

continue to process then-pending applications) for certification of non-portable DSC equipment that does not meet the requirements of ITU-R Recommendation ITU-R M.493-13, "Digital Selective-calling System for Use in the Maritime Mobile Service," with Annexes 1, 2, 3, and 4 (10/2009) (incorporated by reference, see § 80.7), and, in the case of Class D DSC equipment only, IEC 62238, First edition, "Maritime navigation and radiocommunication equipment and systems—VHF radiotelephone equipment incorporating Class 'D' Digital Selective Calling (DSC)—Methods of testing and required test results," March 2003 (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 equipment that does not meet the requirements of ITU-R Recommendation ITU-R M.493-13, "Digital Selective-calling System for Use in the Maritime Mobile Service," with Annexes 1, 2, 3, and 4 (10/2009) (incorporated by reference, see § 80.7), and, in the case of Class D DSC equipment only, IEC 62238, First edition, "Maritime navigation and radiocommunication equipment and systems—VHF radiotelephone equipment incorporating Class 'D' Digital Selective Calling (DSC)—Methods of testing and required test results," March 2003 (incorporated by reference, see § 80.7).

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(c) * * *

(2) Equipment used to perform a selective calling function during narrow-band direct-printing (NB-DP) operations in accordance with ITU-R Recommendation M.476-5, "Direct-Printing Telegraph Equipment in the Maritime Mobile Service," with Annex, 1995 (incorporated by reference, see § 80.7), or ITU-R Recommendation M.625-3, "Direct-Printing Telegraph Equipment Employing Automatic Identification in the Maritime Mobile Service," with Annex, 1995, ITU-R Recommendation ITU-R M.493-13, "Digital Selective-calling System for Use in the Maritime Mobile Service," with Annexes 1, 2, 3, and 4 (10/2009) (incorporated by reference, see § 80.7), and

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18. Section 80.231 is amended by revising paragraph (a) to read as follows:

§ 80.231 Technical Requirements for Class B Automatic Identification System (AIS).

(a) Class B Automatic Identification System (AIS) equipment must meet the technical requirements of the International Electro-technical Commission (IEC) 62287-1, First edition (2006-03) "Maritime navigation and radiocommunication equipment and systems—Class B shipborne equipment of the Automatic Identification System—Part 1: Carrier-sense time division multiple access (CSTDMA) techniques" (incorporated by reference, see § 80.7).

* * * * *

19. Section 80.251 is amended by revising paragraph (a) to read as follows:

§ 80.251 Scope.

(a) This subpart gives the general technical requirements for certification of equipment used on compulsory ships. Such equipment includes automatic-alarm-signal keying devices, survival craft radio equipment, radar equipment and Ship Security Alert System (SSAS) equipment.

* * * * *

20. Section 80.271 is amended by revising paragraph (a)(2) to read as follows:

§ 80.271 Technical requirements for portable survival craft radiotelephone transceivers.

(a) * * *

(2) The receiver must comply with the requirements in part 15, subpart B of this chapter and

continue to process then-pending applications) for certification of non-portable DSC equipment that does not meet the requirements of ITU-R Recommendation ITU-R M.493-13, "Digital Selective-calling System for Use in the Maritime Mobile Service," with Annexes 1, 2, 3, and 4 (10/2009) (incorporated by reference, see § 80.7), and, in the case of Class D DSC equipment only, IEC 62238, First edition, "Maritime navigation and radiocommunication equipment and systems—VHF radiotelephone equipment incorporating Class 'D' Digital Selective Calling (DSC)—Methods of testing and required test results," March 2003 (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 equipment that does not meet the requirements of ITU-R Recommendation ITU-R M.493-13, "Digital Selective-calling System for Use in the Maritime Mobile Service," with Annexes 1, 2, 3, and 4 (10/2009) (incorporated by reference, see § 80.7), and, in the case of Class D DSC equipment only, IEC 62238, First edition, "Maritime navigation and radiocommunication equipment and systems—VHF radiotelephone equipment incorporating Class 'D' Digital Selective Calling (DSC)—Methods of testing and required test results," March 2003 (incorporated by reference, see § 80.7).

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(c) * * *

(2) Equipment used to perform a selective calling function during narrow-band direct-printing (NB-DP) operations in accordance with ITU-R Recommendation M.476-5, "Direct-Printing Telegraph Equipment in the Maritime Mobile Service," with Annex, 1995 (incorporated by reference, see § 80.7), or ITU-R Recommendation M.625-3, "Direct-Printing Telegraph Equipment Employing Automatic Identification in the Maritime Mobile Service," with Annex, 1995, ITU-R Recommendation ITU-R M.493-13, "Digital Selective-calling System for Use in the Maritime Mobile Service," with Annexes 1, 2, 3, and 4 (10/2009) (incorporated by reference, see § 80.7), and

* * * * *

18. Section 80.231 is amended by revising paragraph (a) to read as follows:

§ 80.231 Technical Requirements for Class B Automatic Identification System (AIS).

(a) Class B Automatic Identification System (AIS) equipment must meet the technical requirements of the International Electro-technical Commission (IEC) 62287-1, First edition (2006-03) "Maritime navigation and radiocommunication equipment and systems—Class B shipborne equipment of the Automatic Identification System—Part 1: Carrier-sense time division multiple access (CSTDMA) techniques" (incorporated by reference, see § 80.7).

* * * * *

19. Section 80.251 is amended by revising paragraph (a) to read as follows:

§ 80.251 Scope.

(a) This subpart gives the general technical requirements for certification of equipment used on compulsory ships. Such equipment includes automatic-alarm-signal keying devices, survival craft radio equipment, radar equipment and Ship Security Alert System (SSAS) equipment.

* * * * *

20. Section 80.271 is amended by revising paragraph (a)(2) to read as follows:

§ 80.271 Technical requirements for portable survival craft radiotelephone transceivers.

(a) * * *

(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;

* * * * *

21. Section 80.273 is revised to read as follows:

§ 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:

(1) IEC 60945, Fourth edition (2002-08), “Maritime navigation and radiocommunication equipment and systems—General requirements—Methods of testing and required test results,” with Annexes (incorporated by reference, see § 80.7);

(2) IEC 62388 Edition 1.0 (2007-12), “Maritime navigation and radiocommunication equipment and systems—Shipborne radar—Performance requirements, methods of testing and required test results” (incorporated by reference, see § 80.7);

(3) IMO Resolution A.694(17), “Recommendation on General Requirements for Shipborne Radio Equipment Forming Part of the Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids,” adopted 6 November 1991, as revised by IMO Resolution MSC.149(77), “Adoption of the Revised Performance Standards for Survival Craft Two-Way VHF Radiotelephone Apparatus,” adopted on 3 June 2003 (incorporated by reference, see § 80.7);

(4) IMO Resolution MSC.191(79), “Performance Standards for the Presentation of Navigation-Related Information on Shipborne Navigational Displays,” adopted 6 December 2004 (incorporated by reference, see § 80.7);

(5) IMO Resolution MSC.192(79), “Revised Recommendation on Performance Standards for Radar Equipment” (incorporated by reference, see § 80.7); and

(6) ITU-R Recommendation M.1177-3, “Techniques for measurement of unwanted emissions of radar systems,” June 2003 (incorporated by reference, see § 80.7).

(b) Radar equipment installed on voluntarily equipped vessels must comply with IEC 62252, First edition (2004-07) “Maritime navigation and radiocommunication equipment and systems—Radar for craft not in compliance with IMO SOLAS Chapter V—Performance requirements, methods of test and required test results,” (incorporated by reference, see § 80.7).

* * * * *

22. Section 80.277 is amended by removing paragraph (b) and revising paragraph (a)(1) to read as follows:

§ 80.277 Ship Security Alert System (SSAS).

(a) * * *

(1) Equipment that complies with RTCM 11020.1 (RTCM Paper 110–2004/SC110–STD), “RTCM Standard 11020.0—Ship Security Alert Systems (SSAS) using the Cospas-Sarsat System,” Version 1.0, October 9, 2009, (incorporated by reference, see § 80.7); or

* * * * *

23. Section 80.305 is amended by revising paragraph (b)(1) to read as follows:

§ 80.305 Watch requirements of the Communications Act and the Safety Convention.

* * * * *

(b) * * *

(1) If it is not carrying MF-DSC radio equipment, keep a continuous watch on 2182 kHz in the room from which the vessel is normally steered while at sea, whenever such station is not being used for authorized traffic. Such watch must be maintained by at least one officer or crewmember who may perform other duties relating to the operation or navigation of the vessel, provided such other duties do not interfere with the watch.

* * * * *

24. Section 80.310 is amended to read as follows:

§ 80.310 Watch required by voluntary vessels.

