



THE SHIPPING (RADIO) REGULATIONS 1994

CATHERINE A. TIZARD, Governor-General

ORDER IN COUNCIL

At Wellington this 28th day of March 1994

Present:

THE RIGHT HON. D. C. MCKINNON PRESIDING IN COUNCIL

PURSUANT to sections 236, 504, and 505A of the Shipping and Seamen Act 1952, Her Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following regulations.

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REGULATIONS

1. Title and commencement—(1) These regulations may be cited as the Shipping (Radio) Regulations 1994.

(2) These regulations shall come into force on the 1st day of May 1994.

PART I

PRELIMINARY PROVISIONS

2. Interpretation—In these regulations, unless the context otherwise requires,—

“The Act” means the Shipping and Seamen Act 1952:

“Certificated radio operator” means a person who holds the certificates required by regulation 26 (1) of these regulations:

“GMDSS” means the Global Maritime Distress and Safety System:

“GMDSS ship” means—

(a) A ship to which Part II of these regulations applies; or

(b) A ship that complies in all respects with that Part of these regulations:

“Harmful interference” means any emission, radiation, or induction that endangers the functioning of a radio navigation service or of other safety services, or seriously degrades, obstructs, or repeatedly interrupts a radio communication service operating in accordance with these regulations:

“Organisation” means the International Maritime Organisation:

“Radio installation” means any radio installation provided on board a ship in compliance with these regulations, including its associated antennas, interconnecting circuits and, where appropriate, sources of electrical energy:

“Radio Regulations” means the Radio Regulations annexed to, or regarded as being annexed to, the International Telecommunication Convention that is for the time being in force.

3. Application—Subject to section 195 of the Act and to regulations 5 and 18 of these regulations, these regulations shall apply to the following ships:

(a) New Zealand ships:

- (b) Coastal ships:
- (c) Other ships within any port in New Zealand.

PART II

REQUIREMENTS RELATING TO GMDSS SHIPS

4. Interpretation—In this Part of these regulations, unless the context otherwise requires,—

“Approved” means approved by the Director of Maritime Safety:

“Bridge-to-bridge communications” means safety communications between ships from the position from which the ships are normally navigated:

“Continuous watch” means a radio watch that is not interrupted other than for brief intervals when either—

(a) The ship’s receiving capability is impaired or blocked by its own communications; or

(b) The facilities are under periodical maintenance or checks:

“Direct-printing telegraphy” means automated telegraphy techniques that comply with the relevant recommendations of the International Radio Consultative Committee (CCIR):

“DSC” means Digital Selective Calling, being a technique using digital codes that enables a radio station to establish contact with, and transfer information to, another station or group of stations, and complying with the relevant recommendations of the International Radio Consultative Committee (CCIR):

“EPIRB” means a station in the mobile service the emissions of which are intended to facilitate search and rescue operations:

“General radio communications” means operational and public correspondence traffic, other than distress, urgency, and safety messages, conducted by radio:

“GMDSS operator’s certificate” means a General Radiotelephone Operator’s Certificate endorsed for GMDSS operation and issued by the Secretary of Commerce, under the Radio Regulations 1987:

“HF” means the frequency spectrum between 3000 kHz and 30 MHz:

“INMARSAT” means the organisation established by the Convention on the International Maritime Satellite Organisation (INMARSAT) adopted on the 3rd day of September 1976:

“International NAVTEX service” means the co-ordinated broadcast and automatic reception on 518 kHz of maritime safety information by means of narrow-band direct-printing telegraphy using the English language:

“Locating” means the finding of ships, aircraft, units, or persons in distress:

“Maritime safety information” means navigational and meteorological warnings, meteorological forecasts, and other urgent safety-related messages broadcast to ships:

“MF” means the frequency spectrum between 300 kHz and 3000 kHz:

“Polar orbiting satellite service” means a service that is based on polar orbiting satellites that receive and relay distress alerts from satellite EPIRBs and that provides their position:

“Radar transponder” means a survival craft radar transponder for search and rescue between ships or aircraft and survival craft:

“Radio communication” means telecommunication by means of radio waves:

- “Radio communication service” means a service as defined in the Radio Regulations involving the transmission, emission, or reception of radio waves for specific telecommunication purposes:
- “Radio log” means the record required to be kept by regulation 16 of these regulations:
- “Satellite EPIRB” means an EPIRB in the mobile-satellite service:
- “Sea area A1” means an area within the radiotelephone coverage of at least one VHF coast station in which continuous DSC alerting is available:
- “Sea area A2” means an area, excluding sea area A1, within the radiotelephone coverage of at least one MF coast station in which continuous DSC alerting is available:
- “Sea area A3” means an area, excluding areas A1 and A2, within the coverage of an INMARSAT geostationary satellite in which continuous alerting is available:
- “Sea area A4” means an area outside sea areas A1, A2, and A3:
- “Service” means a service defined in the Radio Regulations:
- “Ship earth station”, in relation to any ship, means a mobile earth station in the maritime mobile-satellite service that is located on board the ship:
- “Ship station” means a mobile station in the maritime mobile service that is located on board a vessel that is not permanently moored; but does not include a survival craft station:
- “Survival craft station” means a mobile station in the maritime mobile service intended solely for survival purposes and located on any lifeboat, life-raft, or other survival equipment:
- “VHF” means the frequency spectrum between 30 MHz and 300 MHz.

5. Application—(1) This Part of these regulations shall apply to every cargo ship of 300 gross tonnage or more that is engaged on an international voyage and every passenger ship engaged on an international voyage, whose keel is laid, or in respect of which a similar stage of construction is reached, on or after the 1st day of February 1995.

(2) On and after the 1st day of February 1999, this Part of these regulations shall also apply to every cargo ship of 300 gross tonnage or more that is engaged on an international voyage and every passenger ship engaged on an international voyage, whose keel was laid, or in respect of which a similar stage of construction was reached, before the 1st day of February 1995.

(3) For the purposes of subclauses (1) and (2) of this regulation, “similar stage of construction”, means the stage at which construction identifiable with the ship comprises at least 50 tonnes or 1 percent of the estimated mass of the structural material of the completed ship, whichever is the lesser.

