AMSA EXTERNAL CONSULTATION ON MO27

Draft Marine Order 27 (Safety of navigation and radio equipment) 2023 is open for external consultation until 8 October 2023.

We invite you to make comment on the draft Marine Order 27 (Safety of navigation and radio equipment) 2023 by using the following link: Consultations (amsa.gov.au)

Who does this Order apply to?

Marine Order 27 (MO27) prescribes standards for safe navigation; radio equipment and communications; and danger, urgency and distress signals and messages for regulated Australian vessels and foreign flagged vessels.

MO27 gives effect to:

- SOLAS Chapter IV (Radiocommunications)
- SOLAS Chapter V (Safety of navigation):
 - o Regulation 10, paragraph 7
 - o Regulation 11, paragraph 7
 - o Regulations 15 to 21, 24, 27, 28 and 29, and 31 to 35.

Background

MO27 was last reviewed in 2016, with an amendment compilation completed in 2019. The 2019 amendment compilation made minor amendments to the Order and amended Schedules 2 and 4.

Amendments have since been made to SOLAS with these amendments coming into effect on 1 January 2024. MO27 requires updating to give effect to these SOLAS amendments. Additionally, it is appropriate to conduct a full review of MO27 to consider any other updates that may be needed and reissue the marine order in current drafting style.

What are the key changes?

The key changes are summarised at 'Have your say on changes to Marine Order 27' through the following link: Consultations (amsa.gov.au)

To align with commencement of the SOLAS amendments, the revised MO27 is expected to come into effect on 1 January 2024.

The table below compares the existing Marine Order 27 (2016) and the draft revised Marine Order 27 (2023).

All changes are highlighted yellow and deleted text from the current MO27 is shown as strikethrough.

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
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Division 1 Preliminary	Division 1 Preliminary	
1 Name of Order This Order is Marine Order 27 (Safety of navigation and radio equipment) 2016.	1 Name of Marine Order This Marine Order is Marine Order 27 (Safety of navigation and radio equipment) 2023.	"Marine" added before the word "Order" for clarity. Title updated with intended issue year.
	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	
This Order: (a) provides for the following: (i) navigation safety measures and equipment; (ii) radio equipment; (iii) danger, urgency and distress signals and messages; 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.	2 Purpose This Marine Order: (a) provides for the following: (i) navigation safety measures and equipment; (ii) radio equipment; (iii) danger, urgency and distress signals and messages; 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	"Marine" added before the word "Order" for clarity

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
(1) The following provisions of the Navigation Act provide for this Order to be made: (a) subsection 187(1) which provides that the regulations may prescribe matters for reports of dangers to navigation; (b) 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; (c) 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; (d) paragraph 339(2)(c) which provides that the regulations may provide for the operation, maintenance, checking and testing of this machinery and equipment; (e) 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; (f) paragraph 339(2)(l) which provides that the regulations may provide for logbooks; (g) paragraph 339(2)(m) which provides that the regulations may provide for records for compliance with the Act; (h) paragraph 339(2)(m) which provides that the regulations may provide for records for compliance with the Act; (h) paragraph 340(1)(a) which provides that the regulations may give effect to SOLAS; (i) 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.	 Power The following provisions of the Navigation Act provide for this Marine Order to be made: subsection 187(1) which provides that the regulations may prescribe matters for reports of dangers to navigation; 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; 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; paragraph 339(2)(c) which provides that the regulations may provide for the operation, maintenance, checking and testing of this machinery and equipment; 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; paragraph 339(2)(l) which provides that the regulations may provide for logbooks; paragraph 339(2)(m) which provides that the regulations may provide for records for compliance with the Act; paragraph 340(1)(a) which provides that the regulations may give effect to SOLAS; subsection 341(1) which provides that the regulations may provide for the imposition of penalties for a contravention of a provision of the regulations. 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. Subsection 50ct and matters that can be provided for by 	"Marine" added before the word "Order" for clarity

4 Definitions

(1) In this Order:

AIS-SART means Automatic Identification System — Search and Rescue Transmitter

approved means approved by:

- (a) for a regulated Australian vessel the issuing body; or
- (b) for a foreign vessel the administration of the country of registry of the vessel; or
- (c) for a training course AMSA.

ARPANSA means the Australian Radiation Protection and Nuclear Safety Agency.

coast radio-station means a radio installation established on land for the exchange of radio communications with vessels.

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

DSC means digital selective calling, a technique that:

- 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-R.

DSC-urgency announcement means a digital selective call, relayed through radio stations, using:

- (a) an urgency call format, in the bands used for terrestrial radiocommunication; or
- (b) an urgency message format.

DSC watchkeeping receiver means a radio installation maintaining a continuous watch on one or more specified DSC frequencies. **EGC** means enhanced group calling.

EPIRB means an approved emergency position indicating radio beacon.

general radio communications means operational and public correspondence traffic, other than distress, urgency and safety messages, conducted by radio.

GMDSS means Global Maritime Distress and Safety System.

IAMSAR Manual means the *International Aeronautical and Maritime* Search and Rescue Manual published jointly by ICAO and the IMO, as amended from time to time.

ICAO means the International Civil Aviation Organization.

INMARSAT means the system of geostationary satellites for worldwide mobile communications services, and which supports the Global Maritime Distress and Safety System and other emergency communications systems.

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 administration of the country of registry of the vessel; or
- (c) for a training course AMSA.

ARPANSA means the Australian Radiation Protection and Nuclear Safety Agency.

coast station means land station in the maritime mobile service.

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

general radio communications means communications other than distress, urgency and safety messages, conducted by radio.

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 means the *International Aeronautical and Maritime* Search and Rescue Manual published jointly by ICAO and the IMO, as amended from time to time.

ICAO means the International Civil Aviation Organization.

"Marine" added before the word "Order" for clarity.

AIS-SART definition updated.

Coast station definition updated to reflect the Radio Regulations

DSC urgency announcement definition is now urgency announcement.

DSC watchkeeping receiver definition has been removed.

EGC definition removed as the term is not included in the draft order.

EPIRB definition will be included in MO1, and will be updated to reflect the new SOLAS IV definition.

INMARSAT definition removed as the term is not included in the draft order

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International Code of Signals means the International Code of Signals published by the IMO. maritime safety information (MSI) means navigational and meteorological warnings, meteorological forecasts and other urgent safety related messages broadcast to ships. NAVAREA X is the sea area with the boundaries mentioned for Navarea X in subsection 2.2.2 of IMO Circular MSC.1/Circ.1403 Revised NAVTEX Manual.	International Code of Signals means the International Code of Signals published by the IMO. 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.	NAVAREA X definition updated for easier reference.
 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 completed an approved training course; 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; or (c) has completed training that is considered by AMSA to be equivalent to an approved training course. Radio Regulations has the same meaning as in Regulation 2.11 of Chapter IV of SOLAS. 	 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. 	Qualified compass adjuster definition updated to reflect current arrangements.
Note The text of the Radio Regulations is available at the International Telecommunication Union website: http://www.itu.int.radio station means a vessel radio station or a coast radio station. 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 VHF radiotelephone coverage area of any coast radio station providing a continuous DSC alerting service on VHF frequency 156.525 MHz.	Note The text of the Radio Regulations is available at the International Telecommunication Union website: http://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.	Radio station definition removed as it is captured in the Radio Regulations – refer S4(2) Sea area A1, A2 and A3 definitions updated to reflect new SOLAS IV definitions.
sea area A2 means an area, excluding sea area A1, within the MF radiotelephone coverage area of any coast radio station providing a continuous DSC alerting service on MF frequency 2187.5 kHz. sea area A3 means an area, excluding sea areas A1 and A2, within the coverage of an INMARSAT geostationary satellite in which continuous alerting is available.	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.	Vessel radio station has been replaced with ship station from improved readability.