Voluntary vessels not equipped with DSC must maintain a watch on 2182 kHz and on 156.800 MHz (Channel 16) whenever the vessel is underway and the radio is not being used to communicate. Noncommercial vessels, such as recreational boats, may alternatively maintain a watch on 156.450 MHz (Channel 9) in lieu of VHF Channel 16 for call and reply purposes. Voluntary vessels equipped with VHF-DSC equipment must maintain a watch on 2182 kHz and on either 156.525 MHz (Channel 70) or VHF Channel 16 aurally whenever the vessel is underway and the radio is not being used to communicate. Voluntary vessels equipped with MF-HF DSC equipment must have the radio turned on and set to an appropriate DSC distress calling channel or one of the radiotelephone distress channels whenever the vessel is underway and the radio is not being used to communicate. Voluntary vessels equipped with a GMDSS-approved Inmarsat system must have the unit turned on and set to receive calls whenever the vessel is underway and the radio is not being used to communicate.

* * * * *

25. Section 80.359 is amended by revising paragraph (b) to read as follows:

§ 80.359 Frequencies for digital selective calling (DSC).

* * * * *

(b) Distress and safety calling. The frequencies 2187.5 kHz, 4207.5 kHz, 6312.0 kHz, 8414.5 kHz, 12577.0 kHz, 16804.5 kHz and 156.525 MHz may be used for DSC by coast and ship stations on a simplex basis for distress and safety purposes, and may also be used for routine ship-to-ship communications provided that priority is accorded to distress and safety communications. The provisions and procedures for distress and safety calling are contained in 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 (incorporated by reference, see § 80.7), and §80.103(c).

* * * * *

26. Section 80.371 is amended by revising paragraph (a) to change the second entry in the Coast transmit column from "¹ 12514.0" to "¹ 2514.0" and revising paragraph (e) to read as follows:

§ 80.371 Public correspondence frequencies.

* * * * *

(e) Canada/U.S.A. channeling arrangement frequencies. The VHF frequencies assignable to ship and coast stations in the State of Washington and their usage limitations pursuant to the Canada/U.S.A. channeling arrangement are described in subpart B of this part.

27. Section 80.373 is amended by revising paragraphs (b), (b)(1), (b)(3), (b)(6), (f) and (g)(1) to read as follows:

§ 80.373 Private communications frequencies.

* * * * *

(b) Frequencies in the 2000–27500 kHz band for intership safety and other communications. This paragraph describes the geographic areas of operation and the frequencies and limitations in the band available for assignment for intership safety and operational simplex radiotelephone communications.

(1) Frequencies available. * * *

* * *

(3) Except for the frequencies 2093.0 kHz, 2214.0 kHz and 2670.0 kHz, the frequencies shown in paragraph (b)(1) of this section may be used on a non-interference basis to safety communications, for operational communications and, in the case of commercial transport ships and ships of municipal and state governments, for business communications.

* * *

(6) Navigational communications between ships and private coast stations may be exchanged on 2738.0 kHz and 2830.0 kHz. The frequencies 2214.0 kHz, 2738.0 kHz and 2830.0 kHz are assignable to private coast stations upon a showing that they need to communicate with commercial transport or Government ships. Private coast station applicants must show that public coast stations do not provide the required communications and harmful interference will not be caused to the intership use of these frequencies. The transmitter power must not exceed 150 watts. If 2214.0 kHz is authorized for ships, intership communication is also authorized. The geographic limitations to the frequencies 2738.0 kHz and 2830.0 kHz do not prohibit intership communication of less than 320 km (200 statute miles) when only one of the ship stations is within a permitted use geographic area.

* * * * *

(f) Frequencies in the 156–162 MHz band. The following tables describe the carrier frequencies available in the 156–162 MHz band for radiotelephone communications between ship and private coast stations. (Note: the letter “A” following the channel designator indicates simplex operation on a channel designated internationally as a duplex channel.)

Frequencies in the 156–162 MHz Band

Channel designator	Carrier frequency (MHz) ship transmit	Carrier frequency (MHz) coast transmit	Points of communication (intership and between coast and ship unless otherwise indicated)
Port Operations			
01A ¹	156.050	156.050	
63A ¹	156.175	156.175	

05A ²	156.250	156.250	
65A	156.275	156.275	
66A	156.325	156.325	
12 ³	156.600	156.600	
73	156.675	156.675	
14 ³	156.700	156.700	
74	156.725	156.725	
75 ¹⁸	156.775	156.775	
76 ¹⁸	156.825	156.825	
77 ⁴	156.875		Internship only.
20A ¹²	157.000		Internship only.
Navigational (Bridge-to-Bridge)⁵			
67 ⁷	156.375	156.375	
13 ⁶	156.650	156.650	
Commercial			
01A ¹	156.050	156.050	
63A ¹	156.175	156.175	
07A	156.350	156.350	
67 ⁷	156.375		Internship only.
08	156.400		Do.
09	156.450	156.450	
10	156.500	156.500	
11 ³	156.550	156.550	
72 ¹⁴	156.625		Internship only.
18A	156.900	156.900	
19A	156.950	156.950	
79A	156.975	156.975	
80A	157.025	157.025	
88A ⁸	157.425	157.425	
Digital Selective Calling			
70 ¹⁵	156.525	156.525	
Noncommercial			

67 ¹⁴	156.375		Internship only.
68 ¹⁷	156.425	156.425	
09 ¹⁶	156.450	156.450	
69	156.475	156.475	
71 ¹⁹	156.575	156.575	
72	156.625		Internship only.
78A	156.925	156.925	
79A	156.975	156.975	Great Lakes only.
80A	157.025	157.025	Do.
Distress, Safety and Calling			
16	156.800	156.800	
Internship Safety			
06	156.300		a. Internship, or b. For SAR: Ship and aircraft for the U.S. Coast Guard.
Environmental			
15 ¹³		156.750	Coast to ship only.

Maritime Control			
17 ^{9,10}	156.850	156.850	
Liaison and Safety Broadcasts, U.S. Coast Guard			
22A ¹¹	157.100	157.100	Ship, aircraft, and coast stations of the U.S. Coast Guard and at Lake Mead, Nev., ship and coast stations of the National Park Service, U.S. Department of the Interior.

¹156.050 MHz and 156.175 MHz are available for port operations and commercial communications purposes when used only within the U.S. Coast Guard designated Vessel Traffic Services (VTS) area of New Orleans, on the lower Mississippi River from the various pass entrances in the Gulf of Mexico to Devil's Swamp Light at River Mile 242.4 above head of passes near Baton Rouge.

²156.250 MHz is available for port operations communications use only within the U.S. Coast Guard designated VTS radio protection areas of New Orleans and Houston described in §80.383. 156.250 MHz is available for intership port operations communications used only within the area of Los Angeles and Long Beach harbors, within a 25-nautical mile radius of Point Fermin, California.

³156.550 MHz, 156.600 MHz and 156.700 MHz are available in the U.S. Coast Guard designated port areas only for VTS communications and in the Great Lakes available primarily for communications relating to the movement of ships in sectors designated by the St. Lawrence Seaway Development Corporation or the U.S. Coast Guard. The use of these frequencies outside VTS and ship movement sector protected areas is permitted provided they cause no interference to VTS and ship movement communications in their respective designated sectors.

⁴Use of 156.875 MHz is limited to communications with pilots regarding the movement and docking of ships. Normal output power must not exceed 1 watt.

⁵156.375 MHz and 156.650 MHz are available primarily for intership navigational communications. These frequencies are available between coast and ship on a secondary basis when used on or in the vicinity of locks or drawbridges. Normal output power must not exceed 1 watt. Maximum output power must not exceed 10 watts for coast stations or 25 watts for ship stations.

⁶On the Great Lakes, in addition to bridge-to-bridge communications, 156.650 MHz is available for vessel control purposes in established vessel traffic systems. 156.650 MHz is not available for use in the Mississippi River from South Pass Lighted Whistle Buoy "2" and Southwest Pass entrance Mid-channel Lighted Whistle Buoy to mile 242.4 above Head of Passes near Baton Rouge. Additionally it is not available for use in the Mississippi River-Gulf Outlet, the Mississippi River-Gulf Outlet Canal, and the Inner Harbor Navigational Canal, except to aid the transition from these areas.

⁷Use of 156.375 MHz is available for navigational communications only in the Mississippi River from South Pass Lighted Whistle Buoy "2" and Southwest Pass entrance Mid-channel Lighted Whistle Buoy to mile 242.4 above Head of Passes near Baton Rouge, and in addition over the full length of the Mississippi River-Gulf Outlet Canal from entrance to its junction with the Inner Harbor Navigational Canal, and over the full length of the Inner Harbor Navigational Canal from its junction with the Mississippi River to its entry to Lake Pontchartrain at the New Seabrook vehicular bridge.