6. Installation, location, and control of radio equipment—(1) Every radio installation shall—

- (a) Be so located that no harmful interference of mechanical, electrical, or other origin affects its proper use, and so as to ensure electromagnetic compatibility and avoidance of harmful interaction with other equipment and systems; and
- (b) Be so located as to ensure the greatest possible degree of safety and operational availability; and

- (c) Be protected against harmful effects of water, extremes of temperature, and other adverse environmental conditions; and
 - (d) Be provided with reliable, permanently arranged electrical lighting, independent of the main and emergency sources of electrical power, for the adequate illumination of the radio controls for operating the radio installation; and
 - (e) Be clearly marked with the call sign, the ship station identity, and other codes, as applicable, for the use of the radio installation.
- (2) Control of the VHF radiotelephone channels shall be immediately available on the navigating bridge convenient to the conning position. Where necessary, facilities shall be available to permit radiocommunications from the wings of the navigating bridge and portable VHF equipment may be used for the purpose.
- (3) Each radio transmitter and receiver fitted in accordance with these regulations shall be provided with a suitable antenna or antennas. The antennas shall be so constructed and sited as to enable each transmitter and receiver to perform its intended communication function effectively.
- (4) Where wire antennas are provided as part of a radio installation, they shall be fitted with suitable insulators and, if suspended between supports liable to whipping, be protected against breakage. In addition, a spare wire antenna completely assembled for rapid replacement shall be carried.
- (5) Where MF and MF/HF radio installations are provided with an antenna which is not a supported wire antenna, a spare antenna of similar electrical characteristics shall be carried.

7. Radio equipment to be provided for all sea areas—(1) Every ship shall be provided with—

- (a) A VHF radio installation capable of—
 - (i) Transmitting and receiving DSC on the frequency 156.525 MHz (channel 70); and
 - (ii) Initiating the transmission of distress alerts on channel 70 from the position from which the ship is normally navigated; and
 - (iii) Transmitting and receiving radiotelephony on the frequencies 156.300 MHz (channel 6), 156.650 MHz (channel 13) and 156.800 MHz (channel 16); and
- (b) A VHF radio installation capable of maintaining a continuous DSC watch on channel 70 which may be separate from, or combined with, that required by paragraph (a) of this regulation; and
- (c) A radar transponder capable of operating in the 9 GHz band, that—
 - (i) Shall be so stowed that it can be easily utilised; and
 - (ii) May be one of those required for a survival craft in accordance with regulation 6 of Chapter III of the Safety Convention; and
- (d) A receiver capable of receiving International NAVTEX service broadcasts if the ship is engaged on voyages in any area in which an international NAVTEX service is provided; and
- (e) A radio facility for reception of maritime safety information by the INMARSAT enhanced group calling system if the ship is engaged on voyages in any area of INMARSAT coverage but in which an international NAVTEX service is not provided, unless the ship is engaged exclusively on voyages in areas where an HF direct printing telegraphy maritime safety information service is

provided and the ship is fitted with equipment capable of receiving such service; and

(f) Subject to regulation 8 (3) of these regulations, a satellite EPIRB which shall—

(i) Be capable of transmitting a distress alert either through the polar orbiting satellite service operating in the 406 MHz band, which may be the float-free satellite EPIRB carried in accordance with regulation 7 of Chapter IV of the Safety Convention or, alternatively, in sea areas A1, A2, and A3 only, through the INMARSAT geostationary satellite service operating in the 1.6 GHz band; and

(ii) Be installed in an easily accessible position; and

(iii) Be ready to be manually released and capable of being carried by one person into a survival craft; and

(iv) Be capable of floating free if the ship sinks and of being automatically activated when afloat; and

(v) Be capable of being activated manually.

(2) Until the 31st day of January 1999, every ship shall, in addition, be fitted with a radio installation consisting of a radiotelephone distress frequency watch receiver capable of operating on 2182 kHz.

(3) Until the 31st day of January 1999, every ship shall, unless it is an A1 area ship, be fitted with a device for generating the radiotelephone alarm signal on the frequency 2182 kHz.

8. Radio equipment—sea area A1—(1) In addition to meeting the requirements of regulation 7 of these regulations, every ship engaged on voyages exclusively in sea area A1 shall be provided with a radio installation capable of initiating the transmission of ship-to-shore distress alerts by operation from the position from which the ship is normally navigated, operating either—

(a) On VHF using DSC, which requirement may be fulfilled by the VHF EPIRB required by subclause (3) of this regulation either by installing it close to, or by providing for its remote activation from, the position from which the ship is normally navigated; or

(b) Through the polar orbiting satellite service on 406 MHz, which requirement may be fulfilled by the satellite EPIRB, required by regulation 7 (1) (f) of these regulations either by installing it close to, or by providing for its remote activation from, the position from which the ship is normally navigated; or

(c) If the ship is at sea within coverage of MF coast stations equipped with DSC, on MF using DSC; or

(d) On HF using DSC; or

(e) Through the INMARSAT geostationary satellite service, which requirement may be fulfilled by either—

(i) An INMARSAT ship earth station; or

(ii) The satellite EPIRB, required by regulation 7 (1) (f) of these regulations, if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated.

(2) The VHF radio installation, required by regulation 7 (1) (a) of these regulations shall also be capable of transmitting and receiving general radiocommunications using radiotelephony.

(3) Any ship engaged on voyages exclusively in sea area A1 may, in lieu of being provided with the satellite EPIRB required by regulation 7 (1) (f) of these regulations, be provided with an EPIRB which shall be—

- (a) Capable of transmitting a distress alert using DSC on VHF channel 70 and providing for locating by means of a radar transponder operating in the 9 GHz band; and
- (b) Installed in an easily accessible position; and
- (c) Ready to be manually released and capable of being carried by one person into a survival craft; and
- (d) Capable of floating free if the ship sinks and being automatically activated when afloat; and
- (e) Capable of being activated manually.

9. Radio equipment—sea areas A1 and A2—(1) In addition to meeting the requirements of regulation 7 of these regulations, every ship engaged on voyages beyond sea area A1, but remaining in sea area A2, shall be provided with—

- (a) 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
- (b) A radio installation capable of maintaining a continuous DSC watch on the frequency 2187.5 kHz, which installation may be separate from, or combined with, that required by paragraph (a) (i) of this subclause; and
- (c) 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 MHz, which requirement may be fulfilled by the satellite EPIRB, required by regulation 7 (1) (f) of these regulations if it is installed close to, or capable of 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, which requirement may be fulfilled by either—
 - (A) The equipment specified in subclause (3) (b) of this regulation; or
 - (B) The satellite EPIRB, required by regulation 7 (1) (f) of these regulations, if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated.