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sea area A4 means an area outside sea areas A1, A2 and A3.	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 urgency announcement means a digital selective call using:	
	(a) an urgency call format, in the bands used for terrestrial	
vessel radio station means a radio installation on board a vessel	radiocommunication; or (b) an urgency message format relayed through space stations.	
(2) Any other term that is used in this Order and defined in the Radio	(2) Any other term that is used in this Marine Order and defined in	'Prevention of Collisions
Regulations, has the meaning given in those Regulations.	the Radio Regulations, has the meaning given in those Regulations.	Convention' is not used in the draft order.
 Note 1 Some terms used in this Order are defined in Marine Order 1 (Administration) 2013, including: IMO SOLAS STCW Code. Note 2 Other terms used in this Order are defined in the Navigation Act, including: AMSA GT inspector 	Note 1 Some terms used in this Order are defined in Marine Order 1 (Administration) 2013, including: EPIRB IMO SOLAS STCW Code. Note 2 Other terms used in this Order are defined in the Navigation Act, including: AMSA GT inspector	Definition of EPIRB will be included in MO1.
 owner Prevention of Collisions Convention regulated Australian vessel STCW Convention. 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 http://www.amsa.gov.au. Note 4 For delegation of AMSA's powers under this Order — see the AMSA website at http://www.amsa.gov.au. 	 owner regulated Australian vessel STCW Convention. 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 http://www.amsa.gov.au . Note 4 For delegation of AMSA's powers under this Order — see the AMSA website at http://www.amsa.gov.au .	

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5 Interpretation A reference to the Administration in SOLAS, an IMO resolution or a document mentioned in this 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.	5 Interpretation A reference to the Administration in SOLAS, an IMO resolution or a 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 (1) This Order applies to: (a) a regulated Australian vessel; and (b) a foreign vessel. (2) However, for provisions giving effect to Chapter IV of SOLAS, this Order applies to a foreign vessel only if Chapter IV of SOLAS applies to the vessel.	6 Application This Marine Order applies to: (a) a regulated Australian vessel; and (b) a foreign vessel.	"Marine" added before "Order" for clarity. (2) has been removed. Application has been addressed at relevant provisions throughout.
 (1) The owner of a regulated Australian vessel may apply for an exemption of the vessel from a requirement of this Order in accordance with the application process set out in Division 3 of Marine Order 1 (Administration) 2013. (2) 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. (3) An exemption is subject to any conditions AMSA imposes to ensure the safety of the vessel. (4) 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 imposing conditions on approval 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 Order — see Division 6. 	 Exemptions 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. AMSA may give an exemption only if satisfied that:	"Marine" added before "Order" for clarity.

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 Equivalents (1) 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. (2) 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 Order — see Division 6. 	 8 Equivalents 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. (2) 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 Order — see Division 6 	
Division 2 Navigation safety	Division 2 Navigation safety	
Subdivision 2.1 Navigation safety measures	Subdivision 2.1 Navigation safety measures	
 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 for paragraph (a) For preparing plans — see IMO Circular MSC/Circ.1079 Guidelines for preparing plans for cooperation between search and rescue services and passenger ships (in accordance with Regulation V/7.3 of SOLAS). Ship reporting systems [SOLAS V/11.7] The master of a vessel must comply with paragraph 7 of Regulation 11 of Chapter V of SOLAS. Penalty: 50 penalty units. An offence against subsection (1) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1).	 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 MSC.1/Circ.1079 as revised from time to time. Ship reporting systems [SOLAS V/11.7] The master of a vessel must comply with paragraph 7 of Regulation 11 of Chapter V of SOLAS. Penalty: 50 penalty units. An offence against subsection (1) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1). Civil penalty: 50 penalty units. 	This section addresses section 11 of the current order. Renumbered for improved readability. Note has been redrafted to capture relevant SOLAS regulation. This section replicates section 12 of the current order. Renumbered for improved readability. Note developed for guidance.

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	 Ships' routeing [SOLAS V/10.7] The master of a vessel must comply with paragraph 7 of Regulation 10 of Chapter V of SOLAS. Penalty: 50 penalty units. An offence against subsection (1) is a strict liability offence. 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. 	SOLAS V/10.7 is included in the Purpose of the current marine order, however the body of the current order does not give effect to SOLAS V/10.7. New section created to clarify existing requirements. Note developed for guidance.

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011		Compilation no.3, Compilation date: 1 January navigation and radio equipment) 2023 MO 27 issue 230905A	
(1) (2)	Use of heading or track control systems [SOLAS V/24] 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. The officer of the watch 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 an area or in conditions where navigation	 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 circumstances including: 	This section includes content of section 13 of the current order. Renumbered and reworded slightly for improved readability. Onus for (2) is placed on
(3)	requires special caution. Examples an area of high traffic density conditions of restricted visibility The master of a vessel must ensure that a change from	(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	the master, rather than office of the watch. Inclusion of penalty provisions.
()	automatic to manual control and from manual to automatic control of a vessel's steering is made: (a) by the officer of the watch; or (b) under the supervision of the officer of the watch.	automatic to manual control and from manual to automatic control of a vessel's steering is made: (a) by the officer of the watch; or (b) under the supervision of the officer of the watch.	providenc.
(4)	The master of a vessel must ensure that the manual steering of a vessel is tested: (a) after prolonged use of the heading or track control systems; and (b) before entering an area where navigation requires special caution.	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) condition 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. 	

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
 Records of navigational activities [SOLAS V/28] The master of a vessel must ensure that: (a) the navigational activities and incidents of importance to safety of navigation on the vessel are recorded; 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. Note For guidance on records—see IMO Resolution A.916(22) Guidelines for recording of events related to navigation. 	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 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: (ii) vessel position; (iii) vessel's course and speed; (iiii) 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.	This section includes content of section 14 of the existing order. Renumbered for improved readability. Heading modified for clarity. (2) developed to clarify existing requirements of SOLAS V/28. Note deleted as it is captured at SOLAS V/28. New note developed to highlight specific circumstance.

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
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—For guidance on voyage planning see the following: (a)—IMO Resolution A.893(21) Guidelines for voyage planning; (b)—IMO Resolution A.1024(26) Guidelines for ships operating in polar waters; (c)—IMO Circulars MSC/Circ.1063 Participation of ships in weather routeing services; (d)—IMO Circular MSC/Circ.1293 Participation in the WMO voluntary observing ships (VOS) scheme; (e)—IMO Resolution A.999(25) Guidelines on voyage planning for passenger ships operating in remote areas; (f)—IMO Circular MSC/Circ.1056 Guidelines for ships operating in Arctic ice-covered waters.	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.	Updated section number. Note redrafted to refer to SOLAS for guidance.
Persons not to interfere with Master's decisions	15 Persons not to interfere with Master's decisions [SOLAS V/34-1]	Updated section number.
 (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 	 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. An offence against subsection (1) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1). Civil penalty: 50 penalty units. 	Relevant SOLAS reference included.
Subdivision 2.2 Navigation safety equipment	Subdivision 2.2 Navigation safety equipment etc	Minor rewording of subheading.

	ting text of Marine Order 27 (Safety of navigation and radio oment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
15	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 equipment in accordance with Regulation 15 of Chapter V of SOLAS.	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 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.	Updated section number. Note developed for guidance.
(1) (2) (3) (4) (5) (6)	Maintenance of navigational equipment [SOLAS V/16] The master of a vessel must take all reasonable steps to have navigational equipment maintained in efficient working order. The owner of a vessel must ensure that spare parts and tools for repairs to navigational equipment fitted on the vessel are available on the vessel. Penalty: 50 penalty units. An offence against subsection (2) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (2). Civil penalty: 50 penalty units. The spare parts and tools must be those that are recommended by the manufacturer of the navigational equipment. However, if the 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, if agreed by AMSA, proceed to a port where repairs can take place.	 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 the 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, if agreed by AMSA, proceed to a port where repairs can take place. Penalty: 50 penalty units. 	Updated section number. Removed requirements regarding availability of spare parts and tools, as this is captured at new S17(1). Inclusion of penalty provisions.
(7)	For subsection (6), 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.	 (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) A person is liable to a civil penalty if the person contravenes subsection (1) or (2). Civil penalty: 50 penalty units. 	

	ing text of Marine Order 27 (Safety of navigation and radio ment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
17	Equipment information and instructions to be kept on vessel		Section deleted as not a requirement of SOLAS.
(1)	The owner of a vessel must ensure that information and instructions about the use and maintenance of all navigational equipment on the vessel are on the vessel.		In addition, this issue is addressed at new S17, which requires the master of a vessel must
(2)	Penalty: 50 penalty units. The owner of the vessel must ensure that the information and instructions are written in English or, for a foreign vessel, the working language of the vessel.		take all reasonable steps to ensure the performance of navigational equipment
liability	Penalty: 50 penalty units. (3) An offence against subsection (1) or (2) is a strict offence		is maintained; and the equipment is maintained in efficient working order.
(4)	A person is liable to a civil penalty if the person contravenes subsection (1) or (2). Civil penalty: 50 penalty units.		

