

AMSA MO 2023/9

Marine Order 27 (Safety of navigation and radio equipment) 2023

I, Michael Kinley, Chief Executive Officer of the Australian Maritime Safety Authority, make this Order under subsection 342(1) of the *Navigation Act 2012*.

Dated   11 December 2023

**Michael Kinley**  
Chief Executive Officer

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Division 1 Preliminary

1 Name of Marine Order

This Order is *Marine Order 27 (Safety of navigation and radio equipment) 2023*.

1A Commencement

This Marine Order commences on 1 January 2024.

1B Repeal of *Marine Order 27 (Safety of navigation and radio equipment) 2016*

*Marine Order 27 (Safety of navigation and radio equipment) 2016* is repealed.

2 Purpose

This Marine Order:

(a) provides for the following:

(i) navigation safety measures and equipment;

(ii) radio equipment;

(iii) safety, urgency and distress communications; and

(b) gives effect to the following:

(i) Chapter IV of SOLAS (Radiocommunications);

(ii) paragraph 7 of Regulation 10 and paragraph 7 of Regulation 11 of Chapter V of SOLAS (Safety of navigation);

(iii) Regulations 15 to 21, 24, 27, 28 and 29, and 31 to 35 of Chapter V of SOLAS.

3 Power

(1) The following provisions of the Navigation Act provide for this Marine Order to be made:

(a) paragraph 309(2)(a) which provides that the regulations may prescribe the entries to be made in an official logbook and when they must be made;

(b) paragraph 339(2)(b) which provides that the regulations may provide for machinery and equipment to be carried on board vessels including for sending or receiving distress, urgency and other signals, radio installations, radio navigational aids and communication equipment, and compasses;

(c) paragraph 339(2)(c) which provides that the regulations may provide for the operation, maintenance, checking and testing of this machinery and equipment;

(d) paragraph 339(2)(g) which provides that the regulations may provide for the equipment to be carried on vessels and measures to be carried out for the saving of life at sea;

(e) paragraph 339(2)(l) which provides that the regulations may provide for logbooks;

(f) paragraph 339(2)(m) which provides that the regulations may provide for records for compliance with the Act;

(g) paragraph 340(1)(a) which provides that the regulations may give effect to SOLAS;

(h) subsection 341(1) which provides that the regulations may provide for the imposition of penalties for a contravention of a provision of the regulations.

(2) Subsection 339(1) of the Navigation Act provides for regulations to be made prescribing matters required or permitted to be prescribed, or that are necessary or convenient to be prescribed, for carrying out or giving effect to the Act.

(3) Subsection 342(1) of the Navigation Act provides that AMSA may make a Marine Order about matters that can be provided for by regulation.

4 Definitions

(1) In this Marine Order:

***AIS-SART*** means an automatic identification system search and rescue transmitter capable of operating on frequencies dedicated for AIS (161.975 MHz (AIS1) and 162.025 MHz (AIS2)).

***approved*** means approved by:

(a) for a regulated Australian vessel — the issuing body; or

(b) for a foreign vessel — the government of the country whose flag the vessel is entitled to fly; or

(c) for a training course — AMSA.

***coast station*** means a land station in the maritime mobile service.

***direct-printing telegraphy***means automated telegraphy techniques which comply with the relevant recommendations of the ITU.

***DSC*** means digital selective calling**,** a technique that:

(a) uses digital codes to enable a radio station to establish contact with, and transfer information to, another station or group of stations; and

(b) complies with recommendations of the ITU.

***general radio communication***means communications other than distress, urgency and safety messages.

***GMDSS*** or ***Global Maritime Distress and Safety System*** means a system that performs the functions set out in Regulation 4.1.1 of Chapter IV of SOLAS.

***IAMSAR Manual***meansthe *International Aeronautical and Maritime Search and Rescue Manual,* endorsed by IMO Resolution A.894 (21), as amended from time to time.

***International Code of Signals*** means the *International Code of Signals,* endorsed by IMO Resolution A.80(4), as amended from time to time.

***maritime safety information (MSI)*** means navigational and meteorological warnings, meteorological forecasts and other urgent safety related messages broadcast to ships.

***NAVAREA X*** is the geographical sea area designated for Australia for broadcasting navigational warnings.

*Note*The delimitation of the area for NAVAREA X is shown on the AMSA website at https://www.amsa.gov.au.

***NAVTEX*** means the system for the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy.

***qualified compass adjuster*** means a person who:

(a) has a statement of attainment for *Compass Adjuster Limited Skill Set* or *Compass Adjuster Unlimited Skill Set*; or

(b) on 30 June 2016 held a compass adjuster licence issued by AMSA under *Marine Order 21 (Safety of navigation and emergency procedures) 2012*.

*Note*These skill sets are part of the MAR Training Package.

***Radio Regulations*** has the same meaning as in Regulation 2.1.12 of Chapter IV of SOLAS.

*Note*The text of the Radio Regulations is available at the International Telecommunication Union website: https://www.itu.int.

***recognised mobile satellite service*** means any service which operates through a satellite system that is for use in the global maritime distress and safety system (GMDSS) and recognised by the IMO.

***sea area A1***means an area within the radiotelephone coverage of at least one VHF coast radio station providing a continuous DSC alerting service.

*Note*Information related to shore-based facilities for the GMDSS, including the designated areas of coverage of sea area A1, is available in the Global Integrated Shipping Information System (GISIS) if this information has been communicated by SOLAS Contracting Governments to the IMO.

***sea area A2***means an area, excluding sea area A1, within the radiotelephone coverage area of at least one MF coast radio station providing a continuous DSC alerting service.

*Note*Information related to shore-based facilities for the GMDSS, including the designated areas of coverage of sea area A2, is available in the Global Integrated Shipping Information System (GISIS) if this information has been communicated by SOLAS Contracting Governments to the IMO.

