

**§ 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 National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). The ITU-R Recommendations can be purchased from the International Telecommunication Union (ITU), Place des Nations, CH-1211 Geneva 20, Switzerland.

[68 FR 46966, Aug. 7, 2003]

**§ 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.

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(d) Any device used by a station to automatically generate the radio-telephone alarm signal must be certificated 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 Recommendation M.476-5, "Direct-Printing Telegraph Equipment in the Maritime Mobile Service," with Annex, 1995; ITU-R Recommendation M.493-11, "Digital Selective-calling System for Use in the Maritime Mobile Service," with Annexes 1 and 2, 2004; ITU-R Recommendation M.541-9, "Operational Procedures for the Use of Digital Selective-Calling Equipment in the Maritime Mobile Service," with Annexes 1 through 5, 2004; ITU-R Recommendation M.625-3, "Direct-Printing Telegraph Equipment Employing Automatic Identification in the Maritime Mobile Service," with Annex, 1995; RTCM Paper 56-95/SC101-STD, "RTCM Recommended Minimum Standards for Digital Selective Calling (DSC) Equipment Providing Minimum Distress and Safety Capability," Version 1.0, August 10, 1995; and IEC 62238, First edition, "Maritime naviga-

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tion and radiocommunication equipment and systems—VHF radio-telephone equipment incorporating Class 'D' Digital Selective Calling (DSC)—Methods of testing and required test results," March 2003. ITU-R Recommendations M.476-5 with Annex, M.493-11 with Annexes 1 and 2, M.541-9 with Annexes 1 through 5, and M.625-3 with Annex, RTCM Paper 56-95/SC101-STD Version 1.0, and IEC 62238, First edition, 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 National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). The ITU-R Recommendations can be purchased from the International Telecommunication Union (ITU), Place des Nations, CH-1211 Geneva 20, Switzerland. The RTCM standards can be purchased from the Radio Technical Commission for Maritime Services (RTCM), 1800 N. Kent Street, Suite 1060, Arlington, Virginia 22209, <http://www.rtcn.org>, e-mail [pubs@rtcn.org](mailto:pubs@rtcn.org).

(a) The requirements for DSC equipment voluntarily installed in coast or 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, RTCM Recommended Minimum Standards for Digital Selective Calling (DSC) Equipment Providing Minimum Distress and Safety Capability," Version 1.0, August 10, 1995, and ITU-R Recommendation M.493-10, "Digital Selective-calling System for Use in the Maritime Mobile Service," with Annexes 1 and 2, 2000 (including only equipment classes A, B, D, and E); or

(ii) ITU-R Recommendation M.493-11, "Digital Selective-calling System for Use in the Maritime Mobile Service," with Annexes 1 and 2, 2004, and, in the