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
19 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 IEC 60533:2015 Electrical and electronic installations in ships—Electromagnetic compatibility (EMC)—Ships with a metallic hull.	 Electromagnetic compatibility [SOLAS V/17] The owner of a regulated Australian 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 	Updated section number. Clarification of application to RAVs. Amendments to align marine order with SOLAS.
(2) The owner of a vessel must ensure that electrical and electronic equipment installed after 30 June 2002 does not affect navigational systems and equipment on the vessel. Penalty: 50 penalty units.	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.	Note developed for guidance.
 (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. 	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.	

20 Radio installations, navigational systems and equipment [SOLAS-IV/7 to 11, V/18, 19 and 20]

- -(1) The owner of a vessel must ensure that the systems and equipment mentioned in Regulations 19 and 20 of Chapter V of SOLAS for the vessel are type approved and installed.
- (2) The owner of a vessel must ensure that the systems and equipment mentioned in Regulations 7 to 11 of Chapter IV of SOLAS are installed.
- (3) The owner of a vessel must ensure each of the following complies with each applicable IMO Resolution, as amended from time to time, that is mentioned in Schedule 2:
 - (a) systems and equipment;
 - (b) back-up arrangements, replacements and additions for systems and equipment;
 - (c) radio installations.

Note Information on obtaining copies of the IMO Resolutions mentioned in Schedule 2, and any amendments made to them, is available in the related information on the Marine Orders link on the AMSA website at http://www.amsa.gov.au.

- (4) Radio installations installed on a vessel must comply with the ARPANSA Radiation Protection Standard *Maximum Exposure Levels to Radiofrequency Fields 3 kHz to 300GHz* (Radiation Protection Series Publication No.3), as in force from time to time.
 - *Note* This standard is available from the ARPANSA website at http://www.arpansa.gov.au.
- (5) For a vessel carrying an electronic chart display and information system (*ECDIS*) for compliance with paragraph 2.1.4 of Regulation 19 of Chapter V of SOLAS:
 - (a) the owner of the vessel must ensure that the system and the back-up arrangements required by paragraphs 2.1.4 and 2.1.5 of Regulation 19 of Chapter V of SOLAS are approved; and
 - (b) 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.
- (6) The owner of a vessel must ensure that:
 - (a) 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
 - (b) any voyage data recorder system used on the vessel, including all sensors, is tested by an approved testing or

19 Navigational systems and equipment — type approval and testing

[SOLAS V/18]

- (1) The owner of a vessel must ensure that the navigational systems 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 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 by an approved testing or servicing facility in accordance with paragraph 8 of Regulation 18 of Chapter V of SOLAS; and

Updated section number.

- (1) clarification of SOLAS requirements
- (2) of current order radio requirements moved to Division 3 for improved readability. Refer S27 of draft marine order.
- (3) of current order has been largely moved to *Note.*
- (4) of current order ARPANSA requirements have been moved to S27.
- (5) of current order -ECDIS requirements have been moved to S20 and S24.
- (6) of current order restructured for improved readability
- (6) and (7) of current order AIS requirements now at S19 and S20. Certificate of compliance and test report requirements have been clarified.

Notes developed for quidance.

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
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servicing facility in accordance with paragraph 8 of Regulation 18 of Chapter V of SOLAS and a certificate of compliance issued stating the date of compliance and the performance standards for the system; and (c) a copy of the certificate of compliance is available for inspection on board the vessel. (7) The master of a vessel must ensure that any automatic identification system installed on a vessel is used, and that use of the 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.	(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 of Regulation 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 approvals on behalf of AMSA in accordance with that agreement.	

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
	 Navigational systems and equipment — installation and use requirements etc [SOLAS V/19] 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. 	Navigations systems and equipment 'type approval and testing' and 'installation and use requirements etc' separated for improved readability. (1) Additional text included to better capture SOLAS V/19 requirements, including Note for guidance. (2) ECDIS requirements have been carried over from S20 of the current marine order. (3) Clarification of application (4) – (6) Additional text about not turning off AIS, including penalty provisions.

	ting text of Marine Order 27 (Safety of navigation and radio pment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
21	Long-range identification and tracking of vessels [SOLAS V/19-1] The owner of a vessel to which Regulation 19-1 of Chapter V of SOLAS applies must ensure that: (a) the equipment mentioned in the Regulation is fitted; and (b) the following information is transmitted automatically: (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.	 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 if: (a) the operation will not 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. 	Redrafted to better capture SOLAS requirements and application. Additional text included about not turning off equipment, including penalty provisions.
		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.	New section created to give effect to VDR requirements as per SOLAS IV/20. Note developed for guidance.

	cisting text of Marine Order 27 (Safety of navigation and radio uipment) 2016 Compilation no.3, Compilation date: 1 January		New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023	Notes on changes
	2020		MO 27 issue 230905A	
	MO 27 issue - F2020C00011			
22	International Code of Signals and IAMSAR Manual	23	International Code of Signals and IAMSAR Manual	Updated section
	[SOLAS V/21]		[SOLAS V/21]	number.
	The owner of a vessel must ensure that the following		The owner of a vessel must ensure that the following documents	
	documents are kept on the vessel and are available for		are kept on the vessel and are available for inspection:	
	inspection:		(a) a copy of the latest edition of the International Code of	
(a)	a copy of the latest edition of the International Code of Signals;		Signals;	
(b)	a copy of Volume III (Mobile facilities) of the IAMSAR Manual.		(b) a copy of Volume III (Mobile facilities) of the IAMSAR Manual.	

Nautical charts and nautical publications [SOLAS V/27]

- (1) The owner of a vessel embarking on a voyage must ensure nautical charts and nautical publications on board for the intended voyage are adequate and up to date.
- (2) The owner of a vessel must ensure that any electronic version of a nautical chart or nautical publication mentioned in subsection (1) is:
 - (a) a version officially issued by an administration, authorised hydrographic office or other approved organisation; and
 - (b) accessible using a computer that is:
 - (i) located on the bridge; and
 - (ii) available at all times to the officer of the watch: and
 - (iv) connected to the vessel's main and emergency power supplies.
- (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 (eg portable mass storage device or compact disc) that can be made available to the officer of the watch within 5 minutes.
- (4) 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.
- (5) The owner of a vessel must ensure that all software and hardware used for accessing official electronic versions of nautical publications complies with the recommendations of IMO Circular MSC/Circ.891 *Guidelines for the onboard use and application of computers*.
- (6) The master of a vessel must ensure that the information mentioned in subsections (1) and (2) is on board before embarking on a voyage.

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 a voyage
- (2) For an electronic nautical chart, the owner of a 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.

This section includes content of section 23 of the existing order.

(1), (2), (4) and (6) of current order captured at (1) and (2) of draft order, to better capture SOLAS requirements and reflect current technology.