***sea area A3***means an area, excluding sea areas A1 and A2, that is: within the coverage of a recognised mobile satellite service supported by the ship earth station carried on board; and in which continuous alerting is available.

***sea area A4***means an area outside sea areas A1, A2 and A3.

***ship station*** means a radio installation on board a vessel.

(2) Any other term that is used in this Marine Order and used or defined in the Radio Regulations, has the meaning given by those Regulations.

*Note 1*Some terms used in this Marine Order are defined in *Marine Order 1 (Administration) 2013*,including:

* EPIRB
* equivalent
* IMO
* SOLAS
* STCW Code
* use.

*Note 2*Other terms used in this Marine Order are defined in the Navigation Act, including:

* AMSA
* GT
* inspector
* owner
* regulated Australian vessel.

*Note 3* Information on obtaining copies of any IMO Resolution, IMO document or other document that is mentioned in this Order is available from the AMSA website Marine Orders link at https://www.amsa.gov.au.

*Note 4*For delegation of AMSA’s powers under this Marine Order — see the AMSA website at https://www.amsa.gov.au.

5 Interpretation

A reference to the Administration in this Marine Order or in SOLAS, an IMO resolution or other document mentioned in this Marine Order is taken to mean:

(a) for a regulated Australian vessel — AMSA; or

(b) for a foreign vessel — the government of the country whose flag the vessel is entitled to fly.

6 Application

This Marine Order applies to:

(a) a regulated Australian vessel; and

(b) a foreign vessel.

7 Exemptions

(1) A requirement of this Marine Order does not apply in relation to a regulated Australian vessel if AMSA, under this section, exempts the vessel from the requirement.

(2) The owner of a regulated Australian vessel may apply for an exemption of the vessel from a requirement of this Marine Order in accordance with the application process set out in Division 3 of *Marine Order 1 (Administration) 2013*.

(3) AMSA may give an exemption only if satisfied that:

(a) compliance with the requirement would be unnecessary or unreasonable having regard to the vessel, its equipment and its intended voyage; and

(b) giving the exemption would not contravene SOLAS.

(4) An exemption is subject to any conditions AMSA imposes to ensure the safety of the vessel.

(5) The owner of the vessel must comply with any conditions mentioned in subsection (3).

*Note 1   Marine Order 1 (Administration) 2013* deals with the following matters about exemptions and equivalents:

* making an application
* seeking further information about an application
* the time allowed for consideration of an application
* imposing conditions on approval of an application
* notification of a decision on an application review of decisions.

*Note 2*For transitional arrangements for an exemption given from a provision of a previous issue of this Marine Order — see Division 6.

8 Equivalents

(1) A requirement under this Marine Order, in relation to a regulated Australian vessel is taken to be complied with if:

(a) AMSA, under this section, approves the use of an equivalent for the vessel in relation to the requirement; and

(b) the equivalent is used for the vessel in accordance with the approval.

(2) A person may apply, in accordance with the application process set out in Division 3 of *Marine Order 1 (Administration) 2013*, for approval to use an equivalent.

*Note*   For definitions of equivalent and use — see section 6 of *Marine Order 1 (Administration) 2013*.

(3) AMSA may approve use of an equivalent only if satisfied that use of the equivalent would be at least as effective as compliance with the requirement to which the equivalent is an alternative.

*Note*For transitional arrangements for an approval to use an equivalent that was given under a previous issue of this Marine Order — see Division 6.

Division 2 Navigation safety

Subdivision 2.1 Navigation safety measures

9 Cooperation with search and rescue services

[SOLAS V/7.3]

For a passenger vessel to which Chapter I of SOLAS applies:

(a) the owner must ensure that there is on board the vessel a plan, developed in accordance with paragraph 3 of Regulation 7 of Chapter V of SOLAS, for cooperation with search and rescue services in an emergency; and

(b) the master must conduct periodic exercises in accordance with the plan.

*Note*Paragraph 3 of Regulation 7 of Chapter V of SOLAS provides that the plan is for emergencies and specifies the parties to be involved in its development. The plan must be based on the Guidelines for preparing plans for co-operation between search and rescue services and passenger ships, approved by IMO Circular MSC.1/Circ.1079, as revised from time to time.

10 Ship reporting systems

[SOLAS V/11.7]

(1) The master of a vessel must comply with paragraph 7 of Regulation 11 of Chapter V of SOLAS.

Penalty: 50 penalty units.

(2) An offence against subsection (1) is a strict liability offence.

(3) A person is liable to a civil penalty if the person contravenes subsection (1).

Civil penalty: 50 penalty units.

*Note*Paragraph 7 of Regulation 11 of Chapter V of SOLAS sets out that the master is to comply with ship reporting systems adopted by the IMO and the applicable reporting requirements for each system.

11 Ships’ routeing

[SOLAS V/10.7]

(1) The master of a vessel must comply with paragraph 7 of Regulation 10 of Chapter V of SOLAS.

Penalty: 50 penalty units.

(2) An offence against subsection (1) is a strict liability offence.

(3) A person is liable to a civil penalty if the person contravenes subsection (1).

Civil penalty: 50 penalty units.

*Note*Paragraph 7 of Regulation 10 of Chapter V of SOLAS sets out the requirement to comply with any mandatory ships’ routeing system adopted by the IMO.

12 Use of heading or track control systems

[SOLAS V/24]

(1) The master of a vessel must ensure that manual control of the vessel’s steering can be established immediately when heading or track control systems are in use on the vessel.

(2) The master of a vessel must ensure that a person who has an approved steering certificate is available to immediately take manual control of the vessel’s steering if the vessel is operating in hazardous navigational circumstance including:

(a) an area of high traffic density; or

(b) condition of restricted visibility; or

(c) other situation where navigation requires caution.

