 1980, as amended at 46 FR 13907, Feb. 24, 1981; 46 FR 18557, Mar. 25, 1981; 49 FR 33663, Aug. 24, 1984]

### § 73.1870 Chief operators.

(a) The licensee of each AM, FM, or TV broadcast station must designate a person to serve as the station's chief operator. At times when the chief operator is unavailable or unable to act (*e.g.*, vacations, sickness), the licensee shall designate another person as the acting chief operator on a temporary basis.

(b) Chief operators shall be employed or serve on the following basis:

(1) The chief operator for an AM station using a directional antenna or operating with greater than 10 kW authorized power, or of a TV station is to be an employee of the station on duty for whatever number of hours each week the station licensee determines is necessary to keep the station's technical operation in compliance with

FCC rules and the terms of the station authorization.

(2) Chief operators for non-directional AM stations operating with authorized powers not exceeding 10 kW and FM stations may be either an employee of the station or engaged to serve on a contract basis for whatever number of hours each week the licensee determines is necessary to keep the station's technical operation in compliance with the FCC rules and terms of the station authorization.

(3) The designation of the chief operator must be in writing with a copy of the designation posted with the station license. Agreements with chief operators serving on a contract basis must be in writing with a copy kept in the station files.

(c) The chief operator is responsible for completion of the following duties specified in this paragraph below. When these duties are delegated to other persons, the chief operator shall maintain supervisory oversight sufficient to know that each requirement has been fulfilled in a timely and correct manner.

(1) Inspections and calibrations of the transmission system, required monitors, metering and control systems; and any necessary repairs or adjustments where indicated. (See § 73.1580.)

(2) Periodic AM field monitoring point measurements, equipment performance measurements, or other tests as specified in the rules or terms of the station license.

(3) Review of the station records at least once each week to determine if required entries are being made correctly. Additionally, verification must be made that the station has been operated as required by the rules or the station authorization. Upon completion of the review, the chief operator or his designee must date and sign the log, initiate any corrective action which may be necessary, and advise the station licensee of any condition which is repetitive.

(4) Any entries which may be required in the station records. (See § 73.1820.)

[46 FR 35463, July 8, 1981, as amended at 47 FR 31580, July 21, 1982; 48 FR 38482, Aug. 24, 1983; 48 FR 44806, Sept. 30, 1983; 49 FR 20670, May 16, 1984; 49 FR 50048, Dec. 26, 1984; 50 FR 32416, Aug. 12, 1985; 60 FR 55482, Nov. 1, 1995]

### § 73.1910 Fairness Doctrine.

The Fairness Doctrine is contained in section 315(a) of the Communications Act of 1934, as amended, which provides that broadcasters have certain obligations to afford reasonable opportunity for the discussion of conflicting views on issues of public importance. See FCC public notice ''Fairness Doctrine and the Public Interest Standards,'' 39 FR 26372. Copies may be obtained from the FCC upon request.

[43 FR 45856, Oct. 4, 1978]

### § 73.1920 Personal attacks.

(a) When, during the presentation of views on a controversial issue of public importance, an attack is made upon the honesty, character, integrity or like personal qualities of an identified person or group, the licensee shall, within a reasonable time and in no event later than one week after the attack, transmit to the persons or group attacked:

(1) Notification of the date, time and identification of the broadcast;

(2) A script or tape (or an accurate summary if a script or tape is not available) of the attack; and

(3) An offer of a reasonable opportunity to respond over the licensee's facilities.

(b) The provisions of paragraph (a) of this section shall not apply to broadcast material which falls within one or more of the following categories:

(1) Personal attacks on foreign groups or foreign public figures;

(2) Personal attacks occurring during uses by legally qualified candidates.

(3) Personal attacks made during broadcasts not included in paragraph

(b)(2) of this section and made by legally qualified candidates, their authorized spokespersons, or those associated with them in the campaign, on other such candidates, their authorized spokespersons or persons associated with the candidates in the campaign; and

(4) Bona fide newscasts, bona fide news interviews, and on-the-spot coverage of bona fide news events, including commentary or analysis contained in the foregoing programs.

(c) The provisions of paragraph (a) of this section shall be applicable to editorials of the licensee, except in the case of noncommercial educational stations since they are precluded from editorializing (section 399(a), Communications Act).

[43 FR 45856, Oct. 4, 1978, as amended at 44 FR 45956, Aug. 6, 1979]

### § 73.1930 Political editorials.

(a) Where a licensee, in an editorial,

(1) Endorses or,

(2) Opposes a legally qualified candidate or candidates, the licensee shall, with 24 hours after the editorial, transmit to, respectively,

(i) The other qualified candidate or candidates for the same office or,

(ii) The candidate opposed in the editorial,

(A) Notification of the date and the time of the editorial,

(B) A script or tape of the editorial and

(C) An offer of reasonable opportunity for the candidate or a spokesman of the candidate to respond over the licensee's facilities. Where such editorials are broadcast on the day of the election or within 72 hours prior to the day of the election, the licensee shall comply with the provisions of this paragraph sufficiently far in advance of the broadcast to enable the candidate or candidates to have a reasonable opportunity to prepare a response and to present it in a timely fashion.

(b) Inasmuch as noncommercial educational stations may not engage in editorializing nor may support nor oppose any candidate for political office (section 399, Communications Act), the provisions of paragraph (a) of this section, do not apply to such stations.

[43 FR 45856, Oct. 4, 1978, as amended at 47 FR 3791, Jan. 27, 1982; 51 FR 9965, Mar. 24, 1986]

### § 73.1940 Legally qualified candidates for public office.

(a) A legally qualified candidate for public office is any person who:

(1) Has publicly announced his or her intention to run for nomination or office;

(2) Is qualified under the applicable local, State or Federal law to hold the office for which he or she is a candidate; and

(3) Has met the qualifications set forth in either paragraph (b), (c), (d), or (e) of this section.

(b) A person seeking election to any public office including that of President or Vice President of the United States, or nomination for any public office except that of President or Vice President, by means of a primary, general or special election, shall be considered a legally qualified candidate if, in addition to meeting the criteria set forth in paragraph (a) of this section, that person:

(1) Has qualified for a place on the ballot; or

(2) Has publicly committed himself or herself to seeking election by the write-in method and is eligible under applicable law to be voted for by sticker, by writing in his or her name on the ballot or by other method, and makes a substantial showing that he or she is a bona fide candidate for nomination or office.

(c) A person seeking election to the office of President or Vice President of the United States shall, for the purposes of the Communications Act and the rules in 47 CFR chapter I, be considered legally qualified candidates only in those States or territories (or the District of Columbia) in which they have met the requirements set forth in paragraphs (a) and (b) of this section: Except, that any such person who has met the requirements set forth in paragraphs (a) and (b) of this section in at least 10 States (or 9 and the District of Columbia) shall be considered a legally qualified candidate for election in all States, territories, and the District of Columbia for the purposes of this Act.

(d) A person seeking nomination to any public office, except that of President or Vice President of the United States, by means of a convention, caucus or similar procedure, shall be considered a legally qualified candidate if, in addition to meeting the requirements set forth in paragraph (a) of this section, that person makes a substantial showing that he or she is a bona fide candidate for such nomination: Except, that no person shall be considered a legally qualified candidate for nomination by the means set forth in this paragraph prior to 90 days before the beginning of the convention, caucus or similar procedure in which he or she seeks nomination.

(e) A person seeking nomination for the office of President or Vice President of the United States shall, for the purposes of the Communications Act and the rules thereunder, be considered a legally qualified candidate only in those States or territories (or the District of Columbia) in which, in addition to meeting the requirements set forth in paragraph (a) of this section:

(1) He or she, or proposed delegates on his or her behalf, have qualified for the primary or Presidential preference ballot in that State, territory or the District of Columbia; or

(2) He or she has made a substantial showing of a bona fide candidacy for such nomination in that State, territory or the District of Columbia; except, that any such person meeting the requirements set forth in paragraphs (a)(1) and (2) of this section in at least 10 States (or 9 and the District of Columbia) shall be considered a legally qualified candidate for nomination in all States, territories and the District of Columbia for purposes of this Act.

(f) The term ''substantial showing'' of a bona fide candidacy as used in paragraphs (b), (d) and (e) of this section means evidence that the person claiming to be a candidate has engaged to a substantial degree in activities commonly associated with political campaigning. Such activities normally would include making campaign speeches, distributing campaign literature, issuing press releases, maintaining a campaign committee, and establishing campaign headquarters (even though the headquarters in some instances might be the residence of the candidate or his or her campaign manager). Not all of the listed activities are necessarily required in each case to demonstrate a substantial showing, and there may be activities not listed herein which would contribute to such a showing.

[57 FR 27708, June 22, 1992]

### § 73.1941 Equal opportunities.

(a) *General requirements.* Except as otherwise indicated in § 73.1944, no station licensee is required to permit the use of its facilities by any legally qualified candidate for public office, but if any licensee shall permit any such candidate to use its facilities, it shall afford equal opportunities to all other candidates for that office to use such facilities. Such licensee shall have no power of censorship over the material broadcast by any such candidate. Appearance by a legally qualified candidate on any:

(1) Bona fide newscast;

(2) Bona fide news interview;

(3) Bona fide news documentary (if the appearance of the candidate is incidental to the presentation of the subject or subjects covered by the news documentary); or

(4) On-the-spot coverage of bona fide news events (including, but not limited to political conventions and activities incidental thereto) shall not be deemed to be use of broadcasting station. (section 315(a) of the Communications Act.)

(b) *Uses.* As used in this section and § 73.1942, the term ''use'' means a candidate appearance (including by voice or picture) that is not exempt under paragraphs 73.1941 (a)(1) through (a)(4) of this section.

(c) *Timing of request.* A request for equal opportunities must be submitted to the licensee within 1 week of the day on which the first prior use giving rise to the right of equal opportunities occurred: Provided, however, That where the person was not a candidate at the time of such first prior use, he or she shall submit his or her request within 1 week of the first subsequent use after he or she has become a legally qualified candidate for the office in question.

(d) *Burden of proof.* A candidate requesting equal opportunities of the licensee or complaining of noncompliance to the Commission shall have the burden of proving that he or she and his or her opponent are legally qualified candidates for the same public office.

(e) *Discrimination between candidates.* In making time available to candidates for public office, no licensee shall make any discrimination between candidates in practices, regulations, facilities, or services for or in connection with the service rendered pursuant to this part, or make or give any preference to any candidate for public office or subject any such candidate to any prejudice or disadvantage; nor shall any licensee make any contract or other agreement which shall have the effect of permitting any legally qualified candidate for any public office to broadcast to the exclusion of other legally qualified candidates for the same public office.

[57 FR 208, Jan. 3, 1992, as amended at 59 FR 14568, Mar. 29, 1994]

### § 73.1942 Candidate rates.

(a) Charges for use of stations. The charges, if any, made for the use of any broadcasting station by any person who is a legally qualified candidate for any public office in connection with his or her campaign for nomination for election, or election, to such office shall not exceed:

(1) During the 45 days preceding the date of a primary or primary runoff election and during the 60 days preceding the date of a general or special election in which such person is a candidate, the lowest unit charge of the station for the same class and amount of time for the same period.

(i) A candidate shall be charged no more per unit than the station charges its most favored commercial advertisers for the same classes and amounts of time for the same periods. Any station practices offered to commercial advertisers that enhance the value of advertising spots must be disclosed and made available to candidates on equal terms. Such practices include but are not limited to any discount privileges that affect the value of advertising, such as bonus spots, time-sensitive make goods, preemption priorities, or any other factors that enhance the value of the announcement.

(ii) The Commission recognizes nonpremptible, preemptible with notice, immediately preemptible and run-of-schedule as distinct classes of time.

(iii) Stations may establish and define their own reasonable classes of immediately preemptible time so long as the differences between such classes are based on one or more demonstrable benefits associated with each class and are not based solely upon price or identity of the advertiser. Such demonstrable benefits include, but are not limited to, varying levels of preemption protection, scheduling flexibility, or associated privileges, such as guaranteed time-sensitive make goods. Stations may not use class distinctions to defeat the purpose of the lowest unit charge requirement. All classes must be fully disclosed and made available to candidates.

(iv) Stations may establish reasonable classes of preemptible with notice time so long as they clearly define all such classes, fully disclose them and make available to candidates.

(v) Stations may treat nonpreemptible and fixed position as distinct classes of time provided that stations articulate clearly the differences between such classes, fully disclose them, and make them available to candidates.

(vi) Stations shall not establish a separate, premium-period class of time sold only to candidates. Stations may sell higher-priced non-preemptible or fixed time to candidates if such a class of time is made available on a *bona fide* basis to both candidates and commercial advertisers, and provided such class is not functionally equivalent to any lower-priced class of time sold to commercial advertisers.

(vii) [Reserved]

(viii) Lowest unit charge may be calculated on a weekly basis with respect to time that is sold on a weekly basis, such as rotations through particular programs or dayparts. Stations electing to calculate the lowest unit charge by such a method must include in that calculation all rates for all announcements scheduled in the rotation, including announcements aired under

long-term advertising contracts. Stations may implement rate increases during election periods only to the extent that such increases constitute ''ordinary business practices,'' such as seasonal program changes or changes in audience ratings.

(ix) Stations shall review their advertising records periodically throughout the election period to determine whether compliance with this section requires that candidates receive rebates or credits. Where necessary, stations shall issue such rebates or credits promptly.

(x) Unit rates charged as part of any package, whether individually negotiated or generally available to all advertisers, must be included in the lowest unit charge calculation for the same class and length of time in the same time period. A candidate cannot be required to purchase advertising in every program or daypart in a package as a condition for obtaining package unit rates.

(xi) Stations are not required to include non-cash promotional merchandising incentives in lowest unit charge calculations; provided, however, that all such incentives must be offered to candidates as part of any purchases permitted by the licensee. Bonus spots, however, must be included in the calculation of the lowest unit charge calculation.

(xii) Makes goods, defined as the rescheduling of preempted advertising, shall be provided to candidates prior to election day if a station has provided a time-sensitive make good during the year preceding the pre-election periods, perspectively set forth in paragraph (a)(1) of this section, to any commercial advertiser who purchased time in the same class.

(xiii) Stations must disclose and make available to candidates any make good policies provided to commercial advertisers. If a station places a make good for any commercial advertiser or other candidate in a more valuable program or daypart, the value of such make good must be included in the calculation of the lowest unit charge for that program or daypart.

(2) At any time other than the respective periods set forth in paragraph (a)(1) of this section, stations may charge legally qualified candidates for public office no more than the changes made for comparable use of the station by commercial advertisers. The rates, if any, charged all such candidates for the same office shall be uniform and shall not be rebated by any means, direct or indirect. A candidate shall be charged no more than the rate the station would charge for comparable commercial advertising. All discount privileges otherwise offered by a station to commercial advertisers must be disclosed and made available upon equal terms to all candidate for public office.

(b) If a station permits a candidate to use its facilities, the station shall make all discount privileges offered to commercial advertisers, including the lowest unit charges for each class and length of time in the same time period, and all corresponding discount privileges, available upon equal terms to all candidates. This duty includes an affirmative duty to disclose to candidates information about rates, terms conditions and all value-enhancing discount privileges offered to commercial advertisers. Stations may use reasonable discretion in making the disclosure; provided, however, that the disclosure includes, at a minimum, the following information:

(1) A description and definition of each class of time available to commercial advertisers sufficiently complete to allow candidates to identify and understand what specific attributes differentiate each class;

(2) A description of the lowest unit charge and related privileges (such as priorities against preemption and make goods prior to specific deadlines) for each class of time offered to commercial advertisers;

(3) A description of the station's method of selling preemptible time based upon advertiser demand, commonly known as the ''current selling level,'' with the stipulation that candidates will be able to purchase at these demand-generated rates in the same manner as commercial advertisers;

(4) An approximation of the likelihood of preemption for each kind of preemptible time; and

(5) An explanation of the station's sales practices, if any, that are based

on audience delivery, with the stipulation that candidates will be able to purchase this kind of time, if available to commercial advertisers.

(c) Once disclosure is made, stations shall negotiate in good faith to actually sell time to candidates in accordance with the disclosure.

(d) This rule (§ 73.1942) shall not apply to any station licensed for non-commercial operation.

[57 FR 209, Jan. 3, 1992, as amended at 57 FR 27709, June 22, 1992]

### § 73.1943 Political file.

(a) Every licensee shall keep and permit public inspection of a complete and orderly record (political file) of all requests for broadcast time made by or on behalf of a candidate for public office, together with an appropriate notation showing the disposition made by the licensee of such requests, and the charges made, if any, if the request is granted. The ''disposition'' includes the schedule of time purchased, when spots actually aired, the rates charged, and the classes of time purchased.

(b) When free time is provided for use by or on behalf of candidates, a record of the free time provided shall be placed in the political file.

(c) All records required by this paragraph shall be placed in the political file as soon as possible and shall be retained for a period of two years. As soon as possible means immediately absent unusual circumstances.

[57 FR 210, Jan. 3, 1992]

### § 73.1944 Reasonable access.

(a) Section 312(a)(7) of the Communications Act provides that the Commission may revoke any station license or construction permit for willful or repeated failure to allow reasonable access to, or to permit purchase of, reasonable amounts of time for the use of a broadcasting station by a legally qualified candidate for Federal elective office on behalf of his candidacy.

(b) *Weekend access.* For purposes of providing reasonable access, a licensee shall make its facilities available for use by federal candidates on the weekend before the election if the licensee has provided similar access to commercial advertisers during the year preceding the relevant election period. Licensees shall not discriminate between candidates with regard to weekend access.

[57 FR 210, Jan. 3, 1992]

### § 73.2080 Equal employment opportunities.

(a) *General EEO policy.* Equal opportunity in employment shall be afforded by all licensees or permittees of commercially or noncommercially operated AM, FM, TV, or international broadcast stations (as defined in this part) to all qualified persons, and no person shall be discriminated against in employment by such stations because of race, color, religion, national origin, or sex.

(b) *EEO program.* Each broadcast station shall establish, maintain, and carry out a positive continuing program of specific practices designed to ensure equal opportunity in every aspect of station employment policy and practice. Under the terms of its program, a station shall:

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

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

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

(4) Conduct a continuing program to exclude all unlawful forms of prejudice or discrimination based upon race, color, religion, national origin, or sex from its personnel policies and practices and working conditions; and

(5) Conduct a continuing review of job structure and employment practices and adopt positive recruitment, job design, and other measures needed

to ensure genuine equality of opportunity to participate fully in all organizational units, occupations, and levels of responsibility.

(c) *EEO program requirements.* A broadcast station's equal employment opportunity program should reasonably address itself to the specific areas set forth below, to the extent possible, and to the extent that they are appropriate in terms of the station's size, location, etc.:

(1) Disseminate its equal opportunity program to job applicants and employees. For example, this requirement may be met by:

(i) Posting notices in the station's office and other places of employment, informing employees, and applicants for employment, of their equal employment opportunity rights. Where it is appropriate, such equal employment opportunity notices should be posted in languages other than English;

(ii) Placing a notice in bold type on the employment application informing prospective employees that discrimination because of race, color, religion, national origin, or sex is prohibited;

(iii) Seeking the cooperation of labor unions, if represented at the station, in the implementation of its EEO program and the inclusion of non-discrimination provisions in union contracts;

(iv) Utilizing media for recruitment purposes in a manner that will contain no indication, either explicit or implicit, of a preference for one sex over another and that can be reasonably expected to reach minorities and women.

(2) Use minority organizations, organizations for women, media, educational institutions, and other potential sources of minority and female applicants, to supply referrals whenever job vacancies are available in its operation. For example, this requirement may be met by:

(i) Placing employment advertisements in media that have significant circulation among minorities residing and/or working in the recruiting area;

(ii) Recruiting through schools and colleges, including those located in the station's local area, with significant minority-group enrollments;

(iii) Contacting, both orally and in writing, minority and human relations organizations, leaders, and spokesmen and spokeswomen to encourage referral of qualified minority or female applicants;

(iv) Encouraging current employees to refer minority or female applicants;

(v) Making known to recruitment sources in the employer's immediate area that qualified minority members and females are being sought for consideration whenever you hire and that all candidates will be considered on a nondiscriminatory basis.

(3) Evaluate its employment profile and job turnover against the availability of minorities and women in its recruitment area. For example, this requirement may be met by:

(i) Comparing the composition of the relevant labor area with composition of the station's workforce;

(ii) Where there is underrepresentation of either minorities and/or women, examining the company's personnel policies and practices to assure that they do not inadvertently screen out any group and take appropriate action where necessary. Data on representation of minorities and women in the available labor force are generally available on a metropolitan statistical area (MSA) or county basis.

(4) Undertake to offer promotions of qualified minorities and women in a nondiscriminatory fashion to positions of greater responsibility. For example, this requirement may be met by:

(i) Instructing those who make decisions on placement and promotion that qualified minority employees and females are to be considered without discrimination, and that job areas in which there is little or no minority or female representation should be reviewed;

(ii) Giving qualified minority and female employees equal opportunity for positions which lead to higher positions. Inquiring as to the interest and skills of all lower paid employees with respect to any of the higher paid positions.

(5) Analyze its efforts to recruit, hire, and promote minorities and women and address any difficulties encountered in implementing its equal employment opportunity program. For example, this requirement may be met by:

(i) Avoiding use of selection techniques or tests that have the effect of discriminating against qualified minority groups or females;

(ii) Reviewing seniority practices to ensure that such practices are nondiscriminatory;

(iii) Examining rates of pay and fringe benefits for employees having the same duties, and eliminating any inequities based upon race or sex discrimination.

(d) *Mid-term review for television broadcast stations.* The Commission will conduct a mid-term review of the employment practices of each broadcast television station at two and one half years following the station's most recent license expiration date as specified in §73.1020. The Commission will use the employment profile information provided on the first two Form 395–B reports submitted following such license expiration date to determine whether television station's employment profiles as compared to the applicable labor force data, are in compliance with the Commission's processing criteria. Television broadcast stations which employment profiles fall below the processing criteria will receive a letter noting any necessary improvements identified as a result of the review.

[52 FR 26684, July 16, 1987, as amended at 58 FR 42249, Aug. 9, 1993]

### § 73.3500 Application and report forms.

Following are the FCC broadcast application and report forms, listed by number.

| Form number | Title |
|---|---|
| 175 | Application to Participate in an FCC Auction |
| 301 | Application for Authority to Construct or Make Changes in a Commercial Broadcast Station. |
| 301–A | Application for Authority to Operate a Broadcast Station by Remote Control or to Make Changes in a Remote Control Authorization. |
| 302–AM | Application for AM Broadcast Station License. |
| 302–FM | Application for FM Broadcast Station License. |
| 302–TV | Application for Television Broadcast Station License. |
| 303–S | Application for Renewal of License for AM, FM, TV, Translator, or LPTV Station. |
| 307 | Application for Extension of Broadcast Construction Permit or to Replace Expired Construction Permit. |
| 308 | Application for Permit to Deliver Programs to Foreign Broadcast Stations. |
| 309 | Application for Authority to Construct or Make Changes in an International or Experimental Broadcast Station. |
| 310 | Application for an International or Experimental Broadcast Station License. |
| 311 | Application for Renewal of an International or Experimental Broadcast Station License. |
| 313 | Application for Authorization in the Auxiliary Broadcast Services. |
| 313–R | Application for Renewal of Auxiliary Broadcast License (Short Form). |
| 314 | Application for Consent to Assignment of Broadcast Station Construction Permit or License. |
| 315 | Application for Consent to Transfer of Control of Corporation Holding Broadcast Station Construction Permit or License. |
| 316 | Application for Consent to Assignment of Broadcast Station Construction Permit or License or Transfer of Control of Corporation Holding Broadcast Station Construction Permit or License. |
| 323 | Ownership Report. |
| 323–E | Ownership Report for Noncommercial Educational Broadcast Station. |
| 330 | Application for authorization to construct new or make changes in Instructional TV Fixed and/or Response Stations, or to assign or transfer such stations. |
| 330–L | Application for Instructional Television Fixed Station License. |
| 330–R | Application for Renewal of Instructional TV Fixed Station and/or Response Station(s) and Low Power Relay Station(s) License. |
| 340 | Application for Authority to Construct or Make Changes in a Noncommercial Educational Broadcast Station. |
| 345 | Application for Consent to Assignment of a TV or FM Translator Station Construction Permit or License. |
| 346 | Application for Authority to Construct or Make Changes in a Low Power TV, TV Translator or TV Booster Station. |
| 347 | Application for a Low Power TV, TV Translator or TV Booster Station License. |
| 349 | Application for Authority to Construct or Make Changes in an FM Translator or FM Booster Station. |
| 350 | Application for an FM Translator or FM Booster Station License. |
| 395–B | Annual Employment Report and instructions. |
| 396 | Broadcast Equal Employment Opportunity Program Report. |
| 396–A | Broadcast Equal Employment Opportunity Model Program Report. |
| 398 | Children's Television Programming Report. |

[44 FR 38486, July 2, 1979]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 73.3500, see the List of CFR Sections Affected in the Finding Aids section of this volume.

EFFECTIVE DATE NOTES 1. At 61 FR 43998, Aug. 27, 1996, in § 73.3500, the table was amended by adding entry ''398'' in numerical order, effective either Jan. 2, 1997 or after approval has been given by the Office of Management and Budget, whichever comes later.

2. At 63 FR 48623, Sept. 11, 1998, in § 73.3500, the table was amended by adding entry ''175'' in numerical order, effective Nov. 10, 1998.

### § 73.3511 Applications required.

(a) *Formal application* means any request for authorization where an FCC form for such request is prescribed. The prescription of an FCC form includes the requirement that the proper edition of the form is used. Formal applications on obsolete forms are subject to the provisions of § 73.3564 concerning acceptance of applications and § 73.3566 concerning defective applications.

(b) *Informal application*1 means all other written requests for authorization. All such applications should contain a caption clearly indicating the nature of the request submitted therein.

(c) Formal and informal applications must comply with the requirements as to signing specified herein and in § 73.3513.

[44 FR 38486, July 2, 1979, as amended at 47 FR 40172, Sept. 13, 1982]

### § 73.3512 Where to file; number of copies.

All applications for authorizations required by § 73.3511 shall be filed at the FCC in Washington, DC (Applications requiring fees as set forth at Part 1, Subpart G of this chapter must be filed in accordance with § 0.401(b) of the rules.) The number of copies required for each application is set forth in the FCC Form which is to be used in filing such application.

[52 FR 10231, Mar. 31, 1987]

### § 73.3513 Signing of applications.

(a) Applications, amendments thereto, and related statements of fact required by the FCC must be signed by the following persons:

(1) *Individual Applicant.* The applicant, if the applicant is an individual.

(2) *Partnership.* One of the partners, if the applicant is a partnership.

(3) *Corporation.* An officer, if the applicant is a corporation.

(4) *Unincorporated Association.* A member who is an officer, if the applicant is an unincorporated association.

(5) *Governmental Entity.* Such duly elected or appointed officials as may be competent to do so under the law of the applicable jurisdiction, if the applicant is an eligible governmental entity, such as a State or Territory of the United States and political subdivisions thereof, the District of Columbia, and a unit of local government, including an unincorporated municipality.

(b) Applications, amendments thereto, and related statements of fact required by the FCC may be signed by the applicant's attorney in case of the applicant's physical disability or of his absence from the United States. 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, amendments, or related statements of fact, need be signed; copies may be conformed.

(d) Applications, amendments, and related statements of fact need not be submitted under oath. Willful false statements made therein however, will be considered a violation of § 73.1015, are also punishable by fine and imprisonment, U.S. Code, Title 18, section 1001, and by appropriate adminstrative sanctions including revocation of station license pursuant to section 312(a)(i) of the Communications Act.

[44 FR 38487, July 2, 1979, as amended at 51 FR 3069, Jan. 23, 1986]

### § 73.3514 Content of applications.

(a) Each application shall include all information called for by the particular form on which the application is required to be filed, unless the information called for is inapplicable, in which case this fact shall be indicated.

(b) The FCC may require an applicant to submit such documents and written statements of fact as in its judgment may be necessary. The FCC may also, upon its own motion or upon motion of any party to a proceeding, order the applicant to amend the application so as to make it more definite and certain.

[44 FR 38487, July 2, 1979]

### § 73.3516 Specification of facilities.

(a) An application for facilities in the AM, FM, or TV broadcast services or low power TV service shall be limited to one frequency, or channel, and no application will be accepted for filing if it requests an alternate frequency or channel. Applications specifying split frequency AM operations using one frequency during daytime hours complemented by a different frequency during nighttime hours will not be accepted for filing.

(b) An application for facilities in the experimental and auxiliary broadcast services may request the assignment of more than one frequency if consistent with applicable rules in Part 74. Such applications must specify the frequency or frequencies requested and may not request alternate frequencies.

(c) An application for a construction permit for a new broadcast station, the facilities for which are specified in an outstanding construction permit or license, will not be accepted for filing.

(d) An application for facilities in the International broadcast service may be filed without a request for specific frequency, as the FCC will assign frequencies from time to time in accordance with §§ 73.702 and 73.711.

(e) An application for construction permit for a new broadcast station or for modification of construction permit or license of a previously authorized broadcast station will not be accepted for filing if it is mutually exclusive with an application for renewal of license of an existing broadcast station unless the application for renewal of license is filed on or before May 1, 1995 and unless the mutually exclusive construction permit application is tendered for filing by the end of the first day of the last full calendar month of the expiring license term. A petition to deny an application for renewal of license of an existing broadcast station will be considered as timely filed if it is tendered for filing by the end of the first day of the last full calendar month of the expiring license term.

(1) If the license renewal application is not timely filed as prescribed in § 73.3539, the deadline for filing petitions to deny thereto is the 90th day after the FCC gives public notice that it has accepted the late-filed renewal application for filing. In the case of a renewal application filed on or before May 1, 1995, if the license renewal application is not timely filed as prescribed in § 73.3539, the deadline for filing applications mutually exclusive therewith is the 90th day after the FCC gives public notice that it has accepted the late-filed renewal application for filing.

(2) If any deadline falls on a nonbusiness day, the cutoff shall be the close of business of the first full business day thereafter.

(3) The dates when the licenses of all broadcast and broadcast auxiliary services regularly expire are listed in §§ 73.733, 73.1020 and 74.15.

[44 FR 38487, July 2, 1979, as amended at 47 FR 21494, May 18, 1982; 49 FR 47843, Dec. 7, 1984; 51 FR 44071, Dec. 8, 1986; 56 FR 64873, Dec. 12, 1991; 61 FR 18291, Apr. 25, 1996]

### § 73.3517 Contingent applications.

Contingent applications for new stations and for changes in facilities of existing stations are not acceptable for filing. Contingent applications will be accepted for filing under circumstances described below:

(a) Upon filing of an application for the assignment of a license or construction permit, or for a transfer of control of a licensee or permittee, the proposed assignee or transferee may, upon payment of the processing fee prescribed in Subpart G, Part 1 of this chapter, file applications in its own name for authorization to make changes in the facilities to be assigned or transferred contingent upon approval and consummation of the assignment or transfer. Any application filed pursuant to this paragraph must be accompanied by a written statement

from the existing licensee which specifically grants permission to the assignee or permittee to file such application. The processing fee will not be refundable should the assignment or transfer not be approved. The existing licensee or permittee may also file a contingent application in its own name, but fees in such cases also not refundable.

(b) Whenever the FCC determines that processing of any application filed pursuant to paragraph (a) of this section, would be contrary to sound administrative practice or would impose an unwarranted burden on its staff and resources, the FCC may defer processing of such application until the assignment or transfer has been granted and consummated.

(c) Upon payment of the filing fees prescribed in §1.1111 of this chapter, the Commission will accept two or more applications filed by existing AM licensees for modification of facilities that are contingent upon granting of both, if granting such contingent applications will reduce interference to one or more AM stations or will otherwise increase the area of interference-free service. The applications must state that they are filed pursuant to an interference reduction arrangement and must cross-reference all other contingent applications.

(d) Modified proposals curing conflicts between mutually exclusive clusters of applications filed in accordance with paragraphs (c) of this section will be accepted for 60 days following issuance of a public notice identifying such conflicts.

NOTE 1: No application to move to a frequency in the 1605–1705 kHz band may be part of any package of contingent applications associated with a voluntary agreement.

NOTE 2: In cases where no modified proposal is filed pursuant to paragraph (d) of this section, the Commission will grant the application resulting in the greatest net interference reduction.

[44 FR 38487, July 2, 1979, as amended at 45 FR 41152, June 18, 1980; 52 FR 5294, Feb. 20, 1987; 53 FR 36787, Sept. 22, 1988; 56 FR 64873, Dec. 12, 1991]

### §73.3518 Inconsistent or conflicting applications.

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

[44 FR 38487, July 2, 1979]

### §73.3519 Repetitious applications.

(a) Where the FCC has denied an application for a new station or for any modification of services or facilities, or dismissed such application with prejudice, no like application involving service of the same kind for substantially the same area by substantially the same applicant, or his successor or assignee, or on behalf or for the benefit of the original parties in interest, may be filed within 12 months from the effective date of the FCC's action. However, applicants whose applications have been denied in a comparative hearing may apply immediately for another available facility.

(b) Where an appeal has been taken from the action of the FCC in denying a particular application, another application for the same class of broadcast station and for the same area, in whole or in part, filed by the same applicant, or his successor or assignee, or on behalf of, or for the benefit of the original parties in interest, will not be considered until final disposition of such appeal.

[44 FR 38488, July 2, 1979]

### §73.3520 Multiple applications.

Where there is one application for new or additional facilities pending, no other application for new or additional facilities for a station of the same class to serve the same community may be filed by the same applicant, or successor or assignee, or on behalf of, or for the benefit of the original parties in interest. Multiple applications may not be filed simultaneously.

[44 FR 38488, July 2, 1979]

### § 73.3521 Mutually exclusive applications for low power television, television translators and television booster stations.

When there is a pending application for a new low power television, television translator, or television booster station, or for major changes in an existing station, no other application which would be directly mutually exclusive with the pending application may be filed by the same applicant or by any applicant in which any individual in common with the pending application has any interest, direct or indirect, except that interests or less than 1% will not be considered.

[52 FR 31400, Aug. 20, 1987]

### § 73.3522 Amendment of applications.

(a) *Broadcast services subject to competitive bidding.* (1) Applicants in all broadcast services subject to competitive bidding will be subject to the provisions of §§ 73.5002 and 1.2105(b) regarding the modification of their short-form applications.

(2) Subject to the provision of § 73.5005, if it is determined that a long form application submitted by a winning bidder or a non-mutually exclusive applicant for a new station or a major change in an existing station in all broadcast services subject to competitive bidding is substantially complete, but contains any defect, omission, or inconsistency, a deficiency letter will be issued affording the applicant an opportunity to correct the defect, omission or inconsistency. Amendments may be filed pursuant to the deficiency letter curing any defect, omission or inconsistency identified by the Commission, or to make minor modifications to the application, or pursuant to § 1.65. Such amendments should be filed in accordance with § 73.3513. If a petition to deny has been filed, the amendment shall be served on the petitioner.

