the Commission's rules and regulations concerning modification of certificated equipment.

(b) Any equipment changes made pursuant to paragraph (a) of this section shall be set forth in the next application for renewal of license.

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

[42 FR 14729, Mar. 16, 1977, as amended at 43 FR 13576, Mar. 31, 1978; 63 FR 36605, July 7, 1998]

§ 74.861 Technical requirements.

(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) Each authorization for a new low power auxiliary station shall require the use of certificated equipment. Such equipment shall be operated in accordance with the emission specifications included in the certification grant and as prescribed in paragraphs (c) through (e) of this section.

(c) Low power auxiliary transmitters not required to operate on specific carrier frequencies shall operate sufficiently within the authorized frequency band edges to insure the emission bandwidth falls entirely within the authorized band.

(d) For low power auxiliary stations operating in the bands other than those allocated for TV broadcasting, the following technical requirements are imposed.

(1) The maximum transmitter power which will be authorized is 1 watt. Licensees may accept the manufacturer's power rating; however, it is the licensee's responsibility to observe specified power limits.

(2) If a low power auxiliary station employs amplitude modulation, modulation shall not exceed 100 percent on positive or negative peaks.

(3) The occupied bandwidth shall not be greater than that necessary for satisfactory transmission and, in any event, an emission appearing on any discrete frequency outside the authorized band shall be attenuated, at least, $43+10\ \log_{10}$ (mean output power, in watts) dB below the mean output power of the transmitting unit.

(e) For low power auxiliary stations operating in the bands allocated for TV broadcasting, the following technical requirements apply:

(1) The power of the measured unmodulated carrier power at the output of the transmitter power amplifier (antenna input power) may not exceed the following:

(i) 54–72, 76–88, and 174–216 MHz bands—50 mW

(ii) 470–608 and 614–806 MHz bands—250 mW

(2) Transmitters may be either crystal controlled or frequency synthesized.

(3) Any form of modulation may be used. A maximum deviation of ±75 kHz is permitted when frequency modulation is employed.

(4) The frequency tolerance of the transmitter shall be 0.005 percent.

(5) The operating bandwidth shall not exceed 200 kHz.

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

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

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

(iii) On any frequency removed from the operating frequency by more than 250 percent of the authorized bandwidth: at least $43+10\log_{10}$ (mean output power in watts) dB.

(f) Unusual transmitting antennas or antenna elevations shall not be used to deliberately extend the range of low power auxiliary stations beyond the limited areas defined in § 74.831.

(g) Low power auxiliary stations shall be operated so that no harmful interference is caused to any other class of station operating in accordance with Commission's rules and regulations and with the Table of Frequency Allocations in part 2 thereof.

(h) In the event a station's emissions outside its authorized frequency band causes harmful interference, the Commission may, at its discretion, require

the licensee to take such further steps as may be necessary to eliminate the interference.

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

[43 FR 13576, Mar. 31, 1978, as amended at 52 FR 2535, Jan. 23, 1987; 63 FR 36605, July 7, 1998]

§ 74.870 Wireless video assist devices.

Television broadcast auxiliary licensees and motion picture and television producers, as defined in § 74.801 may operate wireless video assist devices on a non-interference basis on VHF and UHF television channels to assist with production activities.

(a) The use of wireless video assist devices must comply with all provisions of this subpart, except as indicated in paragraphs (b) through (i) of this section.

(b) Wireless video assist devices may only be used for scheduled productions. They may not be used to produce live events and may not be used for electronic news gathering purposes.

(c) Wireless video assist devices may operate with a bandwidth not to exceed 6 MHz on frequencies in the bands 180–210 MHz (TV channels 8–12) and 470–698 MHz (TV channels 14–51) subject to the following restrictions:

(1) The bandwidth may only occupy a single TV channel.

(2) Operation is prohibited within the 608–614 MHz (TV channel 37) band.

(3) Operation is prohibited within 129 km of a television broadcasting station, including Class A television stations, low power television stations and translator stations.

(4) For the area and frequency combinations listed in the table below, operation is prohibited within the distances indicated from the listed geographic coordinates.

NOTE TO THE FOLLOWING TABLE: All coordinates are referenced to the North American Datum of 1983.

Area	North latitude	West longitude	Excluded frequencies (MHz)	Excluded channels		
				200 km	128 km	52 km
Boston, MA	42°21′24.4″	71°03′23.2″	470–476	14	.....	.....
			476–482	.....	15	.....
			482–488	16	.....	.....
			488–494	.....	17	.....
Chicago, IL	41°52′28.1″	87°38′ 22.2″	470–476	14	.....	.....
			476–482	15	.....	.....
			482–488	.....	16	.....
Cleveland, OH[1]	41°29′51.2″	81°41′49.5″	470–476	14	.....	.....
			476–482	.....	15	.....
			482–488	16	.....	.....
			488–494	.....	17	.....
Dallas/Fort Worth, TX	32°47′09.5″	96°47′38.0″	476–482	.....	15	.....
			482–488	16	.....	.....
			488–494	.....	17	.....
Detroit, MI[1]	42°19′48.1″	83°02′56.7″	470–476	.....	14	.....
			476–482	15	.....	.....
			482–488	.....	16	.....
			488–494	17	.....	.....
Gulf of Mexico			476–494	.....	.....	15, 16, 17
Hawaii			488–494	.....	.....	17
Houston, TX	29°45′26.8″	95°21′37.8″	482–488	.....	16	.....
			488–494	17	.....	.....
			494–500	.....	18	.....
Los Angeles, CA	34°03′15.0″	118°14′31.3″	470–476	14	.....	.....
			476–482	.....	15	.....
			482–488	16	.....	.....
			488–494	.....	17	.....
			500–506	.....	19	.....
			506–512	20	.....	.....
			512–518	.....	21	.....
Miami, Fl	25°46′38.4″	80°11′31.2″	470–476	14	.....	
			476–482	.....	15	.....
New York/NE New Jersey	40°45′	73°59′37.5″	470–476	14	.....	.....
			476–482	15	.....	.....
			482–488	16	.....	.....
			488–494	.....	17	.....
			494–500	.....	18	.....
			500–506	19	.....	.....
			506–512	.....	20	.....