Penalty: 50 penalty units.

(3) The master of a vessel must ensure that a change from automatic to manual control and from manual to automatic control of a vessel’s steering is made:

1. by the officer of the watch; or
2. under the supervision of the officer of the watch.

Penalty: 50 penalty units.

(4) If there has been prolonged use of the heading or track control systems, the master of the vessel must ensure that the manual steering of a vessel is tested before entering an area where navigation requires caution including circumstances where the vessel is operating in:

(a) an area of high traffic density, or

(b) conditions of restricted visibility.

Penalty: 50 penalty units.

(5) An offence against subsection (2), (3) or (4) is a strict liability offence.

(6) A person is liable to a civil penalty if the person contravenes subsections (2), (3) or (4).

Civil penalty: 50 penalty units.

13 Records of navigational activities and daily reporting

[SOLAS V/28]

(1) The master of a vessel must ensure that:

(a) the navigational activities and incidents of importance to safety of navigation of the vessel are recorded in the vessel’s official logbook or other format approved by the Administration; and

(b) the records:

(i) contain sufficient detail to enable the restoration of a complete record of the voyage; and

(ii) are available for inspection on the vessel at all times.

(2) The master of the vessel, to which paragraph 2 of Regulation 28 of Chapter V of SOLAS applies, must ensure that:

(a) a daily report is provided to the vessel’s owner including the following:

(i) vessel position;

(ii) vessel’s course and speed;

(ii) details of any external or internal conditions affecting the vessel’s voyage or the normal safe operation of the vessel;

(b) the daily report is provided as soon as practicable after the vessel position is determined; and

(c) the daily report is recorded; and

(d) if an automated reporting system is used — measures are implemented to monitor and verify the accuracy of vessel position mentioned in the daily report.

*Note*Paragraph 2 of Regulation 28 of Chapter V of SOLAS applies to a vessel >500 GT engaged on international voyages exceeding 48 hours.

14 Safe navigation and avoidance of dangerous situations

[SOLAS V/34]

The master of a vessel must ensure that voyage planning has been carried out in accordance with Regulation 34 of Chapter V of SOLAS.

*Note*Regulation 34 of Chapter V of SOLAS provides that the voyage planning must be undertaken prior to a vessel proceeding to sea and identify a route. The regulation sets out what must be used for planning including nautical charts and publications and any ships’ routeing systems.

15 Persons not to interfere with master’s decisions

[SOLAS V/34-1]

(1) A person must not prevent or restrict the master of a vessel from taking or executing any decision that the master says is necessary for safe navigation or protection of the marine environment.

Penalty: 50 penalty units.

(2) An offence against subsection (1) is a strict liability offence.

(3) A person is liable to a civil penalty if the person contravenes subsection (1).

Civil penalty: 50 penalty units.

Subdivision 2.2 Navigational safety equipment etc

16 Bridge design, bridge procedures, design and arrangement of navigational systems and equipment

[SOLAS V/15]

The owner of a vessel must make decisions about bridge design, bridge procedures and the design and arrangements of navigational systems and equipment in accordance with Regulation 15 of Chapter V of SOLAS.

*Note*Regulation 15 of Chapter V of SOLAS sets out a number of principles for the purpose of applying the requirements of Regulations 19, 22, 24, 25, 27, and 28 of Chapter V of SOLAS.

17 Maintenance of navigational equipment

[SOLAS V/16]

(1)The master of a vessel must take all reasonable steps to ensure:

(a) the performance of navigational equipment is maintained; and

(b) the equipment is maintained in efficient working order.

Penalty: 50 penalty units.

(2) If vessel is at a place where repair facilities are not available and a defect in navigational equipment is discovered on the vessel, the master of the vessel may only proceed to another port if that port is where repairs can take place and AMSA has agreed.

Penalty: 50 penalty units.

(3) For subsection (2), the master of the vessel must ensure that the inoperative equipment or the unavailability of information is taken into account when planning and making the voyage to the port.

(4) An offence against subsection (1) or (2) is a strict liability offence.

(5) A person is liable to a civil penalty if the person contravenes subsection (1) or (2).

Civil penalty: 50 penalty units.

18 Electromagnetic compatibility

[SOLAS V/17]

(1)The owner of a vessel must ensure that the electrical and electronic equipment on or near the bridge of a vessel constructed after 30 June 2002 is tested for electromagnetic compatibility in accordance with paragraph 1 of Regulation 17 of Chapter V of SOLAS*.*

*Note*Paragraph 1 of Regulation 17 of Chapter V of SOLAS provides that the recommendations of the IMO must be taken into account when testing. See the AMSA website for details of the latest IMO resolution in relation to testing for electromagnetic compatibility.

(2)The owner of a vessel must ensure that electrical and electronic equipment does not affect navigational systems and equipment on the vessel.

Penalty: 50 penalty units.

(3)A person must not operate portable electrical or electronic equipment on a vessel if it may affect navigational systems and equipment on the vessel.

Penalty: 50 penalty units.

(4) An offence against subsection (2) or (3) is a strict liability offence.

(5) A person is liable to a civil penalty if the person contravenes subsection (2) or (3).

Civil penalty: 50 penalty units.

19 Navigational systems and equipment — performance standards

[SOLAS V/18]

(1) The owner of a vessel must ensure that a navigational system or equipment mentioned in Regulations 19 and 20 of Chapter V of SOLAS that is used on the vessel is type approved and meets performance standards in accordance with Regulation 18 of Chapter V of SOLAS.

*Note*Regulation 18 of Chapter V of SOLAS provides that type approval must be given by the Administration. Type approval applies to navigational systems and equipment; and back-up arrangements, replacements and the additions to systems and equipment.

