

§§ 95.737–95.739

47 CFR Ch. I (10–1–20 Edition)

§§ 95.737–95.739 [Reserved]

fails to comply with all of the applicable rules in this subpart.

§ 95.741 RCRS antenna height limit.

If the antenna of a RCRS station operating on a channel in the 26–28 MHz frequency band (whether receiving, transmitting) is installed at a fixed location, the highest point of the antenna must not be more than 6.10 meters (20 feet) higher than the highest point of the building or tree on which it is mounted; or 18.3 meters (60 feet) above the ground. RCRS station antennas must also meet the requirements in § 95.317 regarding menaces to air navigation. See 47 CFR 95.317 and consult part 17 of the FCC's Rules for more information (47 CFR part 17).

§ 95.763 RCRS channel frequencies.

The channels listed in this section are allotted for shared use in the RCRS. Each RCRS channel is designated by its center frequency in megahertz.

(a) *26–28 MHz frequency band.* The 26–28 MHz RCRS channel center frequencies are 26.995, 27.045, 27.095, 27.145, 27.195 and 27.255 MHz.

(b) *72 MHz frequency band.* The 72 MHz RCRS channel center frequencies are 72.01, 72.03, 72.05, 72.07, 72.09, 72.11, 72.13, 72.15, 72.17, 72.19, 72.21, 72.23, 72.25, 72.27, 72.29, 72.31, 72.33, 72.35, 72.37, 72.39, 72.41, 72.43, 72.45, 72.47, 72.49, 72.51, 72.53, 72.55, 72.57, 72.59, 72.61, 72.63, 72.65, 72.67, 72.69, 72.71, 72.73, 72.75, 72.77, 72.79, 72.81, 72.83, 72.85, 72.87, 72.89, 72.91, 72.93, 72.95, 72.97, and 72.99 MHz.

§ 95.743 [Reserved]

§ 95.745 Operation of an RCRS transmitter by remote control.

This section sets forth the conditions under which an RCRS station may be operated by remote control, pursuant to the exception in § 95.345.

(c) *75 MHz frequency band.* The 75 MHz RCRS channel center frequencies are 75.41, 75.43, 75.45, 75.47, 75.49, 75.51, 75.53, 75.55, 75.57, 75.59, 75.61, 75.63, 75.65, 75.67, 75.69, 75.71, 75.73, 75.75, 75.77, 75.79, 75.81, 75.83, 75.85, 75.87, 75.89, 75.91, 75.93, 75.95, 75.97, and 75.99 MHz.

(a) *Wireless remote control.* No person shall operate a RCRS station by wireless remote control.

(b) *Wired remote control.* Before operating an RCRS station by wired remote control, the operator must obtain specific approval from the FCC. To obtain FCC approval, the operator must explain why wired remote control is needed.

§ 95.765 RCRS frequency accuracy.

Each RCRS transmitter type must be designed to satisfy the frequency accuracy requirements in this section.

§§ 95.747–95.755 [Reserved]

§ 95.757 Duration of RCRS Communications.

Communications on RCRS channels shall be limited to the minimum practicable time that is necessary.

(a) Each RCRS transmitter type capable of transmitting on channels in the 72 or 75 MHz frequency band must be designed such that the carrier frequencies remain within ± 20 parts-per-million (ppm) of the channel center frequencies listed in § 95.763(b) and (c) during normal operating conditions.

§ 95.759 [Reserved]

§ 95.761 RCRS transmitter certification.

(a) Except as provided in § 95.735, each RCRS transmitter (a transmitter that operates or is intended to operate as a station in the RCRS) must be certified in accordance with this subpart and part 2 of this chapter.

(b) Except as allowed under paragraph (c) of this section, each RCRS transmitter type capable of transmitting in the 26–28 MHz frequency band must be designed such that the carrier frequencies remain within ± 50 ppm of the channel center frequencies listed in § 95.763(a) during normal operating conditions.