⁸Within that portion of VHF Public Coast Station Areas (VPCSA) 1 through 9 listed in the table in Section 80.371(c)(1)(ii) within 120 km (75 miles) of the United States/Canada border, in the area of the Great Lakes, the Saint Lawrence Seaway, and the Puget Sound and the Strait of Juan de Fuca and its approaches, Maritime VHF Channel 88A (157.425 MHz) is available for use for public correspondence communications, subject to prior coordination with Canada. Maritime VHF Channel 88B (162.025 MHz) is available only for Automatic Identification System communications. One hundred twenty kilometers (75 miles) from the United States/Canada border, 157.425 MHz is available for intership and commercial communications. Outside the Puget Sound area and its approaches and the Great Lakes, 157.425 MHz is available for communications between commercial fishing vessels and associated aircraft while engaged in commercial fishing activities.

⁹When the frequency 156.850 MHz is authorized, it may be used additionally for search and rescue training exercises conducted by state or local governments.

¹⁰The frequency 156.850 MHz is additionally available to coast stations on the Great Lakes for transmission of scheduled Coded Marine Weather Forecasts (MAFOR), Great Lakes Weather Broadcast (LAWEB) and unscheduled Notices to Mariners or Bulletins. F3C and J3C emissions are permitted. Coast stations on the Great Lakes must cease weather broadcasts which cause interference to stations operating on 156.800 MHz until the interference problem is resolved.

¹¹The frequency 157.100 MHz is authorized for search and rescue training exercises by state or local government in conjunction with U.S. Coast Guard stations. Prior U.S. Coast Guard approval is required. Use must cease immediately on U.S. Coast Guard request.

¹²The duplex pair for channel 20 (157.000/161.600 MHz) may be used for ship to coast station communications.

¹³Available for assignment to coast stations, the use of which is in accord with an agreed program, for the broadcast of information to ship stations concerning the environmental conditions in which vessels operate, *i.e.*, weather; sea conditions; time signals; notices to mariners; and hazards to navigation.

¹⁴Available only in the Puget Sound and the Strait of Juan de Fuca.

¹⁵The frequency 156.525 MHz is to be used exclusively for distress, safety and calling using digital selective calling techniques. No other uses are permitted.

¹⁶The frequency 156.450 MHz is available for intership, ship and coast general purpose calling by noncommercial vessels, such as recreational boats and private coast stations.

¹⁷The frequency 156.425 MHz is assigned by rule to private coast stations in Alaska for facsimile transmissions as well as voice communications.

¹⁸The 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.

¹⁹156.575 MHz is available for port operations communications use only within the U.S. Coast Guard designated VTS radio protection area of Seattle (Puget Sound) described in §80.383. Normal output power must not exceed 1 watt. Maximum output power must not exceed 10 watts.

(g)(1) On-board communications: This section describes the carrier frequency pairs assignable for on-board mobile radiotelephony communications. The center of the on-board repeater antenna must not be located more than 3 meters (10 feet) above the ship's working deck. These frequencies are available on a shared basis with stations in the Industrial/Business Radio Pool.

FREQUENCIES FOR ON-BOARD COMMUNICATIONS

Channel	Carrier frequency (MHz)	
	On-board mobile station	On-board repeater station ¹
1.....	467.750	457.525
2.....	467.775	457.550
3.....	467.800	457.575
4.....	467.825	457.600

¹ These frequencies may also be assigned to mobile stations for single frequency simplex operation.

28. Section 80.375 is amended by removing paragraph (d)(2)(vi) and revising paragraphs (d)(1) and (d)(2)(v) to read as follows

§ 80.375 Radiodetermination frequencies.

* * * * *

(d) Radiodetermination frequency bands above 2400 MHz. (1) The radiodetermination frequency bands assignable to ship and shore stations including ship and shore radar and transponder stations are as follows: 2450–2500 MHz; 2900–3100 MHz; 5460–5650 MHz; and 9300–9500 MHz.

* * *

(2) * * *

(v) The use of the 5460–5650 MHz band for radionavigation is limited to shipborne radar.

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29. Section 80.511 is removed.

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30. Section 80.605 is amended by revising paragraphs (b) and (c) to read as follows:

§ 80.605 U.S. Coast Guard coordination.

* * * * *

(b) Coast station transponders (*i.e.*, radar beacons, or racons) operating in the band 2900–3100 or 9300–9500 MHz shall meet the requirements of ITU-R Recommendation M.824–3, “Technical Parameters of Radar Beacons (RACONS),” with Annexes, 1992-1994-1995-2007 (incorporated by reference, see § 80.7). Applications for certification of these transponders must include a description of the technical characteristics of the equipment including the scheme of interrogation and the characteristics of the transponder response, and test results demonstrating the device meets each applicable requirement of this ITU-R recommendation.

(c) The use of ship station transponders in the band 2900–3100 or 9300–9500 MHz other than those described in § 80.1085(a)(3) and § 80.1095(b) is prohibited.

* * * * *

31. Section 80.854 is amended by removing paragraph (c) and redesignating paragraphs (d), (e), and (f) as paragraphs (c), (d), and (e).

* * * * *

32. Section 80.905 is amended by removing paragraph (a)(4)(vii), redesignating paragraphs (a)(4)(viii) and (a)(4)(ix) as paragraphs (a)(4)(vii) and (a)(4)(viii), and revising paragraphs (a)(3)(iii)(B), (a)(3)(v), (a)(3)(vi), (a)(4)(v), (a)(4)(vi), and (a)(4)(vii) to read as follows:

§ 80.905 Vessel radio equipment.

(a) * * *

(3) * * *

(iii) * * *

(b) If operated in an area within the coverage of an INMARSAT maritime mobile geostationary satellite in which continuous alerting is available, a GMDSS-approved Inmarsat ship earth station.

* * *

(v) Be equipped with a NAVTEX receiver conforming to the following performance standards: IMO Resolution A.525(13), "Performance Standards for Narrow-band Direct Printing Telegraph Equipment for the Reception of Navigational and Meteorological Warnings and Urgent Information to Ships," including Annex, adopted 17 November 1983, as revised by IMO Maritime Safety Committee (MSC) Resolution MSC.148(77), "Adoption of the Revised Performance Standards for Narrow-band Direct Printing Telegraph Equipment for the Reception of Navigational and Meteorological Warnings and Urgent Information to Ships (NAVTEX)," adopted on 3 June 2003 (incorporated by reference, see § 80.7), and ITU-R Recommendation M.540-2, "Operational and Technical Characteristics for an Automated Direct-printing Telegraph System for Promulgation of Navigational and Meteorological Warnings and Urgent Information to Ships," including Annexes, 1990 (incorporated by reference, see § 80.7);

(vi) Be equipped with a Category I 406-406.1 MHz satellite emergency position-indicating radiobeacon (EPIRB) meeting the requirements of § 80.1061; and

* * * * *

(4) * * *

(v) Be equipped with a NAVTEX receiver conforming to the following performance standards: IMO Resolution A.525(13), "Performance Standards for Narrow-band Direct Printing Telegraph Equipment for the Reception of Navigational and Meteorological Warnings and Urgent Information to Ships," including Annex, adopted 17 November 1983, as revised by IMO Maritime Safety Committee (MSC) Resolution MSC.148(77), "Adoption of the Revised Performance Standards for Narrow-band Direct Printing Telegraph Equipment for the Reception of Navigational and Meteorological Warnings and Urgent Information to Ships (NAVTEX)," adopted on 3 June 2003 (incorporated by reference, see § 80.7), and ITU-R Recommendation M.540-2, "Operational and Technical Characteristics for an Automated Direct-printing Telegraph System for Promulgation of Navigational and Meteorological Warnings and Urgent Information to Ships," including Annexes, 1990 (incorporated by reference, see § 80.7);

(vi) Be equipped with a Category I 406-406.1 MHz satellite emergency position-indicating radiobeacon (EPIRB) meeting the requirements of § 80.1061;

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33. Section 80.917 is amended by revising paragraph (a) and adding paragraph (h) to read as follows:

§ 80.917 Reserve power supply.

(a) Any small passenger vessel the keel of which was laid after March 1, 1957, must have a reserve power supply located on the same deck as the main wheel house or at least one deck above the vessel's main deck, unless the main power supply is so situated, if (1) the vessel is of more than 100 gross tons; or if (2) beginning March 25, 2009, (i) the vessel carries more than 150 passengers or has overnight accommodations for more than 49 persons, or (ii) the vessel operates on the high seas or more than three miles from shore on Great Lakes voyages.