(3) Subject to the provisions of §§ 73.3571, 73.3572 and 73.3573, deficiencies, omissions or inconsistencies in long-form applications may not be cured by major amendment. The filing of major amendments to long-form applications is not permitted. An application will be considered to be newly filed if it is amended by a major amendment.

(4) Paragraph (a) of this section is not applicable to applications for minor modifications of facilities in the non-reserved FM broadcast service, nor to any application for a reserved band FM station.

(b) *Reserved band FM and reserved noncommercial educational television stations*—(1) *Predesignation amendments.* Subject to the provisions of §§ 73.3525, 73.3572, 73.3573 and 73.3580, mutually exclusive broadcast applications for reserved band FM stations and television stations on a reserved channel may be amended as a matter of right by the date specified (not less than 30 days after issuance) in the FCC's Public Notice announcing the acceptance for filing of the last-filed mutually exclusive application. Subsequent amendments prior to designation of the proceeding for hearing will be considered only upon a showing of good cause for late filing or pursuant to § 1.65 or § 73.3514. Unauthorized or untimely amendments are subject to return by the FCC's staff without consideration.

(2) *Postdesignation amendments.* (i) Except as provided in paragraph (ii) of this section, requests to amend an application after it has been designated for hearing will be considered only upon written petition properly served upon the parties of record in accordance with § 1.47 and, where applicable, compliance with the provisions of § 73.3525, and will be considered only upon a showing of good cause for late filing. In the case of requests to amend the engineering proposal (other than to make changes with respect to the type of equipment specified), good cause will be considered to have been shown only if, in addition to the usual good cause consideration, it is demonstrated:

(A) That the amendment is necessitated by events which the applicant could not reasonably have foreseen (e.g., notification of a new foreign station or loss of transmitter site by condemnation); and

(B) That the amendment does not require an enlargement of issues or the addition of new parties to the proceeding.

(ii) In comparative broadcast cases (including comparative renewal proceedings), amendments relating to issues first raised in the designation order may be filed as a matter of right within 30 days after that Order or a summary thereof is published in the FEDERAL REGISTER, or by a date certain to be specified in the Order.

(iii) Notwithstanding the provisions of paragraphs (b)(2)(i) and (b)(2)(ii) of this section, and subject to compliance with the provisions of §73.3525, a petition for leave to amend may be granted, provided it is requested that the application as amended be removed from the hearing docket and returned to the processing line. (c) Minor modifications of facilities in the non-reserved FM broadcast service.

(1) Subject to the provisions of §§73.3525, 73.3573, and 73.3580, for a period of 30 days following the FCC's issuance of a Public Notice announcing the tender of an application for minor modification of a non-reserved band FM station, (other than Class D stations), minor amendments may be filed as a matter of right.

(2) For applications received on or after August 7, 1992, an applicant whose application is found to meet minimum filing requirements, but nevertheless is not complete and acceptable, shall have the opportunity during the period specified in the FCC staff's deficiency letter to correct all deficiencies in the tenderability and acceptability of the underlying application, including any deficiency not specifically identified by the staff. [For minimum filing requirements see §73.3564(a). Examples of tender defects appear at 50 FR 19936 at 19945–46 (May 13, 1985), reprinted as Appendix D, Report and Order, MM Docket No. 91–347, 7 FCC Rcd 5074, 5083–88 (1992). For examples of acceptance defects, see 49 FR 47331.] Prior to the end of the period specified in the deficiency letter, a submission seeking to correct a tender and/or acceptance defect in an application meeting minimum filing requirements will be treated as an amendment for good cause if it would successfully and directly correct the defect. Other amendments submitted prior to grant will be considered only upon a showing of good cause for late filing or pursuant to §1.65 or §73.3514.

(3) Unauthorized or untimely amendments are subject to return by the Commission without consideration. However, an amendment to a non-reserved band application will not be accepted if the effect of such amendment is to alter the proposed facility's coverage area so as to produce a conflict with an applicant who files subsequent to the initial applicant but prior to the amendment application. Similarly, an applicant subject to ''first come/first serve'' processing will not be permitted to amend its application and retain filing priority if the result of such amendment is to alter the facility's coverage area so as to produce a conflict with an applicant which files subsequent to the initial applicant but prior to the amendment.

NOTE 1 TO §73.3522: When two or more broadcast applications are tendered for filing which are mutually exclusive with each other but not in conflict with any previously filed applications which have been accepted for filing, the FCC, where appropriate, will announce acceptance of the earliest tendered application and place the later filed application or applications on a subsequent public notice of acceptance for filing in order to establish a deadline for the filing of amendments as a matter of right for all applicants in the group.

[63 FR 48623, Sept. 11, 1998]

EFFECTIVE DATE NOTE: At 63 FR 48623, Sept. 11, 1998, §73.3522 was revised, effective Nov. 10, 1998. For the convenience of the user, the superseded text is set forth as follows:

**§73.3522 Amendment of applications.**

(a) *Predesignation amendment.* (1) Subject to the provisions of §§73.3525, 73.3571, 73.3572, 73.3573, and 73.3580, and except as provided in paragraph (a)(2) of this section, any application, other than an application for a low power TV, TV translator, TV booster or a nonreserved band FM station may be amended as a matter of right prior to the adoption date of an order designating such applications for hearings, merely by filing the appropriate number of copies of the amendments in question duly executed in accordance with §73.3513. If a petition to deny (or to designate for hearing) has been filed, the amendment shall be served on the petitioner.

(2) Subject to the provisions of §§73.3525, 73.3571, 73.3572, 73.3573 and 73.3580, and except for applications for low power TV, TV translator, TV booster or non-reserved band FM stations, mutually exclusive broadcast applications may be amended as a matter of right by the date specified (not less than 30 days

after issuance) in the FCC's Public Notice announcing the acceptance for filing of the last-filed mutually exclusive application. Subsequent amendments prior to designation of the proceeding for hearing will be considered only upon a showing of good cause for late filing or pursuant to §1.65 or §73.3514. Unauthorized or untimely amendments are subject to return by the FCC's staff without consideration.

(3) Subject to the provisions of §§73.3525, 73.3572 and 73.3580, any application for a low power TV, TV translator or TV booster station may be amended as a matter of right during the application window filing period pursuant to §73.3564(d). If it is determined that a low power TV, TV translator or TV booster application is substantially complete but contains some defect(s) or omission(s), a deficiency letter will be issued affording the applicant 30 days to correct the defect.

(4) No applicant for a low power TV, TV translator or TV booster station which is mutually exclusive can improve its status with respect to §1.1622 by amendment of its application subsequent to the release of the initial Public Notice announcing the public lottery that will resolve the applicant's mutual exclusivity pursuant to §1.1601 *et seq.*, not withstanding the requirements of §1.65.

(5) Paragraphs (b) and (c) of this section are not applicable to applications for low power TV, TV translator, or TV booster stations.

(6) Subject to the provisions of §73.3525, 73.3573, and 73.3580, applications for non-reserved band FM stations (other than Class D stations) may be amended as a matter of right during the appropriate window filing period pursuant to §73.3564(d). For a period of 30 days following the FCC's issuance of a Public Notice announcing the tender of the application, minor amendments may be filed as a matter of right. For applications received on or after August 7, 1992, an applicant whose application is found to meet minimum filing requirements but nevertheless is not complete and acceptable shall have the opportunity in the 30-day period specified in the FCC staff's deficiency letter to correct all deficiencies in the tenderability and acceptability of the underlying application, including any deficiency not specifically identified by the staff. [For minimum filing requirements see §73.3564(a). Examples of tender defects appear at 50 FR 19936 at 19945–46 (May 13, 1985), *reprinted as* Appendix D, *Report and Order*, MM Docket No. Docket No. 91–347, 7 FCC Red 5074, 5083–88 (1992). For examples of acceptance defects see 49 FR 47331.] Prior to the end of the period specified in the deficiency letter, a submission seeking to correct a tender and/or acceptance defect in an application meeting minimum filing requirements will be treated as an amendment for good cause if it would successfully and directly correct the defect. Other amendments prior to designation for hearing or grant will be considered only upon a showing of good cause for late filing or pursuant to §1.65 or §73.3514. Unauthorized or untimely amendments are subject to return by the Commission without consideration. However, an amendment to a non-reserved band application will not be accepted after the close of the appropriate filing window if the effect of such amendment is to alter the proposed facility's coverage area so as to produce a conflict with an applicant who files subsequent to the initial applicant but prior to the amendment application. Similarly, an applicant subject to ''firstcome/first serve'' processing will not be permitted to amend its application and retain filing priority if the result of such amendment is to alter the facility's coverage area so as to produce a conflict with an applicant who files subsequent to the initial applicant but prior to the amendment.

(b) *Postdesignation amendment.* (1) Except as provided in paragraph (b)(2) of this section, requests to amend an application after it has been designated for hearing will be considered only upon written petition properly served upon the parties of record in accordance with §1.47 and, where applicable, compliance with the provisions of §73.3525, and will be considered only upon a showing of good cause for late filing. In the case of requests to amend the engineering proposal (other than to make changes with respect to the type of equipment specified), good cause will be considered to have been shown only if, in addition to the usual good cause consideration, it is demonstrated:

(i) That the amendment is necessitated by events which the applicant could not reasonably have foreseen (e.g., notification of a new foreign station or loss of transmitter site by condemnation); and

(ii) That the amendment does not require an enlargement of issues or the addition of new parties to the proceeding.

(2) In comparative broadcast cases (including comparative renewal proceedings), amendments relating to issues first raised in the designation order may be filed as a matter of right within 30 days after that Order or a summary thereof is published in the FEDERAL REGISTER, or by a date certain to be specified in the Order.

(c) Notwithstanding the provisions of paragraph (b) of this section, and subject to compliance with the provisions of §73.3525, a petition for leave to amend may be granted, provided it is requested that the application as amended be removed from the hearing docket and returned to the processing line. See §73.3571.

NOTE 1: When two or more broadcast applications are tendered for filing which are mutually exclusive with each other but not in

conflict with any previously filed applications which have been accepted for filing, the FCC, where appropriate, will announce acceptance of the earliest tendered application and place the later filed application or applications on a subsequent public notice of acceptance for filing in order to establish a deadline for the filing of amendments as a matter of right for all applicants in the group.

[44 FR 38488, July 2, 1979, as amended at 44 FR 40311, July 10, 1979; 51 FR 19347, May 29, 1986; 52 FR 31400, Aug. 20, 1987; 53 FR 26074, July 11, 1988; 57 FR 34878, Aug. 7, 1992; 58 FR 51250, Oct. 1, 1993; 59 FR 31556, June 20, 1994]

### § 73.3523 Dismissal of applications in renewal proceedings.

(a) An applicant for construction permit, that has filed an application that is mutually exclusive with an application for renewal of a license of an AM, FM or television station (hereinafter competing applicant'') filed on or before May 1, 1995, and seeks to dismiss or withdraw its application and thereby remove a conflict between applications pending before the Commission, must obtain the approval of the Commission.

(b) If a competing applicant seeks to dismiss or withdraw its application prior to the Initial Decision stage of the hearing on its application, it must submit to the Commission a request for approval of the dismissal or withdrawal of its application, a copy of any written agreement related to the dismissal or withdrawal of its application, and an affidavit setting forth:

(1) A certification that neither the applicant nor its principals has received or will receive any money or other consideration in exchange for dismissing or withdrawing its application;

(2) A statement that its application was not filed for the purpose of reaching or carrying out an agreement with any other applicant regarding the dismissal or withdrawal of its application; and

(3) The terms of any oral agreement relating to the dismissal or withdrawal of its application.

In addition, within 5 days of the applicant's request for approval, each remaining competing applicant and the renewal applicant must submit an affidavit setting forth:

(4) A certification that neither the applicant nor its principals has paid or will pay any money or other consideration in exchange for the dismissal or withdrawal of the application; and

(5) The terms of any oral agreement relating to the dismissal or withdrawal of the application.

(c) If a competing applicant seeks to dismiss or withdraw its application after the Initial Decision stage of the hearing on its application, it must submit to the Commission a request for approval of the dismissal or withdrawal of its application, a copy of the any written agreement related to the dismissal or withdrawal, and an affidavit setting forth:

(1) A certification that neither the applicant nor its principals has received or will receive any money or other consideration in excess of the legitimate and prudent expenses of the applicant;

(2) The exact nature and amount of any consideration paid or promised;

(3) An itemized accounting of the expenses for which it seeks reimbursement;

(4) A statement that its application was not filed for the purpose of reaching or carrying out an agreement with any other applicant regarding the dismissal or withdrawal of its application; and

(5) The terms of any oral agreement relating to the dismissal or withdrawal of its application.

In addition, within 5 days of the applicant's request for approval, each remaining party to any written or oral agreement must submit an affidavit setting forth:

(6) A certification that neither the applicant nor its principals has paid or will pay money or other consideration in excess of the legitimate and prudent expenses of the withdrawing applicant in exchange for the dismissal or withdrawal of the application; and

(7) The terms of any oral agreement relating the dismissal or withdrawal of the application.

(d) For the purpose of this section:

(1) Affidavits filed pursuant to this section shall be executed by the applicant, permittee or licensee, if an individual; a partner having personal

knowledge of the facts, if a partnership; or an officer having personal knowledge of the facts, if a corporation or association.

(2) An application shall be deemed to be pending before the Commission from the time an application is filed with Commission until an order of the Commission granting or denying the application is no longer subject to reconsideration by the Commission or to review by any court.

(3) ''Legitimate and prudent expenses'' are those expenses reasonably incurred by an applicant in preparing, filing, and prosecuting its application.

(4) ''Other consideration'' consists of financial concessions, including but not limited to the transfer of assets or the provision of tangible pecuniary benefit, as well as nonfinancial concessions that confer any type of benefit on the recipient.

[54 FR 22598, May 25, 1989, as amended at 61 FR 18291, Apr. 25, 1996]

### § 73.3525 Agreements for removing application conflicts.

(a) Except as provided in § 73.3523 regarding dismissal of applications in comparative renewal proceedings, whenever applicants for a construction permit for a broadcast station enter into an agreement to procure the removal of a conflict between applications pending before the FCC by withdrawal or amendment of an application or by its dismissal pursuant to § 73.3568, all parties thereto shall, within 5 days after entering into the agreement, file with the FCC a joint request for approval of such agreement. The joint request shall be accompanied by a copy of the agreement, including any ancillary agreements, and an affidavit of each party to the agreement setting forth:

(1) The reasons why it is considered that such agreement is in the public interest;

(2) A statement that its application was not filed for the purpose of reaching or carrying out such agreement;

(3) A certification that neither the applicant nor its principals has received any money or other consideration in excess of the legitimate and prudent expenses of the applicant; *Provided* That this provision shall not apply to *bona fide* merger agreements;

(4) The exact nature and amount of any consideration paid or promised;

(5) An itemized accounting of the expenses for which it seeks reimbursement; and

(6) The terms of any oral agreement relating to the dismissal or withdrawal of its application.

(b) Whenever two or more conflicting applications for construction permits for broadcast stations pending before the FCC involve a determination of fair, efficient and equitable distribution of service pursuant to section 307(b) of the Communications Act, and an agreement is made to procure the withdrawal (by amendment to specify a different community or by dismissal pursuant to § 73.3568) of the only application or applications seeking the same facilities for one of the communities involved, all parties thereto shall file the joint request and affidavits specified in paragraph (a) of this section.

(1) If upon examination of the proposed agreement the FCC finds that withdrawal of one of the applications would unduly impede achievement of a fair, efficient and equitable distribution of radio servce among the several States and communities, then the FCC shall order that further opportunity be afforded for other persons to apply for the facilities specified in the application or applications to be withdrawn before acting upon the pending request for approval of the agreement.

(2) Upon release of such order, any party proposing to withdraw its application shall cause to be published a notice of such proposed withdrawal at least twice a week for 2 consecutive weeks within the 3-week period immediately following release of the FCC's order, in a daily newspaper of general circulation published in the community in which it was proposed to locate the station. However, if there is no such daily newspaper published in the community, the notice shall be published as follows:

(i) If one or more weekly newspapers of general circulation are published in the community in which the station was proposed to be located, notice shall

be published in such a weekly newspaper once a week for 3 consecutive weeks within the 4-week period immediately following the release of the FCC's order.

(ii) If no weekly newspaper of general circulation is published in the community in which the station was proposed to be located, notice shall be published at least twice a week for 2 consecutive weeks within the 3-week period immediately following the release of the FCC's order in the daily newspaper having the greatest general circulation in the community in which the station was proposed to be located.

(3) The notice shall state the name of the applicant; the location, frequency and power of the facilities proposed in the application; the location of the station or stations proposed in the applications with which it is in conflict; the fact that the applicant proposes to withdraw the application; and the date upon which the last day of publication shall take place.

(4) Such notice shall additionally include a statement that new applications for a broadcast station on the same frequency, in the same community, with substantially the same engineering characteristics and proposing to serve substantially the same service area as the application sought to be withdrawn, timely filed pursuant to the FCC's rules, or filed, in any event, within 30 days from the last date of publication of the notice (notwithstanding any provisions normally requiring earlier filing of a competing application), will be entitled to comparative consideration with other pending mutually exclusive affidavits.

(5) Within 7 days of the last day of publication of the notice, the applicant proposing to withdraw shall file a statement in triplicate with the FCC giving the dates on which the notice was published, the text of the notice and the name and location of the newspaper in which the notice was published.

(6) Where the FCC orders that further opportunity be afforded for other persons to apply for the facilities sought to be withdrawn, no application of any party to the agreement will be acted upon by the FCC less than 30 days from the last day of publication of the notice specified in paragraph (b)(2) of this section. Any applications for a broadcast station on the same frequency in the same community, with substantially the same engineering characteristics and proposing to serve substantially the same service area as the application sought to be withdrawn, filed within the 30-day period following the last date of publication of the notice (notwithstanding any provisions normally requiring earlier filing of a competing application), or otherwise timely filed, will be entitled to comparative consideration with other pending mutually exclusive applications. If the application of any party to which the new application may be in conflict has been designated for hearing, any such new application will be entitled to consolidation in the proceeding.

(c) Except where a joint request is filed pursuant to paragraph (a) of this section, any applicant filing an amendment pursuant to §§ 73.3522 (b)(1) and (c), or a request for dismissal pursuant to §§ 73.3568 (b)(1) and (c), which would remove a conflict with another pending application; or a petition for leave to amend pursuant to § 73.3522(b)(2) which would permit a grant of the amended application or an application previously in conflict with the amended application; or a request for dismissal pursuant to § 73.3568(b)(2), shall file with it an affidavit as to whether or not consideration (including an agreement for merger of interests) has been promised to or received by such applicant, directly or indirectly, in connection with the amendment, petition or request.

(d) Upon the filing of a petition for leave to amend or to dismiss an application for broadcast facilities which has been designated for hearing or upon the dismissal of such application on the FCC's own motion pursuant to § 73.3568, each applicant or party remaining in hearing, as to whom a conflict would be removed by the amendment or dismissal shall submit for inclusion in the record of that proceeding an affidavit stating whether or not he has directly or indirectly paid or promised consideration (including an agreement for merger of interests) in connection with the removal of such conflict.

(e) Where an affidavit filed pursuant to paragraph (c) of this section states that consideration has been paid or promised, the affidavit shall set forth in full all relevant facts, including, but not limited to, the material listed in paragraph (a) of this section for inclusions in affidavits.

(f) Affidavits filed pursuant to this section shall be executed by the applicant, permittee or licensee, if an individual; a partner having personal knowledge of the facts, if a partnership; or an officer having personal knowledge of the facts, if a corporation or association.

(g) Requests and affidavits which relate to an application which has not been designated for hearing shall bear the file number of such application. If the affiant is also an applicant, the affidavit shall also bear the file number of affiant's pending application(s). Requests and affidavits which relate to an application which is designated for hearing shall bear the file number of that application and the hearing docket number and will be acted on by the presiding officer.

(h) For the purposes of this section an application shall be deemed to be ''pending'' before the FCC and a party shall be considered to have the status of an ''applicant'' from the time an application is filed with the FCC until an order of the FCC granting or denying it is no longer subject to reconsideration by the FCC or to review by any court.

(i) For purposes of this section, ''legitimate and prudent expenses'' are those expenses reasonably incurred by an applicant in preparing, filing, prosecuting, and settling its application for which reimbursement is being sought.

(j) For purposes of this section, ''other consideration'' consists of financial concessions, including, but not limited to the transfer of assets or the provision of tangible pecuniary benefit, as well as non-financial concessions that confer any type of benefit on the recipient.

(k) For purposes of this section, an ''ancillary agreement'' means any agreement relating to the dismissal of an application or settling of a proceeding, including any agreement on the part of an applicant or principal of an applicant to render consulting services to another party or principal of another party in the poroceeding.

(l) The prohibition of collusion as set forth in §§1.2105(c) and 73.5002 of this section, which becomes effective upon the filing of short-form applications, shall apply to all broadcast services subject to competitive bidding.

NOTE: Although §74.780 of the Rules makes this section generally applicable to low power TV, TV translators, and TV booster stations, paragraph (b) of this section shall not be applicable to such stations.

[56 FR 28097, June 19, 1991, as amended at 63 FR 48624, Sept. 11, 1998]

EFFECTIVE DATE NOTE: At 63 FR 48624, Sept. 11, 1998, §73.3525 was amended by revising paragraphs (c) and (d) and adding paragraph (l), effective Nov. 10, 1998. For the convenience of the user, the superseded text is set forth as follows:

**§ 73.3525 Agreements for removing application conflicts.**

* * * * *

(c) Except where a joint request is filed pursuant to paragraph (a) of this section, any applicant filing an amendment pursuant to §73.3522(a) or a request for dismissal pursuant to §73.3568(a) which would remove a conflict with another pending application; or a petition for leave to amend pursuant to §73.3522 (b) or (c) which would permit a grant of the amended applcation or an application previously in conflict with the amended application; or a request for dismissal pursuant to §73.3568(c), shall file with it an affidavit as to whether or not consideration (including an agreement for merger of interests) has been promised to or received by such applicant, directly or indirectly, in connection with the amendment, petition or request.

(d) Upon the filing of a petition for leave to amend or to dismiss an application for broadcast facilities which has been designated for hearing or upon the dismissal of such application on the FCC's own motion pursuant to §73.3568(b), each applicant or party remaining in hearing, as to whom a conflict would be removed by the amendment or dismissal shall submit for inclusion in the record of that proceeding an affidavit stating whether or not he has directly or indirectly paid or promised consideration (including an agreement for merger of interests) in connection with the removal of such conflict.

* * * * *

### § 73.3526 Local public inspection file of commercial stations.

(a) *Responsibility to maintain a file.* The following shall maintain for public inspection a file containing the material set forth in this section.

(1) Applicants for a construction permit for a new station in the commercial broadcast services shall maintain a public inspection file containing the material, relating to that station, described in paragraphs (e)(2) and (e)(10) of this section. A separate file shall be maintained for each station for which an application is pending. If the application is granted, paragraph (a)(2) of this section shall apply.

(2) Every permittee or licensee of an AM, FM, or TV station in the commercial broadcast services shall maintain a public inspection file containing the material, relating to that station, described in paragraphs (e)(1) through (e)(10) and paragraph (e)(13) of this section. In addition, every permittee or licensee of a commercial TV station shall maintain for public inspection a file containing material, relating to that station, described in paragraphs (e)(11) and (e)(15) of this section, and every permittee or licensee of a commercial AM or FM station shall maintain for public inspection a file containing the material, relating to that station, described in paragraphs (e)(12) and (e)(14) of this section. A separate file shall be maintained for each station for which an authorization is outstanding, and the file shall be maintained so long as an authorization to operate the station is outstanding.

(b) *Location of the file.* The public inspection file shall be maintained at the main studio of the station. An applicant for a new station or change of community shall maintain its file at an accessible place in the proposed community of license or at its proposed main studio.

(c) *Access to material in the file.* (1) The file shall be available for public inspection at any time during regular business hours. All or part of the file may be maintained in a computer database, as long as a computer terminal is made available, at the location of the file, to members of the public who wish to review the file. Material in the public inspection file shall be made available for printing or machine reproduction upon request made in person. The applicant, permittee, or licensee may specify the location for printing or reproduction, require the requesting party to pay the reasonable cost thereof, and may require guarantee of payment in advance (e.g., by requiring a deposit, obtaining credit card information, or any other reasonable method). Requests for copies shall be fulfilled within a reasonable period of time, which generally should not exceed 7 days.

(2) The applicant, permittee, or licensee shall make available, by mail upon telephone request, photocopies of documents in the file, and the station shall pay postage. Licensees shall mail the most recent version of ''The Public and Broadcasting'' to any member of the public that requests a copy. Licensees shall be prepared to assist members of the public in identifying the documents they may ask to be sent to them by mail, for example, by describing to the caller, if asked, the period covered by a particular report and the number of pages included in the report.

(d) *Responsibility in case of assignment or transfer.* (1) In cases involving applications for consent to assignment of broadcast station construction permits or licenses, with respect to which public notice is required to be given under the provisions of § 73.3580 or § 73.3594, the file mentioned in paragraph (a) of this section shall be maintained by the assignor. If the assignment is consented to by the FCC and consummated, the assignee shall maintain the file commencing with the date on which notice of the consummation of the assignment is filed with the FCC. The assignee shall retain public file documents obtained from the assignor for the period required under these rules.

(2) In cases involving applications for consent to transfer of control of a permittee or licensee of a broadcast station, the file mentioned in paragraph (a) of this section shall be maintained by the permittee or licensee.

(e) *Contents of the file.* The material to be retained in the public inspection file is as follows:

(1) *Authorization.* A copy of the current FCC authorization to construct or

operate the station, as well as any other documents necessary to reflect any modifications thereto or any conditions that the FCC has placed on the authorization. These materials shall be retained until replaced by a new authorization, at which time a copy of the new authorization and any related materials shall be placed in the file.

(2) *Applications and related materials.* A copy of any application tendered for filing with the FCC, together with all related material, and copies of Initial Decisions and Final Decisions in hearing cases pertaining thereto. If petitions to deny are filed against the application and have been served on the applicant, a statement that such a petition has been filed shall be maintained in the file together with the name and address of the party filing the petition. Applications shall be retained in the public inspection file until final action has been taken on the application, except that applications for a new construction permit granted pursuant to a waiver showing and applications for assignment or transfer of license granted pursuant to a waiver showing shall be retained for as long as the waiver is in effect. In addition, license renewal applications granted on a short-term basis shall be retained until final action has been taken on the license renewal application filed immediately following the shortened license term.

(3) *Citizen agreements.* A copy of every written citizen agreement. These agreements shall be retained for the term of the agreement, including any renewal or extension thereof.

NOTE TO PARAGRAPH (E)(3): For purposes of this section, a citizen agreement is a written agreement between a broadcast applicant, permittee, or licensee, and one or more citizens or citizen groups, entered for primarily noncommercial purposes. This definition includes those agreements that deal with goals or proposed practices directly or indirectly affecting station operations in the public interest, in areas such as—but not limited to—programming and employment. It excludes common commercial agreements such as advertising contracts; union, employment, and personal services contracts; network affiliation, syndication, program supply contracts, etc. However, the mere inclusion of commercial terms in a primarily noncommercial agreement—such as a provision for payment of fees for future services of the citizen-parties (see ''Report and Order,'' Docket 19518, 57 FCC 2d 494 (1976))—would not cause the agreement to be considered commercial for purposes of this section.

(4) *Contour maps.* A copy of any service contour maps, submitted with any application tendered for filing with the FCC, together with any other information in the application showing service contours and/or main studio and transmitter location (State, county, city, street address, or other identifying information). These documents shall be retained for as long as they reflect current, accurate information regarding the station.

(5) *Ownership reports and related materials.* A copy of the most recent, complete ownership report filed with the FCC for the station, together with any statements filed with the FCC certifying that the current report is accurate, and together with all related material. These materials shall be retained until a new, complete ownership report is filed with the FCC, at which time a copy of the new report and any related materials shall be placed in the file. The permittee or licensee must retain in the public file either a copy of the contracts listed in such reports in accordance with § 73.3615(a)(4)(i), or an up-to-date list of such contracts. Licensees or permittees who choose to retain a list of contracts must provide a copy of any contracts to requesting parties within 7 days.

(6) *Political file.* Such records as are required by § 73.1943 to be kept concerning broadcasts by candidates for public office. These records shall be retained for the period specified in § 73.1943 (2 years).

(7) *Annual employment reports.* A copy of every annual employment report filed by the licensee or permittee for the station, together with all related material (Form 395–B). These materials shall be retained until final action has been taken on the station's next license renewal application.

(8) *The public and broadcasting.* At all times, a copy of the most recent version of the manual entitled ''The Public and Broadcasting.''

(9) *Letters and e-mail from public.* All written comments and suggestions received from the public regarding operation of the station, unless the letter

writer has requested that the letter not be made public or when the licensee feels that it should be excluded from public inspection because of the nature of its content, such as a defamatory or obscene letter. Letters and electronic mail messages shall be retained for a period of three years from the date on which they are received by the licensee. For purposes of this section, written comments and suggestions received from the public include electronic mail messages transmitted via the internet. Licensees may retain e-mails either on paper or in a computer file. Licensees who choose to maintain a computer file of e-mails may make the file available to the public either by providing the public with access to a computer terminal at the location of the public file, or providing the public with a copy of such e-mails on computer diskette, upon request. In the case of identical communications, licensees and permittees may retain one sample copy of the letter or electronic mail message together with a list identifying other parties who sent identical communications.

(10) *Material relating to FCC investigation or complaint.* Material having a substantial bearing on a matter which is the subject of an FCC investigation or complaint to the FCC of which the applicant, permittee, or licensee has been advised. This material shall be retained until the applicant, permittee, or licensee is notified in writing that the material may be discarded.

(11)(i) *TV issues/programs lists.* For commercial TV broadcast stations, every three months a list of programs that have provided the station's most significant treatment of community issues during the preceding three month period. The list for each calendar quarter is to be filed by the tenth day of the succeeding calendar quarter (*e.g.,* January 10 for the quarter October—December, April 10 for the quarter January—March, etc.). The list shall include a brief narrative describing what issues were given significant treatment and the programming that provided this treatment. The description of the programs shall include, but shall not be limited to, the time, date, duration, and title of each program in which the issue was treated. The lists described in this paragraph shall be retained in the public inspection file until final action has been taken on the station's next license renewal application.

(ii) *Records concerning commercial limits.* For commercial TV broadcast stations, records sufficient to permit substantiation of the station's certification, in its license renewal application, of compliance with the commercial limits on children's programming established in 47 U.S.C. 303a and 47 CFR 73.670. The records for each calendar quarter must be filed in the public inspection file by the tenth day of the succeeding calendar quarter (*e.g.,* January 10 for the quarter October—December, April 10 for the quarter January—March, etc.). These records shall be retained until final action has been taken on the station's next license renewal application.

(iii) *Children's television programming reports.* For commercial TV broadcast stations, on a quarterly basis, a completed Children's Television Programming Report (''Report''), on FCC Form 398, reflecting efforts made by the licensee during the preceding quarter, and efforts planned for the next quarter, to serve the educational and informational needs of children. The Report for each quarter is to be filed by the tenth day of the succeeding calendar quarter. The Report shall identify the licensee's educational and informational programming efforts, including programs aired by the station that are specifically designed to serve the educational and informational needs of children, and it shall explain how programs identified as Core Programming meet the definition set forth in §73.671(c). The Report shall include the name of the individual at the station responsible for collecting comments on the station's compliance with the Children's Television Act, and it shall be separated from other materials in the public inspection file. These Reports shall be retained in the public inspection file until final action has been taken on the station's next license renewal application. Licensees shall publicize in an appropriate manner the existence and location of these Reports. For an experimental period of three years, licensees shall file these Reports

with the Commission on an annual basis, *i.e.* four quarterly reports filed jointly each year, preferably in electronic form. These Reports shall be filed with the Commission on January 10, 1998, January 10, 1999, and January 10, 2000.

(12) *Radio issues/programs lists.* For commercial AM and FM broadcast stations, every three months a list of programs that have provided the station's most significant treatment of community issues during the preceding three month period. The list for each calendar quarter is to be filed by the tenth day of the succeeding calendar quarter (*e.g.*, January 10 for the quarter October—December, April 10 for the quarter January—March, etc.). The list shall include a brief narrative describing what issues were given significant treatment and the programming that provided this treatment. The description of the programs shall include, but shall not be limited to, the time, date, duration, and title of each program in which the issue was treated. The lists described in this paragraph shall be retained in the public inspection file until final action has been taken on the station's next license renewal application.

(13) *Local public notice announcements.* Each applicant for renewal of license shall, within 7 days of the last day of broadcast of the local public notice of filing announcements required pursuant to §73.3580(h), place in the station's local public inspection file a statement certifying compliance with this requirement. The dates and times that the pre-filing and post-filing notices were broadcast and the text thereof shall be made part of the certifying statement. The certifying statement shall be retained in the public file for the period specified in §73.3580 (for as long as the application to which it refers).

(14) *Radio time brokerage agreements.* For commercial radio stations, a copy of every agreement or contract involving time brokerage of the licensee's station or of another station by the licensee, with confidential or proprietary information redacted where appropriate. These records shall be retained as long as the contract or agreement is in force.

(15) *Must-carry or retransmission consent election.* Statements of a commercial television station's election with respect to either must-carry or retransmission consent as defined in §76.64 of this chapter. These records shall be retained for the duration of the three year election period to which the statement applies.

NOTE 1 TO PARAGRAPH (E): For purposes of this section, action taken on an application tendered with the FCC becomes final when that action is no longer subject to reconsideration, review, or appeal either at the FCC or in the courts.

NOTE 2 TO PARAGRAPH (E): For purposes of this section, the term ''all related material'' includes all exhibits, letters, and other documents tendered for filing with the FCC as part of an application, report, or other document, all amendments to the application, report, or other document, copies of all documents incorporated therein by reference and not already maintained in the public inspection file, and all correspondence between the FCC and the applicant pertaining to the application, report, or other document, which according to the provisions of §§0.451 through 0.461 of this part are open for public inspection at the offices of the FCC.

[63 FR 49497, Sept. 16, 1998]

EFFECTIVE DATE NOTE: At 63 FR 49497, Sept. 16, 1998, §73.3526 was revised. This section contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

### §73.3527 Local public inspection file of noncommercial educational stations.

(a) *Responsibility to maintain a file.* The following shall maintain for public inspection a file containing the material set forth in this section.

(1) Applicants for a construction permit for a new station in the noncommercial educational broadcast services shall maintain a public inspection file containing the material, relating to that station, described in paragraph (e)(2) and (e)(11) of this section. A separate file shall be maintained for each station for which an application is pending. If the application is granted, paragraph (a)(2) of this section shall apply.