(2)The owner of a vessel must ensure that:

(a) any voyage data recorder system used on the vessel, including all sensors, is tested annually by an approved testing or servicing facility in accordance with paragraph 8 of Regulation 18 of Chapter V of SOLAS; and

(b) a certificate of compliance is carried on board for the voyage data recorder system demonstrating compliance and the performance standards for the system that apply; and

(c) any automatic identification system used on the vessel is tested annually by the issuing body or an approved testing or servicing facility in accordance with paragraph 9 of Regulation 18 of Chapter V of SOLAS; and

(d) a copy of a test report for the automatic identification system is carried on board.

*Note for paragraph (a) and (c)*Paragraphs 8 and 9 ofRegulation 18 of Chapter V of SOLAS provide that testing must be undertaken to determine the specified performance standards, functionality or serviceability for the systems.

*Note*AMSA has an agreement with each of the recognised organisations mentioned in Schedule 1 of *Marine Order 1 (Administration) 2013* for the provision of survey and certification services for vessels registered in Australia. These bodies are authorised to undertake type approval of equipment on behalf of AMSA in accordance with that agreement.

20 Navigational systems and equipment — installation and use requirements etc

[SOLAS V/19]

(1) The owner of a vessel must ensure that navigational systems or equipment:

(a) are fitted and used in accordance with Regulation 19 of Chapter V of SOLAS; and

(b) meet the functional requirements mentioned in that regulation; and

(c) are installed, tested and maintained to minimise malfunction.

*Note*Regulation 19 of Chapter V of SOLAS provides for the carriage of specified navigational systems and equipment for certain kinds of vessels. It also includes functionality and use requirements.

(2)For a vessel carrying an electronic chart display and information system (***ECDIS***) — the master of the vessel and all deck watchkeeping officers must have completed an approved training course in its use in accordance with Part A of Chapter II of the STCW Code.

(3)The master of a vessel must ensure that:

(a) any automatic identification system installed on a vessel is used; and

(b) the use of that system is in accordance with the *Revised* *Guidelines for the onboard operational use of shipborne Automatic Identification Systems (AIS)*,adopted by IMO Resolution A.1106(29), as amended from time to time; and

(c) if the system is turned off — AMSA is advised.

(4)The owner of a vessel must not direct, or request, any person to turn off the automatic identification system installed on the vessel.

Penalty: 50 penalty units.

(5) An offence against subsection (4) is a strict liability offence.

(6) A person is liable to a civil penalty if the person contravenes subsection (4).

Civil penalty: 50 penalty units.

21 Long-range identification and tracking of vessels

[SOLAS V/19-1]

(1) This section applies to a vessel to which Regulation 19-1 of Chapter V of SOLAS applies.

(2) The owner of a vessel must ensure that:

(a) the following information is transmitted automatically in accordance with Regulation 19-1 of Chapter V of SOLAS:

(i) the identity of the vessel;

(ii) the position (latitude and longitude) of the vessel;

(iii) the date and time the position information is provided; and

(b) the vessel is fitted with the systems and equipment that meet the performance standards and functional requirements of Regulation 19-1 of Chapter V of SOLAS.

Penalty: 50 penalty units.

(3) The master of a vessel must not switch off any system or equipment mentioned in Regulation 19-1 of Chapter V of SOLAS.

Penalty: 50 penalty units.

(4) However, the master may switch off the system or equipment only if:

(a) its operation will compromise the safety or security of the vessel; and

(b) the Administration has been informed; and

(c) a record is made describing the reason for, and duration of, the switch off.

(5) An offence against subsection (2) of (3) is a strict liability offence.

(6) A person is liable to a civil penalty if the person contravenes subsection (2) or (3).

Civil penalty: 50 penalty units.

22 Voyage data recorders

[SOLAS V/20]

The owner of a vessel must ensure that the vessel is fitted with a voyage data recorder or simplified voyage data recorder in accordance with Regulation 20 of Chapter V of SOLAS.

*Note*Regulation 20 of Chapter V of SOLAS provides for the carriage of voyage data recorders on certain kinds of vessels in the circumstances specified.

23 International Code of Signals and IAMSAR Manual

[SOLAS V/21]

The owner of a vessel must ensure that the following documents are kept on the vessel and are available for inspection:

(a) a copy of the International Code of Signals;

(b) a copy of Volume III (Mobile facilities) of IAMSAR Manual.

24 Nautical charts and nautical publications

[SOLAS V/27]

(1) The owner of a vessel embarking on a voyage must ensure:

(a) nautical charts and nautical publications on board for the intended voyage are adequate and up to date; and

(b) any electronic version of a nautical chart or nautical publication is a version officially issued by an Administration, authorised hydrographic office or other approved organisation; and

(c) the information mentioned in paragraphs (a) and (b) is on board before embarking on the voyage.

(2) For an electronic nautical chart, the owner of the vessel must ensure that:

(a) the chart is displayed on an ECDIS that complies with Regulation 19 of Chapter V of SOLAS; and

(b) a back up version is available:

(i) on a second ECDIS that complies with Regulation 19 of Chapter V of SOLAS; or

(ii) as a folio of adequate and up to date paper charts relevant to the voyage.

(3) For an electronic nautical publication, the owner of a vessel must ensure that a back up version is available:

(a) as an up to date printout; or

(b) on at least 1 other computer or in digital format that can be made available to the officer of the watch within 5 minutes.

(4) For an official version of an electronic nautical publication, the owner of a vessel must ensure that all software and hardware used for accessing it complies with the recommendations of IMO Circular MSC/Circ.891 *Guidelines for the onboard use and application of computers* as amended from time to time.