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18 Magnetic compass	25 Magnetic compass	This section includes
(1) The master of a vessel must ensure that:	(1) The master of a vessel must ensure that:	content of section 18 of
(a) for a vessel more than 100 GT:	(a) for a vessel more than 100 GT:	the existing order.
(i) a compass deviation book is kept on the vessel; and	(i) a compass deviation book is kept on the vessel; and	
(ii) the information mentioned in Schedule 1 is recorded in	(ii) the information mentioned in Schedule 1 is recorded in	
the compass deviation book; and	the compass deviation book; and	Wording update for
(b) if the observations for a magnetic compass on the vessel	(b) if the observations for a magnetic compass on the vessel	improved readability.
show a deviation of the compass on any heading of more	show a deviation of the compass on any heading of more	
than 5° — the compass is adjusted to correct the deviation in	than 5°— they either adjust the compass to correct the	
accordance with subsection (2); and	deviation or arrange for the compass to be adjusted by a	
(c) for each magnetic compass fitted on the vessel — the tables	qualified compass adjuster; and	
or curve of residual deviations from the last adjustment, and details of subsequent changes in deviations, are available for	(c) for each magnetic compass fitted on the vessel — the tables or curve of residual deviations from the last	
use at all times; and	adjustment, and details of subsequent changes in	
(d) the size and position of magnets and soft iron correctors in a	deviations, are available for use at all times; and	
compass fitted on the vessel and the date and nature of any	(d) the size and position of magnets and soft iron correctors in	
changes made to them or to their position are recorded by	a compass fitted on the vessel and the date and nature of	
the person making the adjustment.	any changes made to them or to their position are recorded	
Penalty: 50 penalty units.	by the person making the adjustment.	
(2) For paragraph (1)(b), the compass must be adjusted by a	Penalty: 50 penalty units.	
qualified compass adjuster or the master of the vessel.	Note for paragraph (b) For other circumstances in which it is	
Note For circumstances in which it is recommended that a compass be	recommended that a compass be adjusted, see Annex G of ISO	
adjusted, see Annex G of ISO 25862:2009 Ships and marine technology – Marine magnetic compasses, binnacles and azimuth reading devices.	25862:2009 Ships and marine technology – Marine magnetic compasses, binnacles and azimuth reading devices.	
(3) An offence against subsection (1) is a strict liability offence.	(2) An offence against subsection (1) is a strict liability offence.	
(4) A person is liable to a civil penalty if the person contravenes	(3) A person is liable to a civil penalty if the person contravenes	
subsection (1).	subsection (1).	
Civil penalty: 50 penalty units.	Civil penalty: 50 penalty units.	
(5) If a compass is adjusted, details of the deviations in the approved	(4) If a compass is adjusted, details of the deviations in the	
form must be:	approved form must be:	
(a) if the compass is adjusted by a qualified compass	(a) if the compass is adjusted by a qualified compass	
adjuster — given to the master by the qualified	adjuster — given to the master by the qualified compass	
compass adjuster; or	adjuster; or	
(b) if the compass is adjusted by the master — prepared by the master.	(b) if the compass is adjusted by the master — prepared by	
the master. (6) An inspector may direct the master of a vessel to have a	the master.	
compass of the vessel adjusted if the inspector considers that:	(5) An inspector may direct the master of a vessel to have a	
(a) paragraph (1)(c) or (d) has not been complied with; and	compass of the vessel adjusted if the inspector considers that:	
(b) the compass is, or may be, unreliable.	(a) paragraph (1)(c) or (d) has not been complied with; and(b) the compass is, or may be, unreliable.	
(7) The master of a vessel must comply with the direction as soon as	(6) The master of a vessel must comply with the direction as soon	
practicable.	as practicable.	

equipment) 2016 Co	ine Order 27 (Safety of navigation and radio impilation no.3, Compilation date: 1 January 2020 IO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety navigation and radio equipment) 2023 MO 27 issue 230905A	of Notes on changes
(1) Other equipm (1) The owner of board equipms electronic systems (a) an adequate (b) safe navious (2) For a vessel less the vessel has Code of Signate (3) For a vessel at the vessel has International (4) Except in an expection (1) improperly rigging Penalty: (5) An offence ag	nent a vessel must ensure that the vessel has on tent in good working condition that will, if an tem fails, enable: uate lookout to be maintained; and igation of the vessel. ess than 500 GT, the master must ensure that is on board flags N and C of the International als. at least 500 GT, the master must ensure that is on board a complete set of flags of the Code of Signals. emergency, the master of a vessel must not it to be used, any equipment mentioned in) that is not in good working condition or that is ged. 50 penalty units. gainst subsection (4) is a strict liability offence. able to a civil penalty if the person contravenes).	 Other equipment The owner of a vessel must ensure that the vessel has dependent 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 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 has on board a complete set of flags of the International of Signals. (4) Except in an emergency, the master of a vessel must no or permit to be used, any equipment mentioned in subsection (1) that is not in good working condition or that is improprigged. Penalty: 50 penalty units. An offence against subsection (4) is a strict liability offen A person is liable to a civil penalty if the person contrave subsection (4). Civil penalty: 50 penalty units. 	vessel vessel Code t use, ection erly ce.
	dio equipment	Division 3 Radio installations and radio equipment	Text updated for clarity
		 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 apmust ensure that: (a) a radio installation is fitted and radio equipment is cale on board in accordance with Regulations 6 to 11 of Chapter SOLAS; and (b) for a regulated Australian vessel – the radio installation complies with the ARPANSA Standard for Limiting Exportationary Fields – 100 kHz to 300 GHz (Rev. 1) (2 as amended from time to time. Note for paragraph (b) This standard is available from the ARP website at https://www.arpansa.gov.au. (2) The owner of a regulated Australian vessel to which Chapter 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 requirementioned in section 28(2). 	better capture existing SOLAS requirements, in particular SOLAS IV/6. Refer S20 of current order. ARPANSA requirements have been carried over from S20 of the current order. ARPANSA reference updated.

	text of Marine Order 27 (Safety of navigation and radio nt) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011		New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
(1) Exists in (2) Exists (3) A exists exists (3) A exists (4) exists (4) exists (5) exists (5) exists (5) exists (5) exists (5) exists (6) exis	independent means; transmit ship-to-ship distress alerting; transmit and receive on-scene communications, including appropriate SAR co-ordinating communications; transmit locating signals, unless AMSA considers that the nature of the vessel's operations makes this requirement unnecessary; and	(1)	[SOLAS IV/ 4] For a vessel to which Chapter IV of SOLAS applies - 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. For a vessel to which Chapter IV of SOLAS does not apply - 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 MSC.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.	This section includes content of section 25 of the existing order. Revised to better capture existing SOLAS requirements, in particular SOLAS IV/4. (3) of draft order replaces Note 1 of the current order, and clarifies application of new Schedule 2. (3) of the current order is not required, as it is captured at S(2).

26 Specific requirements

- (1) The radio installations, equipment, watchkeeping arrangements, sources of energy, performance standards, maintenance requirements, personnel and record-keeping-of a vessel-to which Chapter IV of SOLAS applies must comply with:
 - (a) Regulations 6-to 18 of Chapter IV of SOLAS; and
 - (b) the Radio Regulations; and
 - (c) the STCW Convention; and
 - (d) the STCW Code.

Note 1 A list of IMO performance standards for radio equipment is set out in a footnote to Regulation 14 of Chapter IV of SOLAS.

Note 2 If the vessel has, as a source of energy required under paragraph 1 of Regulation 13 of Chapter IV of SOLAS, at least 1 rechargeable accumulator battery and the source of energy meets the requirements of Regulation 13, AMSA will consider exempting the vessel from the requirement mentioned in paragraph 2 of Regulation 13 for a reserve source of energy.