(2) Means shall be provided to initiate transmission of distress alerts by the radio installations specified in paragraphs (a) and (c) of subclause (1) of this regulation from the position from which the ship is normally navigated.

(3) The ship shall, in addition, be capable of transmitting and receiving general radiocommunications using radiotelephony or direct-printing telegraphy by either—

- (a) A radio installation operating on working frequencies in the bands between 1605 kHz and 4000 kHz or between 4000 kHz and 27 500 kHz, which requirement may be fulfilled by the addition of this capability in the equipment required by subclause (1) (a) of this regulation; or

(b) An INMARSAT ship earth station.

(4) Ships constructed before February 1997 that are engaged exclusively on voyages within sea area A2 are exempted from the requirements of paragraphs (a) (i) and (b) of regulation 7 (1) of these regulations provided such ships maintain, when practicable, a continuous listening watch on VHF channel 16. This watch shall be kept from the position from which the ship is normally navigated.

10. Radio equipment—sea areas A1, A2, and A3—(1) In addition to meeting the requirements of regulation 7 of these regulations, every ship engaged on voyages beyond sea areas A1 and A2, but remaining within sea area A3, shall be provided with the equipment specified in *alternative A* or *alternative B* of this subclause.

Alternative A

- (a) An INMARSAT ship earth station capable of—
- (i) Transmitting and receiving distress and safety communications using direct printing telegraphy; and
 - (ii) Initiating and receiving distress priority calls; and
 - (iii) Maintaining watch for shore-to-ship distress alerts, including those directed to specifically defined geographical areas; and
 - (iv) Transmitting and receiving general radiocommunications, using either radiotelephony or direct-printing telegraphy; and
- (b) An MF radio installation capable of transmitting and receiving, for distress and safety purpose, on the frequencies—
- (i) 2187.5 kHz using DSC; and
 - (ii) 2182 kHz using radiotelephony; and
- (c) 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 (b) (i) of this alternative; and
- (d) Means of initiating the transmission of ship-to-shore distress alerts by a radio service operating either—
- (i) Through the polar orbiting satellite service on 406 MHz, which requirement may be fulfilled by the satellite EPIRB, required by regulation 7 (1) (f) of these regulations if it is installed close to, or capable of 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, either by an additional ship earth station or by the satellite EPIRB required by regulation 7 (1) (f) of these regulations if it is installed close to, or capable of remote activation from the position from which the ship is normally navigated.

Alternative B

- (a) An MF/HF radio installation capable of transmitting and receiving, for distress and safety purposes, on all distress and safety frequencies in the bands between 1605 kHz and 4000 kHz and between 4000 kHz and 27 500 kHz—
- (i) Using DSC; and
 - (ii) Using radiotelephony; and
 - (iii) Using direct-printing telegraphy; and

- (b) Equipment capable of maintaining DSC watch on 2187.5 kHz, 8414.5 kHz and on at least one of the distress and safety DSC frequencies 4207.5 kHz, 6312 kHz, 12 577 kHz or 16 804.5 kHz, which equipment shall be such that it shall be possible at any time to select any of these DSC distress and safety frequencies, and which equipment may be separate from, or combined with, the equipment required by paragraph (a) of this alternative; and
- (c) Means of initiating the transmission of ship-to-shore distress alerts by a radiocommunication service other than HF operating either—
- (i) Through the polar orbiting satellite service on 406 MHz, which requirement may be fulfilled by the satellite EPIRB, required by regulation 7 (1) (f) of these regulations if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated; or
 - (ii) Through the INMARSAT geostationary satellite service, which requirement may be fulfilled by either—
 - (A) An INMARSAT ship earth station; or
 - (B) The satellite EPIRB, required by regulation 7 (1) (f) of these regulations if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated; and
- (d) In addition, means of transmitting and receiving general radiocommunications using radiotelephony or direct-printing telegraphy shall be provided by an MF/HF radio installation operating on working frequencies in the bands between 1605 kHz and 4000 kHz and between 4000 kHz and 27 500 kHz, which requirement may be fulfilled by the addition of this capability in the equipment required by paragraph (a) of this alternative.

(2) Means shall be provided to initiate transmission of distress alerts from the position from which the ship is normally navigated by the radio installations specified in paragraphs (a), (b), and (d) of *alternative A* and paragraphs (a) and (c) of *alternative B* of subclause (1) of this regulation.

(3) Ships constructed before February 1997 that are engaged exclusively on voyages within sea areas A2 and A3 are exempted from the requirements of paragraphs (a) (i), (a) (ii), and (b) of regulation 7 (1) of these regulations provided such ships maintain, when practicable, a continuous listening watch on VHF channel 16. This watch shall be kept from the position from which the ship is normally navigated.

11. Radio equipment—sea areas A1, A2, A3, and A4—(1) In addition to meeting the requirements of regulation 7 of these regulations, ships engaged on all sea areas shall be provided with the radio installations and equipment specified in *alternative B* of regulation 10 (1) of these regulations, except that the equipment specified in paragraph (c) (ii) of the said *alternative B* shall not be accepted as an alternative to the equipment specified in paragraph (c) (i) of the said *alternative B*, and the equipment specified in the said paragraph (c) (i) shall always be provided in such cases. Such ships shall in addition comply with the requirements of regulation 10 (2) of these regulations.

(2) Ships constructed before February 1997 that are engaged exclusively on voyages within sea areas A2, A3, and A4 are exempted from the requirements of paragraphs (a) (i), (a) (ii), and (b) of regulation 7 (1) of these regulations provided such ships maintain, when practicable, a continuous

listening watch on VHF channel 16. This watch shall be kept from the position from which the ship is normally navigated.

12. Radio watches—(1) Every ship shall, while at sea, maintain a continuous watch—

- (a) On VHF DSC channel 70, if the ship, in accordance with the requirements of regulation 7 (1) (b) of these regulations, is fitted with a VHF radio installation; and
- (b) On the distress and safety DSC frequency 2187.5 kHz, if the ship, in accordance with the requirements of regulation 9 (1) (b) of these regulations or paragraph (c) of *alternative A* in regulation 10 of these regulations, is fitted with an MF radio installation; and
- (c) On the distress and safety DSC frequencies 2187.5 kHz and 8414.5 kHz and also on at least one of the distress band safety DSC frequencies 4207.5 kHz, 6312 kHz, 12 577 kHz or 16 804.5 kHz, appropriate to the time of day and the geographical position of the ship, if the ship, in accordance with the requirements of paragraph (b) of *alternative B* of regulation 10 or of regulation 11 of these regulations, is fitted with an MF/HF radio installation, which watch may be kept by means of a scanning receiver; and
- (d) For satellite shore-to-ship distress alerts, if the ship, in accordance with the requirements of paragraph (a) of *alternative A* of regulation 10 of these regulations, is fitted with an INMARSAT ship earth station.