* * * * *

(h) Beginning [one year after the effective date], any small passenger vessel that does not carry a reserve power supply must carry at least one VHF handheld radiotelephone.

* * * * *

34. Section 80.1053 is revised to read as follows:

§ 80.1053 Prohibition on certification, manufacture, importation, sale or use of Class A, Class B,

Class S, and INMARSAT-E EPIRBs.

The manufacture, importation, or sale in the United States of Class A, Class B, Class S, or INMARSAT-E EPIRBs is prohibited. New Class A, Class B, Class S, or INMARSAT-E EPIRBs will no longer be certified by the Commission.

35. Section 80.1055 is removed.

36. Section 80.1057 is removed.

37. Section 80.1059 is removed.

38. Section 80.1061 is amended by revising paragraphs (a), (c) and (c)(1)(ii) to read as follows:

§ 80.1061 Special requirements for 406.0–406.1 MHz EPIRB stations.

(a) Notwithstanding the provisions in paragraph (b) of this section, 406.0–406.1 MHz EPIRBs must meet all the technical and performance standards contained in the Radio Technical Commission for Maritime Services document entitled RTCM 11000.1, “RTCM Recommended Standards for 406 MHz Satellite Emergency Position-Indicating Radiobeacons (EPIRBs),” Version 2.1, dated June 20, 2002 (incorporated by reference, see § 80.7), and must also comply with the standards specified in § 80.1101(c)(5) of this part.

* * * * *

(c) Prior to submitting a certification application for a 406.0–406.1 MHz radiobeacon, the radiobeacon must be certified by a test facility recognized by one of the COSPAS–SARSAT Partners that the equipment satisfies the design characteristics associated with the measurement methods described in COSPAS–SARSAT Standards C/S T.001, “Specification for COSPAS–SARSAT 406 MHz Distress Beacons,” Issue 4—Revision 10, October 2009 (incorporated by reference, see § 80.7), and C/S T.007, “COSPAS–SARSAT 406 MHz Distress Beacon Type Approval Standard,” Issue 4—Revision 4, October 2009 (incorporated by reference, see § 80.7). Additionally, the radiobeacon must be subjected to the environmental and operational tests associated with the test procedures described in Appendix A of RTCM Standard 11000.2 (RTCM 11000.1, Version 2.1) for 406 MHz Satellite Emergency Position-Indicating Radiobeacons (EPIRBs), June 20, 2002 (incorporated by reference, see § 80.7), by a test facility accepted by the U.S. Coast Guard for this purpose. Information regarding accepted test facilities may be obtained from Commandant (CG–5214), U.S. Coast Guard, 2100 2nd St., S.W., Mail Stop 7126, Washington, DC 20593–7126, <http://cgmix.uscg.mil/EQLabs/EQLabsSearch.aspx>.

(1) * * *

(i) * * *

(ii) Copies of the certificate and test data obtained from the test facility recognized by a COSPAS/SARSAT Partner showing that the radiobeacon complies with the COSPAS/SARSAT design characteristics associated with the measurement methods described in the COSPAS–SARSAT Standards C/S T.001, “Specification for COSPAS–SARSAT 406 MHz Distress Beacons,” Issue 4—Revision 10, October 2009 (incorporated by reference, see § 80.7), and T.007, “COSPAS–SARSAT 406 MHz Distress Beacon Type Approval Standard,” Issue 4—Revision 4, October 2009 (incorporated by reference, see § 80.7), and RTCM 11000.1, “RTCM Recommended Standards for 406 MHz Satellite Emergency Position-Indicating Radiobeacons (EPIRBs),” Version 2.1, June 20, 2002 (incorporated by reference, see § 80.7);

* * * * *

39. Section 80.1063 is removed.

40. Section 80.1065 is amended by revising paragraph (b)(6) to read as follows:

§ 80.1065 Applicability.

* * * * *

(b) * * *

(6) The expression “ships constructed” means ships the keels of which are laid, or construction identifiable with a specific ship begins and assembly of that ship has commenced comprising at least 50 tons gross tonnage or 1% of the estimated mass of all structural material, whichever is less.

* * * * *

41. Section 80.1077 is amended by removing the entry in the table for INMARSAT-E EPIRBs and deleting footnote 12.

* * * * *

42. Section 80.1074 is amended by revising paragraph (b) to read as follows:

§ 80.1074 Radio maintenance personnel for at-sea maintenance.

* * * * *

(b) The following licenses qualify personnel as GMDSS radio maintainers to perform at-sea maintenance of equipment specified in this subpart. For the purposes of this subpart, no order is intended by this listing or the alphanumeric designator.

(1) DM: GMDSS Maintainer's License;

(2) DB: GMDSS Operator's/Maintainer's License.

* * * * *

43. Section 80.1083 is amended by revising paragraph (d) to read as follows:

§ 80.1083 Ship radio installations.

* * * * *

(d) Shipborne Integrated Radiocommunication System (IRCS) may be utilized to integrate all GMDSS equipment into a standard operator's console. Such installation must be certified in accordance with §80.1103 and meet the requirements of IMO Assembly Resolution A.811(19), “Performance Standards for a Shipborne Integrated Radiocommunication System (IRCS) When Used in the GMDSS,” with Annex, adopted 23 November 1995 (incorporated by reference, see § 80.7).

* * * * *

44. Section 80.1085 is amended by revising paragraphs (a)(6)(i) and (a)(6)(iii) to read as follows:

§ 80.1085 Ship radio equipment—General.

(a) * * *

(6) * * *

(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

* * * * *

(iii) Examined and tested annually in accordance with the IMO standard, Circular MSC/Circ.1040, "Guidelines on annual testing of 406 MHz satellite EPIRBs," adopted 28 May 2002 (incorporated by reference, see § 80.7). See §80.1105(k).

* * * * *

45. Section 80.1087 is amended by revising paragraph (a)(2) to read as follows:

§ 80.1087 Ship radio equipment—Sea Area A1.

(a) * * *

(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

* * * * *

46. Section 80.1089 is amended by revising paragraph (a)(3)(i) to read as follows:

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

(a) * * *

(3) * * *

(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

* * * * *

47. Section 80.1091 is amended by removing paragraph (b)(3)(ii), redesignating paragraph (b)(3)(iii) as (b)(3)(ii), and revising paragraphs (a)(4)(i) and (a)(4)(iii) to read as follows:

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

(a) * * *

(4) * * *

(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

* * * * *

(iii) Through the INMARSAT geostationary satellite service, by an additional ship earth station.

Note to paragraph(a)(4)(iii). For ships subject to this subpart, sailing only in domestic waters, alternative satellite system fitting may be considered. However, the satellite system fitted must comply with all features of the INMARSAT system for its intended function. These are shown in IMO Assembly Resolution A.801(19) Appendix 13, Annex 5, "Criteria for Use When Providing Inmarsat Shore-Based Facilities for Use in the GMDSS," adopted 23 November 1995 (incorporated by reference, see § 80.7), and in IMO Assembly Resolution A.1001(25), "Criteria for the Provision of Mobile Satellite Communication Systems in the Global Maritime Distress and Safety System (GMDSS)," with Annex, adopted 29 November 2007 (incorporated by reference, see § 80.7). In any case, the alternative satellite system must provide continuous coverage for all sea areas in which the ship intends to sail.

* * * * *

48. Section 80.1101 is amended by removing paragraph (d) and revising paragraphs (b), (b)(1)-(7), (c), (c)(1)-(13), and (d)(1)(ii) to read as follows

§ 80.1101 Performance standards.

* * * * *

(b) All equipment specified in this subpart must meet the general requirements for shipboard equipment in conformity with performance specifications listed in this paragraph, which are incorporated by reference. (See § 80.7).

1) IMO Resolution A.694(17), "Recommendation on General Requirements for Shipborne Radio Equipment Forming Part of the Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids," adopted 6 November 1991, as revised by IMO Resolution MSC.149(77), "Adoption of the Revised Performance Standards for Survival Craft Two-Way VHF Radiotelephone Apparatus," adopted on 3 June 2003 (incorporated by reference, see § 80.7).

(2) ITU-T Recommendation E.161, "Arrangement of Digits, Letters and Symbols on Telephones and Other Devices that Can Be Used for Gaining Access to a Telephone Network" (02/2001) (incorporated by reference, see § 80.7).

(3) ITU-T Recommendation E.164.1, "Series E: Overall Network Operation, Telephone Service, Service Operation and Human Factors; Operation, Numbering, Routing and Mobile Services—International Operation—Numbering Plan of the International Telephone Service: Criteria and Procedures for the Reservation, Assignment, and Reclamation of E.164 Country Codes and Associated Identification Codes (ICs)" (09/2008) (incorporated by reference, see § 80.7).