- (2) The radio installations, equipment, watchkeeping arrangements, sources of energy, performance standards, maintenance requirements, personnel and record-keeping of a vessel to which SOLAS does not apply must:
 - (a) enable the functional requirements mentioned in subsection 25(2) to be met; and
 - (b) comply with the relevant provisions of the Radio Regulations, the STCW Convention and the STCW Code.
- (3) MF/HF radiotelephone equipment, VHF equipment and satellite communications equipment must:
 - (a) meet the performance standards mentioned in Regulation 14 of Chapter IV of SOLAS that apply-to them: and
 - (b) be capable of operating on:
 - (i) the frequencies mentioned in Schedule 4 that apply to them; and
 - (ii) any other frequency that is appropriate to the service in which the vessel is engaged.
- (4) MF/HF radiotelephone equipment and VHF equipment-must meet the climatic and durability testing standards mentioned in IEC 60945:2002 Maritime navigation and radiocommunication equipment and systems General requirements Methods of testing and required test results as amended from time to time.

29 Other requirements

- (1) For a vessel to which Chapter IV of SOLAS applies the owner must ensure
 - (a) that radio equipment is type approved in accordance with Regulation 14 of Chapter IV of SOLAS; and
 - (b) the radio equipment is maintained in accordance with Regulation 15 of Chapter IV of SOLAS; and
 - (c) sources of energy for radio installations, maintenance, watchkeeping arrangements, personnel, record-keeping arrangements and position updating must comply with:
 - (i) Regulations 12 to 18 of Chapter IV of SOLAS; and
 - (ii) the Radio Regulations; and
 - (iii) the STCW Convention: and
 - (iv) the STCW Code.

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

Note for paragraph (b) Regulation 15 of Chapter V of SOLAS provides that radio equipment is to be maintained to ensure compliance with functional requirements

- (2) For a regulated Australian vessel to which Chapter IV of SOLAS does not apply it must have:
 - (a) 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
 - (b) sources of energy for radio installations and maintenance, watchkeeping, personnel, record-keeping and position updating arrangements that meet the requirements mentioned subsection (1) as if the vessel were a vessel to which Chapter IV of SOLAS applies; 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

Renumbering of section.

Additional text included to better capture SOLAS IV requirements, and requirements for vessels to which SOLAS IV does not apply.

S27 of draft order gives effect to SOLAS IV/6-11, whereas S29 of draft order gives effect to SOLAS IV/12-18.

S26(3) and (4) of the current order have been captured at S29(2)(a) of the draft order.
Reference to IEC standard has been removed because the IEC standard is included in the SOLAS V/17 Unified Interpretation, which Australia recognised.

S26(5) of the current order has been captured at S29(2)(c) of draft MO27

S26(6) of the current order has been captured at S43(d) of draft order.

S26(7) of the current order has been captured at S29(3) of the draft order.

S26(8)(a) and (b) removed as this is

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(5) For VHF equipment, the priority of use and control of the channels required for navigational safety purposes must be immediately available at the place from which the vessel is normally navigated. (6) A radio logbook must be in the approved form. (7) A vessel normally engaged in harbour duties must: (a) be fitted with a VHF radio installation with DSC capability; and	(b) in accordance with the manufacturer's instructions.	already a requirement of MO31 S26(8)(c) – refer S43(b) of draft MO27 S26(8)(d) – refer S43(a) of draft MO27
(b) be provided with an approved 406 MHz satellite EPIRB. (8) There must be carried on a vessel: (a) the vessel's Cargo Ship Safety Radio Certificate; (b) the vessel's Record of Equipment for Cargo Ship Safety Radio; (c) for a regulated Australian vessel — documentation for any exemption:		S26(8)(e) – refer S43(c) of draft MO27, application to RAVs only S26(8)(f) – no longer required
 (i) given by AMSA under section 7; or (ii) continued in operation by section 45; (d) for a foreign vessel — documentation issued by the Administration for the vessel for any exemption for safety radio equipment; (e) a copy of the latest edition of the handbook for GMDSS 		S26(8)(g) – refer S43(e) of draft MO27 S26(8)(h) – refer S43(f) of draft MO27
ship station operators, published by AMSA; (f) a copy of this Order, in electronic or printed form; (g) 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;		S26(8)(i) – refer S43(g) of draft MO27. Document name updated.
(h) 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;		S26(8)(j) removed as publication no longer exists.
(i) a copy of the latest edition of the <i>List of Ship Stations</i> , published by the International Telecommunication Union, in electronic or printed form;		S26(8)(k) – refer S43(d) of draft MO27,
(j) a copy of the latest edition of the List of Call Signs and Numerical Identities of Stations used by the Maritime Mobile Satellite Services, published by the International Telecommunication Union, in electronic or printed form; (k) the vessel's radio logbook. Note for prograph (c) The bandbook for CMDSS ship.		application to RAVs only. S26(9) removed as this is captured in the ISM Code
Note for paragraph (e) The handbook for GMDSS ship station operators is available from the AMSA website at http://www.amsa.gov.au .		S26(10) – refer S29(2)(d) of draft order.

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Note AMSA will consider exempting a vessel to which Chapter IV of SOLAS does not apply from paragraphs (8)(to (j). (9) Radio equipment must be tested: (a) at intervals specified by the manufacturer; and (b) in accordance with the manufacturer's instructions. (10) Battery installations that provide emergency power supply radio equipment must be tested monthly. 27 EPIRBs — requirements for fitting and maintenance et	o 30 EPIRBs	
 (1) An EPIRB must be fitted, maintained, transported and disposed of in accordance with the manufacturer's instructions. 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 contravene subsection (1). Civil penalty: 50 penalty units. Note 1 Subsection 26(1) requires compliance with Regulations 6 to 18 of Chapter IV of SOLAS. Regulation 7.1.6 of Chapter IV of SOLAS requires each vessel to carry an EPIRB. Note 2 A man-overboard-beacon (MOB) or a personal locator beacon (PLB) is not a substitute for an EPIRB. 	 An owner of a regulated Australian vessel must ensure that any EPIRB fitted or carried on the vessel is registered with AMSA. 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. 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 An offence against subsection (1) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1). Civil penalty: 50 penalty units. 	Revised section to; - require EPIRBs on RAVs to be registered, and for registration details to be kept up to date - include associated penalty provisions - include disposal procedures.
Division 4 Danger, urgency and distress messages	Division 4 Danger, urgency and distress messages	
Subdivision 4.1 Safety signals and danger messages [SOLAS V/31 & V/32]	Subdivision 4.1 Safety signals and danger messages [SOLAS V/31 & V/32]	

Safety signals and danger messages (1) For subparagraph 187(1)(b)(i) of the Navigation Act: (a) the safety signal is the word 'securite' (pronounced 'say-cure-e-tay') spoken 3 times; and (b) the danger message must include the information mentioned in Regulations 31 and 32 of Chapter V of SOLAS. Note For paragraph (a), the sending of a safety signal will normally be preceded by a DSC safety announcement, or an EGC message with safety priority. Safety signals and danger messages (1) For subparagraph 187(1)(b)(i) of the Navigation Act: (a) the safety signal is the word 'securite' (pronounced 'say-cure-e-tay') spoken 3 times; and (b) the danger message must include the information mentioned in Regulations 31 and 32 of Chapter V of SOLAS. Note Regulations 31 and 32 of Chapter V of SOLAS provides that certain information related to the following dangers must be communicated: • dangerous ice • a dangerous derelict or any other direct danger to navigation V/31.4.	
 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. (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; or (b) for a vessel outside NAVAREA X — the Coordinator for the NAVAREA the vessel is in. Note The telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the Rescue Coordination Centre Australia is the telephone number of the	d for order better AS s, in DLAS