(2) Every ship, while at sea, shall maintain a radio watch for broadcasts of maritime safety information on the appropriate frequency or frequencies on which such information is broadcast for the area in which the ship is navigating.

(3) During the period ending with the close of the 31st day of January 1999 every ship while at sea shall maintain, when practicable, a continuous listening watch on VHF channel 16, which watch shall be kept at the position from which the ship is normally navigated.

(4) During the period ending with the close of the 31st day of January 1999 every ship required to carry a radiotelephone watch receiver shall maintain, while at sea, a continuous watch on the radiotelephone distress frequency 2182 kHz, which watch shall be kept at the position from which the ship is normally navigated.

13. Sources of energy—(1) There shall be available at all times, while the ship is at sea, a supply of electrical energy sufficient to operate the radio installations and to charge any batteries used as part of a reserve source or sources of energy for the radio installations.

(2) A reserve source or sources of energy shall be provided on every ship, to supply radio installations used for the purpose of conducting distress and safety radiocommunications, in the event of failure of the ship's main and emergency sources of electrical power. The reserve source or sources of energy shall be capable of simultaneously operating the VHF radio installation required by regulation 7 (1) (a) of these regulations and, as appropriate for the sea area or sea areas for which the ship is equipped, either the MF radio installation required by regulation 9 (1) (a) of these regulations, the MF/HF radio installation required by paragraph (a) of *alternative B* in regulation 10 or by regulation 11 of these regulations, or the INMARSAT ship earth station required by paragraph (a) of *alternative A* of

regulation 10 of these regulations, and any of the additional loads mentioned in subclauses (5), (6), and (9) of this regulation, for a period of at least—

- (a) One hour, on ships provided with an emergency source of electrical power, if such source of power complies fully with all relevant provisions of regulation 1/42 or 1/43 of Chapter II of the Safety Convention, including the supply of such power to the radio installations; and
 - (b) Six hours on ships not provided with an emergency source of electrical power complying fully with all relevant provisions of regulation 1/42 or regulation 1/43 of Chapter II of the Safety Convention, including the supply of such power to the radio installations.
- (3) The reserve source or sources of energy need not be capable of supplying independent HF and MF radio installations simultaneously.
- (4) The reserve source or sources of energy shall be independent of the propelling power of the ship and the ship's electrical system.
- (5) Where, in addition to the VHF installation, two or more of the other radio installations referred to in subclause (2) of this regulation can be connected to the reserve source or sources of energy, such sources shall be capable of simultaneously supplying, for the period specified, as appropriate, in paragraph (a) or paragraph (b) of that subclause the VHF radio installation and either—
- (a) All other radio installations that can be connected to the reserve source or sources of energy at the same time; or
 - (b) If only one of the other radio installations can be connected to the reserve source or sources of energy at the same time as the VHF radio installation, whichever of the other radio installations will consume the most power.
- (6) The reserve source or sources of energy may be used to supply the electrical lighting required by regulation 6 (1) (d) of these regulations.
- (7) Where a reserve source of energy consists of a rechargeable accumulator battery or batteries—
- (a) A means of automatically charging such batteries shall be provided which shall be capable of recharging them to minimum capacity requirements within 10 hours; and
 - (b) The capacity of the battery or batteries shall be checked when the ship is not at sea, at intervals not exceeding 12 months.
- (8) The siting and installation of accumulator batteries which provide a reserve source of energy shall be such as to ensure—
- (a) The highest degree of service; and
 - (b) A reasonable lifetime; and
 - (c) Reasonable safety; and
 - (d) That battery temperatures remain within the manufacturer's specifications whether under charge or idle; and
 - (e) That when fully charged, the batteries will provide at least the minimum required hours of operation under all weather conditions.
- (9) If an uninterrupted input of information from the ship's navigational or other equipment to a radio installation required by this Part is needed to ensure its proper performance, means shall be provided to ensure the continuous supply of such information in the event of failure of the ship's main or emergency source of electrical power.

(10) For the purpose of calculating the capacity of the reserve source of energy referred to in paragraph (a) or the batteries referred to in paragraph (b) of this subclause, the formula or method to be used shall be as specified in the relevant paragraph, namely,—

(a) In the case of the reserve source of energy required by subclause (2) of this regulation, the following formula shall be used:

The electrical load to be supplied by the reserve source of energy for each radio installation required for distress conditions shall be not less than one-half of the current consumption necessary for transmission + the current consumption necessary for reception + current consumption of any additional loads:

(b) In the case of the batteries required by subclause (7) (b) of this regulation, the method used shall be to fully discharge and recharge the battery, using normal operating current and period (e.g. 10 hours). Assessment of the charge condition may be made at any time but it shall be done without significant discharge of the battery while the ship is at sea.

14. Serviceability and maintenance requirements—(1) Equipment shall be so designed that the main units can be replaced readily, without elaborate recalibration or readjustment.

(2) Where appropriate, equipment shall be so constructed and installed that it is readily accessible for inspection and on-board maintenance purposes.

(3) Adequate information shall be provided on board the ship to enable the equipment to be properly operated and maintained.

(4) Adequate tools and spares shall be provided on board the ship to enable the equipment to be maintained.

(5) Radio equipment required by this Part of these regulations shall be maintained to meet the appropriate performance standards prescribed for the purposes of these regulations.

(6) On every ship engaged on voyages in sea area A1 or sea area A2, the equipment availability shall be ensured by using such methods as duplication of equipment, shore based maintenance, or at sea electronic maintenance capability, or a combination of these.

(7) On every ship engaged on voyages in sea area A3 or sea area A4, the equipment availability shall be ensured by using a combination of at least 2 methods such as duplication of equipment, shore based maintenance, or at sea electronic maintenance capability.

(8) In all New Zealand ships to which these regulations apply a person nominated by the master, normally the person qualified under regulation 15 (1) of these regulations, shall, while the ship is at sea, carry out the appropriate tests and checks specified in the First and Second Schedules to these regulations. If any of the radio installations required by these regulations are not in working order, the nominated person shall inform the master and record details of the deficiencies in the radio log.

