could be affected by normal variations and interruptions of ship’s power.


§ 80.1101 Performance standards.

(a) The abbreviations used in this section are as follows:

(1) International Maritime Organization (IMO).

(2) International Telecommunication Union—Telecommunication Standardization Bureau (ITU-T) (Standards formerly designated as CCITT are now designated as ITU-T).


(4) International Organization for Standardization (ISO).

(5) International Telecommunication Union—Radiocommunication Bureau (ITU-R) (Standards formerly designated as CCIR are now designated as ITU-R).

(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), as revised by IMO Resolution MSC.149(77).

(2) ITU-T E.161.

(3) ITU-T E.164.1.

(4) IEC 60992–101.

(5) IEC 60533.

(6) IEC 60945.

(7) ISO Standard 3791.

(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 (see § 80.7), and must be tested in accordance with the applicable IEC testing standards listed in paragraphs (c)(13) of this section, which are also incorporated by reference. (See § 80.7).

(1) IMO Resolution A.525(13), as revised by IMO Maritime Safety Committee (MSC) Resolution MSC.149(77).

(2) ITU-R M.540–2.

(3) MF radio equipment:

(i) IMO Resolution A.804(19), as amended by IMO Resolution MSC.68(68).


(iv) MF/HF radio equipment:

(i) IMO Resolution A.806(19), as amended by IMO Resolution MSC.68(68).


(4) VHF radio equipment:

(i) IMO Resolution A.803(19), as amended by IMO Resolution MSC.68(68).


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

(5) 406.0–406.1 MHz EPIRBs:

(i) IMO Resolution A.808(19).

(ii) IMO Resolution A.662(16).


(6) 9 GHz radar transponders:

(i) IMO Resolution A.802(19), as amended by IMO Resolution MSC.247(83).


(7) Two-Way VHF radiotelephone:

(i) IMO Resolution A.808(19), as revised by IMO Resolution MSC.149(77).

(ii) IMO Resolution MSC.80(70).

(8) INMARSAT Ship Earth Station Capable of Two-Way Communications: IMO Resolution A.808(19).

(9) INMARSAT-C SES: IMO Resolution A.807(19), as amended by IMO Resolution MSC.68(68).

(10) INMARSAT EGC: IMO Resolution A.664(16).

(11) Shipboard radar:

(i) IEC 60945.


(iii) IMO Resolution A.694(17).

(iv) IMO Resolution MSC.191(79).

(v) IMO Resolution MSC.192(79).


(12) Automatic Identification Systems (AIS):

(i) ITU-R M.1371–3.

(ii) IMO Resolution MSC.74(69).

(iii) IEC 61162–1.

(iv) IEC 61993–2.

(13) Standards for testing GMDSS equipment:

(i) IEC 61097–1.

(ii) IEC 61097–3.

(iii) IEC 61097–4.

(iv) IEC 61097–6.

(v) IEC 61097–7.
§ 80.1103 Equipment authorization.

(a) All equipment specified in §80.1101 must be certificated in accordance with 47 CFR part 2 specifically for GMDSS use, except for equipment used in the INMARSAT space segment which must be type-approved by INMARSAT and verified in accordance with 47 CFR part 2 specifically for GMDSS use. The technical parameters of the equipment must conform to the performance standards as specified in §80.1101. For emergency position-indicating radiobeacons operating on 406.0–406.1 MHz (406.0–406.1 MHz EPIRBs) that were authorized prior to April 15, 1992, and meet the requirements of §80.1101, the manufacturer may attest by letter that the equipment (indicate FCC ID#) meets the requirements of §80.1101 and request that it be denoted as approved for GMDSS use.

(b) Applicants for certification must submit with their applications measurement data sufficiently complete to ensure compliance with the technical parameters. The application must include the items listed in 47 CFR 2.1033. Additional measurement data or information may be requested depending upon the equipment. For items not listed in §2.1033 of this chapter, the applicant must attest that the equipment complies with performance standards as specified in §80.1101 and, where applicable, that measurements have been made that demonstrate the necessary compliance. Submission of representative data demonstrating compliance is not required unless requested by the Commission.

(c) Applicants for verification must attest that the equipment complies with performance standards as specified in §80.1101 and, where applicable, that measurements have been made that demonstrate the necessary compliance. Submission of representative data demonstrating compliance is not required unless requested by the Commission. An application must include the items listed in §§2.953 and 2.955 of this chapter and a copy of the type-approval certification indicating that equipment meets GMDSS standards and includes all peripheral equipment associated with the specific unit under review.

(d) Submission of a sample unit is not required unless specifically requested by the Commission.

(e) In addition to the requirements in part 2 of this chapter, equipment specified in §80.1101 shall be labeled as follows: “This device complies with the GMDSS provisions of part 80 of the FCC rules.” Such a label is not required for emergency position-indicating radiobeacons operating on 406.0–406.1 MHz EPIRBs that were authorized prior to April 15, 1992.

§ 80.1105 Maintenance requirements.

(a) Equipment must be so designed that the main units can be replaced readily, without elaborate recalibration or readjustment. Where applicable, equipment must be constructed and installed so that it is readily accessible for inspection and on-board maintenance purposes. Adequate information must be provided to enable the equipment to be properly operated and maintained (see IMO Resolution A.569(14)).

(b) Radio equipment required by this subpart must be maintained to provide the availability of the functional requirements specified in §80.1081 and to meet the performance standards specified in §80.1101.

(c) On ships engaged on voyages in sea areas A1 and A2, the availability must be ensured by duplication of equipment, shore-based maintenance, or at-sea electronic maintenance capability, or a combination of these.

(d) On ships engaged on voyages in sea areas A3 and A4, the availability must be ensured by using a combination of at least two of the following methods: duplication of equipment,