	ing text of Marine Order 27 (Safety of navigation and radio ment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
(2) (3) (4) (5)	Transmission of safety signals and danger messages A person may transmit the safety signal only to give notice that the calling radio station has a danger message to transmit about an important navigational or meteorological warning. Penalty: 50 penalty units. An offence against subsection (1) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1). Civil penalty: 50 penalty units. The master of a vessel must ensure that the safety signal is sent in accordance with Article 33 of the Radio Regulations. The master must: (a) send the danger message as soon as he or she has the information mentioned in subsection (1); and (b) end the danger message with the name of the vessel and the call sign of the vessel radio station. After sending the danger message, the master must make the observations and reports mentioned in paragraph 3 of Regulation 32 of Chapter V of SOLAS.	 32 Transmission of safety signals and danger messages (1) A person may transmit the safety signal only to give notice that the calling radio station has a danger message to transmit about an important navigational or meteorological warning. 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. (4) The master of a vessel must ensure that the safety signal is sent in accordance with Article 33 of the Radio Regulations. (5) The master must: (a) send the danger message as soon as he or she has the information mentioned in subsection (1); and (b) end the danger message with the name of the vessel and the call sign of the ship station. 	Section renumbered. Vessel radio station replaced with ship station to align with revised definitions.
(2) (3) (4)	Duties of person receiving a safety signal A person who operates a radio station on a vessel and hears the safety signal must listen on the radio frequency used for the transmission of the danger message until he or she is satisfied that the message is of no concern to the vessel. Penalty: 50 penalty units. A person must not interfere with the transmission of a danger message that follows the transmission of the safety signal. Penalty: 50 penalty units. An offence against subsection (1) or (2) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1) or (2). Civil penalty: 50 penalty units.	 33 Duties of person receiving a safety signal (1) A person who operates a radio station on a vessel and hears the safety signal must listen on the radio frequency used for the transmission of the danger message until he or she is satisfied that the message is of no concern to the vessel. Penalty: 50 penalty units. (2) A person must not interfere with the transmission of a danger message that follows the transmission of the safety signal. 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. 	Section renumbered.

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34 Priority of safety traffic A danger message preceded by the safety signal has priority over all communications other than distress and urgency communications.	34 Priority of safety traffic A danger message preceded by the safety signal has priority over all communications other than distress and urgency communications.	Section renumbered.
The master of a vessel must ensure that an entry is made in the official logbook recording: (a) any new-danger to navigation observed; and (b) any danger message received for a new danger to the navigation of the vessel; and (c) information received on a new danger to the navigation of the vessel; and (d) any danger message and information sent or transmitted about a new danger to navigation and the exact time and position of the vessel when the transmission is made. Subdivision 4.2 Urgency and distress messages	35 Records of dangers and danger messages (1) The master of a regulated Australian vessel must ensure that a record is kept of the following: (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. Subdivision 4.2 Urgency and distress messages	Section renumbered and renamed for clarity. Clarification of application to RAVs only. Removal of 'new' to avoid ambiguity.

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33	Urgency signal	36 Urgency signals	Section renumbered.
(1)	The urgency signal is the words 'pan pan'.	(1) The urgency signal is the words 'pan pan' (pronounced 'panne	
	Note The sending of an urgency signal is normally	panne') spoken 3 times.	Inclusion of
	preceded by a DSC urgency announcement or an EGC		pronunciation as per
	message with safety priority.		Radio Regulations.
(2)	A person may transmit the urgency signal and a following	(2) A person may transmit the urgency signal and a following	
	message only:	message only:	Note at (1) of current
	(a) when giving notice that the calling radio station has an	(a) when giving notice that the calling radio station has an	order removed as not
	urgent message to transmit about the safety of a vessel,	urgent message to transmit about the safety of a vessel, an	considered necessary.
	an aircraft, a vehicle or a person; and	aircraft, a vehicle or a person; and	
	(b) unless subsection 34(1) applies — on the distress	(b) unless subsection 38(1) applies — on the distress	
	frequency.	frequency.	
	Penalty: 50 penalty units.	Penalty: 50 penalty units.	
(3)	An offence against subsection (2) is a strict liability offence.	(3) An offence against subsection (2) is a strict liability offence.	
(4)	A person is liable to a civil penalty if the person contravenes	(4) A person is liable to a civil penalty if the person contravenes	
	subsection (2).	subsection (2).	
	Civil penalty: 50 penalty units.	Civil penalty: 50 penalty units.	
(5)	An urgency signal or urgency traffic has priority over all other	(5) An urgency signal or urgency traffic has priority over all other	
	radio communication except distress traffic.	radio communication except distress traffic.	

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(2) (3) (4) (5)	Urgency messages If an urgency message that follows the urgency signal is a long message, a medical call or, in an area of heavy radio traffic, a repeated message, the radio frequency used for the message must: (a) not be the distress frequency; and (b) be stated in the DSC urgency announcement or urgency message. A person must not interfere with the transmission of the urgency message that follows the transmission of the urgency announcement or urgency signal. Penalty: 50 penalty units. When the master of a vessel who sent the urgency message is satisfied that action called for by the urgency message is no longer necessary, the master must ensure that a further message is transmitted cancelling the urgency message. Penalty: 50 penalty units. An offence against subsection (2) or (3) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (2) or (3). Civil penalty: 50 penalty units.	(2) (3) (4) (5)	If an urgency message that follows the urgency signal is a long message, a medical call or, in an area of heavy radio traffic, a repeated message, the radio frequency used for the message must: (a) not be the distress frequency; and (b) be stated in the urgency announcement or urgency message. A person must not interfere with the transmission of the urgency message that follows the transmission of the urgency announcement or urgency signal. Penalty: 50 penalty units. When the master of a vessel who sent the urgency message is satisfied that action called for by the urgency message is no longer necessary, the master must ensure that a further message is transmitted cancelling the urgency message. Penalty: 50 penalty units.	Section renumbered. DSC has been removed to align with the revised definitions.
35	Authority for transmission of urgency signal A person on board a vessel may transmit an urgency signal or message only if he or she is authorised by the master of the vessel to do so.			Section removed this is not a requirement of SOLAS.
36	Distress signals The signal of distress is the spoken word 'mayday'. Note—The sending of a distress signal will normally be preceded by a DSC alert or an EGC with distress priority. See also the signals mentioned in Annex IV in the Schedule to the Prevention of Collisions Convention.	38	Distress signals The signal of distress is the spoken word 'mayday'.	Section renumbered. Note removed as not considered necessary.

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(2) (3)	MO 27 issue - F2020C00011 Use of signal of distress A person may transmit a signal of distress only if it relates to the transmission of: (a) a distress call and a distress message; or (b) the acknowledgment of a distress message; or (c) other distress traffic mentioned in this Order. Penalty: 50 penalty units. An offence against subsection (1) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1). Civil penalty: 50 penalty units.	(2) (3)	Use of signals of distress for distress purposes only A person may transmit a signal of distress only if it relates to the transmission of: (a) a distress call and a distress message; or (b) the acknowledgment of a distress message; or (c) other distress traffic mentioned in this Marine Order. Penalty: 50 penalty units. An offence against subsection (1) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1). Civil penalty: 50 penalty units.	Section renumbered and renamed for clarity. "Marine" added before "Order" for clarity.
38	Distress defence For a person who is operating the radio station of a vessel, it is a defence to a prosecution under this Order that: (a) the vessel is in distress; and (b) the person cannot comply with this Order; and (c) the person uses any means available to attract attention to make known the vessel's position and to obtain help.			Section removed as this is not a requirement of SOLAS.