(2) Every permittee or licensee of an AM, FM, or TV station in the noncommercial educational broadcast

services shall maintain a public inspection file containing the material, relating to that station, described in paragraphs (e)(1) through (e)(11) of this section. In addition, every permittee or licensee of a noncommercial educational TV station shall maintain for public inspection a file containing material, relating to that station, described in paragraphs (e)(12) of this section. A separate file shall be maintained for each station for which an authorization is outstanding, and the file shall be maintained so long as an authorization to operate the station is outstanding.

(b) *Location of the file.* The public inspection file shall be maintained at the main studio of the station. An applicant for a new station or change of community shall maintain its file at an accessible place in the proposed community of license or at its proposed main studio.

(c) *Access to material in the file.* (1) The file shall be available for public inspection at any time during regular business hours. All or part of the file may be maintained in a computer database, as long as a computer terminal is made available, at the location of the file, to members of the public who wish to review the file. Material in the public inspection file shall be made available for printing or machine reproduction upon request made in person. The applicant, permittee, or licensee may specify the location for printing or reproduction, require the requesting party to pay the reasonable cost thereof, and may require guarantee of payment in advance (*e.g.,* by requiring a deposit, obtaining credit card information, or any other reasonable method). Requests for copies shall be fulfilled within a reasonable period of time, which generally should not exceed 7 days.

(2) The applicant, permittee, or licensee shall make available, by mail upon telephone request, photocopies of documents in the file, and the station shall pay postage. Licensees shall mail the most recent version of ''The Public and Broadcasting'' to any member of the public that requests a copy. Licensees shall be prepared to assist members of the public in identifying the documents they may ask to be sent to them by mail, for example, by describing to the caller, if asked, the period covered by a particular report and the number of pages included in the report.

(d) *Responsibility in case of assignment or transfer.* (1) In cases involving applications for consent to assignment of broadcast station construction permits or licenses, with respect to which public notice is required to be given under the provisions of § 73.3580 or § 73.3594, the file mentioned in paragraph (a) of this section shall be maintained by the assignor. If the assignment is consented to by the FCC and consummated, the assignee shall maintain the file commencing with the date on which notice of the consummation of the assignment is filed with the FCC. The assignee shall retain public file documents obtained from the assignor for the period required under these rules.

(2) In cases involving applications for consent to transfer of control of a permittee or licensee of a broadcast station, the file mentioned in paragraph (a) of this section shall be maintained by the permittee or licensee.

(e) *Contents of the file.* The material to be retained in the public inspection file is as follows:

(1) *Authorization.* A copy of the current FCC authorization to construct or operate the station, as well as any other documents necessary to reflect any modifications thereto or any conditions that the FCC has placed on the authorization. These materials shall be retained until replaced by a new authorization, at which time a copy of the new authorization and any related materials shall be placed in the file.

(2) *Applications and related materials.* A copy of any application tendered for filing with the FCC, together with all related material, and copies of Initial Decisions and Final Decisions in hearing cases pertaining thereto. If petitions to deny are filed against the application and have been served on the applicant, a statement that such a petition has been filed shall be maintained in the file together with the name and address of the party filing the petition. Applications shall be retained in the public inspection file until final action has been taken on

the application, except that applications for a new construction permit granted pursuant to a waiver showing and applications for assignment or transfer of license granted pursuant to a waiver showing shall be retained for as long as the waiver is in effect. In addition, license renewal applications granted on a short-term basis shall be retained until final action has been taken on the license renewal application filed immediately following the shortened license term.

(3) *Contour maps.* A copy of any service contour maps, submitted with any application tendered for filing with the FCC, together with any other information in the application showing service contours and/or main studio and transmitter location (State, county, city, street address, or other identifying information). These documents shall be retained for as long as they reflect current, accurate information regarding the station.

(4) *Ownership reports and related materials.* A copy of the most recent, complete ownership report filed with the FCC for the station, together with any subsequent supplemental report or statement filed with the FCC certifying that the current report is accurate, and together with all related material. These materials shall be retained until a new, complete ownership report is filed with the FCC, at which time a copy of the new report and any related materials shall be placed in the file. The permittee or licensee must retain in the public file either a copy of the contracts listed in such reports in accordance with §73.3615(d)(3), or an up-to-date list of such contracts. Licensees and permittees who choose to maintain a list of contracts must provide a copy of any contracts to requesting parties within 7 days.

(5) *Political file.* Such records as are required by §73.1943 to be kept concerning broadcasts by candidates for public office. These records shall be retained for the period specified in §73.1943 (2 years).

(6) *Annual employment reports.* A copy of every annual employment report (Form 395) filed by the licensee or permittee for the station, together with all related material. These materials shall be retained until final action has been taken on the station's next license renewal application.

(7) *The Public and Broadcasting.* At all times, a copy of the most recent version of the manual entitled ''The Public and Broadcasting.''

(8) *Issues/programs lists.* For noncommercial educational broadcast stations, every three months a list of programs that have provided the station's most significant treatment of community issues during the preceding three month period. The list for each calendar quarter is to be filed by the tenth day of the succeeding calendar quarter (*e.g.*, January 10 for the quarter October–December, April 10 for the quarter January–March, etc.). The list shall include a brief narrative describing what issues were given significant treatment and the programming that provided this treatment. The description of the programs shall include, but shall not be limited to, the time, date, duration, and title of each program in which the issue was treated. The lists described in this paragraph shall be retained in the public inspection file until final action has been taken on the station's next license renewal application.

(9) *Donor lists.* The lists of donors supporting specific programs. These lists shall be retained for two years.

(10) *Local public notice announcements.* Each applicant for renewal of license shall, within 7 days of the last day of broadcast of the local public notice of filing announcements required pursuant to §73.3580(h), place in the station's local public inspection file a statement certifying compliance with this requirement. The dates and times that the pre-filing and post-filing notices were broadcast and the text thereof shall be made part of the certifying statement. The certifying statement shall be retained in the public file for the period specified in §73.3580 (for as long as the application to which it refers).

(11) *Material relating to FCC investigation or complaint.* Material having a substantial bearing on a matter which is the subject of an FCC investigation or complaint to the FCC of which the applicant, permittee, or licensee has been advised. This material shall be retained until the applicant, permittee,

or licensee is notified in writing that the material may be discarded.

(12) *Must-carry requests.* Noncommercial television stations requesting mandatory carriage on any cable system pursuant to §76.56 of this chapter shall place a copy of such request in its public file and shall retain both the request and relevant correspondence for the duration of any period to which the request applies.

NOTE (1) TO PARAGRAPH (E): For purposes of this section, a decision made with respect to an application tendered with the FCC becomes final when that decision is no longer subject to reconsideration, review, or appeal either at the FCC or in the courts.

NOTE (2) TO PARAGRAPH (E): For purposes of this section, the term ''all related material'' includes all exhibits, letters, and other documents tendered for filing with the FCC as part of an application, report, or other document, all amendments to the application, report, or other document, copies of all documents incorporated therein by reference and not already maintained in the public inspection file, and all correspondence between the FCC and the applicant pertaining to the application, report, or other document, which according to the provisions of §§0.451 through 0.461 of the rules are open for public inspection at the offices of the FCC.

[63 FR 49499, Sept. 16, 1998]

EFFECTIVE DATE NOTE: At 63 FR 49499, Sept. 16, 1998, §73.3527 was revised. This section contains information collection and recordkeeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

### §73.3533 Application for construction permit or modification of construction permit.

(a) Application for construction permit, or modification of a construction permit, for a new facility or change in an existing facility is to be made on the following forms:

(1) FCC Form 301, ''Application for Authority to Construct or Make Changes in an Existing Commercial Broadcast Station.''

(2) FCC Form 309, ''Application for Authority to Construct or Make Changes in an Existing International or Experimental Broadcast Stations.''

(3) FCC Form 313, ''Application for Authorization in the Auxiliary Broadcast Services.''

(4) FCC Form 330, ''Application for Authorization to Construct New or Make Changes in an Instructional Television Fixed and/or Response Station(s), or to Assign to Transfer Such Station(s).''

(5) FCC Form 340, ''Application for Authority to Construct or Make Changes in a Noncommercial Educational Broadcast Station.''

(6) FCC Form 346, ''Application for Authority to Construct or Make Changes in a Low Power TV, TV Translator or TV Booster Station.''

(7) FCC Form 349, ''Application for Authority to Construct or Make Changes in an FM Translator or FM Booster Station.''

(b) The filing of an application for modification of construction permit does not extend the expiration date of the construction permit. Extension of the expiration date must be applied for on FCC Form 307, in accordance with the provisions of §73.3534.

(c) In each application referred to in paragraph (a) of this section, the applicant will provide the Antenna Structure Registration Number (FCC Form 854R) of the antenna structure upon which it will locate its proposed antenna. In the event the antenna structure does not already have a Registration Number, either the antenna structure owner shall file FCC Form 854 (''Application for Antenna Structure Registration'') in accordance with part 17 of this chapter or the applicant shall provide a detailed explanation why registration and clearance of the antenna structure is not necessary.

[44 FR 38494, July 2, 1979, as amended at 47 FR 28388, June 30, 1982; 49 FR 32582, Aug. 15, 1984; 50 FR 40016, Oct. 1, 1985; 53 FR 36788, Sept. 22, 1988; 61 FR 4367, Feb. 6, 1996]

### §73.3534 Application for extension of construction permit or for construction permit to replace expired construction permit.

(a) Application for extension of time within which to construct a station shall be filed on FCC Form 307, ''Application for Extension of Broadcast Construction Permit or to Replace Expired Construction Permit.'' The application shall be filed at least 30 days prior to the expiration date of the construction permit if the facts supporting such application for extension are known to the applicant in time to permit such

filing. In other cases, an application will be accepted upon a showing satisfactory to the FCC of sufficient reasons for filing within less than 30 days prior to the expiration date.

(b) Applications for extension of time to construct broadcast stations, with the exception of International Broadcast and Instructional TV Fixed stations, will be granted only if one of the following three circumstances have occurred:

(1) Construction is complete and testing is underway looking toward prompt filing of a license application;

(2) Substantial progress has been made *i.e.,* demonstration that equipment is on order or on hand, site acquired, site cleared and construction proceeding toward completion; or

(3) No progress has been made for reasons clearly beyond the control of the permittee (such as delays caused by governmental budgetary processes and zoning problems) but the permittee has taken all possible steps to expeditiously resolve the problem and proceed with construction.

(c) Applications for extension of time to construct International Broadcast and Instructional TV Fixed stations will be granted upon a specific and detailed showing that the failure to complete was due to causes not under the control of the permittee, or upon a specific and detailed showing of other sufficient to justify an extension.

(d) If an application for extension of time within which to construct a station is approved, such an extension will be limited to a period of no more than 6 months except when as assignment or transfer has been approved that provides for a longer period up to a maximum of 12 months from the date of consummation.

(e) Application for a construction permit to replace an expired construction permit shall be filed on FCC Form 307. Such applications must be filed within 30 days of the expiration date of the authorization sought to be replaced. If approved, such authorization shall specify a period of not more than 6 months within which construction shall be completed and application for license filed.

[50 FR 52779, Dec. 26, 1985, as amended at 53 FR 36788, Sept. 22, 1988]

### § 73.3535 Application to modify authorized but unbuilt facilities, or to assign or transfer control of an unbuilt facility.

(a) If a permittee finds it necessary to file either an application to modify its authorized, but unbuilt facilities, or an assignment/transfer application, such application shall be filed within the first 9 months of the issuance of the original construction permit for radio and other broadcast and auxiliary stations, or within 12 months of the issuance of the original construction permit for television facilities. Before such an application can be granted, the permittee or assignee must certify that it will immediately begin building after the modification is granted or the assignment is consummated.

(b) Modification and assignment applications filed after the time periods stated in paragraph (a) will not be granted absent a showing that one of the following three criteria apply: (1) Construction is complete and testing is underway looking toward prompt filing of a license application; (2) substantial progress has been made *i.e.,* demonstration that equipment is on order or on hand, site acquired, site cleared and construction proceeding toward completion; or (3) no progress has been made for reasons clearly beyond the control of the permittee (such as delays caused by governmental budgetary processes and zoning problems) but the permittee has taken all possible steps to expeditiously resolve the problem and proceed with construction. A certification by the permittee or the assignee that it immediately will begin building after the modification is granted or the assignment is consummated is also necessary. A seller must make the ''one of three criteria'' showing in an assignment application.

(c) If a modification is granted, the time period allowed for construction will be 6 months from the issuance of the authorization to modify or the remainder of the construction period, whichever is longer. Also, in the case of an assignment, the time period allowed for construction will be 12 months from the consummation of the assignment or the remainder of the construction

period, whichever is longer. The extension will be given subject to the condition that the modification is completed or the assignment is consummated. Failure to modify or consummate within the time allowed will result in cancellation of the construction permit.

(d) We will not entertain an application for modification of an authorized but unbuilt facility or an application for assignment or transfer of control of an unbuilt facility if filed after the expiration of the initial construction period.

[50 FR 52779, Dec. 26, 1985]

### § 73.3536 Application for license to cover construction permit.

(a) The application for station license shall be filed by the permittee pursuant to the requirements of § 73.1620 Program tests.

(b) The following application forms shall be used:

(1)(i) Form 302–AM for AM stations, ''Application for New AM Station Broadcast License.''

(ii) Form 302–FM for FM stations, ''Application for FM Station License.''

(iii) Form 302–TV for television stations, ''Application for TV Station Broadcast License.''

(2) FCC Form 310, ''Application for an International or Experimental Broadcast Station License.''

(3) FCC Form 313, ''Application for Authorization in the Auxiliary Broadcast Services.''

(4) FCC Form 330–L ''Application for Instructional Television Fixed Station License.''

(5) FCC Form 347, ''Application for a Low Power TV, TV Translator or TV Booster Station License.''

(6) FCC Form 350, ''Application for an FM Translator or FM Booster Station License.''

[44 FR 38495, July 2, 1979, as amended at 49 FR 32582, Aug. 15, 1984; 50 FR 40016, Oct. 1, 1985; 51 FR 18451, May 20, 1986; 51 FR 32088, Sept. 9, 1986; 52 FR 31400, Aug. 20, 1987; 53 FR 36788, Sept. 22, 1988; 62 FR 51063, Sept. 30, 1997]

### § 73.3537 Application for license to use former main antenna as an auxiliary.

*See* § 73.1675, *Auxiliary facility*.

[62 FR 51063, Sept. 30, 1997]

### § 73.3538 Application to make changes in an existing station.

Where prior authority is required from the FCC to make changes in an existing station, the following procedures shall be used to request that authority:

(a) An application for construction permit using the forms listed in § 73.3533 must be filed for authority to:

(1) Make any of the changes listed in § 73.1690(b).

(2) Change the hours of operation of an AM station, where the hours of operation are specified on the license or permit.

(3) Install a transmitter which has not been approved (type accepted) by the FCC for use by licensed broadcast stations.

(4) Any change in the location, height, or directional radiating characteristics of the antenna or antenna system.

(b) An informal application filed in accordance with § 73.3511 is to be used to obtain authority to make the following changes in the station authorization:

(1) To specify a new AM station directional antenna field monitoring point as a substitute for one that is no longer suitable or available, such as due to construction. The request is to include sufficient measurement data taken at the new monitoring point to establish its reliability in comparison with data taken at the old monitoring point on the same radial, the routing directions to the new point, a location photograph, and such other information as the FCC may request.

(2) To modify or discontinue the obstruction marking or lighting of the antenna supporting structure where that specified on the station authorization either differs from that specified in FCC Rules, part 17, or is not appropriate for other reasons.

(3) Relocation of a main studio outside the principal community contour may require the filing and approval of a letter request for authority to make this change prior to implementation. *See* § 73.1125.

[44 FR 38495, July 2, 1979, as amended at 44 FR 69935, Dec. 5, 1979; 49 FR 4000, Feb. 1, 1984; 52 FR 21685, June 9, 1987; 62 FR 51063, Sept. 30, 1997]

### § 73.3539 Application for renewal of license.

(a) Unless otherwise directed by the FCC, an application for renewal of license shall be filed not later than the first day of the fourth full calendar month prior to the expiration date of the license sought to be renewed, except that applications for renewal of license of an experimental broadcast station shall be filed not later than the first day of the second full calendar month prior to the expiration date of the license sought to be renewed. If any deadline prescribed in this paragraph falls on a nonbusiness day, the cutoff shall be the close of business of the first full business day thereafter.

(b) No application for renewal of license of any broadcast station will be considered unless there is on file with the FCC the information currently required by §§ 73.3612 through 73.3615, inclusive, for the particular class of station.

(c) Whenever the FCC regards an application for a renewal of license as essential to the proper conduct of a hearing or investigation, and specifically directs that it be filed by a date certain, such application shall be filed within the time thus specified. If the licensee fails to file such application within the prescribed time, the hearing or investigation shall proceed as if such renewal application had been received.

(d) Renewal application forms titles and numbers are listed in § 73.3500, Application and Report Forms.

[44 FR 38495, July 2, 1979, as amended at 47 FR 28388, June 30, 1982; 49 FR 32582, Aug. 15, 1984]

### § 73.3540 Application for voluntary assignment or transfer of control.

(a) Prior consent of the FCC must be obtained for a voluntary assignment or transfer of control.

(b) Application should be filed with the FCC at least 45 days prior to the contemplated effective date of assignment or transfer of control.

(c) Application for consent to the assignment of construction permit or license must be filed on FCC Form 314 ''Assignment of license'' or FCC Form 316 ''Short form'' (See paragraph (f) of this section).

(d) Application for consent to the transfer of control of a corporation holding a construction permit or license must be filed on FCC Form 315 ''Transfer of Control'' or FCC Form 316 ''Short form'' (see paragraph (f) of this section).

(e) Application for consent to the assignment of construction permit or license or to the transfer of control of a corporate licensee or permittee for an FM or TV translator station, a low power TV station and any associated auxiliary station, such as translator microwave relay stations and UHF translator booster stations, only must be filed on FCC Form 345 ''Application for Transfer of Control of Corporate Licensee or Permittee, or Assignment of License or Permit for an FM or TV translator Station, or a Low Power TV Station.''

(f) The following assignment or transfer applications may be filed on FCC ''Short form'' 316:

(1) Assignment from an individual or individuals (including partnerships) to a corporation owned and controlled by such individuals or partnerships without any substantial change in their relative interests;

(2) Assignment from a corporation to its individual stockholders without effecting any substantial change in the disposition of their interests;

(3) Assignment or transfer by which certain stockholders retire and the interest transferred is not a controlling one;

(4) Corporate reorganization which involves no substantial change in the beneficial ownership of the corporation;

(5) Assignment or transfer from a corporation to a wholly owned subsidiary thereof or vice versa, or where there is an assignment from a corporation to a corporation owned or controlled by the assignor stockholders without substantial change in their interests; or

(6) Assignment of less than a controlling interest in a partnership.

[44 FR 38496, July 2, 1979, as amended at 48 FR 21486, May 12, 1983; 49 FR 47843, Dec. 7, 1984; 50 FR 32416, Aug. 12, 1985]

### § 73.3541 Application for involuntary assignment of license or transfer of control.

(a) The FCC shall be notified in writing promptly of the death or legal disability of an individual permittee or licensee, a member of a partnership, or a person directly or indirectly in control of a corporation which is a permittee or licensee.

(b) Within 30 days after the occurrence of such death or legal disability, an application on FCC Form 316 shall be filed requesting consent to involuntary assignment of such permit or license or for involuntary transfer of control of such corporation to a person or entity legally qualified to succeed to the foregoing interests under the laws of the place having jurisdiction over the estate involved.

[44 FR 38496, July 2, 1979]

### § 73.3542 Application for emergency authorization.

(a) Authority may be granted, on a temporary basis, in extraordinary circumstances requiring emergency operation to serve the public interest. such situations include: emergencies involving danger to life and property; a national emergency proclaimed by the President or the Congress of the U.S.A and; the continuance of any war in which the United States is engaged, and where such action is necessary for the national defense or security or otherwise in furtherance of the war effort.

(1) An informal application may be used. The FCC may grant such construction permits, station licenses, modifications or renewals thereof, without the filing of a formal application.

(2) No authorization so granted shall continue to be effective beyond the period of the emergency or war requiring it.

(3) Each individual request submitted under the provisions of this paragraph shall contain, as a minimum requirement, the following information:

(i) Name and address of applicant.

(ii) Location of proposed installation or operation.

(iii) Official call letters of any valid station authorization already held by applicant and the station location.

(iv) Type of service desired (not required for renewal or modification unless class of station is to be modified).

(v) Frequency assignment, authorized transmitter power(s), authorized class(es) of emission desired (not required for renewal; required for modification only to the extent such information may be involved).

(vi) Equipment to be used, specifying the manufacturer and type or model number (not required for renewal; required for modification only to the extent such information may be involved).

(vii) Statements to the extent necessary for the FCC to determine whether or not the granting of the desired authorization will be in accordance with the citizenship eligibility requirements of section 310 of the Communications Act.

(viii) Statement of facts which, in the opinion of the applicant, constitute an emergency to be found by the FCC for the purpose of this section. This statement must also include the estimated duration of the emergency and if during an emergency or war declared by the President or Congress, why such action, without formal application, is necessary for the national defense or security or in furtherance of the war effort.

(b) Emergency operating authority issued under this section may be cancelled or modified by the FCC without prior notice or right to hearing. *See also* § 73.1250, Broadcasting Emergency Information, for situations in which emergency operation may be conducted without prior authorization, and § 73.1635, Special Temporary Authorization (STA), for temporary operating authorizations necessitated by circumstances not within the ambit of this section.

[50 FR 30948, July 31, 1985, as amended at 63 FR 33878, June 22, 1998]

### § 73.3543 Application for renewal or modification of special service authorization.

(a) No new special service authorization will be issued. However, consideration will be given to renewal or modification of a special service authorization which was outstanding on February 3, 1958, providing a satisfactory

showing has been made in regard to the following, among others:

(1) That the requested operation may not be granted on a regular basis under the existing rules governing the operation of AM stations;

(2) That experimental operation is not involved as provided for by § 73.1510 (Experimental authorizations); and

(3) That public interest, convenience and necessity will be served by the authorization requested.

[44 FR 38496, July 2, 1979]

### § 73.3544 Application to obtain a modified station license.

Where prior authority from the FCC is not required to make certain changes in the station authorization or facilities, but a modified station license must be obtained, the following procedures shall be used to obtain modification of the station license:

(a) The changes specified in § 73.1690(c) may be made by the filing of a license application using the forms listed in § 73.3536(b)(1).

(b) An informal application, see § 73.3511(b), may be filed with the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, to cover the following changes:

(1) A correction of the routing instructions and description of an AM station directional antenna system field monitoring point, when the point itself is not changed.

(2) A change in the type of AM station directional antenna monitor. See § 73.69.

(3) A change in the location of the station main studio when prior authority to move the main studio location is not required.

(4) The location of a remote control point of an AM or FM station when prior authority to operate by remote control is not required.

(c) A change in the name of the licensee where no change in ownership or control is involved may be accomplished by written notification by the licensee to the Commission.

[44 FR 38497, July 2, 1979, as amended at 45 FR 20483, Mar. 28, 1980; 50 FR 32416, Aug. 12, 1985; 62 FR 51063, Sept. 30, 1997; 63 FR 33878, June 22, 1998]

### § 73.3545 Application for permit to deliver programs to foreign stations.

Application under section 325(c) of the Communications Act for authority to locate, use, or maintain a broadcast studio in connection with a foreign station consistently received in the United States, should be made on FCC Form 308, ''Application for Permit to Deliver Programs to Foreign Broadcast Stations.'' An informal application may be used by applicants holding an AM, FM or TV broadcast station license or construction permit. Informal applications must, however, contain a description of the nature and character of the programming proposed, together with other information requested on Page 4 of Form 308.

[44 FR 38497, July 2, 1979, as amended at 58 FR 51250, Oct. 1, 1993]

### § 73.3549 Requests for extension of time to operate without required monitors, indicating instruments, and EAS encoders and decoders.

Requests for extension of authority to operate without required monitors, transmission system indicating instruments, or encoders and decoders for monitoring and generating the EAS codes and Attention Signal should be made to the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau. Such requests must contain information as to when and what steps were taken to repair or replace the defective equipment and a brief description of the alternative procedures being used while the equipment is out of service.

[63 FR 33878, June 22, 1998]

### § 73.3550 Requests for new or modified call sign assignments.

(a) Requests for new or modified call sign assignments for broadcast stations shall be made by letter to the Secretary, FCC, Washington, DC 20554. An original and one copy of the letter shall be submitted. Incomplete or otherwise defective filings will be returned by the FCC. As many as five call sign choices, listed in decending order of preference, may be included in a single request. A call sign may not be reserved.

(b) No request for a new call sign assignment will be accepted from an applicant for a new station until the FCC has granted a construction permit. Failure by the permittee of a new station to request the assignment of a specific call sign within 30 days of grant of the construction permit will result in the FCC, on its own motion, assigning an appropriate call sign. All initial construction permits for low power TV stations will be issued with a five-character low power TV call sign.

(c) An applicant for transfer or assignment of an outstanding construction permit or license may, in accordance with this section, request a new call sign assignment at the time the application for transfer or assignment is filed, or at any time thereafter. In the absence of written consent of the proposed transferor or assignor, no change in call sign assignment will be made effective until such application is granted by the FCC and the transaction consummated.

(d) Where an application is granted by the FCC for transfer or assignment of the construction permit or license of a station whose existing call sign conforms to that of a commonly owned station not part of the transaction, the licensee shall, within 30 days after consummation, request a different call sign or submit a statement of written consent to retain the conforming call sign from the existing owner and the licensee of any other station that may be using the station's call sign. In such cases, should a suitable application or proper consent statement not be submitted within that period of time, the FCC will, on its own motion, select an appropriate call sign and effect the change in call sign assignment.

(e) Call signs beginning with the letter ''K'' will not be assigned to stations located east of the Mississippi River, nor will call signs beginning with the letter ''W'' be assigned to stations located west of the Mississippi River.

(f) Only four-letter call signs (plus an LP suffix or FM or TV suffixes, if used) will be assigned. However, subject to the other provisions of this section, a call sign of a station may be conformed to a commonly owned station holding a three-letter call assignment (plus FM, TV or LP suffixes, if used).

(g) Subject to the foregoing limitations, applicants may request call signs of their choice if the combination is available. Objections to the assignment of requested call signs will not be entertained at the FCC. However, this does not hamper any party from asserting such rights as it may have under private law in some other forum. Should it be determined by an appropriate forum that a station should not utilize a particular call sign, the initial assignment of a call sign will not serve as a bar to the making of a different assignment.

(h) Call signs are assigned on a ''first-come-first-served'' basis. Receipt by the FCC of a request for an available call sign blocks the acceptance of competing requests until the first received request is processed to completion. In the case of requests for the same call sign being received on the same date at the FCC, the assignment (if otherwise grantable) will be made to the station having the longest continuous record of broadcasting operation under substantially unchanged ownership and control. However, involuntary and *pro forma* assignments will not be taken into account in determining priority. If a low-power TV operator and an AM, FM or full-power TV operator apply for the same call sign on the same date at the FCC, the AM, FM or full-power TV operator will prevail.

NOTE: The provisions of paragraph (h) of this section shall not apply to a licensee requesting a transfer to another frequency where the existing and new facilities serve substantially the same area (*i.e.,* where at least one of the stations serves both communities of license).

(i) Stations in different broadcast services (or operating jointly in the 535–1605 kHz band and in the 1605–1705 kHz band) which are under common control may request that their call signs be conformed by the assignment of the same basic call sign if that call sign is not being used by a non-commonly owned station. For the purposes of this paragraph, 50% or greater common ownership shall constitute a prima facie showing of common control.

(j) The provisions of this section shall not apply to International broadcast stations, to stations authorized

under Part 74 of the rules (except as provided in §74.783 of this chapter), nor to FM or TV stations seeking to modify an existing call sign only to the extent of adding or deleting an ''–FM'' or ''–TV'' suffix. The latter additions and deletions may be effective upon notification to the Commission.

(k) Unless subject to a pending transfer or assignment application, a change in call sign assignment will be made effective on the date specified in the telegram authorizing the change. In this regard, the applicant may include with its application a request for a specific effective date to take place within 45 days of the submission of its application for a call sign. Postponement of the effective date will be granted only in response to a timely request and for only the most compelling reasons.

(l) Four-letter combinations commencing with ''W'' or ''K'' which are assigned as call signs to ships or to other radio services are not available for assignment to broadcast stations, with or without the ''–FM'' or ''–TV'' suffix.

(m) Users of nonlicensed, low-power devices operating under Part 15 of the FCC rules may use whatever identification is currently desired, so long as propriety is observed and no confusion results with a station for which the FCC issues a license.

(n) Where a requested call sign, without the ''–FM,'' ''–TV'' or ''–LP'' suffix, would conform to the call sign of any other non-commonly owned station(s) operating in a different service, the applicant must obtain and submit with the application for the call sign the written consent of the licensee(s) of such stations.

[48 FR 57136, Dec. 28, 1983, as amended at 52 FR 5295, Feb. 20, 1987; 52 FR 43079, Nov. 9, 1987; 56 FR 64873, Dec. 12, 1991; 59 FR 31556, June 20, 1994]

### § 73.3555 Multiple ownership.

(a)(1) *Radio contour overlap rule.* No license for an AM or FM broadcasting station shall be granted to any party (including all parties under common control) if the grant of such license will result in overlap of the principal community contour of that station and the principal community contour of any other broadcasting station directly or indirectly owned, operated, or controlled by the same party, except that such license may be granted in connection with a transfer or assignment from an existing party with such interests, or in the following circumstances:

(i) In a radio market with 45 or more commercial radio stations, a party may own, operate, or control up to 8 commercial radio stations, not more than 5 of which are in the same service (AM or FM);

(ii) In a radio market with between 30 and 44 (inclusive) commercial radio stations, a party may own, operate, or control up to 7 commercial radio stations, not more than 4 of which are in the same service (AM or FM);

(iii) In a radio market with between 15 and 29 (inclusive) commercial radio stations, a party may own, operate, or control up to 6 commercial radio stations, not more than 4 of which are in the same service (AM or FM); and

(iv) In a radio market with 14 or fewer commercial radio stations, a party may own, operate, or control up to 5 commercial radio stations, not more than 3 of which are in the same service (AM or FM), except that a party may not own, operate, or control more than 50 percent of the stations in such market.

(2) Overlap between two stations in different services is permissible if neither of those two stations overlaps a third station in the same service.

(3) (i) Where the principal community contours of two radio stations overlap and a party (including all parties under common control) with an attributable ownership interest in one such station brokers more than 15 percent of the broadcast time per week of the other such station, that party shall be treated as if it has an interest in the brokered station subject to the limitations set forth in paragraph (a)(1) of this section. This limitation shall apply regardless of the source of the brokered programming supplied by the party to the brokered station.

(ii) Every time brokerage agreement of the type described in paragraph (a)(3)(i) of this section shall be undertaken only pursuant to a signed written agreement that shall contain a certification by the licensee or permittee of the brokered station verifying that

it maintains ultimate control over the station's facilities, including specifically control over station finances, personnel and programming, and by the brokering station that the agreement complies with the provisions of paragraph (a) of this section.

(4) For purposes of this paragraph (a):

(i) The ''principal community contour'' for AM stations is the predicted or measured 5 mV/m groundwave contour computed in accordance with §73.183 or §73.186 and for FM stations is the predicted 3.16 mV/m contour computed in accordance with §73.313.

(ii) The number of stations in a radio market is the number of commercial stations whose principal community contours overlap, in whole or in part, with the principal community contours of the stations in question (i.e., the station for which an authorization is sought and any station in the same service that would be commonly owned whose principal community contour overlaps the principal community contour of that station). In addition, if the area of overlap between the stations in question is overlapped by the principal community contour of a commonly owned station or stations in a different service (AM or FM), the number of stations in the market includes stations whose principal community contours overlap the principal community contours of such commonly owned station or stations in a different service.

(iii) ''Time brokerage'' is the sale by a licensee of discrete blocks of time to a ''broker'' that supplies the programming to fill that time and sells the commercial spot announcements in it.

(b) *Television contour overlap (duopoly) rule.* No license for a TV broadcast station shall be granted to any party (including all parties under common control) if the grant of such license will result in overlap of the Grade B contour of that station (computed in accordance with §73.684) and the Grade B contour of any other TV broadcast station directly or indirectly owned, operated, or controlled by the same party.

(c) *One-to-a-market ownership rule.* No license for an AM, FM or TV broadcast station shall be granted to any party (including all parties under common control) if such party directly or indirectly owns, operates or controls one or more such broadcast stations and the grant of such license will result in:

(1) The predicted or measured 2 mV/m groundwave contour of an existing or proposed AM station, computed in accordance with §73.183 or §73.186, encompassing the entire community of license of an existing or proposed TV broadcast station(s), or the Grade A contour(s) of the TV broadcast station(s), computed in accordance with §73.684, encompassing the entire community of license of the AM station; or

(2) The predicted 1 mV/m contour of an existing or proposed FM station, computed in accordance with §73.313, encompassing the entire community of license of an existing or proposed TV broadcast station(s), or the Grade A contour(s) of the TV broadcast station(s), computed in accordance with §73.684, encompassing the entire community of license of the FM station.

(d) *Daily newspaper cross-ownership rule.* No license for an AM, FM or TV broadcast station shall be granted to any party (including all parties under common control) if such party directly or indirectly owns, operates or controls a daily newspaper and the grant of such license will result in:

(1) The predicted or measured 2 mV/m contour of an AM station, computed in accordance with §73.183 or §73.186, encompassing the entire community in which such newspaper is published; or

(2) The predicted 1 mV/m contour for an FM station, computed in accordance with §73.313, encompassing the entire community in which such newspaper is published; or

(3) The Grade A contour of a TV station, computed in accordance with §73.684, encompassing the entire community in which such newspaper is published.

(e)(1) *National television multiple ownership rule.* No license for a commercial TV broadcast station shall be granted, transferred or assigned to any party (including all parties under common control) if the grant, transfer or assignment of such license would result in such party or any of its stockholders, partners, members, officers or directors, directly or indirectly, owning, operating or controlling, or having a cognizable interest in TV stations

which have an aggregate national audience reach exceeding thirty-five (35) percent.

(2) For purposes of this paragraph (e):

(i) *National audience reach* means the total number of television households in the Arbitron Area of Dominant Influence (ADI) markets in which the relevant stations are located divided by the total national television households as measured by ADI data at the time of a grant, transfer or assignment of a license. For purposes of making this calculation, UHF television stations shall be attributed with 50 percent of the television households in their ADI market. Where the relevant application forms require a showing with respect to audience reach and the application relates to an area where Arbitron ADI market data are unavailable, then the applicant shall make a showing as to the number of television households in its market. Upon such a showing, the Commission shall make a determination as to the appropriate audience reach to be attributed to the applicant.