(9) Malfunction of the equipment for providing the general radio communication required by regulations 8 (2) and 9 (3) of these regulations shall not be considered as making a ship unseaworthy or as reason for delaying the ship in ports where radio repair facilities are not readily available, providing the ship is capable of performing all distress and safety functions.

15. Radio personnel—(1) Every ship to which this Part of these regulations applies shall carry a person or persons qualified for distress and safety radio communication purposes as specified in subclause (2) of this regulation. Such person or persons shall be holders of certificates specified in the Radio Regulations as appropriate. One such person shall be designated by the master to have primary responsibility for radio communications during distress incidents.

(2) On every ship engaged on voyages in any of sea areas A1, A2, A3, and A4, the person mentioned in subclause (1) of this regulation shall hold, as a minimum,—

(a) A radiotelephone operator's general certificate endorsed for GMDSS operation and issued in accordance with subsection C of Section IIIA of Article 55 of the Radio Regulations; and

(b) If the person has not held a radio certificate before the 1st day of November 1986, a certificate of proficiency issued by the Secretary for Transport stating that the applicant has acquired the knowledge and training specified in the Third Schedule to these regulations.

(3) No person who—

(a) First qualifies for a radio certificate after the 1st day of November 1986; or

(b) Has not held a valid radio certificate, or has not served as a radio officer or a radiotelephone operator in any ship to which this Part of these regulations applies during the period of 5 years immediately preceding the 1st day of November 1986,—

shall serve as a radio officer or radiotelephone operator in any such ship, unless that person—

(c) Holds a certificate of attendance at an approved survival craft course; and

(d) Holds a certificate of attendance at an approved fire fighting course; and

(e) Holds an approved first-aid certificate; and

(f) Obtains a certificate of medical fitness at intervals not exceeding 5 years.

(4) A superintendent may require any radio officer or radiotelephone operator to produce a certificate of medical fitness before that officer or operator engages in such a position on board any ship to which this Part of these regulations applies.

(5) Where an officer or operator fails to produce a certificate of medical fitness as required by this regulation, the superintendent may refuse to permit the engagement of the officer or operator until that officer or operator produces a current certificate of medical fitness.

16. Radio records and documents—(1) A record (to be called the radio log) shall be kept of the following matters which shall be recorded as they occur, together with the time of their occurrence; namely—

(a) A summary of communications relating to distress, urgency and safety traffic; and

(b) A record of important incidents connected with the radio service; and

(c) Where appropriate, the position of the ship at least once a day.

(2) The master shall inspect and sign each day's entries in the radio log.

(3) Section 179 of the Shipping and Seamen Act shall apply to the radio log as it applies to the official log book.

(4) In addition to the radio log required by subclause (1) of this regulation, the following documents shall be carried:

- (a) A ship station licence;
- (b) Certificates of radio operators;
- (c) An alphabetical list of call signs of stations used in the Maritime Mobile Service;
- (d) A list of coast stations;
- (e) A list of ship stations;
- (f) A list of radio determination and special service stations;
- (g) An International Telecommunications Union Manual for use in the Maritime Mobile and the Maritime Mobile Satellite Services;
- (h) Tariffs of the countries for which the station most frequently accepts public correspondence.

PART III

REQUIREMENTS RELATING TO NON-GMDSS SHIPS

17. Interpretation—(1) In this Part of these regulations, unless the context otherwise requires,—

“Maintenance” means any activity intended to keep a radio installation in satisfactory working condition; and includes tests, measurements, replacements, adjustments, and repair:

“New Zealand HF coast station” means a land station in the maritime mobile service, approved by the Secretary for Transport, providing a continuous distress and safety service for ships by receiving and transmitting on allocated frequencies in the bands between 1605 kHz and 27 500 kHz:

“New Zealand VHF coast station” means a land station in the maritime mobile service, approved by the Secretary for Transport, providing a continuous distress and safety service for ships by receiving and transmitting on allocated frequencies in the maritime mobile VHF band using radiotelephony:

“Sea area B1” means a sea area within the normal coverage of a New Zealand VHF coast station on channel 16 (radio telephony):

“Sea area B3” means a sea area within the expected coverage of a New Zealand HF coast station, as is appropriate for time of day and geographical location, on 2182 kHz, 4125 kHz, 6215 kHz, 8291 kHz, 12 290 kHz, and 16 420 kHz (radio telephony):

“Silence period” means the period of 3 minutes beginning at each hour and at 30 minutes past each hour, during which no transmission other than for distress shall be made, on the frequency of 2182 kHz.

(2) Expressions used in this Part of these regulations and not otherwise defined in this regulation, but defined in Part II of these regulations, shall have the meanings so defined, unless the context otherwise requires.

18. Application—(1) This Part of these regulations shall apply to—

- (a) Every cargo ship of less than 300 gross tonnage that is engaged on an international voyage; and
- (b) Every coastal ship; and
- (c) Every restricted-limit ship; and
- (d) Every fishing vessel—

whose keel has been laid, or in respect of which a similar stage of construction has been reached, on or after the 1st day of February 1993.

(2) On and after the 1st day of February 1999, this Part of these regulations shall also apply to—

- (a) Every cargo ship of less than 300 gross tonnage that is engaged on an international voyage; and
- (b) Every coastal ship; and
- (c) Every restricted-limit ship; and
- (d) Every fishing vessel—

whose keel was laid, or in respect of which a similar stage of construction was reached, before the 1st day of February 1993.

(3) For the purposes of subclauses (1) and (2) of this regulation, “similar stage of construction”, means the stage at which construction identifiable with the ship comprises at least 50 tonnes or 1 percent of the estimated mass of the structural material of the completed ship, whichever is the lesser.

19. Installation, location, and control of radio equipment—Every ship to which this Part of these regulations applies shall comply with regulation 6 of these regulations and in addition a reliable clock shall be securely mounted in such a position that the entire dial can be easily observed from the radiotelephone operating position. The marking of the silence periods shall be clearly visible.

