

**§ 80.217**

<sup>13</sup>The frequencies 156.775 and 156.825 MHz are available for navigation-related port operations or ship movement only, and all precautions must be taken to avoid harmful interference to channel 16. Transmitter output power is limited to 1 watt for ship stations, and 10 watts for coast stations.

(g) \* \* \*

(1) All transmitters and remote control units must be capable of reducing the carrier power to one watt or less;

(2) Except as indicated in paragraph (g)(3) of this section, all transmitters manufactured after January 21, 1987, or in use after January 21, 1997, must automatically reduce the carrier power to one watt or less when the transmitter is tuned to 156.375 MHz or 156.650 MHz, and must be provided with a manual override switch which when held by an operator will permit full carrier power operation on 156.375 MHz and 156.650 MHz;

(3) Hand-held portable transmitters are not required to comply with the automatic reduction of carrier power in paragraph (g)(2) of this section; and

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**§ 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:

Frequency of interfering emissions	Field intensity in microvolts per meter
Below 30 MHz .....	0.1
30 to 100 MHz .....	.3
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

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**§ 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 CCIR Recommendation 476 or CCIR Recommendation 625 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 CCIR Recommendation 625. 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 CCIR recommendation 625.

[62 FR 40306, July 28, 1997]

EFFECTIVE DATE NOTE: At 68 FR 46966, Aug. 7, 2003, § 80.219 was revised effective October 6, 2003. For the convenience of the user the revised text is set forth as follows:

**§ 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 Recommendation M.476-5, "Direct-Printing Telegraph Equipment in the Maritime Mobile Service," with Annex, 1995, or ITU-R Recommendation M.625-3, "Direct-Printing Telegraph Equipment Employing Automatic Identification in the Maritime Mobile Service," with Annex, 1995, 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 Recommendation M.625-3, "Direct-Printing Telegraph Equipment Employing Automatic Identification in the Maritime Mobile Service," with Annex, 1995. 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 Recommendation M.625-3, "Direct-Printing Telegraph Equipment Employing Automatic Identification in the Maritime Mobile Service," with Annex, 1995. ITU-R Recommendations M. 476-5 and M.625-3

with Annexes are incorporated by reference. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of these standards can be inspected at the Federal Communications Commission, 445 12th Street, SW., Washington, DC (Reference Information Center) or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. The ITU-R Recommendations can be purchased from the International Telecommunication Union (ITU), Place des Nations, CH-1211 Geneva 20, Switzerland.

**§ 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.

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

- (1) The frequency tolerance of each tone must be  $\pm 1.5$  percent;
- (2) The duration tolerance of each tone must be  $\pm 50$  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  $\pm 1.5$  percent;
- (2) The duration tolerance of each tone must be  $\pm 10$  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) 500 kHz must be able to operate with class A2A and A2B or H2A and H2B emissions;
- (2) 2182 kHz must be able to operate with A2B and A3E or H2B and H3E and J2B and J3E emissions;
- (3) 8364 kHz must be able to operate with class A2A or H2A emission; and
- (4) 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. Where the transmitter frequency is 8364 kHz the receiver must be able to receive A1A, A2A and H2A emissions throughout the 8320-8745 kHz band.

(c) Survival craft transmitters operating on 500 kHz or on 8364 kHz must be able to be manually keyed. If provisions are made for automatically transmitting the radiotelegraph alarm signal or the radiotelegraph distress signal, such provisions must meet the requirements in subpart F of this part.

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

[51 FR 31213, Sept. 2, 1986, as amended at 53 FR 8905, Mar. 18, 1988; 53 FR 37308, Sept. 26, 1988; 56 FR 11516, Mar. 19, 1991]

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