(ii) *TV broadcast station or TV station* excludes stations which are primarily satellite operations.

(f) This section is not applicable to noncommercial educational FM and noncommercial educational TV stations.

NOTE 1: The word ''control'' as used herein is not limited to majority stock ownership, but includes actual working control in whatever manner exercised.

NOTE 2: In applying the provisions of this section, ownership and other interests in broadcast licensees, cable television systems and daily newspapers will be attributed to their holders and deemed cognizable pursuant to the following criteria:

(a) Except as otherwise provided herein, partnership and direct ownership interests and any voting stock interest amounting to 5% or more of the outstanding voting stock of a corporate broadcast licensee, cable television system or daily newspaper will be cognizable;

(b) No minority voting stock interest will be cognizable if there is a single holder of more than 50% of the outstanding voting stock of the corporate broadcast licensee, cable television system or daily newspaper in which the minority interest is held;

(c) Investment companies, as defined in 15 U.S.C. 80a–3, insurance companies and banks holding stock through their trust departments in trust accounts will be considered to have a cognizable interest only if they hold 10% or more of the outstanding voting stock of a corporate broadcast licensee, cable television system or daily newspaper, or if any of the officers or directors of the broadcast licensee, cable television system or daily newspaper are representatives of the investment company, insurance company or bank concerned. Holdings by a bank or insurance company will be aggregated if the bank or insurance company has any right to determine how the stock will be voted. Holdings by investment companies will be aggregated if under common management.

(d) Attribution of ownership interests in a broadcast licensee, cable television system or daily newspaper that are held indirectly by any party through one or more intervening corporations will be determined by successive multiplication of the ownership percentages for each link in the vertical ownership chain and application of the relevant attribution benchmark to the resulting product, except that wherever the ownership percentage for any link in the chain exceeds 50%, it shall not be included for purposes of this multiplication. [For example, if A owns 10% of company X, which owns 60% of company Y, which owns 25% of ''Licensee,'' then X's interest in ''Licensee'' would be 25% (the same as Y's interest since X's interest in Y exceeds 50%), and A's interest in ''Licensee'' would be 2.5% (0.1×0.25). Under the 5% attribution benchmark, X's interest in ''Licensee'' would be cognizable, while A's interest would not be cognizable.]

(e) Voting stock interests held in trust shall be attributed to any person who holds or shares the power to vote such stock, to any person who has the sole power to sell such stock, and to any person who has the right to revoke the trust at will or to replace the trustee at will. If the trustee has a familial, personal or extra-trust business relationship to the grantor or the beneficiary, the grantor or beneficiary, as appropriate, will be attributed with the stock interests held in trust. An otherwise qualified trust will be ineffective to insulate the grantor or beneficiary from attribution with the trust's assets unless all voting stock interests held by the grantor or beneficiary in the relevant broadcast licensee, cable television system or daily newspaper are subject to said trust.

(f) Holders of non-voting stock shall not be attributed an interest in the issuing entity. Holders of debt and instruments such as warrants, convertible debentures, options or other non-voting interests with rights of conversion to voting interests shall not be attributed unless and until conversion is effected.

(g)(1) A limited partnership interest shall be attributed to a limited partner unless that partner is not materially involved, directly or indirectly, in the management or

operation of the media-related activities of the partnership and the licensee or system so certifies.

(2) In order for a licensee or system to make the certification set forth in paragraph (g)(1) of this section, it must verify that the partnership agreement or certificate of limited partnership, with respect to the particular limited partner exempt from attribution, establishes that the exempt limited partner has no material involvement, directly or indirectly, in the management or operation of the media activities of the partnership. The criteria which would assume adequate insulation for purposes of this certification are described in the *Memorandum Opinion and Order* in MM Docket No. 83–46, FCC 85–252 (released June 24, 1985), as modified on reconsideration in the *Memorandum Opinion and Order* in MM Docket No. 83–46, FCC 86–410 (released November 28, 1986). Irrespective of the terms of the certificate of limited partnership or partnership agreement, however, no such certification shall be made if the individual or entity making the certification has actual knowledge of any material involvement of the limited partners in the management or operation of the media-related businesses of the partnership.

(h) Officers and directors of a broadcast licensee, cable television system or daily newspaper are considered to have a cognizable interest in the entity with which they are so associated. If any such entity engages in businesses in addition to its primary business of broadcasting, cable television service or newspaper publication, it may request the Commission to waive attribution for any officer or director whose duties and responsibilities are wholly unrelated to its primary business. The officers and directors of a parent company of a broadcast licensee, cable television system or daily newspaper, with an attributable interest in any such subsidiary entity, shall be deemed to have a cognizable interest in the subsidiary unless the duties and responsibilities of the officer or director involved are wholly unrelated to the broadcast licensee, cable television system or daily newspaper subsidiary, and a statement properly documenting this fact is submitted to the Commission. [This statement may be included on the appropriate Ownership Report.] The officers and directors of a sister corporation of a broadcast licensee, cable television system or daily newspaper shall not be attributed with ownership of these entities by virtue of such status.

(i) Discrete ownership interests will be aggregated in determining whether or not an interest is cognizable under this section. An individual or entity will be deemed to have a cognizable investment if:

(1) The sum of the interests held by or through ''passive investors'' is equal to or exceeds 10 percent; or

(2) The sum of the interests other than those held by or through ''passive investors'' is equal to or exceeds 5 percent; or

(3) The sum of the interests computed under paragraph (i)(1) of this section plus the sum of the interests computed under paragraph (i)(2) of this section is equal to or exceeds 10 percent.

NOTE 3: In cases where record and beneficial ownership of voting stock is not identical (*e.g.*, bank nominees holding stock as record owners for the benefit of mutual funds, brokerage houses holding stock in street names for the benefit of customers, investment advisors holding stock in their own names for the benefit of clients, and insurance companies holding stock), the party having the right to determine how the stock will be voted will be considered to own it for purposes of these rules.

NOTE 4: Paragraphs (a) through (e) of this section will not be applied so as to require divestiture, by any licensee, of existing facilities, and will not apply to applications for increased power for Class C stations, to applications for assignment of license or transfer of control filed in accordance with §73.3540(f) or §73.3541(b), or to applications for assignment of license or transfer of control to heirs or legatees by will or intestacy if no new or increased overlap would be created between commonly owned, operated or controlled broadcast stations in the same service and if no new encompassment of Communities proscribed in paragraphs (c) and (d) of this section as to commonly owned, operated or controlled broadcast stations or daily newspaper would result. Said paragraphs will apply to all applications for new stations, to all other applications for assignment or transfer, and to all applications for major changes in existing stations except major changes that will result in overlap of contours of broadcast stations in the same service with each other no greater than already existing. (The resulting areas of overlap of contours of such broadcast stations with each other in such major change cases may consist partly or entirely of new terrain. However, if the population in the resulting areas substantially exceeds that in the previously existing overlap areas, the Commission will not grant the application if it finds that to do so would be against the public interest, convenience or necessity.) Commonly owned, operated or controlled broadcast stations with overlapping contours or with community-encompassing contours prohibited by this section may not be assigned or transferred to a single person, group or entity, except as provided above in this note and by §73.3555(a). If a commonly owned, operated or controlled broadcast station and daily newspaper fall within the encompassing proscription of this section, the

station may not be assigned to a single person, group or entity if the newspaper is being simultaneously sold to such single person, group or entity.

NOTE 5: Paragraphs (a) through (e) of this section will not be applied to cases involving television stations that are ''satellite'' operations. Such cases will be considered in accordance with the analysis set forth in the *Report and Order* in MM Docket No. 87–8, FCC 91–182( released July 8, 1991), in order to determine whether common ownership, operation, or control of the stations in question would be in the public interest. An authorized and operating ''satellite'' television station, the Grade B contour of which overlaps that of a commonly owned, operated, or controlled ''non-satellite'' parent television broadcast station, or the Grade A contour of which completely encompasses the community of publication of a commonly owned, operated, or controlled daily newspaper, or the community of license of a commonly owned, operated, or controlled AM or FM broadcast station, or the community of license of which is completely encompassed by the 2 mV/m contour of such AM broadcast station or the 1 mV/m contour of such FM broadcast station, may subsequently become a ''non-satellite'' station under the circumstances described in the aforementioned *Report and Order* in MM Docket No. 87–8. However, such commonly owned, operated, or controlled ''non-satellite'' television stations and AM or FM stations with the aforementioned community encompassment, may not be transferred or assigned to a single person, group, or entity except as provided in Note 4 of this section. Nor shall any application for assignment or transfer concerning such ''non-satellite'' stations be granted if the assignment or transfer would be to the same person, group or entity to which the commonly owned, operated, or controlled newspaper is proposed to be transferred, except as provided in Note 4 of this section.

NOTE 6: For the purposes of this section a daily newspaper is one which is published four or more days per week, which is in the English language and which is circulated generally in the community of publication. A college newspaper is not considered as being circulated generally.

NOTE 7: The Commission will entertain requests to waive the restrictions of paragraph (c) of this section on a case-by-case basis. The Commission will look favorably upon waiver applications that meet either of the following two standards:

(1) Those involving radio and television station combinations in the top 25 television markets where there will be at least 30 separately owned, operated and controlled broadcast licensees after the proposed combination, as determined by counting television licensees in the relevant ADI television market and radio licensees in the relevant television metropolitan market;

(2) Those involving ''failed'' broadcast stations that have not been operated for a substantial period of time, *e.g.*, four months, or that are involved in bankruptcy proceedings. For the purposes of determining the top 25 ADI television markets, the relevant ADI television market, and the relevant television metropolitan market for each prospective combination, we will use the most recent *Arbitron Ratings Television ADI Market Guide.* We will determine that number of radio stations in the relevant television metropolitan market and the number of television licensees within the relevant ADI television market based on the most recent Commission ownership records.

Other waiver requests will be evaluated on a more rigorous case-by-case basis, as set forth in the *Second Report and Order* in MM Docket No. 87–7, FCC 88–407, released February 23, 1989, and *Memorandum Opinion and Order* in MM Docket No. 87–7, FCC 89–256, released August 4, 1989.

NOTE 8: Paragraph (a)(1) of this section will not apply to an application for an AM station license in the 535–1605 kHz band where grant of such application will result in the overlap of 5 mV/m groundwave contours of the proposed station and that of another AM station in the 535–1605 kHz band that is commonly owned, operated or controlled if the applicant shows that a significant reduction in interference to adjacent or co-channel stations would accompany such common ownership. Such AM overlap cases will be considered on a case-by-case basis to determine whether common ownership, operation or control of the stations in question would be in the public interest. Applicants in such cases must submit a contingent application of the major or minor facilities change needed to achieve the interference reduction along with the application which seeks to create the 5 mV/m overlap situation.

NOTE 9: Paragraph (a)(1) of this section will not apply to an application for an AM station license in the 1605–1705 kHz band where grant of such application will result in the overlap of the 5 mV/m groundwave contours of the proposed station and that of another AM station in the 535–1605 kHz band that is commonly owned, operated or controlled. Paragraphs (d)(1)(i) and (d)(1)(ii) of this section will not apply to an application for an AM station license in the 1605–1705 kHz band by an entity that owns, operates, controls or has a cognizable interest in AM radio stations in the 535–1605 kHz band.

NOTE 10: Authority for joint ownership granted pursuant to Note 9 will expire at 3 a.m. local time on the fifth anniversary for the date of issuance of a construction permit

for an AM radio station in the 1605–1705 kHz band.

[59 FR 49007, Sept. 26, 1994, as amended at 59 FR 62613, Dec. 6, 1994; 61 FR 10690 and 10692, Mar. 15, 1996]

### § 73.3556 Duplication of programming on commonly owned or time brokered stations.

(a) No commercial AM or FM radio station shall operate so as to devote more than 25 percent of the total hours in its average broadcast week to programs that duplicate those of any station in the same service (AM or FM) which is commonly owned or with which it has a time brokerage agreement if the principal community contours (predicted or measured 5 mV/m groundwave for AM stations and predicted 3.16 mV/m for FM stations) of the stations overlap and the overlap constitutes more than 50 percent of the total principal community contour service area of either station.

(b) For purposes of this section, duplication means the broadcasting of identical programs within any 24 hour period.

(c) Any party engaged in a time brokerage arrangement which conflicts with the requirements of paragraph (a) of this section on September 16, 1992, shall bring that arrangement into compliance within one year thereafter.

[57 FR 18093, Apr. 29, 1992, as amended at 57 FR 42706, Sept. 16, 1992]

EFFECTIVE DATE NOTE: At 57 FR 18093, Apr. 29, 1992, § 73.3556 was added, effective August 1, 1992. At 57 FR 35763, Aug. 11, 1992, the effective date was deferred pending action by the agency. At 57 FR 37888, Aug. 21, 1992, the effective date was further deferred. At 57 FR 42706, Sept. 16, 1992, paragraph (a) was revised and paragraph (c) was added, effective September 16, 1992. The agency will publish a notice of the effective date of paragraph (b) in the FEDERAL REGISTER at a later date.

### § 73.3561 Staff consideration of applications requiring Commission action.

Upon acceptance of an application, the complete file is reviewed by the staff and, except where the application is acted upon by the staff pursuant to delegation of authority, a report containing the recommendations of the staff and any other documents required is prepared and placed on the Commission's agenda.

[44 FR 38499, July 2, 1979]

### § 73.3562 Staff consideration of applications not requiring action by the Commission.

Those applications which do not require action by the Commission but which, pursuant to the delegations of authority set forth in subpart B of part 0, may be acted upon by the Chief, Mass Media Bureau, are forwarded to the Mass Media Bureau for necessary action. If the application is granted, the formal authorization is issued. In any case where it is recommended that the application be set for hearing, where a novel question of policy is presented, or where the Chief, Mass Media Bureau desires instructions from the Commission, the matter is placed on the Commission agenda.

[49 FR 14509, Apr. 12, 1984]

### § 73.3564 Acceptance of applications.

(a)(1) Applications tendered for filing are dated upon receipt and then forwarded to the Mass Media Bureau, where an administrative examination is made to ascertain whether the applications are complete. Except for applications for minor modifications of facilities in the non-reserved FM band, as defined in § 73.3573(a)(2), long form applications subject to the provisions of § 73.5005 found to be complete or substantially complete are accepted for filing and are given file numbers. In the case of minor defects as to completeness, a deficiency letter will be issued and the applicant will be required to supply the missing or corrective information. Applications that are not substantially complete will not be considered and will be returned to the applicant.

(2) In the case of minor modifications of facilities in the non-reserved FM band, applications will be placed on public notice if they meet the following two-tiered minimum filing requirement as initially filed in first come/first served proceedings:

(i) The application must include:

(A) Applicant's name and address,

(B) Applicant's original signature,

(C) Principal community,

(D) Channel or frequency,
(E) Class of station, and
(F) Transmitter site coordinates; and

(ii) The application must not omit more than 3 of the second tier items specified in appendix C, Report and Order, MM Docket No. 91–347, FCC 92–328, 7 FCC Rcd 5074 (1992). Applications found not to meet minimum filing requirements will be returned to the applicant. Applications found to meet minimum filing requirements, but that contain deficiencies in tender and/or acceptance information, shall be given an opportunity for corrective amendment pursuant to § 73.3522. Applications found to be substantially complete and in accordance with the Commission's core legal and technical requirements will be accepted for filing. Applications with uncorrected tender and/or acceptance defects remaining after the opportunity for corrective amendment will be dismissed with no further opportunity for corrective amendment.

(b) Acceptance of an application for filing merely means that it has been the subject of a preliminary review by the FCC's administrative staff as to completeness. Such acceptance will not preclude the subsequent dismissal of the application if it is found to be patently not in accordance with the FCC's rules.

(c) At regular intervals, the FCC will issue a Public Notice listing all long form applications which have been accepted for filing. Pursuant to §§ 73.3571(h), 73.3572, and 73.3573(f), such notice shall establish a cut-off date for the filing of petitions to deny. With respect to reserved band FM applications, the Public Notice shall also establish a cut-off date for the filing of mutually exclusive applications pursuant to § 73.3573(e). However, no application will be accepted for filing unless certification of compliance with the local notice requirements of § 73.3580(h) has been made in the tendered application.

(d) The FCC will specify by Public Notice, pursuant to § 73.5002, a period for filing applications for new stations or for major modifications in the facilities of an existing station. Except for reserved band FM stations and TV stations on reserved noncommercial educational channels, applications for new and major modifications in facilities will be accepted only during these window filing periods specified by the Commission.

(e) Applications for minor modification of facilities may be tendered at any time, unless restricted by the FCC. These applications will be processed on a ''first come/first served'' basis and will be treated as simultaneously tendered if filed on the same day. Any applications received after the filing of a lead application will be grouped according to filing date, and placed in a queue behind the lead applicant. The FCC will periodically release a Public Notice listing those minor modification of facilities applications accepted for filing.

(f) If a non-reserved band FM channel allotment becomes vacant, after the grant of a construction permit becomes final, because of a lapsed construction permit or for any other reason, the FCC will, by Public Notice, announce a subsequent filing window for the acceptance of new applications for such channels.

(g) Applications for operation in the 1605–1705 kHz band will be accepted only if filed pursuant to the terms of § 73.30(b).

[63 FR 48624, Sept. 11, 1998]

EFFECTIVE DATE NOTE: At 63 FR 48624, Sept. 11, 1998, § 73.3564 was revised, effective Nov. 10, 1998. For the convenience of the user, the superseded text is set forth as follows:

**§ 73.3564 Acceptance of applications.**

(a) Applications tendered for filing are dated upon receipt and then forwarded to the Mass Media Bureau, where an administrative examination is made to ascertain whether the applications are complete. Except for non-reserved band FM (except for Class D) applications, those found to be complete or substantially complete are accepted for filing and are given file numbers.In the case of minor defects as to completeness, the applicant will be required to supply the missing or correct information. Applications that are not substantially complete will be returned to the applicant. In the case of non-reserved band FM applications received on or after August 7, 1992, applications will be placed on public notice if they meet the following two-tiered minimum filing requirement prior to close of the filing window in window proceedings and as initially filed in first come/first served proceedings:

(1) The application must include:

(i) Applicant's name and address,
(ii) Applicant's original signature,
(iii) Principal community,
(iv) Channel or frequency,
(v) Class of station, and
(vi) Transmitter site coordinates; and

(2) The application must not omit more than 3 of the second tier items specified in appendix C, Report and Order, MM Docket No. 91–347, FCC 92–328, 7 FCC Rcd 5074 (1992). Applications found not to meet minimum filing requirements will be returned to the applicant. Applications found to meet minimum filing requirements but that contain deficiencies in tender and/or acceptance information shall be given an opportunity for corrective amendment pursuant to §73.3522. Applications found to be substantially complete and in accordance with the Commission's core legal and technical requirements will be accepted for filing. Applications with uncorrected tender and/or acceptance defects remaining after the opportunity for corrective amendment will be dismissed with no further opportunity for corrective amendment. In the case of low power TV, TV translator and TV booster applications, those found to be substantially complete will be listed on a Commission public notice as tendered for filing and given file numbers. Those that are not substantially complete will be returned to the applicant. If it is determined that a low power TV, TV translator or TV booster application is substantially complete but contains some defect(s) or omission(s), a deficiency letter will be issued affording the applicant 30 days to correct the defect. If the defect is not corrected within 30 days of the date on the deficiency letter, the application will be returned with no further opportunity to amend.

NOTE: For non-reserved band FM applications received prior to August 7, 1992 applications with deficiencies in tender and/or acceptance information will be returned to the applicant without an opportunity for corrective amendment. See 50 FR 19936 (May 13, 1985).

(b) Acceptance of an application for filing merely means that it has been the subject of a preliminary review by the FCC's administrative staff as to completeness. Such acceptance will not preclude the subsequent dismissal of the application if it is found to be patently not in accordance with the FCC's rules.

(c) At regular intervals, the FCC will issue a Public Notice listing all applications and major amendments thereto which have been accepted for filing, except for low power TV, TV translator, TV booster, and non-reserved band FM stations. Pursuant to §§73.3571(c), 73.3572(c) and 73.3573(d) such notice shall establish a cut-off date (not less than 30 days from the date of issuance) for the filing of mutually exclusive applications and petitions to deny. However, no application will be accepted for filing unless certification of compliance with the local notice requirements of §73.3580(h) has been made in the tendered application.

(d) New and major change applications for non-reserved band FM stations (except for Class D stations) and for low power TV and TV translator stations will be accepted only on date(s) specified by the Commission. Low power TV and TV translator station filing period(s) will be designated by the Commission in a Public Notice. No more than five (5) applications for new low power TV or TV translator stations may be tendered for filing by any applicant, or by any individual or entity having an interest of one (1) percent or greater in any applicant(s) in a single filing period. This restriction does not apply to applications for major or minor changes in low power TV or TV translator stations as defined by §73.3572. Non-reserved band FM facilities and major change applications will have filing dates designated by the Commission in the following manner:

(1) For all vacant non-reserved band FM allocations listed on the FM Table of Allotments, §73.202, as of March 14, 1985, a one-time filing period or ''window'' will open for 30 days, beginning on the 31st day after the date of publication of the *Report and Order* in MM Docket No. 84–750 in the FEDERAL REGISTER and will close on the 60th day after such publication. (This filing window does not apply to the 689 FM channels added to the FM Table of Allotments by the Commission's decision in MM Docket No. 84–231).

(2) The 689 FM allocations added to the FM Table of Allotments by MM Docket 84–231 will be subject to a series of windows. The Audio Services Division of the Mass Media Bureau will establish, by Public Notice, the window filing dates for this group of allotments.

(3) Each *Report and Order* specifying a new non-reserved FM band allocation will identify the window filing period which will begin upon the effective date of that *Order* and continue for at least 30 days.

(4) Where no applications are tendered during a window filing period, applications may be tendered any time after the window closes. These applications will be processed on a ''first come/first serve'' basis and will be treated as simultaneously filed if filed on the same day. Any applications received after the filing of a lead applicant will be placed in a queue, according to filing date, behind the lead applicant.

(5) If a non-reserved band FM channel allotment is vacant after the grant of a construction permit becomes final, because of a lapsed construction permit or for any other reason, the FCC will, by Public Notice, announce a subsequent filing window for the acceptance of new applications for such channels.

(6) However, no application will be accepted for tender unless certification of compliance with the local notice requirements of §73.3580(h) has been made in the tendered application.

(e) Applications for operation in the 1605–1705 kHz band will be accepted only if filed pursuant to the terms of §73.30(b).

[44 FR 38499, July 2, 1979, as amended at 50 FR 19943, May 13, 1985; 52 FR 7421, Mar. 11, 1987; 52 FR 31400, Aug. 20, 1987; 56 FR 64873, Dec. 12, 1991; 57 FR 34878, Aug. 7, 1992; 59 FR 31556, June 20, 1994]

### §73.3566 Defective applications.

(a) Applications which are determined to be patently not in accordance with the FCC rules, regulations, or other requirements, unless accompanied by an appropriate request for waiver, will be considered defective and will not be accepted for filing or if inadvertently accepted for filing will be dismissed. Requests for waiver shall show the nature of the waiver or exception desired and shall set forth the reasons in support thereof.

(b) If an applicant is requested by the FCC to file any additional documents or information not included in the prescribed application form, a failure to comply with such request will be deemed to render the application defective, and such application will be dismissed.

[44 FR 38499, July 2, 1979]

### §73.3568 Dismissal of applications.

(a) (1) Failure to prosecute an application, or failure to respond to official correspondence or request for additional information, will be cause for dismissal.

(2) Applicants in all broadcast services subject to competitive bidding will be subject to the provisions of §§73.5002 and 1.2105(b) regarding the dismissal of their short-form applications.

(3) Applicants in all broadcast services subject to competitive bidding will be subject to the provisions of §§73.5004, 73.5005 and 1.2104(g) regarding the dismissal of their long-form applications and the imposition of applicable withdrawal, default and disqualification payments.

(b)(1) Subject to the provisions of §73.3525, dismissal of applications for channels reserved for noncommercial educational use will be without prejudice where an application has not yet been designated for hearing, but may be made with prejudice after designation for hearing.

(2) Subject to the provisions of §73.3525, requests to dismiss an application for a channel reserved for noncommercial educational use, without prejudice, after it has been designated for hearing, will be considered only upon written petition properly served upon all parties of record. Such requests shall be granted only upon a showing that the request is based on circumstances wholly beyond the applicant's control which preclude further prosecution of his application.

(c) Subject to the provisions of §§73.3523 and 73.3525, any application for minor modification of facilities may, upon request of the applicant, be dismissed without prejudice as a matter of right.

(d) An applicant's request for the return of an application that has been accepted for filing will be regarded as a request for dismissal.

[63 FR 48624, Sept. 11, 1998]

EFFECTIVE DATE NOTE: At 63 FR 48624, Sept. 11, 1998, §73.3568 was revised, effective Nov. 10, 1998. For the convenience of the user, the superseded text is set forth as follows:

#### §73.3568 Dismissal of applications.

(a) Subject to the provisions of §73.3523 (Dismissal of applications in renewal proceedings) and §73.3525 (Agreements for removing application conflicts), any application may, upon request of the applicant be dismissed without prejudice as a matter of right prior to the designation of such application for hearing. An applicant's request for the return of an application that has been accepted for filing will be regarded as a request for dismissal.

(b) Failure to prosecute an application, or failure to respond to official correspondence or request for additional information, will be cause for dismissal. Subject to the provisions of §73.3525, such dismissal will be without prejudice where an application has not yet been designated for hearing, but may be made with prejudice after designation for hearing.

(c) Subject to the provisions of §73.3523 (Dismissal of applications in renewal proceedings) and §73.3525 (Agreements for removing application conflicts), requests to dismiss an application without prejudice after it has been designated for hearing will be considered only upon written petition

properly served upon all parties of record. Such requests shall be granted only upon a showing that the request is based on circumstances wholly beyond the applicant's control which preclude further prosecution of his application.

[44 FR 38499, July 2, 1979, as amended at 54 FR 22599, May 25, 1989]

### § 73.3571 Processing of AM broadcast station applications.

(a) Applications for AM broadcast facilities are divided into three groups.

(1) In the first group are applications for new stations or for major changes in the facilities of authorized stations. A major change for an AM station authorized under this part is any increase in power, except where accompanied by a complimentary reduction of antenna efficiency which leads to the same amount, or less, radiation in all directions (in the horizontal and vertical planes when skywave propagation is involved, and in the horizontal plane only for daytime considerations), relative to the presently authorized radiation levels, or any change in frequency, hours of operation, or community of license. A major change in ownership is a situation where the original party or parties to the application do not retain more than 50% ownership interest in the application as originally filed.

(2) The second group consists of applications for licenses and all other changes in the facilities of authorized stations.

(3) The third group consists of applications for operation in the 1605–1705 kHz band which are filed subsequent to FCC notification that allotments have been awarded to petitioners under the procedure specified in § 73.30.

(b)(1) The FCC may, after acceptance of an application for modification of facilities, advise the applicant that such application is considered to be one for a major change and therefore is subject to the provisions of §§ 73.3522, 73.3580 and 1.1111 of this chapter pertaining to major changes. Such major modification applications will be dismissed as set forth in paragraph (h)(1)(i) of this section.

(2) An amendment to an application which would effect a major change, as defined in paragraph (a)(1) of this section, will not be accepted except as provided for in paragraph (h)(1)(i) of this section.

(c) An application for changes in the facilities of an existing station will continue to carry the same file number even though (pursuant to FCC approval) an assignment of license or transfer of control of said licensee or permittee has taken place if, upon consummation, the application is amended to reflect the new ownership.

(d) If, upon examination, the FCC finds that the public interest, convenience and necessity will be served by the granting of an application, the same will be granted. If the FCC is unable to make such a finding and it appears that a hearing may be required, the procedure set forth in § 73.3593 will be followed.

(e) Applications proposing to increase the power of an AM station are subject to the following requirements:

(1) In order to be acceptable for filing, any application which does not involve a change in site must propose at least a 20% increase in the station's nominal power.

(2) Applications involving a change in site are not subject to the requirements in paragraph (e)(1) of this section.

(3) Applications for nighttime power increases for Class D stations are not subject to the requirements of this section and will be processed as minor changes.

(4) The following special procedures will be followed in authorizing Class II–D daytime-only stations on 940 and 1550 kHz, and Class III daytime-only stations on the 41 regional channels listed in § 73.26(a), to operate unlimited-time.

(i) Each eligible daytime-only station in the foregoing categories will receive an Order to Show Cause why its license should not be modified to specify operation during nighttime hours with the facilities it is licensed to start using at local sunrise, using the power stated in the Order to Show Cause, that the Commission finds is the highest nighttime level—not exceeding 0.5 kW—at which the station could operate without causing prohibited interference to other domestic or foreign stations, or to co-channel or adjacent channel stations for which pending applications were filed before December 1, 1987.

(ii) Stations accepting such modification shall be reclassified. Those authorized in such Show Cause Orders to operate during nighttime hours with a power of 0.25 kW or more, or with a power that, although less than 0.25 kW, is sufficient to enable them to attain RMS field strengths of 141 mV/m or more at 1 kilometer, shall be redesignated as Class II–B stations if they are assigned to 940 or 1550 kHz, and as unlimited-time Class III stations if they are assigned to regional channels.

(iii) Stations accepting such modification that are authorized to operate during nighttime hours at powers less than 0.25 kW, and that cannot with such powers attain RMS field strengths of 141 mV/m or more at 1 kilometer, shall be redesignated as Class II–S stations if they are assigned to 940 or 1550 kHz, and as Class III–S stations if they are assigned to regional channels.

(iv) Applications for new stations may be filed at any time on 940 and 1550 kHz and on the regional channels. Also, stations assigned to 940 or 1550 kHz, or to the regional channels, may at any time, regardless of their classifications, apply for power increases up to the maximum generally permitted. Such applications for new or changed facilities will be granted without taking into account interference caused to Class II–S or Class III–S stations, but will be required to show interference protection to other classes of stations, including stations that were previously classified as Class II–S or Class III–S, but were later reclassified as Class II–B or Class III unlimited-time stations as a result of subsequent facilities modifications that permitted power increases qualifying them to discontinue their ''S'' subclassification.

(f) Applications for minor modifications for AM broadcast stations, as defined in paragraph (a)(2) of this section, may be filed at any time, unless restricted by the FCC, and, generally will be processed in the order in which they are tendered. The FCC will periodically release a Public Notice listing those applications accepted for filing. Any such applications found to be mutually exclusive must be resolved through settlement or technical amendment.

(g) Applications for change of license to change hours of operation of a Class C AM broadcast station, to decrease hours of operation of any other class of station, or to change station location involving no change in transmitter site will be considered without reference to the processing line.

(h) *Processing new and major AM broadcast station applications.* (1)(i) The FCC will specify by Public Notice, pursuant to §73.5002, a period for filing AM applications for a new station or for major modifications in the facilities of an authorized station. AM applications for new facilities or for major modifications will be accepted only during these specified periods. Applications submitted prior to the appropriate filing period or ''window'' opening date identified in the Public Notice will be returned as premature. Applications submitted after the specified deadline will be dismissed with prejudice as untimely.

(ii) Such AM applicants will be subject to the provisions of §§1.2105 and 73.5002 regarding the submission of the short-form application, FCC Form 175, and all appropriate certifications, information and exhibits contained therein. To determine which AM applications are mutually exclusive, AM applicants must submit the engineering data contained in FCC Form 301 as a supplement to the short-form application. Such engineering data will not be studied for technical acceptability, but will be protected from subsequently filed applications as of the close of the window filing period. Determinations as to the acceptability or grantability of an applicant's proposal will not be made prior to an auction.

(iii) AM applicants will be subject to the provisions of §§1.2105 and 73.5002 regarding the modification and dismissal of their short-form applications.

(2) Subsequently, the FCC will release Public Notices:

(i) identifying the short-form applications received during the window filing period which are found to be mutually exclusive;

(ii) establishing a date, time and place for an auction;

(iii) providing information regarding the methodology of competitive bidding to be used in the upcoming auction, bid submission and payment procedures, upfront payment procedures,

upfront payment deadlines, minimum opening bid requirements and applicable reserve prices in accordance with the provisions of § 73.5002;

(iv) identifying applicants who have submitted timely upfront payments and, thus, are qualified to bid in the auction.

(3) If, during the window filing period, the FCC receives non-mutually exclusive AM applications, a Public Notice will be released identifying the non-mutually exclusive applicants, who will be required to submit the appropriate long form application within 30 days of the Public Notice and pursuant to the provisions of § 73.5005(d). These non-mutually exclusive applications will be processed and the FCC will periodically release a Public Notice listing such non-mutually exclusive applications determined to be acceptable for filing and announcing a date by which petitions to deny must be filed in accordance with the provisions of §§ 73.5006 and 73.3584. If the applicant is duly qualified, and upon examination, the FCC finds that the public interest, convenience and necessity will be served by the granting of the non-mutually exclusive long form application, the same will be granted.

(4)(i) The auction will be held pursuant to the procedures set forth in §§ 1.2101 *et seq.* and 73.5000 *et seq.* Subsequent to the auction, the FCC will release a Public Notice announcing the close of the auction and identifying the winning bidders. Winning bidders will be subject to the provisions of §§ 1.2107 and 73.5003 regarding down payments and will be required to submit the appropriate down payment within 10 business days of the Public Notice. Pursuant to §§ 1.2107 and 73.5005, a winning bidder that meets its down payment obligations in a timely manner must, within 30 days of the release of the Public Notice announcing the close of the auction, submit the appropriate long-form application for each construction permit for which it was the winning bidder. Long-form applications filed by winning bidders shall include the exhibits identified in § 73.5005(a).

(ii) These applications will be processed and the FCC will periodically release a Public Notice listing such applications that have been accepted for filing and announcing a date by which petitions to deny must be filed in accordance with the provisions of §§ 73.5006 and 73.3584. If the applicant is duly qualified, and upon examination, the FCC finds that the public interest, convenience and necessity will be served by the granting of the winning bidder's long-form application, a Public Notice will be issued announcing that the construction permit is ready to be granted. Each winning bidder shall pay the balance of its winning bid in a lump sum within 10 business days after release of the Public Notice, as set forth in §§ 1.2109(a) and 73.5003. Construction permits will be granted by the Commission following the receipt of the full payment.

(iii) All long-form applications will be cutoff as of the date of filing with the FCC and will be protected from subsequently filed long-form applications. Applications will be required to protect all previously filed commercial and noncommercial applications. Winning bidders filing long-form applications may change the technical proposals specified in their previously submitted short-form applications, but such change may not constitute a major change. If the submitted long-form application would constitute a major change from the proposal submitted in the short-form application, the long-form application will be returned pursuant to paragraph (h)(1)(i) of this section.