20. Radio equipment to be provided for all sea areas—(1) Every ship to which this Part of these regulations applies shall be provided with—

- (a) A VHF radio installation capable of transmitting and receiving radiotelephony on the frequencies 156.300 MHz (channel 6), 156.650 MHz (channel 13), and 156.800 MHz (channel 16), and initiating the transmission of distress alerts from the position from which the ship is normally navigated by using channel 16; and
- (b) A VHF radio installation capable of maintaining a continuous radiotelephony watch on channel 16, which may be separate from, or combined with, that required by paragraph (a) of this subclause; and
- (c) Subject to the provisions of regulation 21 (2) of these regulations, an EPIRB, which shall comply with the requirements of regulation 7 (1) (f) of these regulations.

(2) The VHF radio installation required by subclause (1)(a) of this regulation shall also be capable of transmitting and receiving general radiocommunications using radiotelephony.

(3) A ship engaged exclusively on internal waters shall not be required to comply with this Part of these regulations, if—

- (a) Fitted with the VHF radio installation described in subclause (1) (a) of this regulation and the EPIRB described in regulation 21 (2) of these regulations; and
- (b) When underway, a listening watch is maintained on the appropriate channel for its area of operations; and
- (c) The VHF radio installation has a reserve source of energy as provided for in regulation 13 of these regulations; and
- (d) The radio operator holds the appropriate qualification specified in regulation 26 of these regulations.

(4) Until the 31st day of January 1999, every ship shall, unless it is engaged exclusively on internal waters or in sea area B1, be fitted with a radio installation consisting of a radiotelephone distress frequency watch receiver capable of operating on 2182 kHz.

(5) Until the 31st day of January 1999, every ship shall, unless it is engaged exclusively on internal waters or in sea area B1, be fitted with a device for generating the radiotelephone alarm signal on the frequency 2182 kHz.

21. Radio equipment—sea area B1—(1) In addition to meeting the requirements of regulation 20 of these regulations, every ship engaged on voyages exclusively in sea area B1 shall be provided with a radio installation capable of initiating the transmission of ship-to-shore distress alerts by operation from the position from which the ship is normally navigated, operating either—

- (a) On VHF using radiotelephony on channel 16; or
- (b) Through the polar orbiting satellite service on 406 MHz, which requirement may be fulfilled by the satellite EPIRB, required by regulation 7 (1) (f) of these regulations either by installing it close to, or by providing for its remote activation from, the position from which the ship is normally navigated; or
- (c) On HF using radiotelephony; or
- (d) Through the INMARSAT geostationary satellite service, which requirement may be fulfilled by—
 - (i) An INMARSAT ship earth station; or
 - (ii) The satellite EPIRB, required by regulation 7 (1) (f) of these regulations if it is installed close to, or capable of remote activation from, the position from which the ship is normally navigated.

(2) Every ship engaged on voyages exclusively in sea area B1 may, in lieu of being provided with the satellite EPIRB required by regulation 20 (1) (c) of these regulations, be provided with an EPIRB which shall—

- (a) Be capable of transmitting a distress alert using an alarm signal operating on 121.5 MHz and 243 MHz; and
- (b) Be installed in an easily accessible position; and
- (c) Be ready to be manually released and capable of being carried by one person into a survival craft; and
- (d) Be capable of being activated manually.

22. Radio equipment—sea areas B1 and B3—In addition to meeting the requirements of regulation 20 of these regulations, every ship engaged on voyages beyond sea area B1, but remaining within sea area B3, shall be provided with equipment that complies with either *alternative A* or *alternative B* of this regulation.

Alternative A

- (a) An MF/HF radio installation capable of transmitting and receiving, for distress and safety purposes, on all distress and safety frequencies in the bands between 1605 kHz and 4000 kHz and between 4000 kHz and 27 500 kHz using radiotelephony; and
- (b) Equipment capable of maintaining a continuous watch on at least one of the distress and safety frequencies, as is appropriate for time of day and the ship's location in respect of a New Zealand coast radio station, of 2182 kHz, 4125 kHz, 6215 kHz, 8291 kHz,

- 12 290 kHz, and 16 420 kHz (radio telephony), which equipment may be separate from, or combined with, the equipment required by paragraph (a) of this alternative; and
- (c) Means of initiating the transmission of ship-to-shore distress alerts by a radiocommunication service separate to MF/HF operating either—
- (i) Through the polar orbiting satellite service on 406 MHz, which requirement may be fulfilled by the satellite EPIRB required by 7 (1) (f) of these regulations; or
 - (ii) By the EPIRB alternative provided in regulation 21 (2) of these regulations for ships, other than passenger ships, operating exclusively within the coastal waters of New Zealand; or
 - (iii) Through the INMARSAT geostationary satellite service on 1.6 GHz, which requirement may be fulfilled by the satellite EPIRB required by regulation 7 (1) (f) of these regulations;— provided that in each case the EPIRB is installed close to, or is capable of remote activation from, the position from which the ship is normally navigated; and
- (d) The MF/HF radio installation, required by paragraph (a) of this alternative shall also be capable of transmitting and receiving general radiocommunications using radiotelephony.

Alternative B

- (a) An INMARSAT ship earth station capable of—
- (i) Transmitting and receiving distress and safety communications using direct-printing telegraphy; and
 - (ii) Initiating and receiving distress priority calls; and
 - (iii) Maintaining watch for shore-to-ship distress alerts, including those directed to specifically defined areas; and
 - (iv) Transmitting and receiving general radio communications, using either radiotelephony or direct-printing telegraphy; and
- (b) An MF radio installation capable of transmitting and receiving, for distress and safety purposes, on the frequency 2182 kHz using radiotelephony; and
- (c) A radio installation capable of maintaining a continuous distress and safety watch on the frequency of 2182 kHz radiotelephony, until the 31st day of January 1999, which equipment may be separate from, or combined with, the equipment required by paragraph (b) of this alternative; and
- (d) An EPIRB provided and fitted as required by paragraph (c) of *alternative A* of this regulation.

23. Radio watches—(1) Every ship, while at sea, shall maintain a continuous watch, such watch to be kept at the position from which the ship is normally navigated and,—

- (a) If the ship, in accordance with the requirements of regulation 20 (1) (b) of these regulations, is fitted with a VHF radio installation, on channel 16 radiotelephony:
- (b) If the ship, in accordance with *alternative A* or *alternative B* of regulation 22 of these regulations, is fitted with a MF or a MF/HF installation,—
- (i) On 2182 kHz radiotelephony; and
 - (ii) If fitted in accordance with the said *alternative A*, on additional distress and safety frequencies for radiotelephony, as

appropriate for time of day and the geographical location of the ship in relation to a New Zealand HF coast radio station, as specified in paragraph (b) of that alternative:

- (c) For satellite shore-to-ship distress alerts, if the ship is fitted with an INMARSAT ship earth station, as specified in paragraph (a) of *alternative B* of regulation 22 of these regulations.