(4) IEC 60092-101, Edition 4.1 (2002-08), "Electrical installations in ships—Part 101: Definitions and general requirements," (incorporated by reference, see § 80.7).

(5) IEC 60533, Second Edition (1999-11), "Electrical and electronic installations in ships—Electromagnetic compatibility," (incorporated by reference, see § 80.7).

(6) IEC 60945, Fourth edition (2002-08), "Maritime navigation and radiocommunication equipment and systems—General requirements—Methods of testing and required test results," with Annexes (incorporated by reference, see § 80.7).

(7) ISO Standard 3791, "Office Machines and Data Processing Equipment—Keyboard Layouts for Numeric Applications," First Edition 1976(E) (incorporated by reference, see § 80.7).

(c) The equipment specified in this subpart must also conform to the appropriate performance standards listed in paragraphs (c)(1) through (12) of this section, which are incorporated by reference, and must be tested in accordance with the applicable IEC testing standards listed in paragraph (c)(13) of this section, which are also incorporated by reference. (See § 80.7).

(1) NAVTEX receivers: (i) IMO Resolution A.525(13), "Performance Standards for Narrow-band Direct Printing Telegraph Equipment for the Reception of Navigational and Meteorological Warnings and Urgent Information to Ships," including Annex, adopted 17 November 1983, as revised by IMO Maritime Safety Committee (MSC) Resolution MSC.148(77), "Adoption of the Revised Performance Standards for Narrow-band Direct Printing Telegraph Equipment for the Reception of Navigational and Meteorological Warnings and Urgent Information to Ships (NAVTEX)," adopted on 3 June 2003 (incorporated by reference, see § 80.7).

(ii) ITU-R Recommendation M.540-2, "Operational and Technical Characteristics for an Automated Direct-printing Telegraph System for Promulgation of Navigational and Meteorological

Warnings and Urgent Information to Ships,” including Annexes, 1990 (incorporated by reference, see § 80.7).

(2) VHF radio equipment: (i) IMO Resolution A.803(19), “Performance Standards for Shipborne VHF Radio Installations Capable of Voice Communication and Digital Selective Calling,” with Annex, adopted 23 November 1995, as amended by IMO Resolution MSC.68(68), “Adoption of Amendments to Performance Standards for Shipborne Radiocommunications Equipment,” adopted on 6 June 1997 (incorporated by reference, see § 80.7).

(ii) ITU-R Recommendation ITU-R M.493-13, “Digital Selective-calling System for Use in the Maritime Mobile Service,” with Annexes 1, 2, 3, and 4 (10/2009) (incorporated by reference, see § 80.7).

(iii) 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 (incorporated by reference, see § 80.7).

(3) MF radio equipment: (i) IMO Assembly Resolution A.804(19), “Performance Standards for Shipborne MF Radio Installations Capable of Voice Communication and Digital Selective Calling,” with Annex, adopted 23 November 1995, as amended by IMO Resolution MSC.68(68), “Adoption of Amendments to Performance Standards for Shipborne Radiocommunications Equipment,” adopted on 6 June 1997 (incorporated by reference, see § 80.7).

(ii) ITU-R Recommendation ITU-R M.493-13, “Digital Selective-calling System for Use in the Maritime Mobile Service,” with Annexes 1, 2, 3, and 4 (10/2009) (incorporated by reference, see § 80.7).

(iii) 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 (incorporated by reference, see § 80.7).

(4) MF/HF radio equipment: (i) IMO Assembly Resolution A.806(19), “Performance Standards for Shipborne MF/HF Radio Installations Capable of Voice Communication, Narrow-Band Direct Printing and Digital Selective Calling,” with Annex, adopted 23 November 1995, as amended by IMO Resolution MSC.68(68), “Adoption of Amendments to Performance Standards for Shipborne Radiocommunications Equipment,” adopted on 6 June 1997 (incorporated by reference, see § 80.7).

(ii) ITU-R Recommendation ITU-R M.493-13, “Digital Selective-calling System for Use in the Maritime Mobile Service,” with Annexes 1, 2, 3, and 4 (10/2009) (incorporated by reference, see § 80.7).

(iii) 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 (incorporated by reference, see § 80.7).

(iv) IMO Assembly Resolution A.700(17), “Performance Standards for Narrow-band Direct-printing Telegraph Equipment for the Reception of Navigational and Meteorological Warnings and Urgent Information to Ships (MSI) by HF,” adopted 6 November 1991 (incorporated by reference, see § 80.7).

(5) 406.0–406.1 MHz EPIRBs: (i) IMO Assembly Resolution A.810(19), “Performance Standards for Float-free Satellite Emergency Position-indicating Radio Beacons (EPIRBs) Operating on 406 MHz,” with Annex, adopted 23 November 1995, as amended by IMO Resolution MSC.56(66), “Adoption of Amendments to Recommendations on Performance Standards for Float-free Satellite Emergency Position-indicating Radio Beacons (EPIRBs) Operating on 406 MHz,” adopted on 3 June 1996, and IMO Resolution MSC.120(74), “Adoption of Amendments to Performance Standards for Float-free Satellite Emergency Position-indicating Radio Beacons (EPIRBs) Operating on 406 MHz,” adopted on 31 May 2001 (incorporated by reference, see § 80.7).

(ii) IMO Assembly Resolution A.662(16), “Performance Standards for Float-free Release and

Activation Arrangements for Emergency Radio Equipment,” adopted 19 October 1989 (incorporated by reference, see § 80.7).

(iii) ITU-R Recommendation M.633-3, “Transmission characteristics of a satellite emergency position-indicating radiobeacon (satellite EPIRB) system operating through a low polar-orbiting satellite system in the 406 MHz band,” 1986-1990-2000-2004 (incorporated by reference, see § 80.7).

(iv) The 406.0–406.1 MHz EPIRBs must also comply with § 80.1061.

(6) 9 GHz radar transponders: (i) IMO Assembly Resolution A.802(19), “Performance Standards for Survival Craft Radar Transponders for Use in Search and Rescue Operations,” with Annex, adopted 23 November 1995, as amended by IMO Resolution MSC.247(83), “Adoption of Amendments to Performance Standards for Survival Craft Radar Transponders for Use in Search and Rescue Operations,” adopted on 8 October 2007, IBR approved for § 80.1101 (incorporated by reference, see § 80.7).

(ii) ITU-R Recommendation M.628-4, “Technical Characteristics for Search and Rescue Radar Transponders,” with Annexes, 1986-1990-1992-1994-2006 (incorporated by reference, see § 80.7).

(7) Two-Way VHF radiotelephone: (i) IMO Assembly Resolution A.809(19), “Performance Standards for Survival Craft Two-Way VHF Radiotelephone Apparatus,” including Annexes 1 and 2, adopted 23 November 1995, as revised by IMO Resolution MSC.149(77), “Adoption of the Revised Performance Standards for Survival Craft Two-Way VHF Radiotelephone Apparatus,” adopted on June 3 2003 (incorporated by reference, see § 80.7).

(ii) IMO Resolution MSC.80(70), “Adoption of New Performance Standards for Radiocommunication Equipment,” with Annexes, adopted 8 December 1998 (incorporated by reference, see § 80.7).

(8) INMARSAT Ship Earth Station Capable of Two-Way Communications: IMO Assembly Resolution A.808(19), “Performance Standards for Ship Earth Stations Capable of Two-Way Communications,” with Annex, adopted 23 November 1995 (incorporated by reference, see § 80.7).

(9) INMARSAT-C SES: IMO Assembly Resolution A.807(19), “Performance Standards for INMARSAT-C Ship Earth Stations Capable of Transmitting and Receiving Direct-Printing Communications,” with Annex, adopted 23 November 1995, as amended by IMO Resolution MSC.68(68), “Adoption of Amendments to Performance Standards for Shipborne Radiocommunications Equipment,” adopted on 6 June 1997 (incorporated by reference, see § 80.7).

(10) INMARSAT EGC: IMO Assembly Resolution A.664(16), “Performance Standards for Enhanced Group Call Equipment,” adopted 19 October 1989 (incorporated by reference, see § 80.7).

(11) Shipboard radar: (i) IEC 60945, Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results, August 14, 2002 (incorporated by reference, see § 80.7).

(ii) IEC 62388 Edition 1.0 (2007-12), “Maritime navigation and radiocommunication equipment and systems—Shipborne radar—Performance requirements, methods of testing and required test results” (incorporated by reference, see § 80.7).

