

§ 95.979

§ 95.979 CBRS unwanted emissions limits.

Each CBRS transmitter type must be designed to comply with the applicable unwanted emissions limits in this section.

(a) *Attenuation requirements.* The power of unwanted emissions must be attenuated below the transmitter output power in Watts (P) as specified in the applicable paragraphs listed in the following table:

Emission type	Paragraph
A3E	(1), (3), (5), (6)
H3E, J3E, R3E	(2), (4), (5), (6)

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

(2) 25 dB in the frequency band 2 kHz to 6 kHz removed from the channel center frequency;

(3) 35 dB in the frequency band 8 kHz to 20 kHz removed from the channel center frequency;

(4) 35 dB in the frequency band 6 kHz to 10 kHz removed from the channel center frequency;

(5) 53 + 10 log (P) dB in any frequency band removed from the channel center frequency by more than 250% of the authorized bandwidth.

(6) 60 dB in any frequency band centered on a harmonic (*i.e.*, an integer multiple of two or more times) of the carrier frequency.

(b) *Measurement bandwidths.* The power of unwanted emissions in the frequency bands specified in paragraphs (a)(1) through (4) 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)(5) and (6) of this section is measured with a reference bandwidth of at least 30 kHz.

(c) *Measurement conditions and procedures.* Subject to additional measurement standards and procedures established pursuant to part 2, subpart J, the following conditions and procedures must be used.

(1) The unwanted emissions limits requirements in this section must be met both with and without the connection of permitted attachments, such as external speakers, microphones, power cords and/or antennas.

(2) Either mean power output or peak envelope power output may be used for measurements, as appropriate for the emission type under test, provided that the same type of power measurement is used for both the transmitter output power and the power of the unwanted emissions.

§§ 95.981–95.985 [Reserved]

§ 95.987 CBRS additional requirements.

Each CBRS transmitter type must be designed to satisfy all of the additional requirements in this section.

(a) *Transmit frequency capability.* Each CBRS transmitter type must be designed to transmit only on one or more of the channels listed in § 95.963. No CBRS transmitter type will be certified for use in the CBRS service if it is capable of transmitting on any frequency or channel other than those listed in § 95.963, unless such transmitter type is also certified for use in another radio service for which the frequency capability is authorized and for which FCC certification is also required.

(b) *Frequency determining circuitry.* All frequency determining circuitry (including crystals) and programming controls in each CBRS transmitter type must be internal to the transmitter and must not be accessible from the operating panel or from the exterior of the transmitter enclosure.

(c) *Final amplifier component ratings.* The dissipation rating of all the semiconductors or electron tubes which supply RF power to the antenna terminals of each CB transmitter must not exceed 10 Watts. For semiconductors, the dissipation rating is the greater of the collector or device dissipation value established by the manufacturer of the semiconductor. These values may be temperature de-rated by no more than 50 °C. For an electron tube, the dissipation rating is the Intermittent Commercial and Amateur Service plate dissipation value established by the manufacturer of the electron tube.

(d) *External controls.* Only the external transmitter controls, connections or devices listed in this paragraph are allowed to be incorporated in a CBRS transmitter type. The FCC, however,

may authorize additional controls, connections or devices after considering the functions to be performed by such additions.

(1) Primary power connection. External power supplies may be used.

(2) Microphone connection.

(3) Antenna connection.

(4) Headphone and speaker output connections and related selector switch.

(5) On-off switch for primary power to the transmitter. This switch may be combined with receiver controls such as the receiver on-off switch and volume control.

(6) Upper/lower sideband selector switch (for a transmitter that is capable of transmitting SSB emissions).

(7) Carrier level selector control (for a transmitter that is capable of transmitting SSB emissions). This control may be combined with the sideband selector switch.

(8) Channel selector switch.

(9) Transmit/receive selector switch.

(10) Meter(s) and selector switch(es) for monitoring transmitter performance.

(11) Pilot lamp(s), meter(s), light emitting diodes, liquid crystal devices or other types of visual display devices to indicate the presence of RF output power or that the transmitter control circuits are activated to transmit.

§ 95.989 [Reserved]

§ 95.991 CBRS marketing limitations.

Marketing of devices that could be used with CBRS stations resulting in violation of the rules in this part is prohibited.

(a) *External radio frequency power amplifiers.* No person shall manufacture, import, sell or offer for sale any external radio frequency power amplifier capable of operation below 144 MHz and intended for use in the CBRS. See § 2.815 of this chapter.

(b) *External frequency determining devices.* No person shall manufacture, import, sell or offer for sale, any add-on device, whether internal or external, the function of which is to extend the transmitting frequency capability of a CBRS transmitter beyond that allowed by §§ 95.963 and 95.965.

§§ 95.993–95.1699 [Reserved]

Subpart E—General Mobile Radio Service

§ 95.1701 Scope.

This subpart contains rules that apply only to the General Mobile Radio Service (GMRS).

§ 95.1703 Definitions, GMRS.

General Mobile Radio Service (GMRS). A mobile two-way voice communication service, with limited data applications, for facilitating activities of individual licensees and their family members, including, but not limited to, voluntary provision of assistance to the public during emergencies and natural disasters.

Grandfathered GMRS license. A GMRS license held by a non-individual person (*i.e.*, a partnership, corporation, association or governmental unit) as a result of renewals of a GMRS license issued prior to July 31, 1987.

§ 95.1705 Individual licenses required; eligibility; who may operate; cooperative use.

A valid individual license is required to operate a GMRS station. To obtain an individual license, an applicant must be eligible and follow the applicable rules and procedures set forth in this subpart and in part 1 of this chapter, and must pay the required application and regulatory fees as set forth in part 1, subpart G of this chapter.

(a) *Eligibility.* This paragraph contains eligibility requirements for individual licenses in the GMRS.

(1) Only an individual who is at least 18 years old and who meets the requirements of § 95.305 is eligible to obtain a new individual GMRS license.

(2) Any person that holds a valid individual license is eligible to obtain a renewed license, or a modified license to reflect a change of name or address.

(b) *Individual licensee responsibility.* The holder of an individual license to operate GMRS stations is responsible at all times for the proper operation of the stations in compliance with all applicable rules in this part.