(i) In order to grant a major or minor change application made contingent upon the grant of another licensee's request for a facility modification, the Commission will not consider mutually exclusive applications by other parties that would not protect the currently authorized facilities of the contingent applicants. Such major change applications remain, however, subject to the provisions of §§ 73.3580 and 1.1111. The Commission shall grant contingent requests for construction permits for station modifications only upon a finding that such action will promote the public interest, convenience and necessity.

[63 FR 48625, Sept. 11, 1998]

EFFECTIVE DATE NOTE: At 63 FR 48625, Sept. 11, 1998, § 73.3571 was revised, effective Nov. 10, 1998. For the convenience of the

user, the superseded text is set forth as follows:

**§ 73.3571 Processing of AM broadcast station applications.**

(a) Applications for AM broadcast facilities are divided into three groups.

(1) In the first group are applications for new stations or for major changes in the facilities of authorized stations. A major change is any increase in power except where accompanied by a complimentary reduction of antenna efficiency which leads to the same amount, or less, radiation in all directions (in the horizontal and vertical planes when skywave propagation is involved, and in the horizontal plane only for daytime considerations), relative to the presently authorized radiation levels, or any change in frequency, hours of operation, or community of license. However, the FCC may, within 15 days after the acceptance for filing of any other application for modification of facilities, advise the applicant that such application is considered to be one for a major change and therefore is subject to the provisions of §§ 73.3580 and 1.1111 of this chapter pertaining to major changes.

(2) The second group consists of applications for licenses and all other changes in the facilities of authorized stations.

(3) The third group consists of applications for operation in the 1605–1705 kHz band which are filed subsequent to Commission notification that allotments have been awarded to petitioners under the procedure specified in § 73.30.

(b) If an application is amended so as to effect a major change as defined in paragraph (a)(1) of this section or so as to result in a situation where the original party or parties to the application do not retain more than 50% ownership interest in the application as originally filed, § 73.3580 will apply to such amended application.

(c) Applications for new stations or for major changes in the facilities of authorized stations are processed as nearly as possible in the order in which they are filed. Such applications will be placed in the processing line in numerical sequence, and are drawn by the staff for study, the lowest file number first. Thus, the file number determines the order in which the staff's work is begun on a particular application or group of conflicting applications. In order that those applications which are entitled to be grouped for processing may be fixed prior to the time processing of the earliest filed application is begun, the FCC will periodically release a Public Notice listing applications which have been accepted for filing and announcing a date (not less than 30 days after release) on which the listed applications will be considered available and ready for processing and by which all mutually exclusive applications and/or petitions to deny the listed applications must be filed.

(1) In order to grant a major or minor change application made contingent upon the grant of another licensee's request for a facility modification, the Commission will not consider mutually exclusive applications by other parties that would not protect the currently authorized facilities of the contingent applicants. Such major change applications remain, however, subject to the provisions of §§ 73.3580 and 1.1111. The Commission shall grant contingent requests for construction permits for station modifications only upon a finding that such action will promote the public interest, convenience and necessity.

(2) In addition to announcing the acceptance of mutually exclusive applications and establishing a date for the filing of petitions to deny such applications, the public notice referred to in paragraph (c) of this section will also announce the date on which all mutually exclusive applicants (including the previously accepted lead applicant) will be required to pay the hearing fee established in part 1 of these rules, 47 CFR 1.1104(2)(c) of this chapter. The date for fee payment shall be at least 30 days after the date established for peitions to deny.

(3) Whenever the public notice announces the acceptance of an application that is mutually exclusive with a renewal application, it shall also announce that the mutually exclusive applicants and the renewal applicant will be required to pay the hearing fee on the date established in the public notice.

(d) Applications proposing to increase the power of an AM station are subject to the following requirements:

(1) In order to be acceptable for filing, any application which does not involve a change in site must propose at least a 20% increase in the station's nominal power.

(2) Applications involving a change in site are not subject to the requirements in paragraph (d)(1) of this section.

(3) Applications for nighttime power increases for Class D stations are not subject to the requirements of this section and will be processed as minor changes.

(4) [Reserved]

(5) The following special procedures will be followed in authorizing Class II–D daytime-only stations on 940 and 1550 kHz, and Class III daytime-only stations on the 41 regional channels listed in § 73.26(a), to operate unlimited-time.

(i) Each eligible daytime-only station in the foregoing categories will receive an Order to Show Cause why its license should not be modified to specify operation during nighttime hours with the facilities it is licensed to start using at local sunrise, using the power stated in the Order to Show Cause, that the Commission finds is the highest nighttime level—not exceeding 0.5 kW—at

which the station could operate without causing prohibited interference to other domestic or foreign stations, or to co-channel or adjacent channel stations for which pending applications were filed before December 1, 1987.

(ii) Stations accepting such modification shall be reclassified. Those authorized in such Show Cause Orders to operate during nighttime hours with a power of 0.25 kW or more, or with a power that, although less than 0.25 kW, is sufficient to enable them to attain RMS field strengths of 141 mV/m or more at 1 kilometer, shall be redesignated as Class II–B stations if they are assigned to 940 or 1550 kHz, and as unlimited-time Class III stations if they are assigned to regional channels.

(iii) Stations accepting such modification that are authorized to operate during nighttime hours at powers less than 0.25 kW, and that cannot with such powers attain RMS field strengths of 141 mV/m or more at 1 kilometer, shall be redesignated as Class II–S stations if they are assigned to 940 or 1550 kHz, and as Class III–S stations if they are assigned to regional channels.

(iv) Applications for new stations may be filed at any time on 940 and 1550 kHz and on the regional channels. Also, stations assigned to 940 or 1550 kHz, or to the regional channels, may at any time, regardless of their classifications, apply for power increases up to the maximum generally permitted. Such applications for new or changed facilities will be granted without taking into account interference caused to Class II–S or Class III–S stations, but will be required to show interference protection to other classes of stations, including stations that were previously classified as Class II–S or Class III–S, but were later reclassified as Class II–B or Class III unlimited-time stations as a result of subsequent facilities modifications that permitted power increases qualifying them to discountinue their ''S'' subclassification.

(e) Applications other than those for new stations or for major changes in the facilities of authorized stations are not placed on the processing line but are processed as nearly as possible in the order in which they are filed.

(f) Applications for change of license to change hours of operation of a Class C station, to decrease hours of operation of any other class of station, or to change station location involving no change in transmitter site will be considered without reference to the processing line.

(g) If, upon examination, the FCC finds that the public interest, convenience and necessity will be served by the granting of an application, the same will be granted. If the FCC is unable to make such a finding and it appears that a hearing may be required, the procedure set forth in §73.3593 will be followed.

(h) When an application which has been designated for hearing has been removed from the hearing docket, the application will be returned to its proper position (as determined by the file number) in the processing line. Whether or not a new file number will be assigned will be determined pursuant to paragraph (i) of this section, after the application has been removed from the hearing docket.

(i)(1) A new file number will be assigned to an application for a new station, or for major changes in the facilities of an authorized station, when it is amended to change frequency, to increase power, to increase hours of operation, or to change station location. Any other amendment modifying the engineering proposal, except an amendment regarding the type of equipment specified, will also result in the assignment of a new file number unless such amendment is accompanied by a complete engineering study showing that the amendments would not involve new or increased interference problems with existing stations or other applications pending at the time the amendment is filed. If, after submission and acceptance of such an engineering amendment, subsequent examination indicates new or increased interference problems within either existing stations or other applications pending at the time the amendment was received at the FCC, the application will then be assigned a new file number and placed in the processing line according to the numerical sequence of the new file number.

(2) A new file number will be assigned where an application for a new station is amended (whether by a single amendment or by a series of amendments) so as to result in a situation where the original party or parties to the application do not retain more than 50% ownership interest in the application as originally filed, and §73.3580 will apply to such amended application.

(3) Where an amendment to an application would require a new file number pursuant to paragraph (j)(1) or (j)(2) of this section, the applicant will have an opportunity to withdraw the amendment at any time prior to designation for a hearing if applicable; and may be afforded, subject to the discretion of the Administrative Law Judge, an opportunity to withdraw the amendment after designation for a hearing.

(4) An application for changes in the facilities of an existing station will continue to carry the same file number even though (pursuant to FCC approval) an assignment of license or transfer of control of said licensee or permittee has taken place if, upon consummation, the application is amended to reflect the new ownership.

(j) When an application is reached for processing, and it is necessary to address a letter to the applicant asking further information, the application will not be processed until

the information requested is received, and the application will be placed in the pending file to await the applicant's response.

(k) When an application is placed in the pending file, the applicant will be notified of the reason for such action.

[44 FR 38501, July 2, 1979; 44 FR 40311, July 10, 1979, as amended at 46 FR 36852, July 16, 1981; 49 FR 14745, Apr. 13, 1984; 49 FR 32589, Aug. 15, 1984; 49 FR 48187, Dec. 11, 1984; 50 FR 18848, May 2, 1985; 50 FR 24522, June 11, 1985; 52 FR 21311, June 5, 1987; 53 FR 1032, Jan. 15, 1988; 54 FR 39534, Sept. 27, 1989; 55 FR 19265, May 9, 1990; 56 FR 795, Jan. 9, 1991; 56 FR 64874, Dec. 12, 1991; 61 FR 46563, Sept. 4, 1996]

### § 73.3572 Processing of TV broadcast, low power TV, TV translator and TV booster station applications.

(a) Applications for TV stations are divided into two groups:

(1) In the first group are applications for new stations or major changes in the facilities of authorized stations. A major change for TV broadcast stations authorized under this part is any change in frequency or community of license which is in accord with a present allotment contained in the Table of Allotments (§ 73.606). Other requests for change in frequency or community of license for TV broadcast stations must first be submitted in the form of a petition for rulemaking to amend the Table of Allotments. In the case of low power TV, TV translator, and TV booster stations authorized under part 74 of this chapter, a major change is any change in:

(i) Frequency (output channel) assignment (does not apply to TV boosters);

(ii) Transmitting antenna system including the direction of the radiation, directive antenna pattern or transmission line;

(iii) Antenna height;

(iv) Antenna location exceeding 200 meters; or

(v) Authorized operating power.

(2) However, if the proposed modification of facilities, other than a change in frequency, will not increase the signal range of the low power TV, TV translator or TV booster station in any horizontal direction, the modification will not be considered a major change.

(i) Provided that in the case of an authorized low power TV, TV translator or TV booster which is predicted to cause or receive interference to or from an authorized TV broadcast station pursuant to § 74.705 or interference with broadcast or other services under § 74.703 or § 74.709, that an application for a change in output channel, together with technical modifications which are necessary to avoid interference (including a change in antenna location of less than 16.1 km), will not be considered as an application for a major change in those facilities.

(ii) Provided further, that a low power TV, TV translator or TV booster station: authorized on a channel from channel 60 to 69, or which is causing or receiving interference or is predicted to cause or receive interference to or from an authorized DTV station pursuant to § 74.706, or which is located within the distances specified below in paragraph (iii) of this section to the coordinates of co-channel DTV authorizations (or allotment table coordinates if there are no authorized facilities at different coordinates), may at any time file a displacement relief application for a change in output channel, together with any technical modifications which are necessary to avoid interference or continue serving the station's protected service area. Such an application will not be considered as an application for a major change in those facilities. Where such an application is mutually exclusive with applications for new low power TV, TV translator or TV booster stations, or with other non-displacement relief applications for facilities modifications, priority will be afforded to the displacement application(s) to the exclusion of the other applications.

(iii)(A) The geographic separations to co-channel DTV facilities or allotment reference coordinates, as applicable, within which to qualify for displacement relief are the following:

(1) Stations on UHF channels: 265 km (162 miles)

(2) Stations on VHF channels 2–6: 280 km (171 miles)

(3) Stations on VHF channels 7–13: 260 km (159 miles)

(B) Engineering showings of predicted interference may also be submitted to justify the need for displacement relief.

(iv) Provided further, that the FCC may, within 15 days after acceptance of

any other application for modification of facilities, advise the applicant that such application is considered to be one for a major change and therefore subject to the provisions of §§ 73.3522, 73.3580, and 1.1111 of this chapter pertaining to major changes. Such major modification applications filed for low power TV, TV translator, TV booster stations, and for a non-reserved television allotment, are subject to competitive bidding procedures and will be dismissed if filed outside a specified filing period. See 47 CFR 73.5002(a).

(b) A new file number will be assigned to an application for a new station or for major changes in the facilities of an authorized station, when it is amended so as to effect a major change, as defined in paragraph (a)(1) of this section, or result in a situation where the original party or parties to the application do not retain more than 50% ownership interest in the application as originally filed and § 73.3580 will apply to such amended application. An application for change in the facilities of any existing station will continue to carry the same file number even though (pursuant to FCC approval) an assignment of license or transfer of control of such licensee or permittee has taken place if, upon consummation, the application is amended to reflect the new ownership.

(c) Amendments to low power TV, TV translator, TV booster stations, or non-reserved television applications, which would require a new file number pursuant to paragraph (b) of this section, are subject to competitive bidding procedures and will be dismissed if filed outside a specified filing period. See 47 CFR 73.5002(a). When an amendment to an application for a reserved television allotment would require a new file number pursuant to paragraph (b) of this section, the applicant will have the opportunity to withdraw the amendment at any time prior to designation for a hearing if applicable; and may be afforded, subject to the discretion of the Administrative Law Judge, an opportunity to withdraw the amendment after designation for a hearing.

(d) Applications for TV stations on reserved noncommercial educational channels will be processed as nearly as possible in the order in which they are filed. Such applications will be placed in the processing line in numerical sequence, and will be drawn by the staff for study, the lowest file number first. In order that those applications which are entitled to be grouped for processing may be fixed prior to the time processing of the earliest filed application is begun, the FCC will periodically release a Public Notice listing applications which have been accepted for filing and announcing a date (not less than 30 days after issuance) on which the listed applications will be considered available and ready for processing and by which all mutually exclusive applications and petitions to deny the listed applications must be filed.

(e)(1) The FCC will specify by Public Notice, pursuant to § 73.5002, a period for filing applications for a new non-reserved television, low power TV and TV translator stations or for major modifications in the facilities of such authorized station.

(2) Such applicants shall be subject to the provisions of §§ 1.2105 and competitive bidding procedures. See 47 CFR 73.5000 *et seq.*

(f) Applications for minor modifications for television broadcast, low power television and TV translator stations, as defined in paragraph (a)(2) of this section, may be filed at any time, unless restricted by the FCC, and, generally, will be processed in the order in which they are tendered.

(g) TV booster station applications may be filed at any time. Subsequent to filing, the FCC will release a Public Notice accepting for filing and proposing for grant those applications which are not mutually exclusive with any other TV translator, low power TV, or TV booster application, and providing for the filing of Petitions To Deny pursuant to § 73.3584.

[63 FR 48626, Sept. 11, 1998]

EFFECTIVE DATE NOTE: At 63 FR 48626, Sept. 11, 1998, § 73.3572 was revised, effective Nov. 10, 1998. For the convenience of the user, the superseded text is set forth as follows:

**§ 73.3572 Processing of TV broadcast, low power TV, TV translator and TV booster station applications.**

(a) Applications for TV stations are divided into two groups:

(1) In the first group are applications for new stations or major changes in the facilities of authorized stations. A major change for TV broadcast stations authorized under this part is any change in frequency or community of license which is in accord with a present allotment contained in the Table of Allotments (§ 73.606). Other requests for change in frequency or community of license for TV broadcast stations must first be submitted in the form of a petition for rulemaking to amend the Table of Allotments. In the case of low power TV, TV translator, and TV booster stations authorized under Part 74 of this chapter, a major change is any change in:

(i) Frequency (output channel) assignment (does not apply to TV boosters);

(ii) Transmitting antenna system including the direction of the radiation, directive antenna pattern or transmission line;

(iii) Antenna height;

(iv) Antenna location exceeding 200 meters; or

(v) Authorized operating power.

(2) However, if the proposed modification of facilities, other than a change in frequency, will not increase the signal range of the low power TV, TV translator or TV booster station in any horizontal direction, the modification will not be considered a major change.

(i) Provided that in the case of an authorized low power TV, TV translator or TV booster which is predicted to cause or receive interference to or from an authorized TV broadcast station pursuant to § 74.705 or interference with broadcast or other services under § 74.703 or § 74.709, that an application for a change in output channel, together with technical modifications which are necessary to avoid interference (including a change in antenna location of less than 16.1 km), will not be considered as an application for a major change in those facilities.

(ii) Provided further, that a low power TV, TV translator or TV booster station:

Authorized on a channel from channel 60 to 69, or which is causing or receiving interference or is predicted to cause or receive interference to or from an authorized DTV station pursuant to § 74.706, or which is located within the distances specified below in paragraph (c) of this section to the coordinates of co-channel DTV authorizations (or allotment table coordinates if there are no authorized facilities at different coordinates), may at any time file a displacement relief application for a change in output channel, together with any technical modifications which are necessary to avoid interference or continue serving the station's protected service area. Such an application will not be considered as an application for a major change in those facilities. Where such an application is mutually exclusive with applications for new low power TV, TV translator or TV booster stations, or with other nondisplacement relief applications for facilities modifications, priority will be afforded to the displacement application(s) to the exclusion of the other applications.

(iii)(A) The geographic separations to co-channel DTV facilities or allotment reference coordinates, as applicable, within which to qualify for displacement relief are the following:

(*1*) Stations on UHF channels: 265 km (162 miles)

(*2*) Stations on VHF channels 2–6: 280 km (171 miles)

(*3*) Stations on VHF channels 7–13: 260 km (159 miles)

(B) Engineering showings of predicted interference may also be submitted to justify the need for displacement relief.

(iv) Provided further, that the FCC may, within 15 days after acceptance of any other application for modification of facilities, advise the applicant that such application is considered to be one for a major change and therefore subject to the provisions of § 73.3580 of this section and § 1.1111 of this chapter pertaining to major changes.

(b) A new file number will be assigned to an application for a new station or for major changes in the facilities of an authorized station, when it is amended so as to effect a major change, as defined in paragraph (a)(1) of this section, or result in a situation where the original party or parties to the application do not retain more than 50% ownership interest in the application as originally filed and § 73.3580 will apply to such amended application. An application for change in the facilities of any existing station will continue to carry the same file number even though (pursuant to FCC approval) an assignment of license or transfer of control of such licensee or permittee has taken place if, upon consummation, the application is amended to reflect the new ownership.

(c) Where an amendment to an application would require a new file number pursuant to paragraph (b) of this section, the applicant will have the opportunity to withdraw the amendment at any time prior to designation for a hearing if applicable; and may be afforded, subject to the discretion of the Administrative Law Judge, an opportunity to withdraw the amendment after designation for a hearing.

(d) Applications for TV stations, other than low power TV, TV translator and TV booster stations, will be processed as nearly as possible in the order in which they are filed. Such applications will be placed in the processing line in numerical sequence, and will be drawn by the staff for study, the lowest file number first. In order that those applications which are entitled to be grouped for processing may be fixed prior to the time processing of the earliest filed application is

begun, the FCC will periodically release a Public Notice listing applications which have been accepted for filing and announcing a date (not less than 30 days after issuance) on which the listed applications will be considered available and ready for processing and by which all mutually exclusive applications and petitions to deny the listed applications must be filed.

(1) In addition to announcing the acceptance of mutually exclusive applications and establishing a date for the filing of petitions to deny such applications, the public notice referred to in paragraph (c) of this section will also announce the date on which all mutually exclusive applicants (including the previously accepted lead applicant) will be required to pay the hearing fee established in part 1 of these rules, 47 CFR 1.1104(1)(c) of this chapter. The date for fee payment shall be at least 30 days after the date established for petitions to deny.

(2) Whenever the public notice announces the acceptance of an application that is mutually exclusive with a renewal application, it shall also announce that the mutually exclusive applicants and the renewal applicant will be required to pay the hearing fee on the date established in the public notice.

(e) Except for applications for low power TV, TV translator and TV booster stations, regardless of the number of applications filed for channels in a city or the number of assignments available in that city, those applications which are mutually exclusive, i.e., which request the same channel, will be designated for hearing. All other applications for channels will, if the applicants are duly qualified, receive grants. For example, if channels 6, 13, 47 and 53 have been assigned to City X and there are pending two applications for Channel 6 and one application for each of the remaining channels, the latter three applications will be considered grants without hearing and the two mutually exclusive applications requesting Channel 6 will be designated for hearing. If there are two pending applications for Channel 6 and two applications for Channel 13, separate hearings will be held.

(f) Where applications, other than applications for low power TV, TV translator, and TV booster stations, are mutually exclusive because the distance between the respective proposed transmitter sites is contrary to the station separation requirements set forth in §73.610, such applications will be processed and designated for hearing at the time the application with the lower file number is reached for processing. In order to be considered mutually exclusive with a lower file number application, the higher file number application must have been accepted for filing at least one day before the lower file number application has been acted upon by the FCC.

(g) *Processing of applications for low power TV and TV translator stations.* (1) Applications for low power TV and TV translator stations will be processed as nearly as possible in the order in which they are filed. Such applications will be placed in the processing line in numerical sequence, and will be drawn by the staff for study, the lowest file number first. The FCC will specify, by Public Notice, a period for filing low power TV or TV translator applications. The filing period will open no less than 30 days after release of the Public Notice and remain open for an least five work days.

(2) Subsequently, the FCC will release a Public Notice: (i) Establishing a date, time, and place for a public lottery; (ii) accepting for filing mutually exclusive applications which were timely filed during the filing period previously specified by the FCC; (iii) designating the listed mutually exclusive applications for public lottery pursuant to the procedures set forth in §1.1601 *et seq.;* and (iv) describing each applicant's certified perferences and selection probabilities and assigning to each applicant a number block. (It will be the applicant's responsibility to notify the FCC, within 30 days of the release of the Public Notice, or any omissions of applications or clerical or mathematical errors in preferences or probabilities. The FCC will not entertain appeals involving these matters if timely notification to the FCC has not been made.) If necessary, the FCC will release subsequent Public Notices correcting only clerical or mathematical errors and including any previously omitted mutually exclusive applications. The public lottery pursuant to the procedures set forth in §1.1601 *et seq.,* will be held no less than 30 days subsequent to the initially released Public Notice announcing the lottery. Subsequent to the lottery, the FCC will release a Public Notice announcing the selection of a tentative selectee resulting from the lottery and providing and opportunity for the filing of Petitions to Deny pursuant to the requirements of §73.3584(c). If, upon examination, the FCC finds that the public interest, convenience and necessity will be served by the granting of a tentative selectee's application, the same will be granted. Those applications which, due to the lottery, are no longer mutually exclusive with other applications will be announced in a Public Notice proposing the grant of those applications and providing an opportunity for the filing of Petitions to Deny pursuant to §73.3584(c). Groups of mutually exclusive applicants remaining after a lottery will be designated for lottery. Applications which are are not grantable due to mutual exclusivity with the permittee selected by lottery will be dismissed.

(3) If, upon examination, the FCC is unable to find that the public interest, convenience and necessity will be served by the granting of a lottery tentative selectee's applications,

and it appears that a hearing may be required, the procedure set forth in § 73.3593 will be followed. No further action will be taken with reference to the other applications in the lottery group from which the tentative selectee was selected until the tentative selectee's qualifications to be a permittee are resolved. If the tentative selectee is ultimately found to be unqualified to be a permittee, the procedure set forth in paragraph (f)(2) of this section will be followed.

(4) The FCC will periodically release a Public Notice accepting for filing and proposing for grant those applications which were timely filed during the filing period specified by the FCC in a Public Notice for filing low power TV or TV translator applications, but which are not mutually exclusive with any other application, and providing an opportunity for the filing of Petitions to Deny pursuant to § 73.3584.

NOTE 1: Notwithstanding paragraph (f)(1) and § 73.3522(a)(3), applications for low power TV and TV translator stations will be processed within the tiered processing framework as set forth in *Notice on Interim Processing,* 45 FR 62004 (published September 17, 1980), *Order Imposing Freeze,* 46 FR 26062 (published May 11, 1981), and *Report and Order in the Matter of Inquiry Into the Future Role of Low Power Television Broadcasting and Television Translators in the National Telecommunications System,* 47 FR 21468 (published May 18, 1982).

NOTE 2: Pursuant to § 73.3584(c), the Commission may announce, by the Public Notice designating the applications for public lottery, that a Notice of Petition to Deny will be required to be filed no later than 30 days after issuance of the Public Notice.

(5) TV booster station applications may be filed at any time and will be subject to the following procedures:

(i) Subsequent to filing, the FCC will release a Public Notice accepting for filing and proposing for grant those applications which are not mutually exclusive with any other TV translator, low power TV, or TV booster application, and providing for the filing of Petitions To Deny pursuant to § 73.3584;

(ii) Any application received during the filing period for TV translator, low power TV, or TV booster applications with which it is mutually exclusive will be included in the relevant public lottery pursuant to § 1.1601 *et seq.;* and

(iii) Applications received after the filing date for applications with which it is mutually exclusive will be dismissed as an untimely filing.

[44 FR 38502, July 2, 1979, as amended at 48 FR 27205, June 13, 1983; 48 FR 34039, July 27, 1983; 49 FR 47843, Dec. 7, 1984; 52 FR 31400, Aug. 20, 1987; 55 FR 19265, May 9, 1990; 56 FR 795, Jan. 9, 1991; 56 FR 33720, July 23, 1991; 63 FR 13562, Mar. 20, 1998]

### § 73.3573 Processing FM broadcast station applications.

(a) Applications for FM broadcast stations are divided into two groups:

(1) In the first group are applications for new stations or for major changes in the facilities of authorized stations. A major change for an FM station authorized under this part is any change in frequency or community of license which is in accord with a present allotment contained in the Table of Allotments (§ 73.202(b)). A licensee or permittee may seek the higher or lower class adjacent channel, intermediate frequency or co-channel or the same class adjacent channel of its existing FM broadcast station authorization by filing a minor change application. Other requests for change in frequency or community of license for FM stations must first be submitted in the form of a petition for rulemaking to amend the Table of Allotments. Long-form applications submitted pursuant to § 73.5005 for a new FM broadcast service may propose a higher or lower class adjacent channel, intermediate frequency or co-channel. For noncommercial educational FM stations, a major change is any change in frequency or community of license or any change in power or antenna location or height above average terrain (or combination thereof) which would result in a change of 50% or more in the area within the station's predicted 1 mV/m field strength contour. (A change in area is defined as the sum of the area gained and the area lost as a percentage of the original area.) A major change in ownership is a situation where the original party or parties to the application do not retain more than 50% ownership interest in the application as originally filed.

(2) The second group consists of applications for licenses and all other changes in the facilities of authorized stations.

(b)(1) The FCC may, after the acceptance of an application for modification of facilities, advise the applicant that such application is considered to be one for a major change and therefore subject to the provisions of §§ 73.3522, 73.3580 and 1.1111 of this chapter pertaining to major changes. Such major modification applications in the non-

reserved band will be dismissed as set forth in paragraph (f)(2)(i) of this section.

(2) An amendment to a non-reserved band application which would effect a major change, as defined in paragraph (a)(1) of this section, will not be accepted, except as provided for in paragraph (f)(2)(i) of this section.

(3) A new file number will be assigned to a reserved band application for a new station or for major changes in the facilities of an authorized station, when it is amended so as to effect a major change, as defined in paragraph (a)(1) of this section. Where an amendment to a reserved band application would require a new file number, the applicant will have the opportunity to withdraw the amendment at any time prior to designation for hearing, if applicable; and may be afforded, subject to the discretion of the Administrative Law Judge, an opportunity to withdraw the amendment after designation for hearing.

(c) An application for changes in the facilities of any existing station will continue to carry the same file number even though (pursuant to FCC approval) an assignment of license or transfer of control of such licensee or permittee has taken place if, upon consummation, the application is amended to reflect the new ownership.

(d) If, upon examination, the FCC finds that the public interest, convenience and necessity will be served by the granting of an application for FM broadcast facilities, the same will be granted. If the FCC is unable to make such a finding and it appears that a hearing may be required, the procedure given in § 73.3593 will be followed.

(e) Applications for reserved band and Class D FM broadcast stations will be processed as nearly as possible in the order in which they are filed. Such applications will be placed in the processing line in numerical sequence, and will be drawn by the staff for study, the lowest file number first. In order that those applications which are entitled to be grouped for processing may be fixed prior to the time processing of the earliest filed application is begun, the FCC will periodically release a Public Notice listing applications which have been accepted for filing and announcing a date (not less than 30 days after publication) on which the listed applications will be considered available and ready for processing and by which all mutually exclusive applications and/or petitions to deny the listed applications must be filed.

(f) *Processing non-reserved FM broadcast station applications.* (1) Applications for minor modifications for non-reserved FM broadcast stations, as defined in paragraph (a)(2) of this section, may be filed at any time, unless restricted by the FCC, and, generally, will be processed in the order in which they are tendered. The FCC will periodically release a Public Notice listing those applications accepted for filing. Processing of these applications will be on a ''first come/first serve'' basis with the first acceptable application cutting off the filing rights of subsequent applicants. All applications received on the same day will be treated as simultaneously tendered and, if they are found to be mutually exclusive, must be resolved through settlement or technical amendment. Applications received after the tender of a lead application will be grouped, according to filing date, behind the lead application in a queue. The priority rights of the lead applicant, as against all other applicants, are determined by the date of filing, but the filing date for subsequent applicants for that channel and community only reserves a place in the queue. The rights of an applicant in a queue ripen only upon a final determination that the lead applicant is unacceptable and if the queue member is reached and found acceptable. The queue will remain behind the lead applicant until a construction permit is finally granted, at which time the queue dissolves.

(2) (i) The FCC will specify by Public Notice, pursuant to § 73.5002(a), a period for filing non-reserved band FM applications for a new station or for major modifications in the facilities of an authorized station. FM applications for new facilities or for major modifications will be accepted only during the appropriate filing period or ''window.'' Applications submitted prior to the window opening date identified in the Public Notice will be returned as premature. Applications submitted after

the specified deadline will be dismissed with prejudice as untimely.

(ii) Such FM applicants will be subject to the provisions of §§ 1.2105 and 73.5002 regarding the submission of the short-form application, FCC Form 175, and all appropriate certifications, information and exhibits contained therein. FM applicants may submit a set of preferred site coordinates as a supplement to the short-form application. Any specific site indicated by FM applicants will not be studied for technical acceptability, but will be protected from subsequently filed applications as a full-class facility as of the close of the window filing period. Determinations as to the acceptability or grantability of an applicant's proposal will not be made prior to an auction.

(iii) FM applicants will be subject to the provisions of §§ 1.2105 and 73.5002(c) regarding the modification and dismissal of their short-form applications.

(3) Subsequently, the FCC will release Public Notices:

(i) Identifying the short-form applications received during the window filing period which are found to be mutually exclusive;

(ii) Establishing a date, time and place for an auction;

(iii) Providing information regarding the methodology of competitive bidding to be used in the upcoming auction, bid submission and payment procedures, upfront payment procedures, upfront payment deadlines, minimum opening bid requirements and applicable reserve prices in accordance with the provisions of § 73.5002;

(iv) Identifying applicants who have submitted timely upfront payments and, thus, are qualified to bid in the auction.

(4) If, after the close of the appropriate window filing period, a non-reserved FM allotment remains vacant, the window remains closed until the FCC, by Public Notice, specifies a subsequent period for filing non-reserved band FM applications for a new station or for major modifications in the facilities of an authorized station pursuant to paragraph (f)(2)(i) of this section. If, during the window filing period, the FCC receives only one application for any non-reserved FM allotment, a Public Notice will be released identifying the non-mutually exclusive applicant, who will be required to submit the appropriate long-form application within 30 days of the Public Notice and pursuant to the provisions of § 73.5005. These non-mutually exclusive applications will be processed and the FCC will periodically release a Public Notice listing such non-mutually exclusive applications determined to be acceptable for filing and announcing a date by which petitions to deny must be filed in accordance with the provisions of §§ 73.5006 and 73.3584 of this chapter. If the applicant is duly qualified, and upon examination, the FCC finds that the public interest, convenience and necessity will be served by the granting of the non-mutually exclusive long-form application, it will be granted.

(5)(i) The auction will be held pursuant to the procedures set forth in §§ 1.2101 *et seq.* and 73.5000 *et seq.* Subsequent to the auction, the FCC will release a Public Notice announcing the close of the auction and identifying the winning bidders. Winning bidders will be subject to the provisions of §§ 1.2107 and 73.5003 regarding down payments and will be required to submit the appropriate down payment within 10 business days of the Public Notice. Pursuant to §§ 1.2107 and 73.5005, a winning bidder that meets its down payment obligations in a timely manner must, within 30 days of the release of the public notice announcing the close of the auction, submit the appropriate long-form application for each construction permit for which it was the winning bidder. Long-form applications filed by winning bidders shall include the exhibits identified in § 73.5005(a).

(ii) These applications will be processed and the FCC will periodically release a Public Notice listing such applications that have been accepted for filing and announcing a date by which petitions to deny must be filed in accordance with the provisions of §§ 73.5006 and 73.3584 of this chapter. If the applicant is duly qualified, and upon examination, the FCC finds that the public interest, convenience and necessity will be served by the granting of the winning bidder's long-form application, a Public Notice will be issued announcing that the construction permit is ready to be granted.

Each winning bidder shall pay the balance of its winning bid in a lump sum within 10 business days after release of the Public Notice, as set forth in §§ 1.2109(a) and 73.5003(c). Construction permits will be granted by the Commission following the receipt of the full payment.

(iii) All long-form applications will be cut-off as of the date of filing with the FCC and will be protected from subsequently filed long-form applications and rulemaking petitions. Applications will be required to protect all previously filed commercial and noncommercial applications. Winning bidders filing long-form applications may change the technical proposals specified in their previously submitted short-form applications, but such change may not constitute a major change. If the submitted long-form application would constitute a major change from the proposal submitted in the short-form application or the allotment, the long-form application will be returned pursuant to paragraph (f)(2)(i) of this section.

NOTE 1 TO § 73.3573: Applications to modify the channel and/or class of an FM broadcast station to an adjacent channel, intermediate frequency (IF) channel, or co-channel shall not require any other amendments to the Table of Allotments. Such applications may resort to the provisions of the Commission's Rules permitting short spaced stations as set forth in § 73.215 as long as the applicant shows by separate exhibit attached to the application the existence of an allotment reference site which meets the allotment standards, the minimum spacing requirements of § 73.207 and the city grade coverage requirements of § 73.315. This exhibit must include a site map or, in the alternative, a statement that the transmitter will be located on an existing tower. Examples of unsuitable allotment reference sites include those which are offshore, in a national or state park in which tower construction is prohibited, on an airport, or otherwise in an area which would necessarily present a hazard to air navigation.