(iii) IMO Resolution A.694(17), “Recommendation on General Requirements for Shipborne Radio Equipment Forming Part of the Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids,” November 6, 1991 (incorporated by reference, see § 80.7).

(iv) IMO Resolution MSC.191(79), “Performance Standards for the Presentation of Navigation-Related Information on Shipborne Navigational Displays,” adopted 6 December 2004 (incorporated by reference, see § 80.7).

(v) IMO Resolution MSC.192(79), “Revised Recommendation on Performance Standards for Radar Equipment,” adopted 6 December 2004 (incorporated by reference, see § 80.7).

(vi) ITU-R Recommendation M.1177-3, Techniques for measurement of unwanted emissions of radar systems, June 2003 (incorporated by reference, see § 80.7).

12) Automatic Identification Systems (AIS): (i) ITU-R Recommendation M.1371-3, “Technical characteristics for a universal shipborne automatic identification system using time division multiple access in the VHF maritime mobile band,” with Annexes, 1992-1994-1995-2007 (incorporated by reference, see § 80.7).

(ii) IMO Resolution MSC.74(69), “Adoption of New and Amended Performance Standards, Annex 3 Recommendation on Performance Standards for a Universal Shipborne Automatic Identification Systems (AIS),” adopted 12 May 1998 (incorporated by reference, see § 80.7).

(iii) IEC 61162-1, Third edition (2007-04) “Maritime navigation and radiocommunication equipment and systems—Digital interfaces—Part 1: Single talker and multiple listeners,” (incorporated by reference, see § 80.7).

(iv) IEC 61993-2, First edition (2001-12) “Maritime navigation and radiocommunication equipment and systems—Automatic identification systems (AIS)—Part 2: Class A shipborne equipment of the universal automatic identification system (AIS)—Operational and performance requirements, methods of test and required test results,” with Annexes (incorporated by reference, see § 80.7).

(13) Standards for testing GMDSS equipment:

(i) IEC 61097-1, Second edition (2007-06), “Global maritime distress and safety system (GMDSS)—Part 1: Radar transponder—Marine search and rescue (SART)—Operational and performance requirements, methods of testing and required test results,” with Annexes (incorporated by reference, see § 80.7).

(ii) IEC 61097-3, First edition (1994-06), “Global maritime distress and safety system (GMDSS)—Part 3: Digital selective calling (DSC) equipment—Operational and performance requirements, methods of testing and required testing results,” with Annexes (incorporated by reference, see § 80.7).

(iii) IEC 61097-4, Edition 2.0 (2007-10), “Global maritime distress and safety system (GMDSS)—Part 4: INMARSAT-C ship earth station and INMARSAT enhanced group call (EGC) equipment—Operational and performance requirements, methods of testing and required test results” (incorporated by reference, see § 80.7).

(iv) IEC 61097-6, Second edition (2005-12), “Global maritime distress and safety system (GMDSS)—Part 6: Narrowband direct-printing telegraph equipment for the reception of navigational and meteorological warnings and urgent information to ships (NAVTEX)” (incorporated by reference, see § 80.7).

(v) IEC 61097-7, First edition (1996-10), “Global maritime distress and safety system (GMDSS)—Part 7: Shipborne VHF radiotelephone transmitter and receiver—Operational and performance requirements, methods of testing and required test results” (incorporated by reference, see § 80.7).

(vi) IEC 61097-8, First edition (1998-09), “Global maritime distress and safety system (GMDSS)—Part 8: Shipborne watchkeeping receivers for the reception of digital selective calling (DSC) in the maritime MF, MF/HF, and VHF bands—Operational and Performance Requirements, Methods of

Testing and Required Test Results,” with Annexes (incorporated by reference, see § 80.7).

(vii) IEC 61097-9, First edition (1997-12), “Global maritime distress and safety system (GMDSS)—Part 9: Shipborne transmitters and receivers for use in the MF and HF bands suitable for telephony, digital selective calling (DSC) and narrow band direct printing (NBDP)—Operational and performance requirements, methods of testing and required test results,” with Annexes (incorporated by reference, see § 80.7).

(viii) IEC 61097-10, First edition (1999-06), “Global maritime distress and safety system (GMDSS)—Part 10: INMARSAT-B ship earth station equipment—Operational and performance requirements, methods of testing and required test results,” with Annexes (incorporated by reference, see § 80.7).

(ix) IEC 61097-12, First edition (1996-11), “Global maritime distress and safety system (GMDSS)—Part 12: Survival craft portable two-way VHF radiotelephone apparatus—Operational and performance requirements, methods of testing and required test results” (incorporated by reference, see § 80.7).

(x) IEC 61097-13, First edition (2003-05), “Global maritime distress and safety system (GMDSS)—Part 13: INMARSAT F77 ship earth station equipment—Operational and performance requirements, methods of testing and required test results” (incorporated by reference, see § 80.7).

(d) * * *

(1) * * *

(i) * * *

(ii) IMO Resolutions A.802(19), A.803(19), A.804(19), A.806(19), A.807(19), A.808(19), A.810(19), and A.811(19) are contained in the Resolutions and Other Decisions of the Assembly of the International Maritime Organization, 19th Session, 1995, (IMO, London, 1988), Sales Number IMO-194E ISBN No. 91-801-1416-6.

* * * * *

49. Section 80.1107 is added, under the heading Equipment Requirements for Ship Stations, to read as follows:

§ 80.1107 Test of radiotelephone station.

Unless the normal use of the required radiotelephone station demonstrates that the equipment is operating, a test communication on a required or working frequency must be made each day the ship is navigated. When this test is performed by a person other than the master and the equipment is found to be defective, the master must be promptly notified.

50. Section 80.1113 is amended by revising paragraph (b) to read as follows:

§ 80.1113 Transmission of a distress alert.

* * * * *

(b) The format of distress calls and distress messages must be in accordance with ITU-R Recommendation ITU-R M.493-13, “Digital Selective-calling System for Use in the Maritime Mobile Service,” with Annexes 1, 2, 3, and 4 (10/2009) (incorporated by reference, see § 80.7), and 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 (incorporated by reference, see § 80.7), as specified in § 80.1101.

* * * * *

51. Section 80.1117 is amended by revising paragraph (a) to read as follows:

§ 80.1117 Procedure for receipt and acknowledgement of distress alerts.

(a) Normally, distress calls received using digital selective calling are only acknowledged using a DSC acknowledgement by a coast station. Ships should delay any acknowledgement in order to give sufficient time for a coast station to acknowledge the call. In cases where no acknowledgement has been heard and no distress traffic has been heard, the ship should transmit a distress alert relay to the coast station. Upon advice from the Rescue Coordination Center, the ship may transmit a DSC acknowledgement call to stop it from being repeated. Acknowledgement by digital selective calling of receipt of a distress alert in the terrestrial services must comply with 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 (incorporated by reference, see § 80.7).

* * * * *

52. Section 80.1125 is amended by revising paragraph (b) to read as follows:

§ 80.1125 Search and rescue coordinating communications.

* * * * *

(b) Error correction techniques, in accordance with ITU-R Recommendation M.625-3, "Direct-printing Telegraph Equipment Employing Automatic Identification in the Maritime Mobile Service," with Annex, 1995 (incorporated by reference, see § 80.7), as specified in § 80.1101, must be used for distress traffic by direct-printing telegraphy. All messages must be preceded by at least one carriage return, a line feed signal, a letter shift signal and the distress signal MAYDAY.

* * * * *

53. Section 80.1127 is amended by revising paragraph (c) to read as follows:

§ 80.1127 On-scene communications.

* * * * *

(c) The preferred frequencies in radiotelephony for on-scene communications are 156.8 MHz and 2182 kHz. The frequency 2174.5 kHz may also be used for ship-to-ship on-scene communications using narrow-band direct-printing telegraphy in the forward error correcting mode in accordance with ITU-R Recommendation M.625-3, "Direct-printing Telegraph Equipment Employing Automatic Identification in the Maritime Mobile Service," with Annex, 1995 (incorporated by reference, see § 80.7), as specified in § 80.1101.

* * * * *

54. Section 80.1129 is amended by revising paragraph (d) to read as follows:

§ 80.1129 Locating and homing signals.

* * * * *

(d) The 9 GHz locating signals must be in accordance with ITU-R Recommendation M.628-4, "Technical Characteristics for Search and Rescue Radar Transponders," with Annexes, 1986-1990-1992-1994-2006 (incorporated by reference, see § 80.7), as specified in § 80.1101.

55. Section 80.1131 is amended by revising paragraph (j) to read as follows:

§ 80.1131 Transmissions of urgency communications.

