

**§ 74.434 Remote control operation.**

(a) A remote control system must provide adequate monitoring and control functions to permit proper operation of the station.

(b) A remote control system must be designed, installed, and protected so that the transmitter can only be activated or controlled by persons authorized by the licensee.

(c) A remote control system must prevent inadvertent transmitter operation caused by malfunctions in the circuits between the control point and transmitter.

[51 FR 4602, Feb. 6, 1986, as amended at 60 FR 55482, Nov. 1, 1995]

**§ 74.436 Special requirements for automatic relay stations.**

(a) An automatic relay station must be designed, installed, and protected so that the transmitter can only be activated or controlled by persons authorized by the licensee.

(b) An automatic relay station may accomplish retransmission of the incoming signals by either heterodyne frequency conversion or by modulating the transmitter with the demodulated incoming signals.

(c) An automatic relay station transmitter may relay the demodulated incoming signals from one or more receivers.

[51 FR 4602, Feb. 6, 1986, as amended at 60 FR 55483, Nov. 1, 1995]

**§ 74.451 Certification of equipment.**

(a) Applications for new remote pickup broadcast stations or systems or for changing transmitting equipment of an existing station will not be accepted unless the transmitters to be used have been certificated by the FCC pursuant to the provisions of this subpart, or have been certificated for licensing under part 90 of this chapter and do not exceed the output power limits specified in § 74.461(b).

(b) Any manufacturer of a transmitter to be used in this service may apply for certification for such transmitter following the certification procedure set forth in part 2 of the Commission's rules and regulations. Attention is also directed to part 1 of the Commission's rules and regulations

which specifies the fees required when filing an application for certification.

(c) An applicant for a remote pickup broadcast station or system may also apply for certification for an individual transmitter by following the certification procedure set forth in part 2 of the Commission's rules and regulations.

(d) All transmitters marketed for use under this subpart shall be certificated by the Federal Communications Commission. (Refer to subpart J of part 2 of the Commission's Rules and Regulations.)

(e) Remote pickup broadcast station equipment authorized to be used pursuant to an application accepted for filing prior to December 1, 1977, may continue to be used by the licensee or its successors or assignees: *Provided, however,* If operation of such equipment causes harmful interference due to its failure to comply with the technical standards set forth in this subpart, the Commission may, at its discretion, require the licensee to take such corrective action as is necessary to eliminate the interference.

(f) Each instrument of authority which permits operation of a remote pickup broadcast station or system using equipment which has not been certificated will specify the particular transmitting equipment which the licensee is authorized to use.

(Sec. 5, 48 Stat. 1068; 47 U.S.C. 155)

[41 FR 29686, July 19, 1976, as amended at 42 FR 14728, Mar. 16, 1977; 42 FR 43636, Aug. 30, 1977; 43 FR 14661, Apr. 7, 1978; 45 FR 28142, Apr. 28, 1980; 63 FR 36604, July 7, 1998; 68 FR 12765, Mar. 17, 2003]

**§ 74.452 Equipment changes.**

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

(b) All transmitters initially installed after November 30, 1977, must be certificated for use in this service or other service as specified in § 74.451(a).

[68 FR 12765, Mar. 17, 2003]

**§ 74.461 Transmitter power.**

(a) Transmitter power is the power at the transmitter output terminals and delivered to the antenna, antenna

transmission line, or any other impedance-matched, radio frequency load. For the purpose of this Subpart, the transmitter power is the carrier power.

(b) The authorized transmitter power for a remote pickup broadcast station shall be limited to that necessary for satisfactory service and, in any event, shall not be greater than 100 watts, except that a station to be operated aboard an aircraft shall normally be limited to a maximum authorized power of 15 watts. Specific authorization to operate stations on board aircraft with an output power exceeding 15 watts will be issued only upon an adequate engineering showing of need, and of the procedures that will be taken to avoid harmful interference to other licensees.

(Sec. 5, 48 Stat. 1068; 47 U.S.C. 155)

[41 FR 29686, July 19, 1976, as amended at 43 FR 14662, Apr. 7, 1978]

**§ 74.462 Authorized bandwidth and emissions.**

(a) Each authorization for a new remote pickup broadcast station or system shall require the use of certified equipment and such equipment shall be operated in accordance with emission specifications included in the grant of certification and as prescribed in paragraphs (b), (c), and (d) of this section.

(b) The maximum authorized bandwidth of emissions corresponding to the types of emissions specified below, and the maximum authorized frequency deviation in the case of frequency or phase modulated emission, shall be as follows:

Frequencies	Authorized bandwidth (kHz)	Maximum frequency deviation <sup>1</sup> (kHz)	Type of emission <sup>2</sup>
MHz:			
25.87 to 26.03 .....	40 .....	10	Frequencies 25.87 to 153.3575 MHz: A3E, F1E, F3E, F9E.
26.07 to 26.47 .....	20 .....	5	
152.8625 to 153.3575 <sup>3</sup> .....	30/60 .....	5/10	
160.860 to 161.400 .....	60 .....	10	
161.625 to 161.775 .....	30 .....	5	
166.25 and 170.15 <sup>4</sup> .....	12.5/25 .....	5	
450.00625 to 450.025 .....	Frequencies 160.860 to 455.950 MHz: A1A, A1B, A1D, A1E, A2A, A2B, A2D, A2E, A3E, F1A, F1B, F1D, F1E, F2A, F2B, F2D, F2E, F3E, F9E.		
450.98125 to 450.99375 .....			
455.00625 to 455.025 .....			
455.98125 to 455.99375 .....			
.....			
Up to 12.5 .....			
.....			
1.5 .....			
450.03125 to 450.61875 .....	Up to 25 .....	5	
455.03125 to 455.61875 .....			
450.6375 to 450.8625 .....			
455.6375 to 455.8625 .....			
450.900, 450.950 .....			
455.900, 455.950 .....	50–100 .....	35	

<sup>1</sup> Applies where F1A, F1B, F1D, F1E, F2A, F2B, F2D, F2E, F3E, or F9E emissions are used.  
<sup>2</sup> Stations operating above 450 MHz shall show a need for employing A1A, A1B, A1D, A1E, A2A, A2B, A2D, A2E, F1A, F1B, F1D, F1E, F2A, F2B, F2D, or F2E emission.  
<sup>3</sup> New or modified licenses for use of the frequencies will not be granted to utilize transmitters on board aircraft, or to use a bandwidth in excess of 30 kHz and maximum deviation exceeding 5 kHz.  
<sup>4</sup> For stations licensed or applied for before April 16, 2003, the sum of the bandwidth of emission and tolerance on frequencies 166.25 MHz or 170.15 MHz shall not exceed 25 kHz, and such operation may continue until January 1, 2005. For new stations licensed or applied for on or after April 16, 2003, the sum of the bandwidth of emission and tolerance on these frequencies shall not exceed 12.5 kHz. For all remote pickup broadcast stations, the sum of the bandwidth of emission and tolerance on these frequencies shall not exceed 12.5 kHz on or after January 1, 2005.

(c) For emissions on frequencies above 25 MHz with authorized bandwidths up to 30 kHz, the emissions shall comply with the emission mask

and transient frequency behavior requirements of §§ 90.210 and 90.214 of this chapter. For all other emissions, the