(b) A grant of equipment certification for the RCRS will not be issued for any RCRS transmitter type that

(c) Each RCRS transmitter type that transmits in the 26–28 MHz frequency band with a mean transmitter power of 2.5 W or less and is used solely by the operator to turn on and/or off a device at a remote location, other than a device used solely to attract attention,

must be designed such that the carrier frequencies remain within ± 100 ppm of the channel center frequencies listed in § 95.763(a) during normal operating conditions.

§ 95.767 RCRS transmitter power.

Each RCRS transmitter type must be designed such that the transmitter power does not exceed the limits in this section.

(a) *72 and 75 MHz frequency bands.* For an RCRS transmitter operating in the 72 and/or 75 MHz frequency bands, the mean transmitter output power must not exceed 0.75 Watts.

(b) *26–28 MHz frequency band.* For an RCRS transmitter operating on 27.255 MHz, the mean transmitter output power must not exceed 25 Watts. For an RCRS transmitter operating on 26.995, 27.045, 27.095, 27.145, or 27.195 MHz, the mean transmitter output power must not exceed 4 Watts.

§ 95.769 [Reserved]

§ 95.771 RCRS emission types.

Each RCRS transmitter type must be designed to satisfy the emission limitations in this section.

(a) *Permitted emission types.* RCRS transmitter types may transmit any type of non-voice emission that is technically appropriate for radio control use.

(b) *Voice emissions prohibited.* RCRS transmitter types must be incapable of transmitting telephony (voice communications).

§ 95.773 RCRS authorized bandwidth.

Each RCRS transmitter type must be designed such that the occupied bandwidth does not exceed 8 kHz for any emission type.

§§ 95.775–95.777 [Reserved]

§ 95.779 RCRS unwanted emissions.

Each RCRS transmitter type must be designed to satisfy the applicable unwanted emissions limits in this paragraph.

(a) *26–28 MHz frequency band.* For an RCRS transmitter operating in the 26–28 MHz frequency band, the power of unwanted emissions must be attenu-

ated below the transmitter output power in Watts (P) by at least:

(1) 25 dB (decibels) in the frequency band 4 kHz to 8 kHz removed from the channel center frequency;

(2) 35 dB in the frequency band 8 kHz to 20 kHz removed from the channel center frequency;

(3) $43 + 10 \log (P)$ dB in any frequency band removed from the channel center frequency by more than 20 kHz.

(b) *72 and 75 MHz frequency bands.* For an RCRS transmitter operating in the 72 and/or 75 MHz frequency bands, the power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) by at least:

(1) 25 dB (decibels) in the frequency band 4 kHz to 8 kHz removed from the channel center frequency;

(2) 45 dB in the frequency band 8 kHz to 10 kHz removed from the channel center frequency;

(3) 55 dB in the frequency band 10 kHz to 20 kHz removed from the channel center frequency; and

(4) $56 + 10 \log (P)$ dB in any frequency band removed from the channel center frequency by more than 20 kHz.

(c) *Measurement bandwidths.* The power of unwanted emissions in the frequency bands specified in paragraphs (a)(1) and (2) and (b)(1) through (3) of this section is measured with a reference bandwidth of 300 Hz. The power of unwanted emissions in the frequency ranges specified in paragraphs (a)(3) and (b)(4) of this section is measured with a reference bandwidth of at least 30 kHz.

§§ 95.781–95.785 [Reserved]

§ 95.787 RCRS additional requirements.

Each RCRS transmitter type must be designed to satisfy all of the following additional requirements:

(a) The antenna of an RCRS station transmitting in the 72 and/or 75 MHz frequency bands must meet the following requirements:

(1) The antenna must be an integral part of the transmitter;

(2) The gain of the antenna must not exceed that of a half-wave dipole; and

(3) The antenna must be designed such that the electric field of the emitted radio waves is vertically polarized