25 Magnetic compass

(1) The master of a vessel must ensure that:

(a) for a vessel >100 GT:

(i) a compass deviation book is kept on the vessel; and

(ii) the information mentioned in Schedule 1 is recorded in the compass deviation book; and

(b) if the observations for a magnetic compass on the vessel show a deviation of the compass on any heading of more than 5°— they either adjust the compass to correct the deviation or arrange for the compass to be adjusted by a qualified compass adjuster; and

(c) for each magnetic compass fitted on the vessel — the tables or curve of residual deviations from the last adjustment, and details of subsequent changes in deviations, are available for use at all times; and

(d) the size and position of magnets and soft iron correctors in a compass fitted on the vessel and the date and nature of any changes made to them or to their position are recorded by the person making the adjustment.

Penalty: 50 penalty units.

*Note for paragraph (b)*For other circumstances in which it is recommended that a compass be adjusted, seeAnnex G of ISO 25862:2019 *Ships and marine technology – Marine magnetic compasses, binnacles and azimuth reading devices*.

(2) An offence against subsection (1) is a strict liability offence.

(3) A person is liable to a civil penalty if the person contravenes subsection (1).

Civil penalty: 50 penalty units.

(4) If a compass is adjusted, details of the deviations in the approved form must be:

(a) if the compass is adjusted by a qualified compass adjuster — given to the master by the qualified compass adjuster; or

(b) if the compass is adjusted by the master — prepared by the master.

(5)An inspector may direct the master of a vessel to have a compass of the vessel adjusted if the inspector considers that:

(a) paragraph (1)(c) or (d) has not been complied with; and

(b) the compass is, or may be, unreliable.

(6)The master of a vessel must comply with the direction as soon as practicable.

26 Other equipment

(1)The owner of a vessel must ensure that the vessel has on board equipment in good working condition that will, if an electronic system fails, enable:

(a) an adequate lookout to be maintained; and

(b) safe navigation of the vessel.

(2)For a vessel < 500 GT, the master must ensure that the vessel has on board flags N and C of the International Code of Signals.

(3)For a vessel ≥500 GT, the master must ensure that the vessel has on board a complete set of flags set out in the International Code of Signals.

(4)Except in an emergency, the master of a vessel must not use, or permit to be used, any equipment mentioned in subsection (1) that is not in good working condition or that is improperly rigged.

Penalty: 50 penalty units.

(5) An offence against subsection (4) is a strict liability offence.

(6) A person is liable to a civil penalty if the person contravenes subsection (4).

Civil penalty: 50 penalty units.

Division 3 Radio installations and radio equipment

27 Radio installations and carriage requirements for radio equipment etc

[SOLAS IV/6-11]

(1) The owner of a vessel to which Chapter IV of SOLAS applies must ensure that:

(a) a radio installation is fitted and radio equipment is carried on board in accordance with Regulations 6 to 11 of Chapter IV of SOLAS; and

(b) for a regulated Australian vessel — they have taken into account the ARPANSA *Standard for Limiting Exposure to Radiofrequency Fields – 100 kHz to 300 GHz* (Rev. 1) (2021), as amended from time to time, for the safe operation of radio installations.

(2) The owner of a regulated Australian vessel to which Chapter IV of SOLAS does not apply must ensure that the vessel has fitted adequate radio installations and carries on board adequate radio equipment to meet the functional requirements mentioned in subsection 28(2).

28 Functional requirements for radio installations and equipment

[SOLAS IV/4]

(1)For a vessel to which Chapter IV of SOLAS applies — the radio installations fitted and radio equipment carried on board must meet the functional requirements that are set out in Regulation 4 of Chapter IV of SOLAS.

(2)For an Australian regulated vessel to which Chapter IV of SOLAS does not apply — the radio installations fitted and radio equipment carried on board must meet the following functional requirements:

(a) perform ship-to-shore distress alerting by two separate and independent means, each using a different radio communication service;

(b) receive shore-to-ship distress alert relays;

(c) transmit and receive ship-to-ship distress alerting;

(d) transmit and receive on-scene communications, including appropriate SAR co-ordinating communications;

(e) transmit and receive locating signals;

(f) receive MSI;

(g) transmit and receive urgency and safety communications;

(h) transmit and receive bridge to bridge communications.

*Note for paragraph (f)*See IMO Circular MSC.1/Circ.1645 *Guidance for the Reception of Maritime Safety Information and Search and Rescue Related Information as Required in the Global Maritime Distress and Safety System (GMDSS*), as amended from time to time.

(3) However, if a regulated Australian vessel to which Chapter IV of SOLAS does not apply, complies with an arrangement set out in Schedule 2, the vessel is taken to have met the functional requirements mentioned in subsection (2).

29 Other requirements for radio installations and equipment — type approval, performance standards, maintenance etc

[SOLAS IV/12-18]

(1) For a vessel to which Chapter IV of SOLAS applies — the owner must ensure:

(a) that radiocommunication watch requirements, while at sea, are maintained in accordance with Regulation 12 of Chapter IV of SOLAS; and

(b) that sources of energy for radio installations are maintained in accordance with Regulation 13 of Chapter IV of SOLAS; and

(c) that radio equipment is type approved in accordance with Regulation 14 of Chapter IV of SOLAS; and

(d) the radio equipment is maintained in accordance with Regulation 15 of Chapter IV of SOLAS; and

(e) that radio personnel are qualified in accordance with Regulation 16 of Chapter IV of SOLAS; and

(f) that radio record keeping arrangements comply with Regulation 17 of Chapter IV of SOLAS; and

(g) that position updating complies with Regulation 18 of Chapter IV of SOLAS.

*Note for paragraph* ***(****a)*   Regulation 12 of Chapter IV of SOLAS provides the radiocommunication watch requirements to be maintained.

*Note for paragraph (b)*   Regulation 13 of Chapter IV of SOLAS provides that sources of energy must be available at all times 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.

*Note for paragraph (c)*Regulation 14 of Chapter IV of SOLAS provides that radio equipment is to be type approved by the Administration.

