

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