

§ 80.217

dB relative to one watt may be authorized.

(l) For operational fixed stations using frequencies in the 72–76 MHz band and for other classes of stations operating above 162.025 MHz, the transmitter power must be specified in the station authorization. Frequencies in the 72–76 MHz band are listed in § 80.381. The operational requirements for 72–76 MHz are contained in subpart L of this part.

(m) For radiodetermination transmitters using A1D, A2D, F1D, F2D, G1D and G2D emissions on 154.585 MHz, 159.480 MHz, 160.725 MHz, 160.785 MHz, 454.000 MHz and 459.000 MHz the mean output power of the unmodulated carrier must not exceed 25 watts.

(n) For radiodetermination stations operating above 2400 MHz the output power must be as follows:

(1) For radar stations that use F3N emission the mean output power must not exceed 200 milliwatts;

(2) For search and rescue stations the output power must be at least 400 milliwatts peak e.i.r.p.

(3) For all other transponder stations the output power must not exceed 20 watts peak e.i.r.p. Licensees of non-selectable transponder coast stations operating in the 2920–3100 MHz and 9320–9500 MHz bands must notify in writing the USCG District Commander of any incremental increase of their station's output power above 5 watts peak e.i.r.p.

[51 FR 31213, Sept. 2, 1986, as amended at 52 FR 7419, Mar. 11, 1987; 52 FR 35244, Sept. 18, 1987; 54 FR 40058, Sept. 29, 1989; 54 FR 49994, Dec. 4, 1989; 56 FR 3783, Jan. 31, 1991; 59 FR 35269, July 11, 1994; 63 FR 36606, July 7, 1998; 65 FR 77824, Dec. 13, 2000; 67 FR 48564, July 25, 2002; 68 FR 46965, Aug. 7, 2003; 69 FR 64673, Nov. 8, 2004]

§ 80.217 Suppression of interference aboard ships.

(a) A voluntarily equipped ship station receiver must not cause harmful interference to any receiver required by statute or treaty.

(b) The electromagnetic field from receivers required by statute or treaty must not exceed the following value at a distance over sea water of one nautical mile from the receiver:

47 CFR Ch. I (10–1–14 Edition)

Frequency of interfering emissions	Field intensity in microvolts per meter
Below 30 MHz	0.1
30 to 100 MHz3
100 to 300 MHz	1.0
Over 300 MHz	3.0

or

Deliver not more than the following amounts of power, to an artificial antenna having electrical characteristics equivalent to those of the average receiving antenna(s) use on shipboard:

Frequency of interfering emissions	Power to artificial antenna in microwatts
Below 30 MHz	400
30 to 100 MHz	4,000
100 to 300 MHz	40,000
Over 300 MHz	400,000

§ 80.219 Special requirements for narrow-band direct-printing (NB-DP) equipment.

NB-DP and data transmission equipment installed in ship and coast stations before October 1, 1990, that operates on the frequencies in the 4,000–27,500 kHz bands must be capable of operation in accordance with the technical requirements of either ITU-R M.476-5 or ITU-R M.625-3 (both incorporated by reference, see § 80.7), and may be used indefinitely. Equipment installed on or after October 1, 1990, must be capable of operation in accordance with the technical requirements of ITU-R M.625-3, 1995 (incorporated by reference, see § 80.7). NB-DP and data transmission equipment are additionally permitted to utilize any modulation, so long as emissions are within the limits set forth in § 80.211(f) and the equipment is also capable of operation in accordance with ITU-R M.625-3 (incorporated by reference, see § 80.7).

[76 FR 67611, Nov. 2, 2011]

§ 80.221 Special requirements for automatically generating the radiotelephone alarm signal.

(a) Each device for automatically generating the radiotelephone alarm signal must be capable of being disabled to permit the immediate transmission of a distress call and message.

Federal Communications Commission

§ 80.225

(b) The device must comply with the following requirements:

(1) The frequency tolerance of each tone must be ± 1.5 percent;

(2) The duration tolerance of each tone must be ± 50 milliseconds;

(3) The interval between successive tones must not exceed 50 milliseconds; and

(4) The amplitude ratio of the tones must be flat within 1.6 dB.

(c) Devices installed on or after January 1, 1983, must comply with the following requirements:

(1) The frequency tolerance of each tone must be ± 1.5 percent;

(2) The duration tolerance of each tone must be ± 10 milliseconds;

(3) The interval between successive tones must not exceed 4 milliseconds;

(4) The amplitude ratio of the tones must be flat within 1.6 dB;

(5) The output of the device must be sufficient to modulate the associated transmitter for H2B emission to at least 70 percent, and for J2B emission to within 3 dB of the rated peak envelope power;

(6) Light from the device must not interfere with the safe navigation of the ship;

(7) After activation the device must automatically generate the radiotelephone alarm signal for not less than 30 seconds and not more than 60 seconds unless manually interrupted;

(8) After generating the radiotelephone alarm signal or after manual interruption the device must be immediately ready to repeat the signal;

(9) The transmitter must be automatically switched from the stand-by condition to the transmit condition at the start and return to the stand-by condition at the conclusion of the radiotelephone alarm signal.

(d) Any device used by a station to automatically generate the radiotelephone alarm signal must be certified by the Commission.

[51 FR 31213, Sept. 2, 1986, as amended at 54 FR 40059, Sept. 29, 1989; 63 FR 36606, July 7, 1998]

§ 80.223 Special requirements for survival craft stations.

(a) Survival craft stations capable of transmitting on:

(1) 2182 kHz must be able to operate with A3E or H3E and J2B and J3E emissions;

(2) 121.500 MHz must be able to operate with A3E or A3N emission.

(b) Survival craft stations must be able to receive the frequency and types of emission which the transmitter is capable of using.

(c) Any EPIRB carried as part of a survival craft must comply with the specific technical and performance requirements for its class contained in subpart V of this chapter.

[68 FR 46966, Aug. 7, 2003, as amended at 73 FR 4482, Jan. 25, 2008]

§ 80.225 Requirements for selective calling equipment.

This section specifies the requirements for voluntary digital selective calling (DSC) equipment and selective calling equipment installed in ship and coast stations, and incorporates by reference ITU-R M.476-5; ITU-R M.493-13; ITU-R M.541-9; ITU-R M.625-3; RTCM Paper 56-95/SC101-STD; and IEC 62238 (all incorporated by reference, *see* § 80.7).

(a) The requirements for DSC equipment voluntarily installed in ship and ships stations are as follows:

(1) Prior to March 25, 2009, DSC equipment must meet the requirements of the following standards in order to be approved for use:

(i) RTCM Paper 56-95/SC101-STD and ITU-R M.493-13 (both incorporated by reference, *see* § 80.7) (including only equipment classes A, B, D, and E); or

(ii) ITU-R M.493-13 and, in the case of Class D DSC equipment only, IEC 62238 (both incorporated by reference, *see* § 80.7).

(2) Beginning March 25, 2009, the Commission will not accept new applications (but will continue to process then-pending applications) for certification of non-portable DSC equipment that does not meet the requirements of ITU-R M.493-13 and, in the case of Class D DSC equipment only, IEC 62238 (both incorporated by reference, *see* § 80.7).

(3) Beginning March 25, 2012, the Commission will not accept new applications (but will continue to process then-pending applications) for certification of handheld, portable DSC