(2) Every ship, while at sea, shall maintain a radio watch for broadcasts of maritime safety information on the appropriate frequency or frequencies on which such information is broadcast for the area in which the ship is navigating.

24. Sources of energy—Sources of energy shall be provided in accordance with regulation 13 of these regulations.

25. Serviceability and maintenance requirements—Serviceability and maintenance requirements shall be provided in accordance with regulation 14 of these regulations except that, for subclause (6) of that regulation, there shall be substituted the following provisions:

- (a) On all ships, other than passenger ships of more than 300 gross tonnage, equipment availability shall be ensured by using one of the following methods:

- (i) Duplication of equipment:
(ii) Shore-based maintenance:

- (b) On passenger ships of more than 300 gross tonnage, equipment availability shall be ensured by using a combination of at least 2 methods such as duplication of equipment, shore-based maintenance, or at-sea electronic maintenance capability.

26. Radio personnel—(1) Every person operating any of the radio transmitting equipment required by this Part of these regulations shall hold as a minimum qualification a valid appropriate certificate issued by the Secretary of Commerce in accordance with the Radio Regulations 1987, as follows:

- (a) On ships equipped with the VHF radio installation described in regulation 20 of these regulations, a restricted radiotelephone operator's certificate:

- (b) On ships equipped with the MF/HF radio installation described in *alternative A* of regulation 22 of these regulations, a radiotelephone operator's general certificate:

- (c) On ships equipped with the INMARSAT ship earth station described in *alternative B* of regulation 22 of these regulations, or voluntarily equipped with the INMARSAT ship earth station allowed by regulation 21 (1) (d) (i) of these regulations, a radiotelephone operator's general certificate endorsed for GMDSS operation and issued in accordance with subsection (c) of section III (a) of Article 55 of the Radio Regulations, and in addition the certificate of proficiency required by regulation 15 (2) (b) of these regulations.

(2) On every ship to which this Part of these regulations applies, when underway,—

- (a) In the case of a passenger ship, the master and each navigating watchkeeping officer:
(b) In the case of a ship exceeding 300 gross tonnage, at least 2 persons:
(c) In the case of any other ship, at least 1 person—

shall be appropriately qualified and hold the appropriate current certificates specified in subclause (1) of this regulation.

27. Radio records and documents—(1) A record shall be kept of the matters specified in regulation 16 (1) of these regulations.

(2) The master shall inspect and sign each day's entries in the record.

(3) Section 179 of the Shipping and Seamen Act shall apply to the record as it applies to the official log book.

(4) In addition to the record required by subclause (1) of this regulation, the following documents shall be carried:

(a) A ship station licence:

(b) Certificates of radio operators:

(c) An alphabetical list of call signs of stations used in the Maritime Mobile Service:

(d) A list of coast stations:

(e) A list of ship stations:

(f) An International Telecommunications Union Manual for use in the Maritime Mobile and the Maritime Mobile Satellite Services.

28. Compliance with Part II is compliance with this Part—It is sufficient compliance with the requirements of this Part of these regulations if a ship complies in all respects with the requirements of Part II of these regulations.

PART IV

GENERAL PROVISIONS

29. Performance standards—(1) Ships of any class to which these regulations apply, and the radio equipment used in them, shall comply with such performance standards as may from time to time—

(a) Be prescribed for the purposes of these regulations by the Minister by notice in the *Gazette*; or

(b) Be issued by the International Maritime Organisation and endorsed for the purposes of these regulations by the Minister by notice in the *Gazette*.

(2) All performance standards prescribed for the purposes of the Shipping (Radio) Regulations 1989 and in force immediately before the commencement of these regulations shall be deemed to apply in respect of ships to which these regulations apply until the Minister prescribes otherwise by a notice referred to in subclause (1) of this regulation.

30. Responsibility of owner—Where these regulations require that a ship shall carry or be provided with any radio equipment or arrangements, it shall be the responsibility of the owner to provide such equipment or arrangements.

31. Responsibility of master—Where these regulations require that a ship shall carry or be provided with any radio equipment or arrangements, it shall be the responsibility of the master to ensure that—

(a) The ship does not put to sea unless such radio equipment and arrangements are carried or provided; and

(b) Such radio equipment and arrangements are in good order and condition and fit in all respects for their intended use.

32. Exemptions—The Director may exempt, on such conditions as the Director thinks fit, any ship or class of ship from any or all of the requirements of these regulations, if the Director is satisfied that compliance therewith is unreasonable or impracticable in the case of that ship or ships of that class.

33. Equivalents—(1) Where these regulations require that a particular fitting, material, appliance or apparatus, or type thereof, shall be fitted or carried in a ship, or that any particular provision shall be made, the Minister may permit any other fitting, material, appliance or apparatus or type thereof to be fitted or carried, or any other provision to be made in that ship if the Minister is satisfied by trial thereof or otherwise that such other fitting, material, appliance or apparatus, or type thereof, or provision is at least as effective as that required by these regulations.

(2) For the purpose of these regulations, the results of verifications and tests carried out by the bodies and laboratories of other Safety Convention countries offering suitable and satisfactory guarantees of technical and professional competence may be accepted.

34. Ships and persons in distress—Nothing in these regulations shall prohibit any ship, survival craft, or person in distress from using any means at their disposal to attract attention, make known their position, and obtain help.

35. Offences and penalties—(1) Every owner or master of a ship who fails to comply with regulation 30 or (as the case may require) regulation 31 of these regulations commits an offence and is liable to a fine not exceeding \$1,000, and, where the offence is a continuing one, a further amount not exceeding \$100 for every day on which the offence has continued.

(2) It is a defence to a prosecution under subclause (1) of this regulation if the defendant proves that—

- (a) The offence occurred without the knowledge, fault, or negligence of the defendant; and
 - (b) The defendant had taken all reasonable steps to ensure that such an offence would not occur.
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SCHEDULES

Reg. 14 (8)

FIRST SCHEDULE

EQUIPMENT TESTS AND BATTERY AND RESERVE POWER CHECKS

1. Daily—

- (a) The proper functioning of the DSC facilities shall be tested at least once each day, without radiation of signals, by use of the means provided on the equipment:
- (b) Batteries providing a source of energy for any part of the radio installations shall be tested daily and, where necessary, brought up to the fully charged condition:
- (c) The accuracy of the clock required by regulation 19 of these regulations.