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40 (1) (2)	Duties on activation of a distress watch receiver When the distress frequency watch receiver or EGC receiver distress alarm on a vessel is activated, the person in charge of the vessel radio station, if it is safe, must commence watch on the distress frequency or other frequency specified by the urgency or distress message. Penalty: 50 penalty units. The person must, if it is safe to do so, and he or she would not be in breach of section 41, keep watch for a time sufficient to ensure that: (a) the urgency message or distress signal is received; or (b) an urgency or distress message would have been received if one had been transmitted and the vessel had been within range of the transmitting station; or (c) the person is satisfied that the activation was due to: (i) a fault in the radio installation, or (ii) an electrical storm. Penalty: 50 penalty units. A person who receives an urgency or distress message, must immediately give the master details of the message if it is safe to do so. Penalty: 50 penalty units.	(2) (3) (4)	Duties on activation of a distress watch receiver When the distress frequency watch receiver or EGC receiver distress alarm on a vessel is activated, the person in charge of the vessel radio station must: (a) commence watch on the distress frequency or other frequency specified by the urgency or distress message; and (b) keep watch until: (i) the urgency message or distress signal is received; or (ii) an urgency or distress message would have been received if one had been transmitted and the vessel had been within range of the transmitting station; or (iii) the person is satisfied that the activation was due to a fault in the radio installation or an electrical storm. Penalty: 50 penalty units. A person who receives an urgency or distress message, must immediately give the master details of the message if it is safe to do so. Penalty: 50 penalty units. An offence against subsection (1) or (2) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1) or (2).	Amendments to improve readability
(4)	An offence against subsection (1), (2) or (3) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1), (2) or (3).		Civil penalty: 50 penalty units.	
Civil pe	enalty: 50 penalty units.			

	ing text of Marine Order 27 (Safety of navigation and radio ment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
(2) (3) (4)	A person who hears an urgency or distress signal A person who hears an urgency or distress signal must, if it is safe to do so, continue to listen on the radio frequency on which it was received and must not resume normal radio service until: (a) if no message follows the signal — the end of at least 5 minutes; or (b) if a message follows the signal — the person has told the master of the vessel details of the message and the master has permitted resumption of normal radio service. Penalty: 50 penalty units. An offence against subsection (1) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1). Civil penalty: 50 penalty units. The person in charge of the vessel radio station may resume normal communication on frequencies other than that used for the urgency or distress communication when a message that follows the activation of a DSC or EGC distress alert: (a) is not addressed to all radio stations; or (b) is addressed to all vessels in a geographical area that does not include the current position of the vessel.	 41 Duties of a person hearing an urgency or distress signal (1) A person who hears an urgency or distress signal must continue to listen on the radio frequency on which it was received and must not resume normal radio service until: (a) if no message follows the signal — the end of at least 5 minutes; or (b) if a message follows the signal — the person has told the master of the vessel details of the message and the master has permitted resumption of normal radio service. Penalty: 50 penalty units. (2) However, the person in charge of the vessel radio station may resume normal communication on frequencies other than that used for the urgency or distress communication if a message that follows the activation of a DSC or EGC distress alert: (a) is not addressed to all radio stations; or (b) is addressed to all vessels in a geographical area that does not include the current position of the vessel. (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. 	Amendments for improved readability and application of penalty provision.

	ng text of Marine Order 27 (Safety of navigation and radio ment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
(2) (3)	Misuse of distress and safety signals A person may do any of the following only if permitted by a Marine Order: (a) transmit or display a signal of distress; (b) transmit an urgency signal; (c) send out a danger message. Penalty: 50 penalty units. A person may-use a flare, rocket or shell, that could be mistaken for a prescribed signal of distress coming from a vessel, only 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 RCC to the intended use. Penalty: 50 penalty units. Note 1 The approved form is available from the AMSA website at http://www.amsa.gov.au Notification to the RCC 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. If a distress signal is accidentally transmitted or displayed from a vessel 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. Note Cancellation of a distress alert sent accidentally must be in accordance with Article 32 of the International Telecommunication Convention in force. An offence against subsection (1), (2) or (3) is a strict liability	(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. (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. Penalty: 50 penalty units. Note 1 The approved form is available from the AMSA website at http://www.amsa.gov.au. Notification to the JRCC may be by email: rocaus@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. (3) If a distress signal is accidentally transmitted or displayed from a vessel 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. Note Cancellation of a distress alert sent accidentally must be in accordance with Article 32 of the International Telecommunication Convention Radio Regulations annexed to the most recent International Telecommunication Convention in force.	Section renumbered and renamed for clarity. S43(1) removed for improved readability.
(5)	offence. A person is liable to a civil penalty if the person contravenes subsection (1), (2) or (3). Civil penalty: 50 penalty units.	(5) A person is liable to a civil penalty if the person contravenes subsection (1) or (3).Civil penalty: 50 penalty units.	

	ing text of Marine Order 27 (Safety of navigation and radio ment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
		Division 5 Other matters	
(1) (2) (3)	Obligations and procedures The master of a vessel must meet the obligations and follow the procedures mentioned in Regulation 33 of Chapter V of SOLAS. Penalty: 50 penalty units. An offence against subsection (1) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1). Civil penalty: 50 penalty units.	 43 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 	Section renumbered and renamed for clarity. Included reference to the relevant SOLAS regulation. Note developed for clarification.
(2) (3) 44	Life-saving signals to be used by ships, aircraft or persons in distress [SOLAS V/29] 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. Penalty: 50 penalty units. Note Life-saving signals are described in Volume III (Mobile Facilities) of the IAMSAR Manual and illustrated in the International Code of Signals. An offence against subsection (1) is a strict liability offence. A person is liable to a civil penalty if the person contravenes subsection (1). Civil penalty: 50 penalty units. Testing of equipment — default requirement The manufacturer's requirements for inspection, testing, maintenance and replacement of navigation safety or radio equipment mentioned in this Order must be followed unless the Order requires another method for its inspection, testing, maintenance and replacement to be followed.	 bligation to provide assistance to, and treatment of, persons in distress [SOLAS V/29] 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. 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) Vol. III, Mobile Facilities and illustrated in the International Code of Signals, as amended from time to time. 	Moved to Division 5 for improved readability. Penalty provisions for (1) removed. Specification of when life-saving signals must be used. Note amended for improved readability. Section deleted as requirements are captured at other sections of the draft order, including S19 Navigational systems and equipment – type approval and testing.

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
	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 44; (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 handbook for GMDSS ship station operators is available from the AMSA website at https://www.amsa.gov.au.	Order restructured for improved readability. (a)-(h) have been carried over from S26 of current MO27. (h) clarification of application
Division 6 Transitional arrangements	Division 6 Transitional arrangements	

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011			New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
	,	<mark>4</mark> 6	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.	"Marine" added before "Order" for clarity. Reference to MO21 is no longer required. Additional text to improve readability.
A u (a	n approvals n approval for use of an equivalent is taken to be approved nder this Order if: a) it was for an equivalent that was in use on a vessel on 30 June 2016; and b) either: (i) it was given or continued in force under Marine Order 21 (Safety of navigation and emergency procedures) 2012 for a requirement of section 19 of that Order; or (ii) it was given or continued in force under Marine Order 27 (Radio equipment) 2009.	4 7	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.	"Marine" added before "Order" for clarity. Reference to MO21 is no longer required. Additional text to improve readability.
Schedule		Sc	hedule 1 Compass deviation book information (subparagraph 25(1)(a)(ii))	

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011				Notes on changes
Item	Information	Item	Information	
1	Date	1	Date	
2	vessel's position:	2	vessel's position:	
	(a) latitude; and		(a) latitude; and	
	(b) longitude		(b) longitude	
3	time of observation	3	time of observation	
4	body observed or method of obtaining true bearing or head	ing4	body observed or method of obtaining true bearing or head	ing
5	direction of the vessel's head by:	5	direction of the vessel's head by:	
	(a) standard compass; and		(a) standard compass; and	
	(b) steering compass		(b) steering compass	
6	direction of the vessel's head by gyro compass	6	direction of the vessel's head by gyro compass	
7	direction of the vessel's true head	7	direction of the vessel's true head	
8	azimuth or bearing or heading by magnetic compass	8	azimuth or bearing or heading by magnetic compass	
9	azimuth/bearing or heading by gyro compass	9	azimuth/bearing or heading by gyro compass	
10	true azimuth or bearing or heading	10	true azimuth or bearing or heading	
11	magnetic compass error	11	magnetic compass error	
12	gyro compass error	12	gyro compass error	
13	corrected variation	13	corrected variation	
14	magnetic compass deviation	14	magnetic compass deviation	
Schedu	lle 2 IMO resolutions			Schedule removed.
	(subsection 20(3))			These performance standards are captured
	Note Information on obtaining copies of the IMO			within SOLAS, as
	Resolutions mentioned in this schedule, and any			referenced within S19
	amendments made to them, is available in the related			and S28 of the draft
	information on the Marine Orders link on the AMSA website			order.
	at http://www.amsa.gov.au.			

