

**§ 74.536 Directional antenna required.**

(a) Aural broadcast STL and ICR stations are required to use a directional antenna with the minimum beamwidth necessary, consistent with good engineering practice, to establish the link.

(b) An aural broadcast STL or intercity relay station operating in the 17.7–19.7 GHz band shall employ an antenna that meets the performance standards for Category A, except that in areas not subject to frequency congestion, antennas meeting standards for Category B may be employed. However, the Commission may require the replacement, at the licensee’s expense, of any antenna or periscope antenna system of a permanent fixed station that

does not meet performance Standard A, which is specified in the table in paragraph (c) of this section, upon a showing that said antenna causes or is likely to cause interference to (or receive interference from) any other authorized or proposed station; provided that an antenna meeting performance Standard A is unlikely to involve such interference.

(c) Licensees shall comply with the antenna standards table shown in this paragraph in the following manner:

(1) With either the maximum beamwidth to 3 dB points requirement or with the minimum antenna gain requirement; and

(2) With the minimum radiation suppression to angle requirement.

ANTENNA STANDARDS

Frequency (GHz)	Category	Maximum beamwidth to 3 dB points <sup>1</sup> (included angle in degrees)	Minimum antenna gain (dbi)	Minimum radiation suppression to angle in degrees from centerline of main beam in decibels						
				5° to 10°	10° to 15°	15° to 20°	20° to 30°	30° to 100°	100° to 140°	140° to 180°
17.7 to 19.7 .....	A	2.2	38	25	29	33	36	42	55	55
	B	2.2	38	20	24	28	32	35	36	36

<sup>1</sup> If a licensee chooses to show compliance using maximum beamwidth to 3 dB points, the beamwidth limit shall apply in both the azimuth and the elevation planes.

[48 FR 50333, Nov. 1, 1983, as amended at 49 FR 7130, Feb. 27, 1984; 50 FR 48599, Nov. 26, 1985; 51 FR 19840, June 3, 1986; 62 FR 4922, Feb. 3, 1997; 68 FR 12767, Mar. 17, 2003]

**§ 74.537 Temporary authorizations.**

(a) Special temporary authority may be granted for aural broadcast STL or intercity relay station operation which cannot be conducted in accordance with §74.24. Such authority will normally be granted only for operations of a temporary nature. Where operation is seen as likely on a continuing annual basis, an application for a regular authorization should be submitted.

(b) A request for special temporary authority for the operation of an aural broadcast STL or an intercity relay station must be made in accordance with the procedures of §1.931(b) of this chapter.

(c) All requests for special temporary authority of an aural broadcast auxiliary stations must include full particulars including: licensee’s name and address, facility identification number of the associated broadcast station(s),

call letters of the aural broadcast STL or intercity relay station, if assigned, type and manufacturer of equipment, effective isotropic radiated power, emission, frequency or frequencies proposed for use, commencement and termination date and location of the proposed operation, and purpose for which request is made including any particular justification.

(d) A request for special temporary authorization shall specify a frequency or frequencies consistent with the provisions of §74.502. However, in the case of events of widespread interest and importance which cannot be transmitted successfully on these frequencies, frequencies assigned to other services may be requested upon a showing that operation thereon will not cause interference to established stations. In no case will operation of an aural broadcast STL or intercity relay

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station be authorized on frequencies employed for the safety of life or property.

(e) When the transmitting equipment utilized is not licensed to the user, the user shall nevertheless have full control over the use of the equipment during the period it is operated.

(f) Special temporary authorization to permit operation of aural broadcast STL or intercity relay stations or systems pending FCC action on an application for regular authority will normally not be granted.

[47 FR 9220, Mar. 4, 1982, as amended at 50 FR 23709, June 5, 1985; 58 FR 19775, Apr. 16, 1993; 68 FR 12767, Mar. 17, 2003]

**§ 74.550 Equipment authorization.**

Each authorization for aural broadcast STL, ICR, and booster stations shall require the use of equipment which has been certificated or verified. Equipment which has not been approved under the equipment authorization program and which was in service prior to July 1, 1993, may be retained solely for temporary uses necessary to restore or maintain regular service provided by approved equipment, because the main or primary unit has failed or requires servicing. Such temporary uses may not interfere with or impede the establishment of other aural broadcast auxiliary links and may not occur during more than 720 cumulative hours per year. Should interference occur, the licensee must take all steps necessary to eliminate it, up to and including cessation of operation of the auxiliary transmitter. All unapproved equipment retained for temporary use must have been in the possession of the licensee prior to July 1, 1993, and may not be obtained from other sources. Equipment designed exclusively for fixed operation shall be authorized under the verification procedure. The equipment authorization procedures are contained in subpart J of part 2 of the rules.

NOTE TO § 74.550: Consistent with the note to § 74.502(a), grandfathered equipment in the 942-944 MHz band and STL/ICR users of these frequencies in Puerto Rico are also required to come into compliance by July 1, 1993. The backup provisions described above apply to these stations also.

[63 FR 36604, July 7, 1998]

**§ 74.551 Equipment changes.**

(a) Modifications may be made to an existing authorization in accordance with §§ 1.929 and 1.947 of this chapter.

(b) Permissible changes in equipment operating in the bands 18.3-18.58, 18.76-18.82 GHz and 19.1-19.16 GHz. Notwithstanding other provisions of this section, licensees of stations that remain co-primary under the provisions of § 74.502(c) may not make modifications to their systems that increase interference to satellite earth stations, or result in a facility that would be more costly to relocate.

[28 FR 13716, Dec. 14, 1963, as amended at 38 FR 6827, Mar. 13, 1973; 47 FR 54448, Dec. 3, 1982; 49 FR 7130, Feb. 27, 1984; 50 FR 48599, Nov. 26, 1985; 58 FR 19775, Apr. 16, 1993; 61 FR 4368, Feb. 6, 1996; 65 FR 54172, Sept. 7, 2000; 68 FR 12768, Mar. 17, 2003; 68 FR 16967, Apr. 8, 2003; 68 FR 20225, Apr. 24, 2003; 69 FR 43772, July 22, 2004]

**§ 74.561 Frequency tolerance.**

In the bands above 944 MHz, the operating frequency of the transmitter shall be maintained in accordance with the following table:

Frequency band (MHz)	Tolerance as percentage of assigned frequency
944 to 952 .....	0.005
17,700 to 19,700 .....	0.003

[54 FR 30043, July 18, 1989, as amended at 68 FR 12768, Mar. 17, 2003]

**§ 74.562 Frequency monitors and measurements.**

The licensee shall ensure that the STL, ICR, TVP, or booster transmitter does not exceed the emission limitations of § 74.535. This may be accomplished by appropriate frequency measurement techniques and consideration of the transmitter emissions.

[50 FR 48599, Nov. 26, 1985]

**§ 74.564 Posting of station license.**

(a) The station license and any other instrument of authorization or individual order concerning the construction of the equipment or manner of operation of the station shall be posted in the room in which the transmitter is located, provided that if the station is