

§ 95.1773

H3E, J3E, R3E, F2D, and G2D are authorized for use in the GMRS. Equipment for which certification is sought under this subpart may have capabilities to transmit other emission types intended for use in other services, provided that these emission types can be deactivated when the equipment is used in the GMRS.

§ 95.1773 GMRS authorized bandwidths.

Each GMRS transmitter type must be designed such that the occupied bandwidth does not exceed the authorized bandwidth for the channels used. Operation of GMRS stations must also be in compliance with these requirements.

(a) *Main channels.* The authorized bandwidth is 20 kHz for GMRS transmitters operating on any of the 462 MHz main channels (see § 95.1763(a)) or any of the 467 MHz main channels (see § 95.1763(c)).

(b) *Interstitial channels.* The authorized bandwidth is 20 kHz for GMRS transmitters operating on any of the 462 MHz interstitial channels (see § 95.1763(b)) and is 12.5 kHz for GMRS transmitters operating on any of the 467 MHz interstitial channels (see § 95.1763(d)).

(c) *Digital data transmissions.* Digital data transmissions are limited to the 462 MHz main channels and interstitial channels in the 462 MHz and 467 MHz bands.

§ 95.1775 GMRS modulation requirements.

Each GMRS transmitter type must be designed to satisfy the modulation requirements in this section. Operation of GMRS stations must also be in compliance with these requirements.

(a) *Main channels.* The peak frequency deviation for emissions to be transmitted on the main channels must not exceed ± 5 kHz.

(b) *462 MHz interstitial channels.* The peak frequency deviation for emissions to be transmitted on the 462 MHz interstitial channels must not exceed ± 5 kHz.

(c) *467 MHz interstitial channels.* The peak frequency deviation for emissions to be transmitted on the 467 MHz interstitial channels must not exceed ± 2.5

kHz, and the highest audio frequency contributing substantially to modulation must not exceed 3.125 kHz.

(d) *Overmodulation.* Each GMRS transmitter type, except for a mobile station transmitter type with a transmitter power output of 2.5 W or less, must automatically prevent a higher than normal audio level from causing overmodulation.

(e) *Audio filter.* Each GMRS transmitter type must include audio frequency low pass filtering, unless it complies with the applicable paragraphs of § 95.1779 (without filtering).

(1) The filter must be between the modulation limiter and the modulated stage of the transmitter.

(2) At any frequency (f in kHz) between 3 and 20 kHz, the filter must have an attenuation of at least 60 log ($f/3$) dB more than the attenuation at 1 kHz. Above 20 kHz, it must have an attenuation of at least 50 dB more than the attenuation at 1 kHz.

§ 95.1777 GMRS tone transmissions.

In addition to audible and subaudible tones used for receiver squelch activation and selective calling, to establish or maintain communications with specific stations or to access repeater stations (see § 95.377), GMRS transmitters may also transmit audio tones for station identification (see § 95.1751).

§ 95.1779 GMRS unwanted emissions limits.

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

(a) *Emission masks.* Emission masks applicable to transmitting equipment in the GMRS are defined by the requirements in the following table. The numbers in the attenuation requirements column refer to rule paragraph numbers under paragraph (b) of this section.

Emission types filter	Attenuation requirements
A1D, A3E, F1D, G1D, F2D, F3E, G3E with audio filter	(1), (2), (7)
A1D, A3E, F1D, G1D, F3E, G3E without audio filter	(3), (4), (7)
H1D, J1D, R1D, H3E, J3E, R2E	(5), (6), (7)