

**Federal Communications Commission**

**§ 95.639**

by more than 250 percent of the authorized bandwidth: at least  $43 + 10 \log (P)$  dB.

[53 FR 36789, Sept. 22, 1988, as amended at 56 FR 15837, Apr. 18, 1991. Redesignated and amended at 61 FR 28769, 28770, June 6, 1996, and further redesignated and amended at 61 FR 46567, 46568, Sept. 4, 1996; 63 FR 36610, July 7, 1998; 64 FR 69931, Dec. 15, 1999; 65 FR 60878, Oct. 13, 2000; 67 FR 63289, Oct. 11, 2002]

EFFECTIVE DATE NOTE: At 69 FR 46446, Aug. 3, 2004, §95.635 was amended by adding a DSRCS-OBU designation to the Table in paragraph (b) and paragraph (f), effective October 4, 2004. For the convenience of the user, the added text is set forth as follows:

**§ 95.635 Unwanted radiation.**

*	*	*	*	*
(b) * * * *				
Transmitter	Emission type	Applicable paragraphs (b)		
DSRCS-OBU .....	As specified in paragraph (f) of this section.	*	*	*

(f) DSRCS-OBUs are governed under subpart L of this part.

**§ 95.637 Modulation standards.**

(a) A GMRS transmitter that transmits emission types F1D, G1D, or G3E must not exceed a peak frequency deviation of plus or minus 5 kHz. A GMRS transmitter that transmits emission type F3E must not exceed a peak frequency deviation of plus or minus 5 kHz. A FRS unit that transmits emission type F3E must not exceed a peak frequency deviation of plus or minus 2.5 kHz, and the audio frequency response must not exceed 3.125 kHz .

(b) Each GMRS transmitter, except a mobile station transmitter with a power output of 2.5 W or less, must automatically prevent a greater than normal audio level from causing overmodulation. The transmitter also must include audio frequency low pass filtering, unless it complies with the applicable paragraphs of §95.631 (without filtering.) The filter must be between the modulation limiter and the modulated stage of the transmitter. At any frequency (f in kHz) between 3 and 20

kHz, the filter must have an attenuation of at least  $60 \log_{10} (f/3)$  dB greater than the attenuation at 1 kHz. Above 20 kHz, it must have an attenuation of at least 50 dB greater than the attenuation at 1 kHz.

(c) When emission type A3E is transmitted, the modulation must be greater than 85% but must not exceed 100%. Simultaneous amplitude modulation and frequency or phase modulation of a transmitter are not permitted.

(d) When emission type A3E is transmitted by a CB transmitter having a TP of greater than 2.5 W, the CB transmitter must automatically prevent the modulation from exceeding 100%.

(e) Each CB transmitter that transmits emission type H3E, J3E or R3E must be capable of transmitting the upper sideband. The capability of also transmitting the lower sideband is permitted.

[53 FR 36789, Sept. 22, 1988. Redesignated and amended at 61 FR 28769, 28770, June 6, 1996, and further redesignated at 61 FR 46567, Sept. 4, 1996]

EFFECTIVE DATE NOTE: At 69 FR 46446, Aug. 3, 2004, §95.637 was amended by adding paragraph (f), effective October 4, 2004. For the convenience of the user, the added text is set forth as follows:

**§ 95.637 Modulation standards.**

(f) DSRCS-OBUs are governed under subpart L of this part.

**§ 95.639 Maximum transmitter power.**

(a) No GMRS transmitter, under any condition of modulation, shall exceed:

(1) 50 W *Carrier power* (average TP during one unmodulated RF cycle) when transmitting emission type A1D, F1D, G1D, A3E, F3E or G3E.

(2) 50 W peak envelope TP when transmitting emission type H1D, J1D, R1D, H3E, J3E or R3E.

(b) No R/C transmitter, under any condition of modulation, shall exceed a carrier power or peak envelope TP (single-sideband only) of:

(1) 4 W in the 26–27 MHz frequency band, except on channel frequency 27.255 MHz;

(2) 25 W on channel frequency 27.255 MHz;