

(c) The antenna system must be as nondirectional and efficient as is practicable for the transmission and reception of radio ground waves over seawater. The installation and construction of the required antenna must ensure, insofar as is practicable, proper operation in time of emergency. If the required antenna is suspended between masts or other supports subject to whipping, a safety link must be installed which under heavy stress will reduce breakage of the antenna, the halyards, or any other supporting elements.

(d) The radiotelephone installation must be provided with a device for permitting changeover from transmission to reception and vice versa without manual switching.

(e) An artificial antenna must be provided to permit weekly checks, without causing interference, of the automatic device for generating the radiotelephone alarm signal on frequencies other than the radiotelephone distress frequency.

(f) The radiotelephone installation must be located in the radiotelegraph operating room or in the room from which the ship is normally steered.

(g) Demonstration of the radiotelephone installation may be required by Commission representatives to show compliance with applicable regulations.

(h) The radiotelephone installation must be protected from excessive currents and voltages.

(i) The radiotelephone installation must be maintained in an efficient condition.

[51 FR 31213, Sept. 2, 1986. Redesignated and amended at 68 FR 46973, Aug. 7, 2003; 73 FR 4483, Jan. 25, 2008]

**§ 80.271 Technical requirements for portable survival craft radiotelephone transceivers.**

(a) Portable survival craft radiotelephone transceivers must comply with the following:

(1) The transceivers must receive and transmit either on 457.525 MHz or on 156.800 MHz;

(2) The receiver must comply with the requirements in part 15, subpart B of this chapter and must have a sensitivity of not more than 2 microvolts;

(3) The effective radiated power of the transmitter must be at least 0.1 watt;

(4) The transceivers must be battery powered and operate for at least four hours with a transmit to receive ratio of 1:9 with no significant adverse effect upon the performance of the device;

(5) The transceivers must have a permanently attached waterproof label with the statement "Complies with the FCC requirements for survival craft two-way radiotelephone equipment"; and

(6) The antenna must be permanently attached to the device or its removal must require the use of a special tool.

(b) Portable radiotelephone transceivers that are already certificated may be used to satisfy the survival craft radiotelephone requirement until October 1, 1993, provided the device meets the technical requirements in paragraphs (a) (1) through (3) of this section.

(c) Survival craft radiotelephone equipment installed after October 1, 1988, must be certificated to meet the requirements of this section.

(d) After October 1, 1993, all portable radiotelephone transceivers that are used to satisfy the survival craft radiotelephone requirement must have been certificated to meet the requirements of this section.

(e) Portable radiotelephone transceivers which are certified to meet the requirements of this section must be identified by an appropriate note in the Commission's database.

[51 FR 31213, Sept. 2, 1986, as amended at 63 FR 36607, July 7, 1998; 73 FR 4483, Jan. 25, 2008; 76 FR 67612, Nov. 2, 2011]

**§ 80.273 Radar standards.**

(a) Radar installations on board ships that are required by the Safety Convention or the U.S. Coast Guard to be equipped with radar must comply with the following standards (all incorporated by reference, *see* § 80.7):

- (1) IEC 60945;
- (2) IEC 62388;
- (3) IMO Resolution A.694(17), as revised by IMO Resolution MSC.149(77);
- (4) IMO Resolution MSC.191(79);
- (5) IMO Resolution MSC.192(79); and
- (6) ITU-R M.1177-3.

## § 80.275

(b) For any ship of 10,000 tons gross tonnage and upwards or that is otherwise required to be equipped with two radar systems, each of the two radar systems must be capable of operating independently and must comply with the specifications, standards and general requirements set forth on paragraph (a) of this section. One of the systems must provide a display with an effective diameter of not less than 320 millimeters (12.6 inches), (16-inch cathode ray tube). The other system must provide a display with an effective diameter of not less than 250 millimeters (9.8 inches), (12-inch cathode ray tube).

(c) Radar installed before March 25, 2008 must meet and be maintained to comply with the Commission's regulations in effect for the equipment on the date of its installation.

[73 FR 4483, Jan. 25, 2008, as amended at 76 FR 67612, Nov. 2, 2011; 81 FR 90747, Dec. 15, 2016]

## § 80.275 Technical Requirements for Class A Automatic Identification System (AIS) equipment.

(a) Prior to submitting a certification application for a Class A AIS device, the following information must be submitted in duplicate to the Commandant (G-PSE), U.S. Coast Guard, 2100 2nd Street, SW., Washington, DC 20593-0001:

(1) The name of the manufacturer or grantee and the model number of the AIS device;

(2) Copies of the test report and test data obtained from the test facility showing that the device complies with the environmental and operational requirements identified in § 80.1101.

(b) After reviewing the information described in paragraph (a) of this section, the U.S. Coast Guard will issue a letter stating whether the AIS device satisfies all of the requirements specified in § 80.1101.

(c) A certification application for an AIS device submitted to the Commission must contain a copy of the U.S. Coast Guard letter stating that the device satisfies all of the requirements specified in § 80.1101, a copy of the technical test data, and the instruction manual(s).

[69 FR 64673, Nov. 8, 2004, as amended at 74 FR 5125, Jan. 29, 2009]

## 47 CFR Ch. I (10-1-20 Edition)

## § 80.277 Ship Security Alert System (SSAS).

(a) Vessels equipped with a Ship Security Alert System pursuant to the Safety Convention or 33 CFR 101.310 may utilize:

(1) Equipment that complies with RTCM 11020 (incorporated by reference, § 80.7); or

(2) INMARSAT D + equipment; or

(3) Equipment that complies with the technical specifications found in this subpart.

(b) [Reserved]

[73 FR 4484, Jan. 25, 2008, as amended at 76 FR 67612, Nov. 2, 2011; 81 FR 90747, Dec. 15, 2016]

## § 80.288 Direction finding and homing equipment.

Each compulsory ship of 1,600 gross tons or over whose keel was laid:

(a) *Prior to May 25, 1980*, must be equipped with radio direction finding apparatus in operating condition and approved by the Commission during an inspection.

(b) *On or after May 25, 1980*, must be equipped with radio direction finding apparatus having a homing capability in accordance with § 80.824.

[51 FR 31213, Sept. 2, 1986, as amended at 63 FR 29960, June 1, 1998. Redesignated at 68 FR 46973, Aug. 7, 2003]

## § 80.289 Requirements for radio direction finder.

(a) The radio direction finding apparatus must:

(1) Be capable of receiving signals A1A, A2B and R2B emission, on each frequency within the band 285-515 kHz assigned by the Radio Regulations for distress and direction finding and for maritime radio beacons, and be calibrated to take bearings on such signals from which the true bearing and direction may be determined; and

(2) Possess a sensitivity, sufficient to permit the taking of bearings on a signal having a field strength of 50 microvolts per meter.

(b) The calibration of the direction finder must be verified by check bearings or by a further calibration whenever any changes are made in the physical or electrical characteristics or the position of any antennas, and whenever any changes are made in the position