* * * * *

(j) Error correction techniques, in accordance with ITU-R Recommendation M.625-3, "Direct-printing Telegraph Equipment Employing Automatic Identification in the Maritime Mobile Service," with Annex, 1995 (incorporated by reference, see § 80.7), as specified in § 80.1101, must be used for urgency messages by direct-printing telegraphy. All messages must be preceded by at least one carriage return, a line feed signal, a letter shift signal and the urgency signal PAN PAN.

* * * * *

56. Section 80.1133 is amended by revising paragraph (g) to read as follows:

§ 80.1133 Transmission of safety communications.

* * * * *

(g) Error correction techniques, in accordance with ITU-R Recommendation M.625-3, "Direct-printing Telegraph Equipment Employing Automatic Identification in the Maritime Mobile Service," with Annex, 1995 (incorporated by reference, see § 80.7), as specified in § 80.1101, must be used for safety messages by direct-printing telegraphy. All messages must be preceded by at least one carriage return, a line feed signal, a letter shift signal and the safety signal SECURITE.

* * * * *

57. Section 80.1135 is amended by revising paragraph (b) to read as follows:

§ 80.1135 Transmission of maritime safety information.

* * * * *

(b) The mode and format of the transmissions mentioned in this section is in accordance with ITU-R Recommendation M.540-2, "Operational and Technical Characteristics for an Automated Direct-printing Telegraph System for Promulgation of Navigational and Meteorological Warnings and Urgent Information to Ships," including Annexes, 1990 (incorporated by reference, see § 80.7) as specified in § 80.1101.

* * * * *

APPENDIX C

Final Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Third Further Notice of Proposed Rule Making (Third Further Notice)* in this proceeding.² The Commission sought written public comment on the proposals in the *Third Further Notice*, including comment on the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, the Fourth Report and Order

The rules adopted in the *Fourth Report and Order* are intended to promote maritime safety, maximize effective and efficient use of the spectrum available for maritime communications, accommodate technological innovation, avoid unnecessary regulatory burdens, maintain consistency with international maritime standards to the extent consistent with the United States public interest, and regulate the Maritime Radio Services in a manner that advances our nation's homeland security. Specifically, in the *Fourth Report and Order* the Commission (a) prohibits the certification, manufacture, importation, installation, or continued use of INMARSAT-E emergency position indicating radiobeacons (EPIRBs);⁴ (b) concludes that VHF-DSC handheld radiotelephones should include integrated Global Positioning System (GPS) capability, but defers adopting such a requirement until the Radio Technical Commission for Maritime Services (RTCM) completes work on GPS performance standards;⁵ (c) requires carriage of at least one VHF handheld radio transceiver on all small passenger vessels that do not carry a reserve power supply;⁶ (d) declines to take any immediate action to provide additional spectrum for ship station facsimile communications or to permit the transmission of data on maritime voice channels;⁷ (e) removes limits on the number of frequencies that can be assigned to a private coast station or marine utility station;⁸ (f) revises the Part 80 rules to incorporate by reference the latest international standards for radar equipment;⁹ and (g) clarifies that vessels subject to the GMDSS requirements are required to test their radiotelephone equipment on a daily basis.¹⁰

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601–612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, *Memorandum Opinion and Order, Third Report and Order, and Third Further Notice of Proposed Rule Making*, WT Docket No. 00-48, 21 FCC Rcd 10282, 10362 (2006) (*Third Further Notice*).

³ See 5 U.S.C. § 604.

⁴ See para. 4, *supra*.

⁵ See paras. 5-6, *supra*.

⁶ See paras. 7-11, *supra*.

⁷ See para. 12, *supra*.

⁸ See para. 13, *supra*.

⁹ See paras. 14-17, *supra*.

¹⁰ See paras. 18-19, *supra*.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

No comments were submitted specifically in response to the IRFA. We nonetheless considered the potential economic impact on small entities of the rules discussed in the IRFA, and we have considered alternatives that would reduce the potential economic impact on small entities of the rules adopted herein, regardless of whether the potential economic impact was discussed in any comments.

C. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.¹¹ The RFA defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹² In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹³ A small business concern is one which (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).¹⁴

Small businesses in the aviation and marine radio services use a marine very high frequency (VHF), medium frequency (MF), or high frequency (HF) radio, any type of emergency position indicating radio beacon (EPIRB) and/or radar, an aircraft radio, and/or any type of emergency locator transmitter (ELT). The Commission has not developed a definition of small entities specifically applicable to these small businesses. For purposes of this FRFA, therefore, the applicable definition of small entity is the definition under the SBA rules applicable to wireless telecommunications. Pursuant to this definition, a “small entity” for purposes of the ship station licensees, public coast station licensees, or other marine radio users that may be affected by these rules, is any entity employing 1,500 or fewer persons. 13 C.F.R. § 121.201 (NAICS Code 517212).

Nationwide, there are a total of approximately 29.6 million small businesses, according to the SBA.¹⁵ A “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹⁶ Nationwide, as of 2002, there were approximately 1.6 million small organizations.¹⁷ The term “small governmental jurisdiction” is defined generally as “governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”¹⁸ Census Bureau data for 2002 indicate that there were 87,525 local

¹¹ 5 U.S.C. § 603(b)(3).

¹² *Id.* § 601(6).

¹³ *Id.* § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” *Id.* § 601(3).

¹⁴ Small Business Act, 15 U.S.C. § 632 (1996).

¹⁵ See SBA, Office of Advocacy, “Frequently Asked Questions,” <http://web.sba.gov/faqs> (accessed Jan. 2009).

¹⁶ 5 U.S.C. § 601(4).

¹⁷ Independent Sector, *The New Nonprofit Almanac & Desk Reference* (2002).

¹⁸ 5 U.S.C. § 601(5).

governmental jurisdictions in the United States.¹⁹ We estimate that, of this total, 84,377 entities were “small governmental jurisdictions.”²⁰ Thus, we estimate that most governmental jurisdictions are small.

Wireless Service Providers. Since 2007, the Census Bureau has placed wireless firms within the broad, economic census category of Wireless Telecommunications Categories (Except Satellite).²¹ Prior to that time, such firms were within the now-superseded categories of “Paging” and “Cellular and Other Wireless Telecommunications.”²² Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.²³ Because Census Bureau data are not yet available for the new category, we will estimate small business prevalence using the prior categories and associated data. For the category of Paging, data for 2002 show that there were 807 firms that operated for the entire year.²⁴ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.²⁵ For the category of Cellular and Other Wireless Telecommunications, data for 2002 show that there were 1,397 firms that operated for the entire year.²⁶ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.²⁷ Thus, we estimate that the majority of wireless firms are small.

Aviation and Marine Services. Small businesses in the aviation and marine radio services use a very high frequency (“VHF”) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except Satellite), which is 1,500 or fewer employees.²⁸ Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any

¹⁹ U.S. Census Bureau, Statistical Abstract of the United States: 2006, Section 8, page 272, Table 415.

²⁰ We assume that the villages, school districts, and special districts are small, and total 48,558. See U.S. Census Bureau, Statistical Abstract of the United States: 2006, section 8, page 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

²¹ U.S. Census Bureau, 2007 NAICS Definitions, “517210 Wireless Telecommunications Categories (Except Satellite)”; <http://www.census.gov/naics/2007/def/ND517210.HTM#N517210>.

²² U.S. Census Bureau, 2002 NAICS Definitions, “517211 Paging”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>; U.S. Census Bureau, 2002 NAICS Definitions, “517212 Cellular and Other Wireless Telecommunications”; <http://www.census.gov/epcd/naics02/def/NDEF517.HTM>.

²³ 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

²⁴ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517211 (issued Nov. 2005).

²⁵ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

²⁶ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

²⁷ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

²⁸ 13 C.F.R. § 121.201, NAICS code 517210.

statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a “small” business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a “very small” business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.²⁹ There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as “small” businesses under the above special small business size standards.

Marine Radio Equipment Manufacturers. Some of the rules adopted herein may also affect small businesses that manufacture marine radio equipment. The Commission has not developed a definition of small entities applicable to marine radio equipment manufacturers. Therefore, the applicable definition is that for Wireless Communications Equipment Manufacturers. The Census Bureau defines this category as follows: “This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.”³⁰ The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees.³¹ According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year.³² Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999.³³ Thus, under this size standard, the majority of firms can be considered small.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

In the *Fourth Report and Order*, we adopt two rule amendments that could potentially have a direct, significant economic impact on a substantial number of small entities.³⁴ First, we amend Section

29 *Amendment of the Commission’s Rules Concerning Maritime Communications*, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853 (1998).

³⁰ U.S. Census Bureau, 2002 NAICS Definitions, “334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing”; <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

³¹ 13 C.F.R. § 121.201, NAICS code 334220.