*Note for paragraph (d)*Regulation 15 of Chapter IV of SOLAS provides that radio equipment is to be maintained to ensure compliance with functional requirements.

*Note for paragraph (e)*   Regulation 16 of Chapter IV of SOLAS provides that radio personnel must be qualified to the satisfaction of the Administration. For RAVs — the qualification must be in accordance with subdivision 3.2 of *Marine Order 70. (Seafarer Certification) 2014*). For foreign vessels — the qualification must be to the satisfaction of the government of the country whose flag the vessel is entitled to fly. Regulation 16 further provides that one qualified radio personnel must be designated as having responsibility for communications during distress incidents.

*Note for paragraph (f)*   Regulation 17 of Chapter IV of SOLAS provides that radio records (of all incidents connected with the radiocommunication services which appear to be of importance to safety of life at sea) must be kept on board to the satisfaction of the Administration.

*Note for paragraph (g)*Regulation 18 of Chapter IV of SOLAS provides for the automatic transmission of the ships position from an internal or external navigation receiver in working condition and an alternative method in the case of malfunction of this equipment.

(2) For a regulated Australian vessel to which Chapter IV of SOLAS does not apply — the owner must ensure that the vessel has:

(a) arrangements that meet the requirements mentioned subsection (1) as if the vessel were a vessel to which Chapter IV of SOLAS applies; and

(b) MF/HF radiotelephone equipment, VHF equipment and satellite communications equipment that meets the performance standards mentioned in Regulation 14 of Chapter IV of SOLAS that apply to the equipment; and

(c) VHF equipment with available priority of use and control of the channels required for navigational safety purposes immediately available at the place where the vessel is normally navigated; and

(d) battery installations that provide emergency power supply to radio equipment must be tested monthly.

(3) A vessel that is normally engaged in harbour duties must:

(a) be fitted with a VHF radio installation with DSC capability; and

(b) be provided with an approved 406 MHz satellite EPIRB.

(4) Radio equipment must be tested:

(a) at intervals specified by the manufacturer; and

(b) in accordance with the manufacturer’s instructions.

30 EPIRBs — registration and disposal

(1) An owner of a regulated Australian vessel must ensure that any EPIRB fitted or carried on the vessel is registered with AMSA.

Penalty 50 penalty units

*Note*Registration is to be updated when an EPIRB changes ownership — with both the old owner and the new owner needing to update their details held by AMSA. Details should also be updated when the EPIRB is disposed of.

(2) An owner of a regulated Australian vessel must ensure that manufacturer’s instructions are followed for any EPIRB that is disposed of.

Penalty 50 penalty units

(3) An offence against subsection (1) or (2) is a strict liability offence.

(4) A person is liable to a civil penalty if the person contravenes subsection (1) or (2).

Civil penalty: 50 penalty units.

Division 4 Safety, urgency and distress communications

Subdivision 4.1 Safety communications including safety signals and danger messages

[SOLAS V/31 & V/32]

31 Safety signals and danger messages — prescribed matters

(1) For subparagraph 187(1)(b)(i) of the Navigation Act:

(a) the safety signal that is sent out in the format mentioned in Article 33 of the Radio Regulations; and

(b) the danger message must include the information mentioned in Regulations 31 and 32 of Chapter V of SOLAS.

*Note for paragraph (a)*Article 33 sets out the format and manner of transmission of safety communications including the use of the safety signal being the word ‘SECURITE’ spoken 3 times.

*Note for paragraph (b)*   Regulations 31 and 32 of Chapter V of SOLAS provide that certain information related to the following dangers must be communicated:

* dangerous ice
* a dangerous derelict or any other direct danger to navigation
* a tropical storm
* encounters with sub-freezing air temperatures associated with gale force winds causing severe ice accretion on superstructures
* winds of force 10 or above on the Beaufort scale for which no storm warning has been received.

(2) The safety signal and danger message must be sent out in accordance with paragraph 4 of Regulation 31 of Chapter V of SOLAS.

*Note*   Paragraph 4 of Regulation 31 of Chapter V of SOLAS provides that the procedure mentioned in the Radio Regulations must be used to send out radio messages. See section IV of Article 33 of the Radio Regulations.

(3) For subparagraph 187(1)(b)(ii) of the Navigation Act, the report to shore must be made to:

(a) for a vessel in NAVAREA X — the Joint Rescue Coordination Centre Australia; or

(b) for a vessel outside NAVAREA X — the Coordinator for the NAVAREA the vessel is in.

*Note*   The telephone number of the Joint Rescue Coordination Centre Australia is +61 2 6230 6811 or 1800 641 792; the fax number is +61 2 6230 6868 or 1800 622 153; the email is rccaus@amsa.gov.au.

32 Records of dangers and danger messages

The master of a regulated Australian vessel must ensure that the following is recorded in the vessel’s official logbook:

(a) any danger to navigation observed; and

(b) any danger message received for a danger to the navigation of the vessel; and

(c) information received on a danger to the navigation of the vessel; and

(d) any danger message and information sent or transmitted about a danger to navigation and the exact time and position of the vessel when the transmission is made.

*Note*An owner of a vessel must ensure that a record of navigational activities and incidents which are of importance to safety of navigation are kept on board in accordance with Regulation 28 of Chapter V of SOLAS. See section 13.

33 Transmission of safety communications and danger messages

(1) Any safety communication must be transmitted in accordance with Article 33 of Chapter VII of the Radio Regulations.

*Note*Article 33 sets out the format and manner of transmission of safety communications including safety announcement, call and message and the use of the safety signal being the word ‘SECURITE’ spoken 3 times.

(2) A person may only transmit a safety communication to give notice that the calling ship station has a transmission about an important navigational or meteorological warning.

Penalty: 50 penalty units.

(3)A person must not interfere with the transmission of a safety communication.

Penalty: 50 penalty units.