NOTE 2 TO § 73.3573: Processing of applications for new low power educational FM applications: Pending the Commission's restudy of the impact of the rule changes pertaining to the allocations of 10-watt and other low power noncommercial educational FM stations, applications for such new stations, or major changes in existing ones, will not be accepted for filing. Exceptions are: (1) In Alaska, applications for new Class D stations or major changes in existing ones are acceptable for filing; and (2) applications for existing Class D stations to change frequency are acceptable for filing. In (2), upon the grant of such application, the station shall become a Class D (secondary) station. (See First Report and Order, Docket 20735, FCC 78–386, 43 FR 25821, and Second Report and Order, Docket 20735, FCC 78–384, 43 FR 39704.) Effective date of this FCC imposed ''freeze'' was June 15, 1978. Applications which specify facilities of at least 100 watts effective radiated power will be accepted for filing.

NOTE 3 TO § 73.3573: For rules on processing FM translator and booster stations, see § 74.1233 of this chapter.

[63 FR 48627, Sept. 11, 1998]

EFFECTIVE DATE NOTE: At 63 FR 48627, Sept. 11, 1998, § 73.3573 was revised, effective Nov. 10, 1998. For the convenience of the user, the superseded text is set forth as follows:

**§ 73.3573 Processing FM broadcast station applications.**

(a) Applications for FM broadcast stations are divided into two groups:

(1) In the first group are applications for new stations or for major changes in the facilities of authorized stations. A major change for FM station authorized under this part is any change in frequency or community of license which is in accord with a present allotment contained in the Table of Allotments (73.202 (b)). Other requests for change in frequency or community of license for FM stations must first be submitted in the form of a petition for rule making to amend the Table of Allotments. Applications filed on a first come, first served basis may propose a higher or lower class adjacent, intermediate frequency or co-channel in an application for a new FM broadcast station. A licensee or permittee may seek the higher or lower class adjacent, intermediate frequency or co-channel or the same class adjacent channel of its existing FM broadcast station authorization by filing a minor change application. For noncommercial educational FM stations, a major change is any change in frequency or community of license or any change in power or antenna location or height above average terrain (or combination thereof) which would result in a change of 50% or more in the area within the station's predicted 1 mV/m field strength contour. (A change in area is defined as the sum of the area gained and the area lost as a percentage of the original area). However, the FCC may within 15 days after the acceptance of the application for modification of facilities, advise the applicant that such application is considered to be one for a major change and therefore subject to the provisions of §§ 73.3580 and 1.1111 of this chapter pertaining to major changes.

(2) The second group consists of applications for licenses and all other changes in the facilities of authorized stations.

(b) A new file number will be assigned to an application for a new station or for major changes in the facilities of an authorized station, when it is amended so as to effect a major change, as defined in paragraph (a)(1) of this section, or result in a situation where the original party or parties to the application do not retain more than 50% ownership interest in the application as originally filed, and §73.3580 will apply to such amended application. An application for changes in the facilities of any existing station will continue to carry the same file number even though (pursuant to FCC approval) an assignment of license or transfer of control of such licensee or permittee has taken place if, upon consummation, the application is amended to reflect the new ownership.

(c) Where an amendment to an application would require a new file pursuant to paragraph (b) of this section, the applicant will have the opportunity to withdraw the amendment at any time prior to designation for a hearing if applicable; and may be afforded, subject to the discretion of the Administrative Law Judge, an opportunity to withdraw the amendment after designation for a hearing.

(d) If, upon examination, the FCC finds that the public interest, convenience and necessity will be served by the granting of an application for FM broadcast facilities, the same will be granted. If the FCC is unable to make such a finding and it appears that a hearing may be required, the procedure given in §73.3593 will be followed.

(e) Applications for reserved band and Class D FM broadcast stations will be processed as nearly as possible in the order in which they are filed. Such applications will be placed in the processing line in numerical sequence, and will be drawn by the staff for study, the lowest file number first. In order that those applications which are entitled to be grouped for processing may be fixed prior to the time processing of the earliest filed application is begun, the FCC will periodically release a Public Notice listing applications which have been accepted for filing and announcing a date (not less than 30 days after publication) on which the listed applications will be considered available and ready for processing and by which all mutually exclusive applications and/or petitions to deny the listed applications must be filed.

(f) Where reserved band plus Class D applications are mutually exclusive because the distance between their respective proposed transmitter sites is contrary to the station separation requirements set forth in §73.507, such applications will be processed and designated for hearing at the time the application with the lower file number is reached for processing. In order to be considered mutually exclusive with a lower file number application, the higher file number application must have been accepted for filing at least one day before the lower file number application has been acted upon by the FCC.

(g) Processing non-reserved FM broadcast station applications.

(1) Applications for non-reserved FM broadcast stations will be processed as nearly as possible in the order in which they are tendered. Such applications will be placed in the processing line in numerical sequence, and will be drawn by the staff for study, the lowest file number first. The FCC will specify, pursuant to §73.3564(d), the filing periods for non-reserved band FM applications.

(2) All applications received during the appropriate filing period or ''window'' which are found to be mutually exclusive will be designated for hearing. All other applications will, if the applicants are duly qualified, receive grants. The FCC will periodically release a Public Notice listing applications pending hearings or grant and announcing a date (not less than 30 days after issuance) by which petitions to deny must be filed.

(i) In addition to announcing the acceptance of mutually exclusive applications and establishing a date for the filing of petitions to deny such applications, the public notice referred to in paragraph (g)(2) of this section will also announce the date on which all mutually exclusive applicants will be required to pay the hearing fee established in part 1 of these rules, 47 CFR 1.1104(2)(c) of this chapter. The date for fee payment shall be at least 30 days after the date established for petitions to deny.

(ii) Whenever the public notice announces the acceptance of an application that is mutually exclusive with a renewal application, it shall also announce that the mutually exclusive applicants and the renewal applicant will be required to pay the hearing fee on the date established in the public notice.

(3) If, after the close of the appropriate window filing period, a non-reserved FM allotment remains vacant, processing for that channel will be on a ''first come/first serve'' basis with the first acceptable application cutting off the filing rights of subsequent applicants. All applications received on the same day will be treated as simultaneously tendered and, if they are found to be mutually exclusive, will be designated for hearing. Applications received after the tender of a lead application will be grouped, according to filing date, behind the lead application in a queue. The priority rights of the lead applicant, as against all other applicants, are determined by the date of filing but the filing date for subsequent applicants for that channel and community only reserves a place in the queue. The rights of an applicant in a queue ripen only upon a final determination that the lead applicant is unacceptable and if

the queue member is reached and found acceptable. The queue will remain behind the lead applicant until a construction permit is finally granted, at which time the queue dissolves. If there is no queue or if no queue member is found acceptable, that allotment remains subject to ''first come/first serve'' processing. The FCC will periodically release a Public Notice listing those pending hearings or grant and announcing a date (not less than 30 days after issuance) by which petitions to deny must be filed.

(h) Resolving processing conflicts between the reserved and non-reserved bands. The reserved bands include Class D stations.

(1) Reserved band applicants, applying for a channel on the non-reserved band are subject to the processing procedures in paragraph (f).

(2) If a reserved band applicant has generated a cut-off list that overlaps a non-reserved band window filing period, the non-reserved band applicant must file within the cut-off if he seeks mutually exclusive status with the reserved band applicant.

(3) Following the close of a non-reserved band application filing window, the non-reserved band applicant is subject to the ''first come/first serve'' rules and would lose to a pre-filed reserved band applicant.

NOTE 1: Applications to modify the channel and/or class of an FM broadcast station to an adjacent channel, intermediate frequency (IF) channel, or co-channel shall not require any other amendments to the Table of Allotments. Such applications may resort to the provisions of the Commission's Rules permitting short spaced stations as set forth in §73.215 as long as the applicant shows by separate exhibit attached to the application the existence of an allotment reference site which meets the allotment standards, the minimum spacing requirements of §73.207 and the city grade coverage requirements of §73.315. This exhibit must include a site map or, in the alternative, a statement that the transmitter will be located on an existing tower. Examples of unsuitable allotment reference sites include those which are offshore, in a national or state park in which tower construction is prohibited, on an airport, or otherwise in an area which would necessarily present a hazard to air navigation.

NOTE 2: Processing of applications for new low power educational FM applications:

Pending the Commission's restudy of the impact of the rule changes pertaining to the allocations of 10-watt and other low power noncommercial educational FM stations, applications for such new stations, or major changes in existing ones, will not be accepted for filing. Exceptions are: (1) In Alaska, applications for new Class D stations or major changes in existing ones are acceptable for filing; and (2) applications for existing Class D stations to change frequency are acceptable for filing. In (2), upon the grant of such application, the station shall become a Class D (secondary) station. (See First Report and Order, Docket 20735, FCC 78–386, 43 FR 25821, and Second Report and Order, Docket 20735, FCC 78–384, 43 FR 39704.) Effective date of this FCC imposed ''freeze'' was June 15, 1978. Applications which specify facilities of at least 100 watts effective radiated power will be accepted for filing.

NOTE 3: For rules on processing FM translator and booster stations, see §74.1233 of this chapter.

[44 FR 38503, July 2, 1979, as amended at 48 FR 29510, June 27, 1983; 49 FR 32589, Aug. 15, 1984; 50 FR 19943, May 13, 1985; 54 FR 11954, Mar. 23, 1989; 55 FR 19265, May 9, 1990; 55 FR 50692, Dec. 10, 1990; 56 FR 796, Jan. 9, 1991; 58 FR 38535, July 19, 1993]

### §73.3574 Processing of international broadcast station applications.

(a) Applications for International station facilities are divided into two groups.

(1) In the first group are applications for new stations, or for major changes in the facilities of authorized stations. A major change is any change in or addition to authorized zones or areas of reception, any change in transmitter location other than one in the immediate vicinity of existing antennas of the station, or any change in power, or antenna directivity. However, the FCC may, within 15 days after the acceptance for filing of any other application for modification, advise the applicant that such application is considered to be one for a major change and therefore is subject to §§1.1111 and 73.3580 pertaining to major changes.

(2) The second group consists of applications for licenses and all other changes in the facilities of authorized stations.

(b) If an application is amended so as to effect a major change as defined in paragraph (a)(1) of this section, or so as to result in an assignment or transfer of control which, in the case of an authorized station, would require the filing of an application therefor on FCC Form 314 or 315 (see §73.3540), §73.3580 will apply to such amended application.

(c) Applications for International stations will be processed as nearly as

possible in the order in which they are filed.

[44 FR 38504, July 2, 1979]

### § 73.3578 Amendments to applications for renewal, assignment or transfer of control.

(a) Any amendments to an application for renewal of any instrument of authorization shall be considered to be a minor amendment. However, the FCC may, within 15 days after tender for filing of any amendment, advise the applicant that the amendment is considered to be a major amendment and therefore is subject to the provisions of § 73.3580.

(b) Any amendment to an application for assignment of construction permit or license, or consent to the transfer of control of a corporation holding such a construction permit or license, shall be considered to be a minor amendment, except that any amendment which seeks a change in the ownership interest of the proposed assignee or transferee which would result in a change in control, or any amendment which would require the filing of FCC Forms 314, 315, or 345 (see § 73.3540), if the changes sought were made in an original application for assignment or transfer of control, shall be considered to be a major amendment. However, the FCC may, within 15 days after the acceptance for filing of any other amendment, advise the applicant that the amendment is considered to be a major amendment and therefore is subject to the provisions of § 73.3580.

[44 FR 38504, July 2, 1979, as amended at 51 FR 18451, May 20, 1986]

### § 73.3580 Local public notice of filing of broadcast applications.

(a) All applications for instruments of authorization in the broadcast service (and major amendments thereto, as indicated in §§ 73.3571, 73.3572, 73.3573, 73.3574 and 73.3578) are subject to the local public notice provisions of this section, except applications for:

(1) A minor change in the facilities of an authorized station, as indicated in §§ 73.3571, 73.3572, 73.3573 and 73.3574.

(2) Consent to an involuntary assignment or transfer or to a voluntary assignment or transfer which does not result in a change of control and which may be applied for on FCC Form 316 pursuant to the provisions of § 73.3540(b).

(3) A license under section 319(c) of the Communications Act or, pending application for or grant of such license, any special or temporary authorization to permit interim operation to facilitate completion of authorized construction or to provide substantially the same service as would be authorized by such license.

(4) Extension of time to complete construction of authorized facilities.

(5) An authorization of facilities for remote pickup or studio links for use in the operation of a broadcast station.

(6) Authorization pursuant to section 325(c) of the Communications Act (''* * * studios of foreign stations'') where the programs to be transmitted are special events not of a continuing nature.

(7) An authorization under any of the proviso clauses of section 308(a) of the Communications Act concerning applications for and conditions in licenses.

(b) Applications (as originally filed or amended) will be acted upon by the FCC no sooner than 30 days following public notice of acceptance for filing or amendment, except as otherwise permitted in § 73.3542, ''Application for temporary authorization.''

(c) An applicant who files an application or amendment thereto which is subject to the provisions of this section, must give a notice of this filing in a newspaper. Exceptions to this requirement are applications for renewal of AM, FM, TV and International broadcasting stations; low power TV stations; TV and FM translator stations, TV booster stations; FM booster stations; and applications subject to paragraph (e) of this section. The local public notice must be completed within 30 days of the tendering of the application. In the event the FCC notifies the applicant that a major change is involved, requiring the applicant to file public notice pursuant to §§ 73.3571, 73.3572, 73.3573 or 73.3578, this filing notice shall be given in a newspaper following this notification.

(1) *Notice requirements for these applicants are as follows.* (i) In a daily newspaper of general circulation published in the community in which the station

is located, or proposed to be located, at least twice a week for two consecutive weeks in a three-week period; or,

(ii) If there is no such daily newspaper, in a weekly newspaper of general circulation published in that community, once a week for 3 consecutive weeks in a 4-week period; or,

(iii) If there is no daily or weekly newspaper published in that community, in the daily newspaper from wherever published, which has the greatest general circulation in that community, twice a week for 2 consecutive weeks within a 3-week period.

(2) *Notice requirements for applicants for a permit pursuant to section 325(b) of the Communications Act (''* * * Studios of Foreign Stations'') are as follows.* In a daily newspaper of general circulation in the largest city in the principal area to be served in the U.S.A. by the foreign broadcast station, at least twice a week for 2 consecutive weeks within a three-week period.

(3) *Notice requirements for applicants for a change in station location are as follows.* In the community in which the station is located and the one in which it is proposed to be located, in a newspaper with publishing requirements as in paragraphs (c)(1)(i), (ii) or (iii) of this section.

(4) The notice required in paragraphs (c)(1), (2) and (3) of this section shall contain the information described in paragraph (f) of this section.

(d) The licensee of an operating broadcast station who files an application or amendment thereto which is subject to the provisions of this section must gibe notice as follows:

(1) An applicant who files for renewal of a broadcast station license, other than a low power TV station license not locally originating programming as defined by §74.701(h), an FM translator station or a TV translator station license, must give notice of this filing by broadcasting announcements on applicant's station. (Sample and schedule of announcements are below.) Newspaper publication is not required. An applicant who files for renewal of a low power TV station license not locally originating programming as defined by §74.701(h), an FM translator station or a TV translator station license will comply with (g) below.

(2) An applicant who files an amendment of an application for renewal of a broadcast station lincense will comply with paragraph (d)(1) of this section.

(3) An applicant who files for modification, assignment or transfer of a broadcast station license (except for International broadcast, low power TV, TV translator, TV booster, FM translator and FM booster stations) shall give notice of the filing in a newspaper as described in paragraph (c) of this section, and also broadcast the same notice over the station as follows:

(i) At least once daily on four days in the second week immediately following either the tendering for filing of the application or immediately following notification to the applicant by the FCC that Public Notice is required pursuant to §§73.3571, 73.3572, 73.3573 or §73.3578. For commercial radio stations these announcements shall be made between 7 a.m. and 9 a.m. and/or 4 p.m. and 6 p.m. For stations which neither operate between 7 a.m. and 9 a.m. nor between 4 p.m. and 6 p.m., these announcements shall be made during the first two hours of broadcast operation. For commercial TV stations, these announcements shall be made between 6 p.m. and 11 p.m. (5 p.m. and 10 p.m. Central and Mountain time).

(4) The broadcast notice requirements for those filing renewal applications and amendments thereto are as follows:

(i) *Pre-filing announcements.* During the period and beginning on the first day of the sixth calendar month prior to the expiration of the license, and continuing to the date on which the application is filed, the following announcement shall be broadcast on the 1st and 16th day of each calendar month. Stations broadcasting primarily in a foreign language should broadcast the announcements in that language.

On (*date of last renewal grant*) (*Station's call letters*) was granted a license by the Federal Communication Commission to serve the public interest as a public trustee until (*expiration date*).

Our license will expire on (*date*). We must file an application for renewal with the FCC (*date four calendar months prior to expiration date*). When filed, a copy of this application will be available for public inspection during

our regular business hours. It contains information concerning this station's performance during the last (*period of time covered by the application*).

Individuals who wish to advise the FCC of facts relating to our renewal application and to whether this station has operated in the public interest should file comments and petitions with the FCC by (*date first day of last full calendar month prior to the month of expiration).*

Further information concerning the FCC's broadcast license renewal process is available at (*address of location of the station's public inspection file*) or may be obtained from the FCC, Washington, DC 20554.

(A) An applicant who files for renewal of a low power TV station locally originating programming (as defined by §74.701(h)) shall broadcast this announcement, except that statements indicating there is a public inspection file at the station containing the renewal application and other information on the license renewal process, shall be omitted.

(B) This announcement shall be made during the following time periods:

(*1*) For commercial TV stations—at least two of the required announcements between 6 p.m. and 11 p.m. (5 p.m. and 10 p.m. Central and Mountain Time).

(*2*) For commercial radio stations—at least two of the required announcements between 7 a.m. and 9 a.m. and/or 4 p.m. and 6 p.m. For stations which neither operate between 7 a.m. and 9 a.m. nor between 4 p.m. and 6 p.m., at least two of the required announcements shall be made during the first two hours of broadcast operation.

(*3*) For noncommercial educational stations, at the same time as commercial stations, except that such stations need not broadcast the announcement during any month during which the station does not operate.

(*4*) For low power TV stations locally originating programming (as defined by §74.701(h)), at the same time as for commercial TV stations, or as close to that time as possible.

(ii) *Post-filing announcements.* During the period beginning of the date on which the renewal application is filed to the sixteenth day of the next to last full calendar month prior to the expiration of the license, all applications for renewal of broadcast station licenses shall broadcast the following announcement on the 1st and 16th day of each calendar month. Stations broadcasting primarily in a foreign language should broadcast the announcements in that language.

On (*date of last renewal grant*) (*Station's call letters*) was granted a license by the Federal Communications Commission to serve the public interest as a public trustee until (*expiration date*).

Our license will expire on (*date*). We have filed an application for renewal with the FCC.

A copy of this application is available for public inspection during our regular business hours. It contains information concerning this station's performance during the last (*period of time covered by application*).

Individuals who wish to advise the FCC of facts relating to our renewal application and to whether this station has operated in the public interest should file comments and petitions with the FCC by (*date first day of last full calendar month prior to the month of expiration*).

Further information concerning the FCC's broadcast license renewal process is available at (*address of location of the station's public inspection file*) or may be obtained from the FCC, Washington, DC 20554.

(A) An applicant who files for renewal of a low power TV station locally originating programming (as defined by §74.701(h)) shall broadcast this announcement, except that statements indicating there is a public inspection file at the station containing the renewal application and other information on the license renewal process, shall be omitted.

(B) This announcement shall be made during the following time periods:

(*1*) For commercial TV stations—at least three of the required announcements between 6 p.m. and 11 p.m. (5 p.m. and 10 p.m. Central and Mountain time), at least one announcement between 9 a.m. and 1 p.m., at least one announcement between 1 p.m. and 5 p.m., and at least one announcement between 5 p.m. and 7 p.m.

(*2*) For commercial radio stations—at least three of the required announcements between 7 a.m. and 9 a.m. and/or 4 p.m. and 6 p.m., at least one announcement between 9 a.m. and noon, at least one announcement between

noon and 4 p.m., and at least one announcement between 7 p.m. and midnight. For stations which do not operate between 7 a.m. and 9 a.m. or between 4 p.m. and 6 p.m., at least three of the required announcements shall be made during the first two hours of broadcast operation.

(*3*) For noncommercial educational stations, at the same time as commercial stations, except that such stations need not broadcast the announcement during any month during which the station does not operate. In such instances noncommercial educational stations shall meet the requirements in the exact order specified in paragraph (d)(4)(ii)(A) (*1*) or (*2*) of this section (e.g., if only four renewal notices are broadcast by an educational TV licensee, 3 must be broadcast between 6 p.m. and 11 p.m. and the fourth between 9 a.m. and 1 p.m.).

(*4*) For low power TV stations locally originating programming (as defined by §74.701(h)), at the same time as for commercial TV stations, or as close to that time as possible.

(iii) TV broadcast stations (commercial and noncommercial educational), in presenting the pre- and post-filing announcements, must use visuals with the licensee's and the FCC's addresses when this information is being orally presented by the announcer.

(iv) Stations which have not received a renewal grant since the filing of their previous renewal application, shall use the following first paragraph for the pre-filing and the post-filing announcements:

(*Station's call letters*) is licensed by the Federal Communications Commission to serve the public interest as a public trustee.

(e) When the station in question is the only operating station in its broadcast service which is located in the community involved, or if it is a noncommercial educational station, publication of the notice in a newspaper, as provided in paragraph (c) of this section is not required, and publication by broadcast over that station as provided in paragraph (d) of this section shall be deemed sufficient to meet the notice requirements of this section. Noncommercial educational broadcast stations which do not broadcast during the portion of the year in which the period of broadcast of notice falls must comply with the provisions of paragraph (c) of this section.

(f) The notice required by paragraphs (c) and (d) of this section shall contain, when applicable, the following information, except as otherwise provided in paragraphs (d) (1) and (2) and (e) of this section in regard to renewal applications:

(1) The name of the applicant, if the applicant is an individual; the names of all partners, if the applicant is a partnership; or the names of all officers and directors and of those persons holding 10% or more of the capital stock or other ownership interest if the applicant is a corporation or an unincorporated association. (In the case of applications for assignment or transfer of control, information should be included for all parties to the application.)

(2) The purpose for which the application was or will be filed (such as, construction permit, modification, assignment or transfer of control).

(3) The date when the application or amendment was tendered for filing with the FCC.

(4) The call letters, if any, of the station, and the frequency or channel on which the station is operating or proposes to operate.

(5) In the case of an application for construction permit for a new station, the facilities sought, including type and class of station, power, location of studios, transmitter site and antenna height.

(6) In the case of an application for modification of a construction permit or license, the exact nature of the modification sought.

(7) In the case of an amendment to an application, the exact nature of the amendment.

(8) In the case of applications for a permit pursuant to Section 325(b) of the Communications Act (''* * * studios of foreign stations''), the call letters and location of the foreign radio broadcast station, the frequency or channel on which it operates, and a description of the programs to be transmitted over the station.

(9) A statement that a copy of the application, amendment(s), and related

material are on file for public inspection at a stated address in the community in which the station is located or is proposed to be located. See §§ 73.3526 and 73.3527.

(g) An applicant who files for authorization or major modifications, or a major amendment thereto, for a low power TV, TV translator, TV booster, FM translator, or FM booster station, must give notice of this filing in a daily, weekly or biweekly newspaper of general circulation in the community or area to be served. Likewise, an applicant for assignment, transfer or renewal, or a major amendment thereto, for a low power TV, TV translator or FM translator station, must give this same type of newspaper notice. The filing notice will be given immediately following the tendering for filing of the application or amendment, or immediately following notification to the applicant by the FCC that public notice is required pursuant to §§ 73.3572, 73.3573, or 73.3578.

(1) Notice requirements for these applicants are as follows:

(i) In a newspaper at least one time; or

(ii) If there is no newspaper published or having circulation in the community or area to be served, the applicant shall determine an appropriate means of providing the required notice to the general public, such as posting in the local post office or other public place. The notice shall state:

(A) The name of the applicant, the community or area to be served, and the transmitter site.

(B) The purpose for which the application was filed.

(C) The date when the application or amendment was filed with the FCC.

(D) The output channel or channels on which the station is operating or proposes to operate and the power used or proposed to be used.

(E) In the case of an application for changes in authorized facilities, the nature of the changes sought.

(F) In the case of a major amendment to an application, the nature of the amendment.

(G) A statement, if applicable, that the station engages in or intends to engage in rebroadcasting, and the call letters, location and channel of operation of each station whose signals it is rebroadcasting or intends to rebroadcast.

(H) A statement that invites comment from individuals who wish to advise the FCC of facts relating to the renewal application and whether the station has operated in the public interest.

(h) The applicant may certify in the appropriate application that it has or will comply with the public notice requirements contained in paragraphs (c), (d) or (g) of this section. However, an applicant for renewal of a license that is required to maintain a public inspection file, shall, within 7 days of the last day of broadcast of the required publication announcements, place in its public inspection file a statement certifying compliance with § 73.3580 along with the dates and times that the pre-filing and post-filing notices were broadcast and the text thereof. This certification need not be filed with the Commission but shall be retained in the public inspection file for as long as the application to which it refers.

(i) Paragraphs (a) through (h) of this section apply to major amendments to license renewal applications. See § 73.3578(a).

[44 FR 38504, July 2, 1979, as amended at 44 FR 65765, Nov. 15, 1979; 45 FR 6402, Jan. 28, 1980; 46 FR 36852, July 16, 1981; 47 FR 17066, Apr. 21, 1982; 49 FR 33664, Aug. 24, 1984; 49 FR 47844, Dec. 7, 1984; 50 FR 40015, Oct. 1, 1985; 52 FR 21686, June 9, 1987; 52 FR 31401, Aug. 20, 1987; 53 FR 26074, July 11, 1988; 57 FR 14647, Apr. 22, 1992; 58 FR 51251, Oct. 1, 1993]

### § 73.3584 Procedure for filing petitions to deny.

(a) Except in the case of applications for new low power TV, TV translator or TV booster stations, for major changes in the existing facilities of such stations, or for applications for a change in output channel tendered by displaced low power TV and TV translator stations pursuant to § 73.3572(a)(1), any party in interest may file with the Commission a Petition to Deny any application (whether as originally filed or if amended so as to require a new file number pursuant to §§ 73.3571(j), 73.3572(b), 73.3573(b), 73.3574(b) or 73.3578) for which local notice pursuant to § 73.3580 is required, provided such

petitions are filed prior to the day such applications are granted or designated for hearing; but where the FCC issues a public notice pursuant to the provisions of §§73.3571(c), 73.3572(c) or §73.3573(d), establishing a ''cut-off'' date, such petitions must be filed by the date specified. In the case of applications for transfers and assignments of construction permits or station licenses, Petitions to Deny must be filed not later than 30 days after issuance of a public notice of the acceptance for filing of the applications. In the case of applications for renewal of license, Petitions to Deny may be filed at any time up to the deadline established in §73.3516(e). Requests for extension of time to file Petitions to Deny applications for new broadcast stations or major changes in the facilities of existing stations or applications for renewal of license will not be granted unless all parties concerned, including the applicant, consent to such requests, or unless a compelling showing can be made that unusual circumstances make the filing of a timely petition impossible and the granting of an extension warranted.

(b) Except in the case of applications for new low power TV or TV translator stations, or for major changes in the existing facilities of such stations, the applicant may file an opposition to any Petition to Deny, and the Petitioner a reply to such opposition in which allegations of fact or denials thereof shall be supported by affidavit of a person or persons with personal knowledge thereof. The times for filing such oppositions and replies shall be those provided in §1.45 except that as to a Petition to Deny an application for renewal of license, an opposition thereto may be filed within 30 days after the Petition to Deny is filed, and the party that filed the Petition to Deny may reply to the opposition within 20 days after opposition is due or within 20 days after the opposition is filed, whichever is longer. The failure to file an opposition or a reply will not necessarily be construed as an admission of fact or argument contained in a pleading.

(c) In the case of applications for new low power TV, TV translator, or TV booster stations, for major changes in the existing facilities of such stations, or for applications for a change in output channel tendered by displaced low power TV and TV translator stations pursuant to §73.3572(a)(1), any party in interest may file with the FCC a Petition to Deny any applcation (whether as originally filed or if amended so as to require a new file number pursuant to §73.3572(b)) for which local notice pursuant to §73.3580 is required, provided such petitions are filed within 30 days of the FCC Public Notice proposing the application for grant (applicants may file oppositions within 15 days after the Petition to Deny is filed); but where the FCC selects a tentative permittee pursuant to Section 1.1601 *et seq.*, Petitions to Deny shall be accepted only if directed against the tentative selectee and filed after issuance of and within 15 days of FCC Public Notice announcing the tentative selectee. The applicant may file an opposition within 15 days after the Petition to Deny is filed. In cases in which the minimum diversity preference provided for in §1.1623(f)(1) has been applied, an ''objection to diversity claim'' and opposition thereto, may be filed against any applicant receiving a diversity preference, within the same time period provided herein for Petitions and Oppositions. In all pleadings, allegations of fact or denials thereof shall be supported by appropriate certification. However, the FCC may announce, by the Public Notice announcing the acceptance of the last-filed mutually exclusive application, that a notice of Petition to Deny will be required to be filed no later than 30 days after issuance of the Public Notice.

(d) Untimely Petitions to Deny, as well as other pleadings in the nature of a Petition to Deny, and any other pleadings or supplements which do not lie as a matter of law or are otherwise procedurally defective, are subject to return by the FCC's staff without consideration.

[48 FR 27206, June 13, 1983, as amended at 52 FR 31401, Aug. 20, 1987; 53 FR 2499, Jan. 28, 1988; 55 FR 28914, July 16, 1990; 61 FR 18291, Apr. 25, 1996]

### § 73.3587 Procedure for filing informal objections.

Before FCC action on any application for an instrument of authorization, any person may file informal objections to the grant. Such objections may be submitted in letter form (without extra copies) and shall be signed. The limitation on pleadings and time for filing pleadings provided for in §1.45 of the rules shall not be applicable to any objections duly filed under this section.

[44 FR 38507, July 2, 1979]

### § 73.3588 Dismissal of petitions to deny or withdrawal of informal objections.

(a) Whenever a petition to deny or an informal objection has been filed against any application, and the filing party seeks to dismiss or withdraw the petition to deny or the informal objection, either unilaterally or in exchange for financial consideration, that party must file with the Commission a request for approval of the dismissal or withdrawal, a copy of any written agreement related to the dismissal or withdrawal, and an affidavit setting forth:

(1) A certification that neither the petitioner nor its principals has received or will receive any money or other consideration in excess of legitimate and prudent expenses in exchange for the dismissal or withdrawal of the petition to deny;

(2) The exact nature and amount of any consideration received or promised;

(3) An itemized accounting of the expenses for which it seeks reimbursement; and

(4) The terms of any oral agreement related to the dismissal or withdrawal of the petition to deny.

In addition, within 5 days of petitioner's request for approval, each remaining party to any written or oral agreement must submit an affidavit setting forth:

(5) A certification that neither the applicant nor its principals had paid or will pay money or other consideration in excess of the legitimate and prudent expenses of the petitioner in exchange for dismissing or withdrawing the petition to deny; and

(6) The terms of any oral agreement relating to the dismissal or withdrawal of the petition to deny.

(b) Citizens' agreements. For purposes of this section, citizens agreements include agreements arising whenever a petition to deny or informal objection has been filed against any application and the filing party seeks to dismiss or withdraw the petition or objection in exchange for nonfinancial consideration (*e.g.*, programming, ascertainment or employment initiatives). The parties to such an agreement must file with the Commission a joint request for approval of the agreement, a copy of any written agreement, and an affidavit executed by each party setting forth:

(1) Certification that neither the petitioner, nor any person or organization related to the petitioner, has received or will receive any money or other consideration in connection with the citizens' agreement other than legitimate and prudent expenses incurred in prosecuting the petition to deny;

(2) Certification that neither the petitioner, nor any person or organization related to petitioner is or will be involved in carrying out, for a fee, any programming, ascertainment, employment or other non-financial initiative referred to in the citizens' agreement; and

(3) The terms of any oral agreement.

(c) For the purposes of this section:

(1) Affidavits filed pursuant to this section shall be executed by the applicant, permittee or licensee, if an individual; a partner having personal knowledge of the facts, if a partnership; or an officer having personal knowledge of the facts, if a corporation or association.

(2) A petition shall be deemed to be pending before the Commission from the time a petition is filed with the Commission until an order of the Commission granting or denying the petition is no longer subject to reconsideration by the Commission or to review by any court.

(3) ''Legitimate and prudent expenses'' are those expenses reasonably incurred by a petitioner in preparing, filing, and prosecuting its petition for which reimbursement is being sought.

(4) ''Other consideration'' consists of financial concessions, including but not limited to the transfer of assets or the provision of tangible pecuniary benefit, as well as non-financial concessions that confer any type of benefit on the recipient.

[54 FR 22598, May 25, 1989. Redesignated and amended at 55 FR 28914, July 16, 1990]

### § 73.3589 Threats to file petitions to deny or informal objections.

(a) No person shall make or receive any payments in exchange for withdrawing a threat to file or refraining from filing a petition to deny or an informal objection. For the purposes of this section, reimbursement by an applicant of the legitimate and prudent expenses of a potential petitioner or objector incurred reasonably and directly in preparing to file a petition to deny will not be considered to be payment for refraining from filing a petition to deny or informal objection. Payments made directly to a potential petitioner or objector, or a person related to a potential petitioner or objector, to implement nonfinancial promises are prohibited unless specifically approved by the Commission.

(b) Whenever any payment is made in exchange for withdrawing a threat to file or refraining from filing a petition to deny or informal objection, the licensee must file with the Commission a copy of any written agreement related to the dismissal or withdrawal, and an affidavit setting forth:

(1) Certification that neither the would-be petitioner, nor any person or organization related to the would-be petitioner, has received or will receive any money or other consideration in connection with the citizens' agreement other than legitimate and prudent expenses reasonably incurred in preparing to file the petition to deny;

(2) Certification that unless such arrangement has been specifically approved by the Commission, neither the would-be petitioner, nor any person or organization related to the would-be petitioner, is or will be involved in carrying out, for a fee, any programming ascertainment, employment or other nonfinancial initiative referred to in the citizens' agreement; and

(3) The terms of any oral agreement.

(c) For purposes of this section:

(1) Affidavits filed pursuant to this section shall be executed by the licensee, if an individual; a partner having personal knowledge of the facts, if a partnership; or an officer having personal knowledge of the facts, if a corporation or association.

(2) ''Legitimate and prudent expenses'' are those expenses reasonably incurred by a would-be petitioner in preparing to file its petition for which reimbursement is being sought.

(3) ''Other consideration'' consists of financial concessions, including but not limited to the transfer of assets or the provision of tangible pecuniary benefit, as well as non-financial concessions that confer any type of benefit on the recipient.

