be stowed so that it is easily utilized (this transponder may be one of those required by §80.1095(b) for a survival craft):

- (4) A receiver capable of receiving international NAVTEX service broadcasts;
- (5) If the ship is engaged on voyages in any area of INMARSAT coverage in which an international NAVTEX service is not provided, a radio facility for reception of maritime safety information by the INMARSAT enhanced group calling system, i.e., SafetyNet, (this requirement does not apply to ships engaged exclusively on voyages in areas where an HF direct-printing telegraphy maritime safety information service, as identified by the IMO GMDSS Master Plan Publication, is provided and the ship is fitted with equipment capable of receiving such service); and
- (6) A satellite emergency position-indicating radio beacon (satellite EPIRB) which must be:
- (i) Capable of transmitting a distress alert through the polar orbiting satellite service operating in the 406.0–406.1 MHz band (406.0–406.1 MHz EPIRB); and
- (ii) Installed in an easily accessible position, ready to be manually released and capable of being carried by one person into a survival craft, capable of floating free if the ship sinks and of being automatically activated when afloat, and capable of being activated manually.
- (iii) Examined and tested annually in accordance with the IMO standard, IMO Circular MSC/Circ.1040 (incorporated by reference, see §80.7). See §80.1105(k).
- (b) Ships must carry either the most recent edition of the IMO publication entitled GMDSS Master Plan of Shore-Based Facilities, the U.S. NGA Publication 117, or the Admiralty List of Radio Signals Volume 5 Global Maritime Distress and Safety System. Notice of new editions will be published on the Commission's Wireless Telecommunications Bureau Web page under "Marine Services" and information will be provided about obtaining the new document.
- (c) All GMDSS equipment capable of transmitting an automatic distress

alert which includes position of the ship must have either an integral navigation receiver or capability of being connected to an external navigation receiver. If an external navigation receiver is installed, it shall be connected to all of the alerting devices referred to in paragraph (a) of this section. If there is no navigation receiver, the position must be entered manually for each alerting device at least once every 4 hours (at the change of the navigation watch).

(d) Every passenger ship shall be provided with means for two-way on-scene radiocommunications for search and rescue purposes using the aeronautical frequencies 121.5 and 123.1 MHz from the position from which the ship is normally navigated.

[57 FR 9065, Mar. 16, 1992, as amended at 60 FR 50122, Sept. 28, 1995; 68 FR 46977, Aug. 7, 2003; 69 FR 64679, Nov. 8, 2004; 73 FR 4489, Jan. 25, 2008; 76 FR 67616, Nov. 2, 2011; 78 FR 23158, Apr. 18, 2013]

§80.1087 Ship radio equipment—Sea area A1.

This section contains the additional equipment requirements for ships that remain within sea area A1 at all times.

- (a) In addition to meeting the requirements of §80.1085, ships engaged on voyages exclusively in sea area A1 must be provided with a radio installation capable of initiating the transmission of ship-to-shore distress alerts from the position from which the ship is normally navigated, operating either:
 - (1) On VHF using DSC; or
- (2) Through the polar orbiting satellite service on 406.0–406.1 MHz (this requirement may be fulfilled by the EPIRB required by \$80.1085(a)(6), either by installing the EPIRB close to, or by allowing remote activation from, the position from which the ship is normally navigated); or
- (3) On MF using DSC if the ship is engaged on voyages within coverage of MF coast stations equipped with DSC;
 - (4) On HF using DSC; or
- (5) Through the INMARSAT geostationary satellite service if within INMARSAT coverage. This requirement may be fulfilled by an

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INMARSAT ship earth station capable of two way communication.

(b) The VHF radio installation, required by §80.1085(a)(1), must also be capable of transmitting and receiving general radiocommunications using radiotelephony.

[57 FR 9065, Mar. 16, 1992, as amended at 68 FR 46977, Aug. 7, 2003; 69 FR 64680, Nov. 8, 2004; 73 FR 4490, Jan. 25, 2008; 76 FR 67617, Nov. 2, 2011]

§80.1089 Ship radio equipment—Sea areas A1 and A2.

This section contains the additional equipment requirements for ships that remain within sea areas A1 or A2 at all times. Ships fitting in accordance with this section satisfy the sea area A1 requirements denoted in §80.1087.

- (a) In addition to meeting the requirements of §80.1085, ships engaged on voyages beyond sea area A1, but remaining within sea area A2, must be provided with:
- (1) An MF radio installation capable of transmitting and receiving, for distress and safety purposes, on the frequencies:
 - (i) 2187.5 kHz using DSC; and
 - (ii) 2182 kHz using radiotelephony;
- (2) A radio installation capable of maintaining a continuous DSC watch on the frequency 2187.5 kHz which may be separate from or combined with, that required by paragraph (a)(1)(i) of this section; and
- (3) Means of initiating the transmission of ship-to-shore distress alerts by a radio service other than MF operating either:
- (i) Through the polar orbiting satellite service on 406.0–406.1 MHz (this requirement may be fulfilled by the EPIRB required by \$80.1085(a)(6), either by installing the EPIRB close to, or by allowing remote activation from, the position from which the ship is normally navigated); or
 - (ii) On HF using DSC; or
- (iii) Through the INMARSAT geostationary satellite service if within INMARSAT coverage; this requirement may be fulfilled by an INMARSAT ship earth station.
- (b) It must be possible to initiate transmission of distress alerts by the radio installations specified in paragraphs (a)(1) and (a)(3) of this section

from the position from which the ship is normally navigated.

- (c) Ships subject to this section must be capable of transmitting and receiving general radiocommunications using radiotelephony or direct-printing telegraphy by either:
- (1) A radio installation operating on working frequencies in the bands between 1605-4000 kHz or between 4000-27500 kHz (this requirement may be fulfilled by the addition of this capability to the equipment required by paragraph (a)(1) of this section); or
- (2) An INMARSAT ship earth station. [57 FR 9065, Mar. 16, 1992, as amended at 68 FR 46977, Aug. 7, 2003; 69 FR 64680, Nov. 8, 2004; 73 FR 4490, Jan. 25, 2008; 76 FR 67617, Nov. 2, 2011]

§80.1091 Ship radio equipment—Sea areas A1, A2, and A3.

This section contains the additional equipment requirements for ships that remain within sea areas A1, A2, or A3 at all times. Ships fitting in accordance with this section satisfy the requirements denoted in \$80.1087 or \$80.1089 for sea-areas A1 and A2. Ships fitting in accordance to this section have the option to comply with either the requirements of paragraph (a) or (b) of this section.

- (a) In addition to meeting the requirements of §80.1085, ships subject to this section must be provided with:
- (1) An INMARSAT ship earth station capable of:
- (i) Transmitting and receiving distress and safety data communications;
- (ii) Initiating and receiving distress priority calls;
- (iii) Maintaining watch for shore-toship distress alert, including those directed to specifically defined geographical areas;
- (iv) Transmitting and receiving general radiocommunications, using either radiotelephony or direct-printing telegraphy; and
- (2) An MF radio installation capable of transmitting and receiving, for distress and safety purposes, on the frequencies:
 - (i) 2187.5 kHz using DSC; and
- (ii) 2182 kHz using radiotelephony; and
- (3) A radio installation capable of maintaining a continuous DSC watch