(4) An offence against subsection (2) or (3) is a strict liability offence.

(5) A person is liable to a civil penalty if the person contravenes subsection (2) or (3).

Civil penalty: 50 penalty units.

(6)A danger message preceded by the safety signal has priority over all communications other than distress and urgency communications.

34 Duties of persons hearing safety communications

(1) A person who operates a ship station and hears a safety communication must listen on the radio frequency used for the transmission until they are satisfied that the safety communication is of no concern to the vessel.

Penalty: 50 penalty units.

(2) An offence against subsection (1) is a strict liability offence.

(3) A person is liable to a civil penalty if the person contravenes subsection (1).

Civil penalty: 50 penalty units.

Subdivision 4.2 Urgency and distress communications

35 Transmission of urgency communications

(1) Any urgency communication must be transmitted in accordance with Article 33 of Chapter VII of the Radio Regulations.

*Note*Article 33 sets out the format and manner of transmission of urgency communications including urgency announcement, call and message and the use of the urgency signal being the words ‘PAN PAN’ spoken 3 times.

(2) A person may only transmit an urgency communication on a distress frequency when giving notice that the calling ship station has an urgent communication to transmit about safety of a vessel, an aircraft, a vehicle or a person.

Penalty: 50 penalty units.

(3) An urgency communication has priority over all other radio communication except a distress communication.

(4) A person must not interfere with the transmission of an urgency communication.

Penalty: 50 penalty units.

(5) When the master of a vessel who sent an urgency communication is satisfied that action called for is no longer necessary, the master must ensure that a further communication is transmitted in accordance with Article 33 of Chapter VII of the Radio Regulations cancelling the urgency communication.

Penalty: 50 penalty units.

(6) An offence against subsection (2), (4) or (5) is a strict liability offence.

(7) A person is liable to a civil penalty if the person contravenes subsection (2), (4) or (5).

Civil penalty: 50 penalty units.

36 Transmission of distress communications

(1) Any distress communication must be transmitted in accordance with Article 32 of Chapter VII of the Radio Regulations.

*Note*Article 32 sets out the format and manner of transmission of distress communications including distress alert, call, message and relay and the use of the distress signal being the word ‘MAYDAY’.

(2) A person may only transmit a distress communication if it relates to:

(a) a vessel or person at sea requiring immediate assistance due to the grave and imminent threat to safety; or

(b) an acknowledgment of a distress alert or distress call; or

(c) a distress alert relay or distress call relay.

Penalty: 50 penalty units.

(3) If a distress communication is accidentally transmitted when there is no danger to the vessel, the master of the vessel must immediately tell the marine rescue coordination centre for the search and rescue area:

(a) about the accidental transmission; and

(b) that there is no danger to the vessel.

Penalty: 50 penalty units.

(4) An offence against subsection (2) or (3) is a strict liability offence.

(5) A person is liable to a civil penalty if the person contravenes subsection (2) or (3).

Civil penalty: 50 penalty units.

37 Duties of persons hearing urgency or distress communications

(1) A person who operates a ship station and hears an urgency communication may only resume normal radio service on the frequency or channel of the communication if any of the following apply:

(a) when no urgency message follows any urgency announcement or call — at least 5 minutes has elapsed after receiving that announcement or call;

(b) an urgency cancellation has been received;

(c) priority for urgency communication is no longer required for safety or navigational reasons.

Penalty: 50 penalty units.

(2) A person who operates a ship station and hears a distress communication must not resume normal radio service on the frequency or channel of the communication until a message is received indicating:

(a) the distress communication is cancelled; or

(b) that normal radio service may be resumed.

Penalty: 50 penalty units.

(3) An offence against subsection (1) or (2) is a strict liability offence.

(4) A person is liable to a civil penalty if the person contravenes subsection (1) or (2).

Civil penalty: 50 penalty units.

Division 5 Other matters

38 Obligations and procedures in relation to persons in distress at sea

[SOLAS V/33]

(1) The master of a vessel must meet the obligations and follow the procedures mentioned in Regulation 33 of Chapter V of SOLAS in relation to persons in distress at sea.

Penalty: 50 penalty units.

(2) An offence against subsection (1) is a strict liability offence.

(3) A person is liable to a civil penalty if the person contravenes subsection (1).

Civil penalty: 50 penalty units.

*Note*Regulation 33 of Chapter V of SOLAS sets out procedures related to the obligation to provide assistance to, and treatment of, persons in distress.

39 Life-saving signals to be used by ships, aircraft or persons in distress

[SOLAS V/29]

(1) The owner of a vessel must ensure that an illustrated table describing the life-saving signals to be used when communicating with life-saving stations, maritime rescue units and aircraft engaged in search and rescue operations is available to the officer of the watch at all times.

(2) The life-saving signals must be used when persons on the vessel are communicating with life-saving stations, marine rescue units and aircraft engaged in search and rescue operations.

*Note*Life-saving signals are described in the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR) Manual Vol. III, Mobile Facilities and illustrated in the International Code of Signals.

40 Misuse of flares etc

(1) A person must not use a flare, rocket or shell, if it could be mistaken for a signal of distress coming from a vessel.

Penalty: 50 penalty units.

(2) It is a defence if:

(a) the person or another person is in distress; or

(b) both:

(i) the person has notified the JRCC using the approved form, and at least 24 hours before the proposed time of use of the flare, rocket or shell, of:

(A) the intended use of the flare, rocket or shell; and

(B) the proposed time for the intended use; and

(ii) the person has not received any objection from the JRCC to the intended use.

(3) An offence against subsection (1) is a strict liability offence.

(4) A person is liable to a civil penalty if the person contravenes subsection (1).

Civil penalty: 50 penalty units.

*Note 1*   The approved form is available from the AMSA website at https://www.amsa.gov.au. Notification to the JRCC may be by email: *rccaus@amsa.gov.au* or fax: 1800 622 153.