[55 FR 28914, July 16, 1990]

### § 73.3591 Grants without hearing.

(a) Except for renewal applications filed after May 1, 1995 which will be subject to paragraph (d) of this section, in the case of any application for an instrument of authorization, other than a license pursuant to a construction permit, the FCC will make the grant if it finds (on the basis of the application, the pleadings filed or other matters which it may officially notice) that the application presents no substantial and material question of fact and meets the following requirements:

(1) There is not pending a mutually exclusive application filed in accordance with paragraph (b) of this section;

(2) The applicant is legally, technically, financially, and otherwise qualified;

(3) The applicant is not in violation of provisions of law, the FCC rules, or established policies of the FCC; and

(4) A grant of the application would otherwise serve the public interest, convenience and necessity.

(b) In making its determinations pursuant to the provisions of paragraph (a) of this section, the FCC will not consider any other application, or any application if amended so as to require a new file number, as being mutually exclusive or in conflict with the application under consideration unless such other application was substantially complete, and tendered for filing by:

(1) The close of business on the day preceding the day designated by Public Notice as the day the listed application is to be available and ready for processing;

(2) The date prescribed in § 73.3516(e) in the case of applications which are mutually exclusive with applications for renewal of license of broadcast stations; or

(3) The close of business on the day designated by the FCC pursuant to § 73.3564(d) as the date(s) for filing low power TV or TV translator applications.

(c) If a petition to deny the application has been filed in accordance with § 73.3584 and the FCC makes the grant in accordance with paragraph (a) of this section, the FCC will deny the petition and issue a concise statement setting forth the reasons for denial and disposing of all substantial issues raised by the petition.

(d) Renewal applications filed after May 1, 1995 will be governed by the criteria established in 47 U.S.C. § 309(k).

[44 FR 38507, July 2, 1979, as amended at 50 FR 47844, Dec. 7, 1984; 59 FR 31557, June 20, 1994; 61 FR 18291, Apr. 25, 1996]

### § 73.3592 Conditional grant.

(a) Where a grant of an application would preclude the grant of any application or applications mutually exclusive with it, the FCC may, if the public interest will be served thereby, make a conditional grant of one of the applications and designate all of the mutually exclusive applications for hearing. Such conditional grant will be made upon the express condition that such grant is subject to being withdrawn if, at the hearing, it is shown that public interest will be better served by a grant of one of the other applications. Such conditional grants will be issued only where it appears:

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

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

(3) That a grant of one or more applications would be in the public interest, and that a delay in making a grant to any applicant until after the conclusion of a hearing on all applications might jeopardize the rights of the United States under the provisions of international agreement to the use of the frequency in question; or

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

(b) When two or more applications for the same AM, FM or TV assignment have been designated for hearing, the FCC may, if the public interest will be served thereby, make a conditional grant to a group composed of any two or more of the competing applicants, such grant to terminate when the successful applicant commences operation under the terms of a regular authorization. No conditional grant will be made unless all of the competing applicants have been afforded a reasonable opportunity to participate in the group seeking the conditional grant. In its application, the group shall include a special showing as to the need for the service pending operation by the successful applicant under the terms of a regular authorization; the effect, if any, of a grant on the position of any applicant which is not a member of the group; and any other factors which are deemed pertinent to the public interest judgment.

[44 FR 38507, July 2, 1979]

### § 73.3593 Designation for hearing.

If the FCC is unable, in the case of any application for an instrument of authorization, to make the findings specified in § 73.3591(a), it will formally designate the application for hearing on the grounds or reasons then obtaining and will forthwith notify the applicant and all known parties in interest of such action and the grounds and reasons therefor, specifying with particularity the matters and things in issue but not including issues or requirements phrased generally.

[44 FR 38508, July 2, 1979]

### § 73.3594 Local public notice of designation for hearing.

(a) Except as otherwise provided in paragraph (c) of this section when an application subject to the provisions of § 73.3580 (except for applications for International broadcast, low power TV, TV translator, FM translator, and FM booster stations) is designated for hearing, the applicant shall give notice of such designation as follows: Notice shall be given at least twice a week, for 2 consecutive weeks within the 3-week period immediately following release of the FCC's order, specifying the time and place of the commencement of the hearing, in a daily newspaper of general circulation published in the community in which the station is located or proposed to be located.

(1) However, if there is no such daily newspaper published in the community, the notice shall be given as follows:

(i) If one or more weekly newspapers of general circulation are published in the community in which the station is located or proposed to be located, notice shall be given in such a weekly newspaper once a week for 3 consecutive weeks within the 4-week period immediately following the release of the FCC's order, specifying the time and place of the commencement of the hearing;

(ii) If no weekly newspaper of general circulation is published in the community in which the station is located or proposed to be located, notice shall be given at least twice a week for 2 consecutive weeks within the 3-week period immediately following the release of the FCC's orders, specifying the time and place of the commencement of the hearing in the daily newspaper having the greatest general circulation in the community in which the station is located or proposed to be located.

(2) In the case of an application for a permit pursuant to Section 325(c) of the Communications Act, the notice shall be given at least twice a week for 2 consecutive weeks within the 3-week period immediately following release of the FCC's order, specifying the time and place of the commencement of the hearing in a daily newspaper of general circulation in the largest city in the principal area to be served in the United States by the foreign radio broadcast station.

(3) In the case of an application for change in the location of a station, the notice shall be given both in the community in which the station is located and in the community in which the station is proposed to be located.

(b) When an application which is subject to the provisions of § 73.3580 and which seeks modification, assignment, transfer, or renewal of an operating broadcast station is designated for hearing (except for applications for an International broadcast, low power TV, TV translator, FM translator, or FM booster stations), the applicant shall, in addition to giving notice of such designation as provided in paragraph (a) of this section, cause the same notice to be broadcast over that station at least once daily for 4 days in the second week immediately following the release of the FCC's order, specifying the time and place of the commencement of the hearing. In the case of both commercial and noncommercial TV broadcast stations such notice shall be broadcast orally with the camera focused on the announcer. The notice required by this paragraph shall be broadcast during the following periods:

(1) For commercial TV stations, between 7:00 p.m. and 10:00 p.m.

(2) For commercial AM and FM stations, between 7:00 a.m. and 10:00 a.m., but if such stations do not operate during those hours, then between 6:00 p.m. and 9:00 p.m.

(3) For noncommercial educational TV stations, between 7:00 p.m. and 10:00 p.m., but if the period of broadcast of notice falls within a portion of the year during which such stations do not broadcast, then such stations need not comply with the provisions of this paragraph.

(4) For noncommercial educational AM and FM stations, between 3:00 p.m. and 10:00 p.m., but if the period of broadcast of notice falls within a portion of the year during which such stations do not broadcast, then such stations need not comply with the provisions of this paragraph.

(c) If the station in question is the only operating station in its broadcast service which is located in the community involved, or if it is a

noncommerical educational station, publication of the notice in a newspaper, as provided in paragraph (a) of this section, is not required, and publication by broadcast over that station as provided in paragraph (b) of this section shall be deemed sufficient to meet the requirements of paragraphs (a) and (b)of this section. However, noncommercial educational stations which do not broadcast during the portion of the year in which the period of broadcast of notice falls must comply with the provisions of paragraph (a) of this section.

(d) The notice required by paragraphs (a) and (b) of this section shall state:

(1) The name of the applicant or applicants designated for hearing.

(2) The call letters, if any, of the stations or stations involved, and the frequencies or channels on which the station or stations are operating or proposed to operate.

(3) The time and place of the hearing.

(4) The issues in the hearing as listed in the FCC's order or summary of designation for hearing.

(5) A statement that a copy of the application, amendment(s), and related material are on file for public inspection at a stated address in the community in which the station is located or is proposed to be located. See §§ 73.3526 and 73.3527.

(e) When an application for renewal of license is designated for hearing, the notice shall contain the following additional statements:

(1) Immediately preceding the listing of the issues in the hearing:

The application of this station for a renewal of its license to operate this station in the public interest was tendered for filing with the Federal Communications Commission on (*date*). After considering this application, the FCC has determined that it is necessary to hold a hearing to decide the following questions:

(2) Immediately following the listing of the issues in the hearing:

The hearing will be held at (*place of hearing*) commencing at (*time*), on (*date*). Members of the public who desire to give evidence concerning the foregoing issues should write to the Federal Communications Commission, Washington, DC 20554, not later than (*date).* Letters should set forth in detail the specific facts concerning which the writer wishes to give evidence. If the FCC believes that the evidence is legally competent, material, and relevant to the issues, it will contact the person in question.

(Here the applicant shall insert, as the date on or before which members of the public who desire to give evidence should write to the FCC, the date 30 days after the date of release of the FCC's order specifying the time and place of the commencement of the hearing.)

(f) When an application for a low power TV, TV translator, FM translator, or FM booster station which is subject to the provisions of § 73.3580 is designated for hearing, the applicant shall give notice of such designation as follows: Notice shall be given at least once during the 2-week period immediately following release of the FCC's order, specifying the time and place of the commencement of the hearing in a daily, weekly or biweekly publication having general circulation in the community or area to be served. However, if there is no publication of general circulation in the community or area to be served, the applicant shall determine an appropriate means of providing the required notice to the general public, such as posting in the local post office or other public place. The notice shall state:

(1) The name of the applicant or applicants designated for hearing.

(2) The call letters, if any, of the station or stations involved, the output channel or channels of such stations, and, for any rebroadcasting, the call letters, channel and location of the station or stations being or proposed to be rebroadcast.

(3) The time and place of the hearing.

(4) The issues in the hearing as listed in the FCC's order or summary of designation for hearing.

(5) If the application is for renewal of license, the notice shall contain, in addition to the information required by paragraphs (f) (1) through (4) of this section, the statements required by paragraph (e) of this section.

(g) Within 7 days of the last day of publication or broadcast of the notice required by paragraphs (a) and (b) of this section, the applicant shall file a statement in triplicate with the FCC setting forth the dates on which the notice was published, the newspaper in which the notice was published, the

text of the notice, and/or, where applicable, the date and time the notice was broadcast and the text thereof. When public notice is given by other means, as provided in pararaph (f) of this section, the applicant shall file, within 7 days of the giving of such notice, the text of the notice, the means by which it was accomplished, and the date thereof.

(h) The failure to comply with the provisions of this section is cause for dismissal of an application with prejudice. However, upon a finding that applicant has complied (or proposes to comply) with the provisions of Section 311(a)(2) of the Communications Act, and that the public interest, convenience and necessity will be served thereby, the presiding officer may authorize an applicant, upon a showing of special circumstances, to publish notice in a manner other than that prescribed by this section; may accept publication of notice which does not conform strictly in all respects with the provisions of this section; or may extend the time for publishing notice.

[44 FR 38508, July 2, 1979, as amended at 47 FR 21495, May 18, 1982; 48 FR 9012, Mar. 3, 1983; 49 FR 38132, Sept. 27, 1984; 51 FR 19347, May 29, 1986; 52 FR 21686, June 9, 1987; 58 FR 51251, Oct. 1, 1993]

### § 73.3597 Procedures on transfer and assignment applications.

(a) If, upon the examination of an application for FCC consent to an assignment of a broadcast construction permit or license or for a transfer of control of a corporate permittee or licensee, it appears that the station involved has been operated on-air by the current licensee or permittee for less than one year, the application will be designated for hearing on appropriate issues unless the FCC is able to find that:

(1) The permit or license was not authorized either through the Minority Ownership Policy or after a comparative hearing or, in the case of low power TV and TV translator stations, the permit or license was not authorized after a lottery in which the permittee or licensee benefited from minority or diversity preferences;

(2) The application involves an FM translator station or FM booster station only;

(3) The application involves a *pro forma* assignment or transfer of control; or

(4) The assignor or transferor has made an affirmative factual showing, supported by affidavits of a person or persons with personal knowledge thereof, which establishes that, due to unavailability of capital, to death or disability of station principals, or to other changed circumstances affecting the licensee or permittee occurring subsequent to the acquisition of the license or permit, FCC consent to the proposed assignment or transfer of control will serve the public interest, convenience and necessity.

(5) the assignee or transferee has made an affirmative factual showing, supported by affidavits of a person or persons with personal knowledge thereof, which established that the proposed transaction would involve an assignment or transfer to a minority-owned or minority controlled entity in furtherance of our Minority Ownership Policy.

(b)(1) The commencement date of the one-year period set forth in paragraph (a) of this section shall be the date on which the station initiated program tests in accordance with § 73.1620 or § 74.14.

(2) In determining whether the station has been operating on-air for one year, the FCC will calculate the period between the date of initiation of program tests (as specified in paragraph (b)(1) of this section) and the date the application for transfer or assignment is tendered for filing with the FCC.

(c)(1) As used in paragraphs (c) and (d) of this section:

(i) *Unbuilt station* refers to an AM, FM, or TV broadcast station or a low power TV or TV translator station for which a construction permit is outstanding, and, regardless of the stage of physical completion, as to which program tests have not commenced or, if required, been authorized.

(ii) *Seller* includes the assignor(s) of a construction permit for an unbuilt station, the transferor(s) of control of the holder of such construction permit, and any principal or such assignor(s) or

transferor(s) who retains an interest in the permittee or acquires or reacquires such interest within 1 year after commencing program tests.

(2) The FCC will not consent to the assignment or transfer of control of the construction permit of an unbuilt station if the agreements or understandings between the parties provide for, or permit, payment to the seller of a sum in excess of the aggregate amount clearly shown to have been legitimately and prudently expended and to be expended by the seller, solely for preparing, filing, and advocating the grant of the construction permit for the station, and for other steps reasonably necessary toward placing the station in operation.

(3)(i) Applications for consent to the assignment of a construction permit or transfer of control shall, in the case of unbuilt stations, be accompanied by declarations both by the assignor (or transferor) and by the assignee (or transferee) that, except as clearly disclosed in detail in the applications, there are no agreements or understandings for reimbursement of the seller's expenses or other payments to the seller, for the seller's retention of any interest in the station, for options or any other means by which the seller may acquire such an interest, or for any other actual or potential benefit to the seller in the form of loans, the subsequent repurchase of the seller's retained interest, or otherwise.

(ii) When the seller is to receive reimbursement of his expenses, the applications of the parties shall include an itemized accounting of such expenses, together with such factual information as the parties rely upon for the requisite showing that those expenses represent legitimate and prudent outlays made solely for the purposes allowable under paragraph (c)(2) of this section.

(d)(1) Whenever an agreement for the assignment of the construction permit of an unbuilt station or for the transfer of control of the permittee of an unbuilt station, or any arrangement or understanding incidental thereto, provides for the retention by the seller of any interest in the station, or for any other actual or potential benefit to the seller in the form of loans or otherwise, the question is raised as to whether the transaction involves actual or potential gain to the seller over and above the legitimate and prudent out-of-pocket expenses allowable under paragraph (c)(2) of this section. In such cases the FCC will designate the assignment or transfer applications for evidentiary hearing. However, a hearing is not mandatory in cases coming within paragraph (d)(2) of this section.

(2) It is not intended to forbid the seller to retain an equity interest in an unbuilt station which he is transferring or assigning if the seller obligates himself, for the period ending 1 year after commencing program tests, to provide that part of the total capital made available to the station, up to the end of that period, which is proportionate to the seller's equity share in the permittee, taking into account equity capital, loan capital, and guarantees of interest and amortization payments for loan capital provided by the seller before the transfer or assignment. This condition will be satisfied:

(i) In the case of equity capital: By paid-in cash capital contributions proportionate to the seller's equity share;

(ii) In cases where any person who has an equity interest in the permittee provides loan capital: By the seller's provision of that part of the total loan capital provided by equity holders which is proportionate to the seller's equity share; and

(iii) In cases where any person cosigns or otherwise guarantees payments under notes given for loan capital provided by nonequity holders: By similar guarantees by the seller covering that part of such payments as is proportionate to the seller's equity share. However, this condition shall not be deemed to be met if the guarantees given by persons other than the seller cover, individually or collectively, a larger portion of such payments than the ratio of the combined equities of persons other than the seller to the total equity.

(3) In cases which are subject to the requirements of paragraphs (d)(2) (i), (ii) and (iii) of this section:

(i) The assignee's (or transferee's) application shall include a showing of the anticipated capital needs of the station through the first year of its operation and the seller's financial capacity to

comply with the above requirements, in the light of such anticipated capital needs.

(ii) The FCC will determine from its review of the applications whether a hearing is necessary to ensure compliance with the above requirements.

(iii) Compliance with the above requirements will be subject to review by the FCC at any time, either when considering subsequently filed applications or whenever the FCC may otherwise find it desirable.

(iv) Within 30 days after any time when a seller is required to provide equity or loan capital or execute guarantees, the permittee shall furnish the FCC a written report containing sufficient details as to the sources and amounts of equity capital paid in, loan capital made available, or guarantees obtained as to enable the FCC to ascertain compliance with the above requirements.

(v) No steps shall be taken by the permittee to effectuate arrangements for the provision of equity or loan capital from sources not previously identified and disclosed to the FCC, until 30 days after the permittee has filed with the FCC a report of such arrangements and of provisions made for the seller's compliance with the above requirement.

(vi) The provisions of paragraphs (d)(3) (iv) and (v) of this section shall cease to apply 1 year after commencing program tests.

(4) Applications subject to this paragraph (d) of this section will, in any event, be designated for evidentiary hearing in any case where the agreements, arrangements or understandings with the seller provide for the seller's option to acquire equity in the station or to increase equity interests he retains at the time of the assignment or transfer of control. An evidentiary hearing will similarly be held in any case in which the assignee(s), transferee(s) or any of their principals, or any person in privity therewith, has an option to purchase all or part of the seller's retained or subsequently acquired equity interests in the station.

[44 FR 38509, July 2, 1979, as amended at 47 FR 24580, June 7, 1982; 47 FR 55930, Dec. 14, 1982; 48 FR 9012, Mar. 3, 1983; 48 FR 27207, June 13, 1983; 50 FR 6946, Feb. 19, 1985; 53 FR 36787, Sept. 22, 1988]

### § 73.3598 Period of construction.

(a) *TV broadcast stations.* Each original construction permit for the construction of a new TV broadcast station, or to make changes in an existing station, shall specify a period of no more than 24 months from the date of issuance of the original construction permit within which construction shall be completed and application for license filed.

(b) *Other broadcast, auxiliary and Instructional TV Fixed Stations.* Each original permit for the construction of a new AM, FM or International Broadcast; low power TV; TV translator; TV booster; FM translator; FM booster; broadcast auxiliary; or Instructional TV Fixed station, or to make changes in such existing stations, shall specify a period of no more than 18 months from the date of issuance of the original construction permit within which construction shall be completed and application for licensed be filed.

(c) An existing AM station operating in the 535–1605 kHz band that receives a conditional permit to operate in the 1605–1705 kHz band; such permit shall specify a period of not more than 18 months from the date of issuance of the original construction permit within which construction shall be completed and application for license filed.

[50 FR 52779, Dec. 26, 1985, as amended at 52 FR 11656, Apr. 10, 1987; 52 FR 31402, Aug. 20, 1987; 56 FR 64874, Dec. 12, 1991]

### § 73.3599 Forefeiture of construction permit.

A construction permit shall be declared forfeited if the station is not ready for operation within the time specified therein or within such further time as the FCC may have allowed for completion, and a notation of the forefeiture of any construction permit

under this provision will be placed in the records of the FCC as of the expiration date.

[50 FR 52779, Dec. 26, 1985]

### § 73.3601 Simultaneous modification and renewal of license.

When an application is granted by the FCC necessitating the issuance of a modified license less than 60 days prior to the expiration date of the license sought to be modified, and an application for renewal of the license is granted subsequent or prior thereto (but within 30 days of expiration of the present license), the modified license as well as the renewal license shall be issued to conform to the combined action of the FCC.

[44 FR 38511, July 2, 1979]

### § 73.3603 Special waiver procedure relative to applications.

(a) In the case of any broadcast applications designated for hearing, the parties may request the FCC to grant or deny an application upon the basis of the information contained in the applications and other papers specified in paragraph (b) of this section without the presentation of oral testimony. Any party desiring to follow this procedure should execute and file with the FCC a waiver in accordance with paragraph (e) of this section, and serve copies on all other parties, or a joint waiver may be filed by all the parties. Upon the receipt of waivers from all parties to a proceeding, the FCC will decide whether the case is an appropriate one for determination without the presentation of oral testimony. If it is determined by the FCC that, notwithstanding the waivers, the presentation of oral testimony is necessary, the parties will be so notified and the case will be retained on the hearing docket. If the FCC concludes that the case can appropriately be decided without the presentation of oral testimony, the record will be considered as closed as of the date the waivers of all the parties were first on file with the FCC.

(b) In all cases considered in accordance with this procedure, the FCC will decide the case on the basis of the information contained in the applications and in any other papers pertaining to the applicants or applications which are open to public inspection and which were on file with the FCC when the record was closed. The FCC may call upon any party to furnish any additional information which the FCC deems necessary to a proper decision. Such information shall be served upon all parties. The waiver previously executed by the parties shall be considered in effect unless within 10 days of the service of such information the waiver is withdrawn.

(c) Any decision by the FCC rendered pursuant to this section will be in the nature of a final decision, unless otherwise ordered by the FCC.

(d) By agreeing to the waiver procedure prescribed in this section, no party shall be deemed to waive the right to petition for reconsideration or rehearing, or to appeal to the courts from any adverse final decision of the FCC.

(e) The waiver provided for by this section shall be in the following form:

WAIVER

Name of applicant .....
Call letters .....
Docket No. .....

The undersigned hereby requests the FCC to consider its application and grant or deny it in accordance with the procedure prescribed in § 73.3603 of the FCC's rules and regulations. It is understood that all the terms and provisions of ———— are incorporated in this waiver.

[44 FR 38511, July 2, 1979]

### § 73.3605 Retention of applications in hearing status after designation for hearing.

(a) After an application for a broadcast facility is designated for hearing, it will be retained in hearing status upon the dismissal or amendment and removal from hearing of any other application or applications with which it has been consolidated for hearing.

(b) Where any applicants for a broadcast facility file a request pursuant to § 73.3525(a) for approval of an agreement to remove a conflict between their applications, the applications will be retained in hearing status pending such proceedings on the joint request as may be ordered and such action thereon as may be taken.

(1) If further hearing is not required on issues other than those arising out of the agreement, the proceeding shall be terminated and appropriate disposition shall be made of the applications.

(2) Where further hearing is required on issues unrelated to the agreement, the presiding officer shall continue to conduct the hearing on such other issues pending final action on the agreement, but the record in the proceeding shall not be closed until such final action on the agreement has been taken.

(3) In any case where a conflict between applications will be removed by an agreement for an engineering amendment to an application, the amended application shall be removed from hearing status upon final approval of the agreement and acceptance of the amendment.

(c) An application for a broadcast facility which has been designated for hearing and which is amended so as to eliminate the need for hearing or further hearing on the issues specified, other than as provided for in paragraph (b) of this section, will be removed from hearing status.

[44 FR 38511, July 2, 1979]

### § 73.3612 Annual employment report.

Each licensee or permittee of a commercially or noncommercially operated AM, FM, TV or International broadcast station with five or more full-time employees shall file an annual employment report with the FCC on or before September 30 of each year on FCC Form 395.

[63 FR 16907, Apr. 7, 1998]

### § 73.3613 Filing of contracts.

Each licensee or permittee of a commercial or noncommercial AM, FM, TV or International broadcast station shall file with the FCC copies of the following contracts, instruments, and documents together with amendments, supplements, and cancellations (with the substance of oral contracts reported in writing), within 30 days of execution thereof:

(a) Network service: Network affiliation contracts between stations and networks will be reduced to writing and filed as follows:

(1) All network affiliation contracts, agreements, or understandings between a TV broadcast or low power TV station and a national network. For the purposes of this paragraph the term network means any person, entity, or corporation which offers an interconnected program service on a regular basis for 15 or more hours per week to at least 25 affiliated television licensees in 10 or more states; and/or any person, entity, or corporation controlling, controlled by, or under common control with such person, entity, or corporation.

(2) Each such filing on or after May 1, 1969, initially shall consist of a written instrument containing all of the terms and conditions of such contract, agreement or understanding without reference to any other paper or document by incorporation or otherwise. Subsequent filings may simply set forth renewal, amendment or change, as the case may be, of a particular contract previously filed in accordance herewith.

(3) The FCC shall also be notified of the cancellation or termination of network affiliations, contracts for which are required to be filed by this section.

(b) Ownership or control: Contracts, instruments or documents relating to the present or future ownership or control of the licensee or permittee or of the licensee's or permittee's stock, rights or interests therein, or relating to changes in such ownership or control shall include but are not limited to the following:

(1) Articles of partnership, association, and incorporation, and changes in such instruments;

(2) Bylaws, and any instruments effecting changes in such bylaws;

(3) Any agreement, document or instrument providing for the assignment of a license or permit, or affecting, directly or indirectly, the ownership or voting rights of the licensee's or permittee's stock (common or preferred, voting or nonvoting), such as:

(i) Agreements for transfer of stock;

(ii) Instruments for the issuance of new stock; or

(iii) Agreements for the acquisition of licensee's or permittee's stock by the issuing licensee or permittee corporation. Pledges, trust agreements,

options to purchase stock and other executory agreements are required to be filed. However, trust agreements or abstracts thereof are not required to be filed, unless requested specifically by the FCC. Should the FCC request an abstract of the trust agreement in lieu of the trust agreement, the licensee or permittee will submit the following information concerning the trust:

(A) Name of trust;

(B) Duration of trust;

(C) Number of shares of stock owned;

(D) Name of beneficial owner of stock;

(E) Name of record owner of stock;

(F) Name of the party or parties who have the power to vote or control the vote of the shares; and

(G) Any conditions on the powers of voting the stock or any unusual characteristics of the trust.

(4) Proxies with respect to the licensee's or permittee's stock running for a period in excess of 1 year, and all proxies, whether or not running for a period of 1 year, given without full and detailed instructions binding the nominee to act in a specified manner. With respect to proxies given without full and detailed instructions, a statement showing the number of such proxies, by whom given and received, and the percentage of outstanding stock represented by each proxy shall be submitted by the licensee or permittee within 30 days after the stockholders' meeting in which the stock covered by such proxies has been voted. However, when the licensee or permittee is a corporation having more than 50 stockholders, such complete information need be filed only with respect to proxies given by stockholders who are officers or directors, or who have 1% or more of the corporation's voting stock. When the licensee or permittee is a corporation having more than 50 stockholders and the stockholders giving the proxies are not officers or directors or do not hold 1% or more of the corporation's stock, the only information required to be filed is the name of any person voting 1% or more of the stock by proxy, the number of shares voted by proxy by such person, and the total number of shares voted at the particular stockholders' meeting in which the shares were voted by proxy.

(5) Mortgage or loan agreements containing provisions restricting the licensee's or permittee's freedom of operation, such as those affecting voting rights, specifying or limiting the amount of dividends payable, the purchase of new equipment, or the maintenance of current assets.

(6) Any agreement reflecting a change in the officers, directors or stockholders of a corporation, other than the licensee or permittee, having an interest, direct or indirect, in the licensee or permittee as specified by § 73.3615.

(c) Personnel: (1) Management consultant agreements with independent contractors; contracts relating to the utilization in a management capacity of any person other than an officer, director, or regular employee of the licensee or permittee; station management contracts with any persons, whether or not officers, directors, or regular employees, which provide for both a percentage of profits and a sharing in losses; or any similar agreements.

(2) The following contracts, agreements, or understandings need not be filed: Agreements with persons regularly employed as general or station managers or salesmen; contracts with program managers or program personnel; contracts with attorneys, accountants or consulting radio engineers; contracts with performers; contracts with station representatives; contracts with labor unions; or any similar agreements.

(d) Time brokerage agreements: Time brokerage agreements involving radio stations, where the licensee (including all parties under common control) is the brokering entity, there is a principal community contour (predicted or measured 5 mV/m groundwave for AM stations and predicted 3.16 mV/m for FM stations) overlap with the brokered station, and more than 15 percent of the time of the brokered station, on a weekly basis, is brokered by that licensee. Confidential or proprietary information may be redacted where appropriate but such information shall be made available for inspection upon request by the FCC.

(e) The following contracts, agreements or understandings need not be

filed but shall be kept at the station and made available for inspection upon request by the FCC: contracts relating to the sale of television broadcast time to ''time brokers'' for resale; subchannel leasing agreements for Subsidiary Communications Authorization operation; franchise/leasing agreements for operation of telecommunications services on the TV vertical blanking interval and in the visual signal; time sales contracts with the same sponsor for 4 or more hours per day, except where the length of the events (such as athletic contests, musical programs and special events) broadcast pursuant to the contract is not under control of the station; and contracts with chief operators.

[44 FR 38512, July 2, 1979, as amended at 47 FR 21496, May 18, 1982; 50 FR 4664, Feb. 1, 1985; 50 FR 30951, July 31, 1985; 51 FR 9966, Mar. 24, 1986; 51 FR 15785, Apr. 28, 1986; 57 FR 18093, Apr. 29, 1992; 57 FR 42706, Sept. 16, 1992; 61 FR 36305, July 10, 1996]

### § 73.3615 Ownership reports.

(a) With the exception of sole proprietorships and partnerships composed entirely of natural persons, each licensee of a commercial AM, FM, or TV broadcast station shall file an Ownership Report on FCC Form 323 once a year, on the anniversary of the date that its renewal application is required to be filed. Licensees owning multiple stations with different anniversary dates need file only one Report per year on the anniversary of their choice, provided that their Reports are not more than one year apart. A licensee with a current and unamended Report on file at the Commission may certify that it has reviewed its current Report and that it is accurate, in lieu of filing a new Report. Ownership Reports shall provide the following information as of a date not more than 60 days prior to the filing of the Report:

(1) In the case of an individual, the name of such individual;

(2) In the case of a partnership, the name of each partner and the interest of each partner. Except as specifically noted below, the names of limited partners shall be reported. A limited partner need not be reported, regardless of the extent of its ownership, if the limted partner is not materially involved, directly or indirectly, in the management or operation of the licensee and the licensee so certifies.

(i) Any change in partners or in their rights will require prior consent of the FCC upon an application for consent to assignment of license or permit. If such change involves less than a controlling interest, the application for FCC consent to such changes may be made upon FCC Form 316.

(ii) [Reserved]

(3) In the case of a corporation, association, trust, estate or receivership, the data applicable to each:

(i)(A) The name, residence, citizenship, and stockholding of every officer, director, trustee, executor, administrator, receiver and member of an association, and any stockholder which holds stock accounting for 5 percent or more of the votes of the corporation, except that an investment company, insurance company, or bank trust department need be reported only if it holds stock amounting to 10 percent or more of the votes, provided that the licensee certifies that such entity has made no attempt to influence, directly or indirectly, the management or operation of the licensee, and that there is no representation on the licensee's board or among its officers by any person professionally or otherwise associated with the entity.

(B) A licensee shall report any separate interests known to the licensee to be held ultimately by the same individual or entity, whether those interests are held in custodial accounts, by individual holding corporations or otherwise, if, when aggregated:

(*1*) The sum of all interests except those held by or through ''passive investors'' is equal to or exceeds 5 percent; or

(*2*) The sum of all interests held by or through ''passive investors'' is equal to or exceeds 10 percent; or

(*3*) The sum of the interests computed under paragraph (a)(3)(i)(B)(*1*) of this section plus the sum of the interests computed under paragraph (a)(3)(i)(B)(*2*) of this section is equal to or exceeds 10 percent.

(C) If the majority of the voting stock of a corporate licensee is held by a single individual or entity, no other

stockholding need be reported for that licensee;

(ii) Full information as to family relationship or business association between two or more officials and/or stockholders, trustees, executors, administrators, receivers, and members of any association;

(iii) Capitalization with a description of the classes and voting power of stock authorized by the corporate charter or other appropriate legal instrument and the number of shares of each class issued and outstanding; and

(iv) Full information with respect to the interest and identity of any person having any direct, indirect, fiduciary, or beneficial interest in the licensee or in its stock accounting for 5% or more of its votes. For example:

(A) Where A is the trustee of stock held for beneficiary B, A shall be reported if A votes the stock or has the sole or shared power to dispose of the stock; B or any other party shall be reported if B or such party votes the stock or has sole power to dispose of the stock or has the power to revoke the trust or replace the trustee at will;

(B) Where X is not a natural person and has attributable ownership interest in the licensee under § 73.3555 of the rules, regardless of its position in the vertical ownership chain, an Ownership Report shall be filed for X which, except as specifically noted below, must contain the same information as required of a licensee. If X has a voting stockholder interest in the licensee, only those voting interests of X that are cognizable after application of the ''multiplier'' described in Note 2(d) of § 73.3555 of the rules, if applicable, shall be reported. If X is a corporation, whether or not its interest in the licensee is by virtue of its ownership of voting stock, the officers and directors shall be reported. With respect to those officers and directors whose duties and responsibilities are wholly unrelated to the licensee, and who wish to be relieved of attribution in the licensee, the name, title and duties of these officers and directors, with statements properly documenting that their duties do not involve the licensee, shall be reported.

(4) In the case of all licensees:

(i) A list of all contracts still in effect required to be filed with the FCC by § 73.3613 showing the date of execution and expiration of each contract; and

(ii) Any interest which the licensee may have in any other broadcast station.

(b) Except as specifically noted below, each permittee of a commercial AM, FM or TV broadcast station shall file an Ownership Report on FCC Form 323 (1) within 30 days of the date of grant by the FCC of an application for original construction permit and (2) on the date that it applies for a station license. The Ownership Report of the permittee shall give the information required by the applicable portions of paragraph (a) of this section. A permittee with a current and unamended Report on file at the Commission may certify that it has reviewed its current Report and it is accurate, in lieu of filing a new Report.

(c) Before any change is made in the organization, capitalization, officers, directors, or stockholders of a corporation other than licensee or permittee, which results in a change in the control of the licensee or permittee, prior FCC consent must be received under § 73.3540. A transfer of control takes place when an individual or group in privity, gains or loses affirmative or negative (50%) control. See instructions on FCC Form 323 (Ownership Report).

(d) Each licensee of a noncommercial educational AM, FM or TV broadcast station shall file an Ownership Report on FCC Form 323–E at the time the application for renewal of station license is required to be filed. Licensees owning more than one noncommercial educational AM, FM or TV broadcast station need file only one Ownership Report at 5 year intervals for TV stations and 7 year intervals for AM and FM stations. Ownership Reports shall give the following information as of a date not more than 30 days prior to the filing of the Ownership Report:

(1) The following information as to all officers, members of governing board, and holders of 1% or more ownership interest (if any): Name, residence, office held, citizenship, principal

profession or occupation, and by whom appointed or elected.

(2) Full information with respect to the interest and identity of any individual, organization, corporation, association, or any other entity which has direct or indirect control over the licensee or permittee.

(3) A list of all contracts still in effect required by §73.3613 to be filed with the FCC, showing the date of execution and expiration of each contract.

(4) Any interest which the licensee or permittee or any of its officers, members of the governing board, and holders of 1% or more ownership interest (if any) held in any other broadcast station.