2. Weekly—

- (a) The proper operation of the DSC facilities shall be tested at least once a week by means of a test call, when within communication range of a coast station fitted with DSC equipment. Where a ship has been out of communication range of a coast station fitted with DSC equipment for a period of longer than one week, a test call shall be made on the first opportunity that the ship is within communication range of such a coast station:
- (b) Where the reserve source of energy is not a battery (for example, a motor generator), the reserve source of energy shall be tested weekly.

3. Monthly—

- (a) Each EPIRB and satellite EPIRB shall be tested at least once a month to determine its capability to operate properly using the means provided on the device and without using the satellite system:
- (b) Each search and rescue radar transponder, other than one carried in accordance with regulation 7 (1) (c) (ii) of these regulations, shall be checked at least once a month, for security and signs of damage:
- (c) Each survival craft two-way VHF equipment shall be tested at least once a month on a frequency other than 156.8 MHz (VHF Channel 16):
- (d) A check shall be made at least once a month on the security and condition of all batteries providing a source of energy for any part of a radio installation. The battery connections and compartment shall also be checked.

SECOND SCHEDULE

Reg. 14 (8)

EQUIPMENT TESTS AND BATTERY AND RESERVE POWER CHECKS

1. Daily—

- (a) The radiotelephone distress frequency watch receiver shall be tested at least once each day by checking the proper functioning of its muting circuits or those of the radiotelephone auto alarm receiver:
- (b) Batteries providing a source of energy for any part of the radio installation shall be tested daily and, where necessary, brought up to the fully charged condition:
- (c) Where the reserve source of energy is not a battery (for example, a motor generator), the reserve source of energy shall be tested daily.

2. Weekly—

- (a) The radiotelephone alarm signal generating device shall be tested at least once every 7 days to check its proper functioning by ensuring that it can modulate satisfactorily the radiotelephone transmitter. The radiotelephone transmitter shall not radiate signals during such checking:
- (b) Motor life-boat fixed radio installations and portable radio equipment for survival craft shall be tested at least once every 7 days using suitable artificial antennas:
- (c) Batteries forming part of a two-way radiotelephone apparatus for survival craft shall be tested weekly and, where appropriate, brought up to the fully charged condition. Where non-rechargeable batteries are provided as a source of energy the batteries shall be checked and replaced if necessary.

3. Monthly—

- (a) Motor life-boat fixed radio installations and portable radio equipment for survival craft shall be tested at least once a month using an antenna provided with the installations or equipment. In the case of motor life-boat fixed radio installations, the test shall, where practicable, be carried out with the life-boat floating in the sea:
- (b) Batteries providing a source of energy for any part of the radio installation shall be tested at least once a month by means of a hydrometer where practicable or, where a hydrometer cannot be used, by a suitable load test. A check shall also be made of the security of the battery and its connections and the conditions of the battery and its compartment.

4. Annually—

Survival craft emergency position-indicating radio beacons shall be inspected, tested and, if necessary, have their source of energy replaced at least once every 12 months, provided that, the interval may be extended to a maximum of 17 months to permit the inspection to take place concurrently with a radio survey.

Reg. 15 (2)

THIRD SCHEDULE**ADDITIONAL KNOWLEDGE AND TRAINING REQUIREMENTS FOR
RADIOTELEPHONE OPERATORS AND RADIO OFFICERS**

- (a) The provision of radio services in emergencies including—
 - (i) Abandon ship; and
 - (ii) Fire aboard ship; and
 - (iii) Partial or full breakdown of the radio station:
- (b) The operation of lifeboats, liferafts, buoyant apparatus, and their equipment, with special reference to portable and fixed lifeboat radio apparatus and emergency position indicating radio beacons:
- (c) Survival at sea:
- (d) First aid:
- (e) Fire prevention and fire-fighting with particular reference to the radio installation:
- (f) Preventive measures for the safety of ship and personnel in connection with hazards related to radio equipment including electrical, radiation, chemical, and mechanical hazards:
- (g) The use of the Organisation's Merchant Ship Search and Rescue Manual (MERSAR) published in January 1981 (including any relevant amendments for the time being in force), with particular reference to radiocommunications:
- (h) Ship position-reporting systems and procedures:
- (i) The use of the International Code of Signals and the Standard Marine Navigational Vocabulary:
- (j) Radio medical systems and procedures.

MARIE SHROFF,
Clerk of the Executive Council.

EXPLANATORY NOTE

This note is not part of the regulations, but is intended to indicate their general effect.

These regulations, which come into force on 1 May 1994, replace the Shipping (Radio) Regulations 1989 in the case of the following ships:

- (a) Cargo ships of 300 gross tonnage or more and passenger ships, that are engaged on an international voyage, being ships constructed on or after 1 February 1995:
- (b) Cargo ships of less than 300 gross tonnage that are engaged on an international voyage, coastal ships, restricted-limit ships, and fishing vessels, being ships constructed on or after 1 February 1993.

Part II of the regulations contains the GMDSS (Global Maritime Distress and Safety System) provisions. It requires new ships to carry new types of radio equipment, including equipment for satellite communication, emergency radio beacons (EPIRBs), and other items. The carriage requirements depend on the ship's area of operations. For this purpose, the world is divided up under the GMDSS into 4 sea areas: area A1 (which is within range of VHF coastal radio); area A2 (which is within range of MF coastal radio); area A3 (which is within coverage of geostationary satellites); and area A4 (which covers the remainder of the world). The requirements for maintenance of the equipment carried permit some flexibility. Maintenance may be achieved by duplication of equipment, by shore-based maintenance, or by an at-sea maintenance capability.

Part III of the regulations applies to those vessels which are required to be surveyed under the Shipping and Seamen Act 1952 but which do not have to comply with the GMDSS provisions of the SOLAS Convention. The same broad principles have been applied as for the vessels covered by Part II of the regulations in that each vessel is required to have 2 different methods to communicate distress and safety messages and 1 form of on-scene communication.

Part IV contains general provisions similar to those contained in Part VII of the Shipping (Radio) Regulations 1989.

Existing ships are subject to the Shipping (Radio) Regulations 1989 until 31 January 1999 and after that date are subject to the relevant provisions of these regulations.

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Date of notification in *Gazette*: 31 March 1994.

These regulations are administered in the Ministry of Transport.