*Note 2*   The person may also need to comply with State or Territory requirements for the use of flares.

41 Documentation requirements — general

The owner of a vessel must ensure the following is available for inspection on the vessel:

(a) for a foreign vessel — documentation issued by the Administration for the vessel for any exemption for safety radio equipment;

(b) for a regulated Australian vessel — documentation for any exemption:

(i) given by AMSA under section 7; or

(ii) continued in operation by section 42;

(c) for a regulated Australian vessel — a copy of the latest edition of the *Australian Global Maritime Distress and Safety System (GMDSS) Handbook*, published by AMSA in electronic or printed form;

(d) for a regulated Australian vessel — the vessel’s radio logbook;

(e) for a vessel on an international voyage — a copy of the latest edition of the *Manual for use by the Maritime Mobile and Maritime Mobile-Satellite Services*, published by the International Telecommunication Union, in electronic or printed form;

(f) for a vessel on an international voyage — a copy of the latest edition of the *Admiralty List of Radio Signals*, published by the Hydrographer of the Navy (UK), in electronic or printed form;

(g) for a vessel on an international voyage — a copy of the latest edition of the *List of Ship Stations and Maritime Mobile Service Identity Assignments*, published by the International Telecommunication Union, in electronic or printed form.

*Note for paragraph (c)*The GMDSS Handbook is available from the AMSA website at https://www.amsa.gov.au.

*Note for paragraph (d)*   An approved form is available from the AMSA website at https://www.amsa.gov.au.

Division 6 Transitional arrangements

42 Continuation of exemptions

An exemption is taken to be in force and granted under this Marine Order if:

(a) it was in force on 30 December 2023*;* and

(b) the requirement to which it applies is a requirement under this Marine Order.

43 Approvals

An approval for use of an equivalent is taken to be approved under this Marine Order if:

(a) it was for an equivalent that was in use on a vessel on 30 December 2023*;* and

(b) the requirement to which it applies is a requirement under this Marine Order.

Schedule 1 Compass deviation book information

(subparagraph 25(1)(a)(ii))

| Item | Information |
| --- | --- |
| 1 | Date |
| 2 | vessel’s position:  (a) latitude; and  (b) longitude |
| 3 | time of observation |
| 4 | body observed or method of obtaining true bearing or heading |
| 5 | direction of the vessel’s head by:  (a) standard compass; and  (b) steering compass |
| 6 | direction of the vessel’s head by gyro compass |
| 7 | direction of the vessel’s true head |
| 8 | azimuth or bearing or heading by magnetic compass |
| 9 | azimuth/bearing or heading by gyro compass |
| 10 | true azimuth or bearing or heading |
| 11 | magnetic compass error |
| 12 | gyro compass error |
| 13 | corrected variation |
| 14 | magnetic compass deviation |

Schedule 2 Radio installations and equipment — regulated Australian vessels to which Chapter IV of SOLAS does not apply

(subsection 28(3))

*Note*This Schedule sets out alternative arrangements for radio installations and equipment for a regulated Australian vessel to which Chapter IV of SOLAS does not apply that is taken to meet the functional requirements mentioned in subsection 28(2).

1 Australian coastal voyages (sea area A3)

Arrangement A

(a) A VHF radio installation with DSC capability; and

(b) A DSC watchkeeping receiver for VHF channel 70 which may be separate or combined with the VHF radio installation mentioned in paragraph (a); and

(c) A MF radio installation with DSC capability; and

(d) A MF DSC watchkeeping receiver capable of maintaining a continuous DSC watch on 2187.5 kHz which may be separate or combined with the MF radio installation above; and

(e) Ship earth station for a recognised mobile satellite service capable of:

(i) transmitting and receiving distress and safety communications using data-communications;

(ii) initiating and receiving distress priority calls;

(iii) transmitting and receiving general radio communications, using either radiotelephony or data communication;

(iv) receiving Maritime Safety Information (MSI) using enhanced group calling; and

(f) A 406 MHz EPIRB; and

(g) Hand held VHF radiotelephone apparatus fitted with VHF channels 6, 13, 16 and 67; and

(h) 9 GHz radar transponder(s) or an AIS-SART(s).

*Note*   Specifications and performance standards of radio and communication equipment must be in accordance with Chapter IV of SOLAS.

*Note for paragraph (e)*   Data communication includes direct-printing telegraphy.

Arrangement B

(a) A VHF radio installation with DSC capability; and

(b) A DSC watchkeeping receiver for VHF channel 70 which may be separate or combined with the VHF radio installation mentioned in paragraph (a); and

(c) A MF/HF radio installation with DSC capability; and

(d) A MF/HF DSC watchkeeping receiver capable of maintaining a continuous DSC watch on 2187.5 kHz, 8414.5 and at least one of the distress and safety frequencies 4207.5, 6312, 12577 or 16804.5 kHz, and allowing, at any time, the selection of any of any of these distress and safety frequencies — this equipment may be combined with or separate from the MF/HF radio installation mentioned in paragraph (c); and

(e) Ship earth station for a recognised mobile satellite service capable of receiving Maritime Safety Information (MSI) using enhanced group calling; and

(f) A 406 MHz EPIRB; and

(g) Hand held VHF radiotelephone apparatus fitted with VHF channels 6, 13, 16 and 67; and

(h) 9 GHz radar transponder(s) or an AIS-SART(s).

2 International voyages

(a) Items listed in Arrangement 1A or 1B; and

(b) a NAVTEX receiver when operating in a NAVTEX area.

3 Voyages in sea area A4

Items listed in Arrangement 1B.

Note

1. All legislative instruments and compilations of legislative instruments are registered on the Federal Register of Legislation under the *Legislation Act 2003.* See https://www.legislation.gov.au.