³² U.S. Census Bureau, American FactFinder, 2002 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334220 (released May 26, 2005); <http://factfinder.census.gov>. The number of “establishments” is a less helpful indicator of small business prevalence in this context than would be the number of “firms” or “companies,” because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which was 929.

³³ *Id.* An additional eighteen establishments had employment of 1,000 or more.

³⁴ Although we have determined that VHF-DSC handheld radiotelephones should include integrated GPS capability, we also have deferred adopting such a requirement. It is our intent to adopt a rule requiring integrated GPS (continued....)

80.917 of the Commission's Rules³⁵ to require carriage of at least one VHF handheld marine radio by any small passenger vessel that does not carry a reserve power supply.³⁶ This requirement could affect small entities that own or operate small passenger vessels which do not carry a reserve power supply either in compliance with a pre-existing Commission requirement or voluntarily. Second, we amend Sections 80.273 and 80.1101 of the Commission's Rules³⁷ to incorporate by reference the currently applicable international standards for marine radar.³⁸ This could affect small entities that manufacture or use marine radar equipment.

In the IRFA accompanying the *Third Further Notice*, we specifically identified each of the above rule amendments as potentially affecting reporting, recordkeeping and other compliance requirements, and specifically requested comment on the economic impact of these changes.³⁹

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities."⁴⁰

Although we received no comments specifically addressed to the IRFA for the *Third Further Notice*, we have considered all comments to the *Third Further Notice* addressing the impact of any proposed change on small entities and all suggestions for alternative measures that would have a less significant impact on small entities. Moreover, even where we received no comments of this nature with regard to a particular new requirement, we considered the potential impact of the requirement on small entities, and considered alternatives. As noted above, we have identified two new requirements that may affect reporting, recordkeeping and other compliance requirements for small entities. We discuss both of these new requirements adopted in the *Fourth Report and Order*, and relevant alternatives, below.

In determining to require the carriage of a VHF handheld radio transceiver on all small passenger vessels that do not carry a reserve power supply, we found that such a requirement, which was supported by all commenters who addressed it, would enhance the safety of passengers and crew on such vessels by providing a means of communicating with search and rescue personnel in the event that an emergency

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capability in VHF-DSC handheld radiotelephones after RTCM completes work on GPS performance standards. See para. 6, *supra*. The Commission will undertake a Final Regulatory Flexibility Analysis of that requirement when it is adopted. We note, moreover, that the rule we adopt regarding daily testing of GMDSS radiotelephones simply clarifies an existing requirement, and therefore does not impose a new compliance burden on any entity. See para. 18 & n.60, *supra*.

³⁵ See 47 C.F.R. § 80.917.

³⁶ See para. 9, *supra*.

³⁷ See 47 C.F.R. §§ 80.273, 80.1101.

³⁸ See paras. 14-17, *supra*.

³⁹ See *Third Further Notice*, 21 FCC Rcd at 10365-66.

⁴⁰ 5 U.S.C. § 603(c)(1)-(4).

situation, such as an on-board fire or the taking on of water, disrupts or disables the main power supply.⁴¹ We also determined that there is no basis to exempt any class of small passenger vessel from the requirement to carry either a reserve power supply or at least one VHF handheld marine radio transceiver, or to otherwise take additional action to minimize the compliance costs of this requirement.⁴² In the IRFA accompanying the *Third Further Notice*, the Commission said that its “understanding [was] that such handheld radio equipment can be purchased for under fifty dollars at retail, making it a far less expensive proposition for small vessel owners and operators than would expanding the reserve power supply requirement to all small passenger vessels, regardless of size.”⁴³ The Commission also said that, “[n]otwithstanding the relative inexpensiveness of VHF handheld marine radios, and the important safety benefits that would accrue from imposing such a carriage requirement, we request that interested parties ... address whether the costs of such a requirement would outweigh the safety benefits, and ... suggest any alternatives, exemptions or phased-in implementation schedules that the Commission might adopt to reduce the compliance burden of such a requirement on small entities.”⁴⁴ No commenter has suggested that the Commission was incorrect in estimating the retail cost of VHF handheld marine radio transceivers as under fifty dollars. In fact, no commenter has suggested that the compliance costs of this new requirement would be onerous. Indeed, coupled with our earlier determination in the *Third Report and Order* regarding the appropriate scope of the reserve power supply requirement, we believe our action here benefits the small passenger vessel owners and operators that are subject to this new requirement to carry a VHF handheld marine radio transceiver insofar as it accords them a significantly less-costly alternative to carriage of a reserve power supply in order to meet their obligation to passengers and crew to have a means of maintaining communication with search and rescue personnel in the event of a disruption to the main power supply during a distress situation. We are requiring compliance with the requirement for carriage of a VHF handheld marine radio transceiver (or a reserve power supply for those small passenger vessels that elect to install a reserve power supply voluntarily as an alternative) within one year after the effective date of this rule amendment, in keeping with the one-year transition period the Commission adopted in the *Third Report and Order* with respect to the reserve power supply requirement.⁴⁵

We have also carefully considered the impact on small entities of our decision to incorporate by reference in Part 80 the currently applicable international standards for radar equipment.⁴⁶ In the IRFA accompanying the *Third Further Notice*, the Commission stated

We seek comment on the impact of such a revision on radar equipment manufacturers and on the owners and operators of vessels required to be fitted with radar equipment. Given that we contemplate amending our rules only to reflect the most up-to-date international standards for ship radar equipment, we question whether such an amendment would impose any new compliance burden on small entities, since they may already be required to, or have decided it is prudent to, manufacture and use equipment that conforms to those international standards. To the extent such an amendment would be deemed to create a new compliance burden, we ask interested parties whether and how that burden can be eliminated or

⁴¹ See paras. 8-9, *supra*.

⁴² See paras. 9-10, *supra*.

⁴³ See *Third Further Notice*, 21 FCC Rcd at 10366.

⁴⁴ *Id.*

⁴⁵ See *Third Report and Order*, 21 FCC Rcd at 10303-04 ¶ 38.

⁴⁶ See paras. 14-17, *supra*.

mitigated for small entities, both small manufacturers and small owners and operators of vessels fitted with radar equipment. Commenters should consider the possibility of retaining the existing Part 80 radar standards, incorporating by reference only some of the newer international radar standards, exempting certain entities from the requirement to comply with the newer international radar standards, and/or providing transition periods before compliance is required (so that, *e.g.*, radar equipment can still be certified based on compliance with the current standards for a specified period of time) and grandfathering protection (to permit the continued manufacture, sale, importation, and use of radar equipment certified under the old standards, either for a specified period of years or indefinitely). Commenters are also invited to suggest alternatives other than those discussed here.⁴⁷

No commenter opposed this proposed rule amendment, and no commenter suggested that there was any need for the Commission to carve out any special provisions for small entities. In fact, nothing in the record suggests that this rule change will impose significant compliance costs on any entity. Instead, it appears that, although the incorporation by reference of the international radar standards will impose new Part 80 requirements on certain vessels which have not been subject to Commission radar standards to date, such vessels would have to meet the international radar requirements when operating in international waters, irrespective of the Part 80 rules, so the incorporation by reference of the international radar standards should not create a new compliance burden on the owners and operators of those vessels. Indeed, the commenters addressing this issue believe that the adoption of the international radar standards for domestic use will actually benefit manufacturers and users of radar equipment because they will need to meet only a single set of radar standards, irrespective of where they operate. The absence of any comments opposing the incorporation by reference of any of these standards, or seeking relief for any small entities that may be newly subject to a requirement to comply with any of the standards, lends credence to the view that this rule change will not be burdensome to either vessel owners and operators or to manufacturers of radar equipment, whether or not they are small entities. In addition, we have accorded considerable flexibility to users of marine radar equipment, including small entities, by grandfathering all certified radar equipment installed prior to the effective date of these rule amendments, for the remainder of its useful life.

F. Report to Congress

The Commission will send a copy of the *Fourth Report and Order* in WT Docket No. 00-48, including the Final Regulatory Flexibility Analysis, in a report to be sent to Congress and the Congressional Budget Office pursuant to the Congressional Review Act.⁴⁸ In addition, the Commission will send a copy of the *Fourth Report and Order* in WT Docket No. 00-48, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the SBA. A copy of the *Fourth Report and Order* in WT Docket No. 00-48 and the Final Regulatory Flexibility Analysis (or summaries thereof) will also be published in the Federal Register.⁴⁹

⁴⁷ See *Third Report and Order*, 21 FCC Rcd at 10366-67.

⁴⁸ See 5 U.S.C. § 801(a)(1)(A).

⁴⁹ See *id.* § 604(b).