(e) Each permittee of a noncommercial educational AM, FM or TV broadcast station shall file an Ownership Report on FCC Form 323–E within 30 days of the date of grant by the FCC of an application for original construction permit. The Ownership Report of the permittee shall give the information required by the applicable form.

(f) A supplemental Ownership Report on FCC Form 323–E shall be filed by each licensee or permittee within 30 days after any change occurs in the information required by the Ownership Report from that previously reported. Such report should include, without limitation:

(1) Any change in organization;

(2) Any change in officers or directors;

(3) Any transaction affecting the ownership (direct or indirect) or voting rights with respect to the licensee or permittee (or with respect to any stock interest therein).

(g) A copy of all ownership and supplemental ownership reports and related material filed pursuant to this section shall be maintained and made available for public inspection locally as required by §§73.3526 and 73.3527.

[44 FR 38513, July 2, 1979, as amended at 49 FR 19498, May 8, 1984; 50 FR 27450, July 3, 1985; 50 FR 40016, Oct. 1, 1985; 52 FR 1632, Jan. 15, 1987; 53 FR 2499, Jan. 28, 1988; 53 FR 5684, Feb. 25, 1988; 53 FR 36787, Sept. 22, 1988]

### §73.3617 Broadcast information available on the Internet.

The Mass Media Bureau and each of its Divisions provide information on the Internet regarding broadcast rules and policies, pending and completed rulemakings, and pending applications. These sites also include copies of public notices and texts of recent decisions. The Mass Media Bureau Internet address ishttp://www.fcc.gov/mmb/; the Audio Services Division address ishttp://www.fcc.gov/mmb/asd/; the Video Services Division address is http://www.fcc.gov/mmb/vsd/; the Policy and Rules Division address is http://www.fcc.gov/mmb/prd/; and the Enforcement Division address is http://www.fcc.gov/mmb/enf/.

[63 FR 33878, June 22, 1998]

### §73.3999 Enforcement of 18 U.S.C. 1464 (restrictions on the transmission of obscene and indecent material).

(a) No licensee of a radio or television broadcast station shall broadcast any material which is obscene.

(b) No licensee of a radio or television broadcast station shall broadcast on any day between 6 a.m. and 10 p.m. any material which is indecent.

[60 FR 44439, Aug. 28, 1995]

### §73.4000 Listing of FCC policies.

The following sections list, solely for the purpose of reference and convenience, certain Policies of the FCC. The present listing of FCC policies and citations thereto should not be relied upon as an all-inclusive list, and the failure to include a policy in this list does not affect its validity. Each section bears the title of one Policy and the citations which will direct the user to the specific document(s) pertaining to that Policy.

[44 FR 36387, June 22, 1979]

### §73.4005 Advertising—refusal to sell.

See 412 U.S. 94 (Supreme Court, 1973).

[44 FR 36388, June 22, 1979]

### §73.4015 Applications for AM and FM construction permits, incomplete or defective.

See Public Notice, FCC 84–366, dated August 2, 1984, 49 FR 47331, December 3, 1984.

[49 FR 50048, Dec. 26, 1984]

### § 73.4017 Application processing: Commercial FM stations.

See Report and Order, MM Docket 84–750, FCC 85–125, adopted March 4, 1985. 50 FR 19936, May 13, 1985.

[59 FR 52086, Oct. 14, 1994]

### § 73.4045 Barter agreements.

See Order, FCC 72–167, adopted February 16, 1972. 33 FCC 2d 653; 37 FR 4009, February 25, 1972.

[44 FR 36388, June 22, 1979]

### § 73.4050 Children's TV programs.

(a) See Report and Policy Statement, Docket 19142, FCC 74–1174, adopted October 24, 1974. 50 FCC 2d 1; 39 FR 39396, November 6, 1974.

(b) See Report and Order; Policy Statement, Docket 19142, FCC 83–609, adopted December 22, 1983. 96 FCC 2d 634; 49 FR 1704, January 13, 1984.

(c) See Report and Order, MM Dockets 90–570 and 83–670, FCC 91–113, adopted April 9, 1991. 6 FCC Rcd 2111; 56 FR 19611, April 19, 1991; Memorandum Opinion and Order, MM Dockets 90–570 and 83–670, FCC 91–248, adopted August 1, 1991. 6 FCC Rcd 5093; 56 FR 42707, August 29, 1991.

[49 FR 14509, Apr. 12, 1984, as amended at 59 FR 52086, Oct. 14, 1994]

### § 73.4055 Cigarette advertising.

See 15 U.S.C. 1335.

[44 FR 36388, June 22, 1979]

### § 73.4060 Citizens agreements.

(a) See Report and Order, Docket 20495, FCC 75–1359, adopted December 10, 1975. 57 F.C.C. 2d 42; 40 F.R. 49730, December 30, 1975.

(b) See Memorandum Opinion and Order, FCC 78–875, adopted December 21, 1978. 70 F.C.C. 2d 1672.

[44 FR 58720, Oct. 11, 1979]

### § 73.4075 Commercials, loud.

See Memorandum Opinion and Order, BC Docket 79–168, FCC 84–300, adopted June 27, 1984. 49 FR 28077, July 10, 1984.

[49 FR 38132, Sept. 27, 1984]

### § 73.4082 Comparative broadcast hearings—specialized programming formats.

(a) See Memorandum Opinion and Order, FCC 80–33, adopted January 30, 1980. 75 FCC 2d 721.

(b) See Report and Order, Docket 79–137, FCC 79–331, adopted June 1, 1979. 72 FCC 2d 202.

(c) See Memorandum Opinion and Order, FCC 79–206, adopted March 30, 1979. 71 FCC 2d 460.

[47 FR 3792, Jan. 27, 1982]

### § 73.4091 Direct broadcast satellites.

(a) See Report and Order, General Docket 80–603, FCC 82–285, adopted June 23, 1982. 90 FCC 2d 676; 47 FR 31555, July 21, 1982.

(b) See Memorandum Opinion and Order, FCC 82–427, adopted September 23, 1982. 91 FCC 2d.

(c) See Memorandum Opinion and Order, FCC 82–498, adopted November 4, 1982. 91 FCC 2d.

[48 FR 9012, Mar. 3, 1983]

### § 73.4094 Dolby encoder.

See Public Notice dated July 10, 1974, 72 FCC 2d 790.

[45 FR 6403, Jan. 28, 1980]

### § 73.4095 Drug lyrics.

(a) See Public Notice, FCC 71–205, dated March 5, 1971. 28 FCC 2d 409; 36 FR 4901, March 13, 1971.

(b) See Memorandum Opinion and Order, FCC 71–428, adopted April 16, 1971. 31 FCC 2d 377; 36 FR 8090, April 29, 1971.

[44 FR 36388, June 22, 1979]

### § 73.4097 EBS (now EAS) attention signals on automated programing systems.

See Public Notice dated March 1, 1979. 72 FCC 2d 788; 44 FR 17792, March 23, 1979.

[49 FR 50049, Dec. 26, 1984, as amended at 59 FR 67103, Dec. 28, 1994]

### § 73.4099 Financial qualifications, certification of.

See Public Notice, FCC 87–97, adopted March 19, 1987. 52 FR 17333, May 7, 1987.

[53 FR 2499, Jan. 28, 1988]

### § 73.4100 Financial qualifications; new AM and FM stations.

See Public Notice, FCC 78–556, dated August 2, 1978. 69 FCC 2d 407; 43 FR 34841, August 7, 1978.

[44 FR 36388, June 22, 1979]

### § 73.4101 Financial qualifications, TV stations.

See Public Notice, FCC 79–299, dated May 11, 1979. 72 F.C.C. 2d 784; 44 FR 29160, May 18, 1979.

[45 FR 6403, Jan. 28, 1980]

### § 73.4102 FAA communications, broadcast of.

See Public Notice, FCC 72–105, dated February 2, 1972. 37 FR 3567, February 17, 1972.

[45 FR 6403, Jan. 28, 1980]

### § 73.4104 FM assignment policies and procedures.

See Report and Order, BC Docket 80–130, FCC 82–240, adopted May 20, 1982. 90 FCC 2d, 88; 47 FR 26625, June 21, 1982.

[47 FR 54448, Dec. 3, 1982]

### § 73.4107 FM broadcast assignments, Increasing availability of.

(a) See, First Report and Order MM Docket 84–231, FCC 84–640, adopted December 19, 1984. 100 FCC 2d 1332; 50 FR 3514, January 25, 1994.

(b) See, Second Report and Order, MM Docket 84–231, FCC 85–124, adopted March 14, 1985. 101 FCC 2d 630; 50 FR 15558, April 19, 1985.

(c) See, Memorandum Opinion and Order, MM Docket 84–231, FCC 86–76, adopted February 10, 1986. 51 FR 9210, March 18, 1986.

(d) See Public Notice, 51 FR 26009, July 18, 1986.

[51 FR 26251, July 22, 1986, as amended at 52 FR 11656, Apr. 10, 1987; 59 FR 52086, Oct. 14, 1994]

### § 73.4108 FM transmitter site map submissions.

See Memorandum Opinion and Order and Public Notice, adopted October 24, 1986. 1 FCC Rcd 381 (1986); 51 FR 45945, December 23, 1986.

[52 FR 11656, Apr. 10, 1987]

### § 73.4110 Format changes of stations.

See Memorandum Opinion and Order, Docket 20682, FCC 76–744, adopted July 28, 1976. 60 FCC 2d 858; 41 FR 37153, September 2, 1976.

[44 FR 36388, June 22, 1979]

### § 73.4135 Interference to TV reception by FM stations.

See Public Notice, FCC 67–1012, dated August 30, 1967, 74 FCC 2d 619.

(Secs. 4, 5, 303, 48 Stat., as amended, 1066, 1068, 1082 (47 U.S.C. 154, 155, 303))

[44 FR 36388, June 22, 1979, as amended at 45 FR 28142, Apr. 28, 1980; 49 FR 45154, Nov. 15, 1984; 50 FR 5073, Feb. 6, 1985; 51 FR 26251, July 22, 1986]

### § 73.4140 Minority ownership; tax certificates and distress sales.

(a) See Public Notice, FCC 78–322, dated May 25, 1978. 68 FCC 2d 979; 43 FR 25188, June 9, 1978.

(b) See Public Notice, FCC 78–725, dated October 11, 1978. 43 FR 47612, October 16, 1978.

(c) See Policy Statement, General Docket 82–797, FCC 82–523, adopted December 2, 1982. 92 FCC 2d 849; 48 FR 5943, February 9, 1983.

(d) See Report and Order, General Docket 82–797, FCC 84–647, adopted December 21, 1984. 99 FCC 2d 1249; 50 FR 1239, January 10, 1985.

[44 FR 36388, June 22, 1979, as amended at 49 FR 38132, Sept. 27, 1984; 49 FR 50049, Dec. 26, 1984; 50 FR 47055, Nov. 14, 1985; 52 FR 11656, Apr. 10, 1987]

### § 73.4154 Network/AM, FM station affiliation agreements.

See Report, Statement of Policy, and Order, Docket 20721, FCC 77–206, adopted March 10, 1977. 63 FCC 2d 674.

[47 FR 28388, June 30, 1982]

### § 73.4157 Network signals which adversely affect affiliate broadcast service.

See Public Notice, FCC 79–387, dated April 20, 1970. 22 F.C.C. 2d 779.

[45 FR 6403, Jan. 28, 1980]

### § 73.4163 Noncommercial nature of educational broadcast stations.

(a) See Second Report and Order, BC Docket 21136, FCC 81–204, adopted April

23, 1981. 86 FCC 2d 141; 46 FR 27944, May 22, 1981.

(b) See Order, BC Docket 21136, FCC 82–327 adopted July 15, 1982. 90 FCC 2d 895; 47 FR 36171, August 19, 1982.

(c) See Memorandum Opinion and Order, BC Docket 21136, FCC 84–105, adopted March 28, 1984. 97 FCC 2d 255; 49 FR 13534, April 5, 1984.

(d) See, Public Notice, FCC 86–161, dated April 11, 1986. 51 FR 21800, June 16, 1986. Excerpt reprinted at 7 FCC Rcd 827.

(e) See Memorandum Opinion and Order, FCC 90–111, adopted March 28, 1990. 5 FCC Rcd 4920.

[47 FR 54448, Dec. 3, 1982, as amended at 51 FR 26251, July 22, 1986; 59 FR 52087, Oct. 14, 1994]

### § 73.4165 Obscene language.

(a) See *FCC* v. *Pacifica Foundation,* 438 U.S. 726, 57 L.Ed 2d 1073, 46 U.S.L.W. 5018 (1978). See also *Action for Children's Television* v. *FCC,* 852 F.2d 1332 (D.C. Cir. 1988).

(b) See *Action for Children's Television* v. FCC, [ACT III] 11 F.3d 170 (D.C. Cir. 1993). See also, *Action for Children's Television* v. *FCC,* [ACT IV] 15 F.3d 186 (D.C. Cir. 1994), rehearing granted, en banc.

(c) See Report and Order, GC Docket 92–223, FCC 93–42, adopted January 19, 1993. 8 FCC Rcd 704; 58 FR 5937, January 25, 1993.

(d) See Memorandum Opinion and Order, FCC 93–246, adopted May 11, 1993, 8 FCC Rcd 3600.

(e) See Letter to Rusk Corporation, dated May 6, 1993, FCC 93–229, 8 FCC Rcd 3228.

(f) See Memorandum Opinion and Order, FCC 93–4, adopted January 5, 1993. 8 FCC Rcd 498

(g) See *Branton* v. *FCC,* 993 F.2d 906 (D.C. Cir. 1993).

(h) See Memorandum Opinion and Order, DA 91–557, adopted April 30, 1991. 6 FCC Rcd 2560.

[59 FR 52087, Oct. 14, 1994]

### § 73.4170 Obscene broadcasts.

(a) See *Miller* v. *California,* 413 U.S.C. 15 (1973). See also *Pope* v. *Illinois,* 107 S.Ct. 1918 (1987). 18 U.S.C. 1464.

(b) See Memorandum Opinion and Order, MM Docket 83–575, FCC 88–4, adopted January 12, 1988. 3 FCC Rcd 757. See also Memorandum Opinion and Order, MM Docket 83–575, FCC 93–180, adopted April 2, 1993. 8 FCC Rcd 2753.

(c) See Memorandum Opinion and Order, FCC 87–365, adopted November 24, 1987. 3 FCC Rcd 930.

(d) See ''Memorandum of Understanding between the Federal Communications Commission and the Department of Justice concerning Complaints and Cases Involving Obscenity and Indecency,'' released April 9, 1991. See also News Release dated April 19, 1991.

[59 FR 52087, Oct. 14, 1994]

### § 73.4180 Payment disclosure: Payola, plugola, kickbacks.

(a) See 47 U.S.C. 507.

(b) See Public Notice, FCC 70–593, dated June 4, 1970. 23 FCC 2d 588; 35 FR 9045, June 11, 1970.

(c) See Public Notice, FCC 88–175, dated May 18, 1988.

[44 FR 36389, June 22, 1979, as amended at 49 FR 20504, May 15, 1984; 59 FR 52087, Oct. 14, 1994]

### § 73.4185 Political broadcasting and telecasting, the law of.

(a) See ''The Law of Political Broadcasting and Cablecasting: Political Primer 1984,'' 100 FCC 2d 1476 (1984).

(b) See Report and Order, MM Docket 91–168, FCC 91–403, adopted December 12, 1991. 7 FCC Rcd 678; 57 FR 189, January 3, 1992; Memorandum Opinion and Order, MM Docket 91–168, FCC 92–210, adopted May 14, 1992. 7 FCC Rcd 4611; 57 FR 27705, June 22, 1992.

[59 FR 52087, Oct. 14, 1994]

### § 73.4190 Political candidate authorization notice and sponsorship identification.

(a) See Joint Public Notice by the Federal Communications Commission and the Federal Election Commission, FCC 78–419, dated June 19, 1978. 69 FCC 2d 1129; 43 FR 30126, July 13, 1978.

(b) See Memorandum Opinion and Order, FCC 92–55, adopted February 12, 1992. 7 FCC Rcd 1616.

[44 FR 36389, June 22, 1979, as amended at 59 FR 52087, Oct. 14, 1994]

### § 73.4195 Political advertising by UHF translators.

See Public Notice, FCC 76936, dated October 8, 1976. 62 FCC 2d 896; 41 FR 45043, October 14, 1976.

[44 FR 36389, June 22, 1979]

### § 73.4210 Procedure Manual: "The Public and Broadcasting".

See FCC 74–942, dated September 5, 1974. 49 FCC 2d 1; 39 FR 32288, dated September 5, 1974.

[44 FR 36389, June 22, 1979]

### § 73.4215 Program matter: Supplier identification.

See Public Notice, FCC 73–595, dated June 1, 1973. 41 FCC 2d 333; 38 FR 14979, June 7, 1973.

[44 FR 36389, June 22, 1979]

### § 73.4242 Sponsorship identification rules, applicability of.

See Public Notice dated September 3, 1975, 40 FR 41936, September 9, 1975.

[47 FR 28388, June 30, 1982]

### § 73.4246 Stereophonic pilot subcarrier use during monophonic programming.

See Report and Order, Docket 19571, FCC 73–680, adopted June 21, 1973. 41 FCC 2d 534; 38 FR 17021, June 28, 1973.

[47 FR 3792, Jan. 27, 1982]

### § 73.4247 STV: Competing applications.

See Second Report and Order, Docket 21502, FCC 81–13, adopted January 8, 1981. 85 FCC 2d 631; 46 FR 19937, April 2, 1981.

[47 FR 3792, Jan. 27, 1982]

### § 73.4250 Subliminal perception.

(a) See Public Notice, FCC 74–78, dated January 24, 1974. 44 FCC 2d, 1016; 39 FR 3714, January 29, 1974.

(b) See FCC Information Bulletin, ''Subliminal Projection'', dated November 1977.

[44 FR 36389, June 22, 1979]

### § 73.4255 Tax certificates: Issuance of.

(a) See Public Notice, FCC 76–337, dated April 21, 1976. 59 FCC 2d, 91; 41 FR 17605, April 27, 1976.

(b) See Report and Order MM Docket 87–267, FCC 91–303 adopted, September 26, 1991. 6 FCC Rcd 6273; 56 FR 64842, December 12, 1991.

[56 FR 64874, Dec. 12, 1991, as amended at 59 FR 52087, Oct. 14, 1994]

### § 73.4260 Teaser announcements.

See Public Notice, FCC 62–592, dated June 1, 1962. 27 FR 5274, June 5, 1962.

[44 FR 36389, June 22, 1979]

### § 73.4265 Telephone conversation broadcasts (network and like sources).

See Memorandum Opinion and Order, FCC 75–1406, adopted December 18, 1975. 57 FCC 2d, 334; 41 FR 816, January 5, 1976.

[44 FR 36389, June 22, 1979]

### § 73.4266 Tender offer and proxy statements.

See *Policy Statement*, MM Docket 85–218, FCC 86–67, adopted January 30, 1986. 51 FR 9794, March 21, 1986.

[51 FR 26251, July 22, 1986]

### § 73.4267 Time brokerage.

(a) See Policy Statement, Docket 78–355, FCC 80–621, adopted October 21, 1980. 82 FCC 2d 107.

(b) See Report and Order, MM Docket 91–140, FCC 92–97, adopted March 12, 1992. 7 FCC Rcd 2755; 57 FR 18089, April 29, 1992.

(c) See Memorandum Opinion and Order and Further Notice of Proposed Rule Making, MM Docket 91–140, FCC 92–361, adopted August 5, 1992. 7 FCC Rcd 6387; 57 FR 42701, September 16, 1992.

[47 FR 3792, Jan. 27, 1982, as amended at 59 FR 52087, Oct. 14, 1994]

### § 73.4275 Tone clusters; audio attention-getting devices.

See Public Notice, FCC 76–610, dated July 2, 1976. 60 FCC 2d 920; 41 FR 28582, July 12, 1976.

[44 FR 36389, June 22, 1979]

### § 73.4280 Character evaluation of broadcast applicants.

(a) See Report and Order and Policy Statement, Gen. Docket 81–500, BC

Docket 78–108, FCC 85–648, adopted December 10, 1985. 102 FCC 2d 1179; 51 FR 3049, January 23, 1986.

(b) See Policy Statement and Order, FCC 90–195, adopted May 10, 1990. 5 FCC Rcd 3252, 55 FR 23082, June 6, 1990.

(c) See Memorandum Opinion and Order, FCC 91–146, adopted May 1, 1991. 6 FCC Rcd 3448, 56 FR 25633, June 5, 1991.

(d) See Memorandum Opinion and Order, FCC 92–448, adopted September 18, 1992. 7 FCC Rcd 6564, 57 FR 47410, October 16, 1992.

[59 FR 52087, Oct. 14, 1994]

## Subpart I—Competitive Bidding Procedures

SOURCE: 63 FR 48629, Sept. 11, 1998, unless otherwise noted.

EFFECTIVE DATE NOTE: At 63 FR 48629, Sept. 11, 1998, Subpart I was added, effective Nov. 10, 1998.

### § 73.5000 Services subject to competitive bidding.

(a) Mutually exclusive applications for new facilities and for major changes to existing facilities in the following broadcast services are subject to competitive bidding: AM; FM; FM translator; analog television; low power television; and television translator. Mutually exclusive applications for new facilities and for major changes to existing facilities in the Instructional Television Fixed Service (ITFS) are also subject to competitive bidding. The general competitive bidding procedures found in 47 CFR part 1, subpart Q will apply unless otherwise provided in 47 CFR part 73 and Part 74.

(b) Mutually exclusive applications for broadcast channels in the reserved portion of the FM band (Channels 200–220) and for television broadcast channels reserved for noncommercial educational use are not subject to competitive bidding procedures.

### § 73.5001 Competitive bidding procedures.

(a) Specific competitive bidding procedures for broadcast service and ITFS auctions will be set forth by public notice prior to any auction. The Commission may also design and test alternative procedures, including combinatorial bidding and real time bidding. See 47 CFR 1.2103 and 1.2104.

(b) The Commission may utilize the following competitive bidding mechanisms in broadcast service and ITFS auctions:

(1) *Sequencing.* The Commission will establish and may vary the sequence in which broadcast service construction permits and ITFS licenses will be auctioned.

(2) *Grouping.* In the event the Commission uses either a simultaneous multiple round competitive bidding design or combinatorial bidding in broadcast service or ITFS auctions, the Commission will determine which construction permits or licenses will be auctioned simultaneously or in combination.

(3) *Reservation price.* The Commission may establish a reservation price, either disclosed or undisclosed, below which a broadcast construction permit or ITFS license subject to auction will be not awarded.

(4) *Minimum and maximum bid increments.* The Commission may, by announcement before or during broadcast service or ITFS auctions, require minimum bid increments in dollar or percentage terms. The Commission may, by announcement before or during broadcast service or ITFS auctions, establish maximum bid increments in dollar or percentage terms.

(5) *Minimum opening bids.* The Commission may establish a minimum opening bid for each broadcast construction permit or ITFS license subject to auction.

(6) *Stopping rules.* The Commission will establish stopping rules before or during multiple round broadcast service or ITFS auctions in order to terminate the auction within a reasonable time.

(7) *Activity rules.* The Commission will establish activity rules which require a minimum amount of bidding activity. In the event that the Commission establishes an activity rule in connection with a simultaneous multiple round auction, each bidder will be entitled to request and will be automatically granted a certain number of waivers of such rule during the auction.

### § 73.5002 Bidding application and certification procedures; prohibition of collusion.

(a) Prior to any broadcast service or ITFS auction, the Commission will issue a public notice announcing the upcoming auction and specifying the period during which all applicants seeking to participate in an auction must file their applications for new broadcast or ITFS facilities or for major changes to existing facilities. Broadcast service or ITFS applications for new facilities or for major modifications will be accepted only during these specified periods. This initial and other public notices will contain information about the completion and submission of applications to participate in the broadcast or ITFS auction, any materials that must accompany the applications, and any filing fee that must accompany the applications or any upfront payments that will need to be submitted. Such public notices will also, in the event mutually exclusive applications are filed for broadcast construction permits or ITFS licenses, contain information about the method of competitive bidding to be used and more detailed instructions on submitting bids and otherwise participating in the auction. In the event applications are submitted that are not mutually exclusive with any other application in the same service, such applications will be identified by public notice and will not be subjected to auction.

(b) To participate in broadcast service or ITFS auctions, all applicants must timely submit short-form applications (FCC Form 175), along with all required certifications, information and exhibits, pursuant to the provisions of 47 CFR 1.2105(a) and any Commission public notices. So determinations of mutual exclusivity for auction purposes can be made, applicants for non-table broadcast services or for ITFS must also submit the engineering data contained in the appropriate FCC form (FCC Form 301, FCC Form 346, FCC Form 349 or FCC Form 330). Beginning January 1, 1999, all short-form applications must be filed electronically.

(c) Applicants in all broadcast service or ITFS auctions will be subject to the provisions of 47 CFR 1.2105(b) regarding the modification and dismissal of their short-form applications. Notwithstanding the general applicability of Section 1.2105(b) to broadcast and ITFS auctions, applicants who file mutually exclusive major modification applications, or mutually exclusive major modification and new station applications, will be permitted to make amendments to their engineering submissions following the filing of their short-form applications so as to resolve their mutual exclusivity.

(d) The prohibition of collusion set forth in 47 CFR 1.2105(c), which becomes effective upon the filing of short-form applications, shall apply to all broadcast service or ITFS auctions. Notwithstanding the general applicability of Section 1.2105(c) to broadcast and ITFS auctions, applicants who file mutually exclusive major modification applications, or mutually exclusive major modifications and new station applications, will be permitted to resolve their mutual exclusivities by means of engineering solutions or settlements during a limited period after the filing of short-form applications. Such period will be further specified by Commission public notices.

### § 73.5003 Submission of upfront payments, down payments and full payments.

(a) To be eligible to bid, each bidder in every broadcast service or ITFS auction shall submit an upfront payment prior to the commencement of bidding, as set forth in any public notices and in accordance with 47 CFR 1.2106.

(b) Within ten (10) business days following the close of bidding and notification to the winning bidders, each winning bidder in every broadcast service or ITFS auction shall make a down payment in an amount sufficient to bring its total deposits up to twenty (20) percent of its high bid(s), as set forth in 47 CFR 1.2107(b).

(c) Each winning bidder in every broadcast service or ITFS auction shall pay the balance of its winning bid(s) in a lump sum within ten (10) business days after release of a public notice announcing that the Commission is prepared to award the construction permit(s) or license(s), as set forth in 47 CFR 1.2109(a). If a winning bidder fails to pay the balance of its winning bid in

a lump sum by the applicable deadline as specified by the Commission, it will be allowed to make payment within ten (10) business days after the payment deadline, provided that it also pays a late fee equal to five (5) percent of the amount due. Broadcast construction permits and ITFS licenses will be granted by the Commission following the receipt of full payment.

### § 73.5004 Bid withdrawal, default and disqualification.

(a) The Commission shall impose the bid withdrawal, default and disqualification payments set forth in 47 CFR 1.2104(g) upon bidders who withdraw high bids during the course, or after the close, of any broadcast service or ITFS auction, who default on payments due after an auction closes, or who are disqualified. 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 also be subject to the remedies set forth in 47 CFR 1.2109(d).

(b) In the event of a default by or the disqualification of a winning bidder in any broadcast service or ITFS auction, the Commission will follow the procedures set forth in 47 CFR 1.2109 (b)–(c) regarding the reauction of the construction permit(s) or license(s) at issue.

### § 73.5005 Filing of long-form applications.

(a) Within thirty (30) days following the close of bidding and notification to the winning bidders, each winning bidder must submit an appropriate long-form application (FCC Form 301, FCC Form 346, FCC Form 349 or FCC Form 330) for each construction permit or license for which it was the high bidder. Long-form applications filed by winning bidders shall include the exhibits required by 47 CFR 1.2107(d) (concerning any bidding consortia or joint bidding arrangements); § 1.2110(i) (concerning designated entity status, if applicable); and § 1.2112 (a) and (b) (concerning disclosure of ownership and real party in interest information, and, if applicable, disclosure of gross revenue information for small business applicants).

(b) The long-form application should be submitted pursuant to the rules governing the service in which the applicant is a high bidder and according to the procedures for filing such applications set out by public notice. When electronic procedures become available for the submission of long-form applications, the Commission may require all winning bidders to file their long-form applications electronically.

(c) An applicant that fails to submit the required long-form application under this section, and fails to establish good cause for any late-filed submission, shall be deemed to have defaulted and shall be subject to the payments set forth in 47 CFR 1.2104(g).

(d) An applicant whose short-form application, submitted pursuant to 47 CFR 73.5002(b), was not mutually exclusive with any other short-form application in the same service and was therefore not subject to auction, shall submit an appropriate long-form application within thirty (30) days following release of a public notice identifying any such non-mutually exclusive applicants. The long-form application should be submitted pursuant to the rules governing the relevant service and according to any procedures for filing such applications set out by public notice. The long-form application filed by a non-mutually exclusive applicant need not contain the additional exhibits, identified in § 73.5005(a), required to be submitted with the long-form applications filed by winning bidders. When electronic procedures become available, the Commission may require any non-mutually exclusive applicants to file their long-form applications electronically.

### § 73.5006 Filing of petitions to deny against long-form applications.

(a) As set forth in 47 CFR 1.2108, petitions to deny may be filed against the long-form applications filed by winning bidders in broadcast service or ITFS auctions and against the long-form applications filed by applicants whose short-form applications to participate in a broadcast or ITFS auction were not mutually exclusive with any other applicant.

(b) Within ten (10) days following the issuance of a public notice announcing

that a long-form application has been accepted for filing, petitions to deny that application may be filed. Any such petitions must contain allegations of fact supported by affidavit of a person or persons with personal knowledge thereof.

(c) An applicant may file an opposition to any petition to deny, and the petitioner a reply to such opposition. Allegations of fact or denials thereof must be supported by affidavit of a person or persons with personal knowledge thereof. The time for filing such oppositions shall be five (5) days from the filing date for petitions to deny, and the time for filing replies shall be five (5) days from the filing date for oppositions.

(d) If the Commission denies or dismisses all petitions to deny, if any are filed, and is otherwise satisfied that an applicant is qualified, a public notice will be issued announcing that the broadcast construction permit(s) or ITFS license(s) is ready to be granted, upon full payment of the balance of the winning bid(s). See 47 CFR 73.5003(c). Construction of broadcast stations or ITFS facilities shall not commence until the grant of such permit or license to the winning bidder.

### § 73.5007 Designated entity provisions.

*New entrant bidding credit.* A winning bidder that qualifies as a ''new entrant'' may use a bidding credit to lower the cost of its winning bid on any broadcast construction permit. A thirty-five (35) percent bidding credit will be given to a winning bidder if it and/or its owners have no recognizable interest (more than fifty (50) percent or de facto control) in the aggregate, in any other media of mass communications. A twenty-five (25) percent bidding credit will be given to a winning bidder if it and/or its owners, in the aggregate, have a recognizable interest in no more than three mass media facilities. No bidding credit will be given if any of the commonly owned mass media facilities serves the same area as the proposed broadcast station, or if the winning bidder and/or its owners have recognizable interests in more than three mass media facilities.

(a) The new entrant bidding credit is not available to applicants that control, or whose owners control, in the aggregate, more than fifty (50) percent of any other media of mass communications in the same area as the proposed broadcast facility. The facilities will be considered in the ''same area'' if the following defined areas wholly encompass, or are encompassed by, the proposed broadcast or secondary broadcast facility's relevant contour:

(1) AM broadcast station—predicted or measured 2mV/m groundwave contour (see 47 CFR 73.183 or 73.186);

(2) FM broadcast or FM translator station—predicted 1.0 mV/m contour (see 47 CFR 73.313);

(3) Television broadcast station—Grade A contour (see 47 CFR 73.684);

(4) Low power television or television translator station—the predicted, protected contour (see 47 CFR 74.707(a));

(5) Cable television system—the franchised community of a cable system;

(6) Daily newspaper—community of publication; and

(7) Multipoint Distribution Service station—protected service area (see 47 CFR 21.902(d) or 21.933).

(b) *Unjust enrichment.* If a licensee or permittee that utilizes a new entrant bidding credit under this subsection seeks to assign or transfer control of its license or construction permit to an entity not meeting the eligibility criteria for the bidding credit, the licensee or permittee must reimburse the U.S. Government for the amount of the bidding credit, plus interest based on the rate for ten-year U.S. Treasury obligations applicable on the date the construction permit was originally granted, as a condition of Commission approval of the assignment or transfer. If a licensee or permittee that utilizes a new entrant bidding credit seeks to assign or transfer control of a license or construction permit to an entity that is eligible for a lower bidding credit, the difference between the bidding credit obtained by the assigning party and the bidding credit for which the acquiring party would qualify, plus interest based on the rate for ten-year U.S. Treasury obligations applicable on the date the construction permit was originally granted, must be paid to the U.S. Government as a condition of Commission approval of the assignment or transfer. The amount of the

reimbursement payments will be reduced over time. An assignment or transfer in the first two years after issuance of the construction permit to the winning bidder will result in a forfeiture of one hundred (100) percent of the value of the bidding credit; during year three, of seventy-five (75) percent of the value of the bidding credit; in year four, of fifty (50) percent; in year five, twenty-five (25) percent; and thereafter, no payment. If a licensee or permittee who utilized a new entrant bidding credit in obtaining a broadcast license or construction permit acquires within this five-year reimbursement period an additional broadcast facility or facilities, such that the licensee or permittee would not have been eligible for the new entrant credit, the licensee or permittee will not be required to reimburse the U.S. Government for the amount of the bidding credit.

### § 73.5008 Definitions applicable for designated entity provisions.

(a) *Scope.* The definitions in this section apply to 47 CFR 73.5007, unless otherwise specified in that section.

(b) A *medium of mass communications* means a daily newspaper; a cable television system; or a license or construction permit for a television station, a low power television or television translator station, an AM, FM or FM translator broadcast station, a direct broadcast satellite transponder, or a Multipoint Distribution Service station.

(c) The *owners* of a winning bidder shall include the winning bidder, in the case of a sole proprietor; partner, including limited or ''silent'' partners, in the case of a partnership; the beneficiaries, in the case of a trust; any member, in the case of a nonstock corporation or unincorporated association with members; any member of the governing board (including executive boards, boards of regents, commissions, or similar governmental bodies where each member has one vote), in the case of nonstock corporation or unincorporated association without members; and owners of voting shares, in the case of stock corporations.

### § 73.5009 Assignment or transfer of control.

(a) The reporting requirement contained in 47 CFR 1.2111(a) shall apply to an applicant seeking approval for a transfer of control or assignment of a broadcast construction permit or license within three years of receiving such permit or license by means of competitive bidding.

(b) The ownership disclosure requirements contained in 47 CFR 1.2112(a) shall apply to an applicant seeking consent to assign or transfer control of a broadcast construction permit or license awarded by competitive bidding.

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# PART 74—EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES

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