IMO Resolutio n Number	IMO Resolution title
A.694(17)	General requirements for shipborne radio equipment forming part of the global maritime distress and safety systems (GMDSS) and for electronic navigational aids
MSC.434(98)	Performance standards for a ship earth station for use in the GMDSS
A.807(19)	Performance standards for INMARSAT-C ship earth stations capable of transmitting and receiving direct-printing communications
A.808(19)	Performance standards for ship earth stations capable of two-way communication
MSC.306(87)	Revised performance standards for enhanced group call (EGC) equipment
A.382(X), Annex II	Recommendation on performance standards for magnetic compasses
A.424(XI)	Performance standards for gyro-compasses
MSC.86(7 0), Annex 2	Recommendation on performance standards for marine transmitting magnetic heading devices (TMHDs)
	Note A TMHD installed after 31 December 1999 and before 1 July 2002 must conform to performance standards not inferior to those set out in MSC.86(70), Annex 2.
MSC.116(73)	Performance standards for transmitting heading devices (THDs). Note—A THD installed after 30 June 2002 must conform to performance standards not inferior to those set out in MSC.116(73) Annex.
MSC.64(6 7), Annex 4	Recommendation on performance standards for radar equipment
MSC.192 (79)	Adoption of the revised performance standards for radar equipment Note This resolution applies to equipment installed after 30 June 2008.

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011		New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on ch
A.823(19)	Recommendation on performance standards for automatic radar plotting aids (ARPAs)		
A.817(19)	Performance standards for electronic chart display and information systems (ECDIS)		
	Note This resolution applies to equipment installed after 30 December 1995 and before 1 January 2009.		
MSC.232(82)	Adoption of the revised performance standards for electronic chart display and information systems (ECDIS)		
	Note This resolution applies to equipment installed after 30 December 2008.		
A.816(19)	Performance standards for shipborne Decca navigator receivers		
A.818(19)	Performance standards for shipborne Loran-C and Chayka receivers		
A.819(19)	Performance standards for shipborne global positioning system (GPS) receiver equipment		
	Note This resolution applies if GPS receiver equipment was installed before 1 July 2003.		
MSC.112 (73)	Adoption of the revised performance standards for shipborne global positioning system (GPS) receiver equipment		
	Note This resolution applies if GPS receiver equipment was installed after 30 June 2003.		
MSC.53(6 6)	Performance standards for shipborne GLONASS receiver equipment		
	Note This resolution applies if GLONASS receiver equipment was installed before 1 July 2003.		
MSC.113(73)	Adoption of the revised performance standards for shipborne GLONASS receiver equipment		

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011		New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
	Note This resolution applies if GLONASS receiver		
	equipment was installed after 30 June 2003.		
MSC.64(6 7), Annex 2	Recommendation on performance standards for shipborne DGPS and DGLONASS maritime radio beacon receiver equipment		
	Note 1 A shipborne DGPS and DGLONASS installed on or after 1 July 2003, must conform to performance standards not inferior to those mentioned in MSC.114(73), Annex.		
	Note 2 A shipborne DGPS and DGLONASS installed after 31 December 1998 and before 1 July 2003, must conform to performance standards not inferior to those mentioned in the Annex to MSC.64(67), Annex 2.		
MSC.74(6 9), Annex I	Recommendation on performance standards for shipborne combined GPS/GLONASS receiver equipment Note MSC.74(69), Annex I applies to a GPS/GLONASS receiver installed before 30 June 2003.		
MSC.115(73)	Adoption of the revised performance standards for shipborne combined GPS/GLONASS receiver equipment Note MSC.115(73) applies to a GPS/GLONASS receiver installed after 30 June 2003.		
MSC.233(82)	Adoption of the performance standards for shipborne Galileo receiver equipment		
	Note MSC.233(82) applies to a Galileo receiver installed after 31 December 2008.		
MSC.379(93)	Performance standards for Shipborne Beidou Satellite Navigation System (BDS) receiver equipment		
MSC.401 (95)	Performance standards for multi-system shipborne radio navigation receivers		

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011		New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
MSC.64(6 7), Annex 3	Recommendation on performance standards for heading control systems Note—A heading control system installed after 31 December 1998 must conform to performance standards not inferior to those mentioned in MSC.64(67), Annex 3.		
MSC.74(6 9), Annex 2	Recommendation on performance standards for track control systems Note—A track control system installed after 31 December 1999 must conform to performance standards not inferior to those mentioned in MSC.74(69), Annex 2.		
A.526(13)	Performance standards for rate-of-turn indicators		
A.224(VII)	Performance standards for echo sounding equipment		
A.824(19)	Performance standards for devices to indicate speed and distance		
	Note 1 A device to measure and indicate speed and distance installed after 30 June 2002, must conform to performance standards not inferior to those mentioned in MSC.96(72), Annex. Note 2 A device to indicate speed and distance installed after 31 December 1996 and before 1 July 2002 must conform at least to the performance standards mentioned in A.824(19).		
	Note 3 MSC.334(90) applies to equipment installed after 1 July 2014.		
MSC.74(6 9), Annex 3	Recommendation on performance standards for an universal shipborne automatic identification system (AIS)		
	Note AIS installed after 31 December 1999 must conform to performance standards not inferior to those mentioned in MSC.74(69), Annex 3.		

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011		New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
MSC.263(84)	Revised performance standards and functional requirements for the long range identification and tracking of ships (LRIT)		
A.861(20)	Performance standards for shipborne voyage data recorders (VDRs)		
	Note 1 A VDR fitted before 1 June 2008, must conform to performance standards not inferior to those mentioned in A.861(20), Annex. Note 2 A VDR fitted after 31 May 2008, must also conform to the amendments to performance standards not inferior to those mentioned in MSC.214(81), Annex I.		
MSC.163(78)	Performance standards for shipborne simplified voyage data recorders (S-VDRs) Note 1 A S-VDR fitted before 1 June 2008 must conform to performance standards not inferior to those mentioned in MSC.163(78), Annex. Note 2 A S-VDR fitted after 31 May 2008, must also conform to the amendments to performance standards not inferior to those mentioned in MSC.214(81), Annex 2.		
MSC.363(92)	Performance standards for electronic inclinometers		
MSC.333(90)	Adoption of revised performance standards for shipborne voyage data recorders (VDRs) Note MSC.333(90) applies to equipment installed after 1 July 2014.		
A.575(14)	Unification of performance standards for navigational equipment		
MSC.64(6 7), Annex I	Recommendation on performance standards for integrated bridge systems (IBS)		

Existing text of Marine Order 27 (Safety of navigation and radio equipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011 Note An IBS fitted after 31 December 1998 must		New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
	conform to performance standards not inferior to those mentioned in MSC.64(67), Annex I.		
MSC.86(7 0), Annex 3	Recommendation on performance standards for an integrated navigation system (INS)		
Ð	Note—An INS installed after 31 December 1999 must conform to performance standards not inferior to those mentioned in MSC.86(70), Annex 3.		
MSC.252(83)	Adoption of the revised performance standards for integrated navigation systems (INS)		
	Note 1 An INS installed after 31 December 2010 must conform to performance standards mentioned in MSC.252(83).		
	Note 2 Regulation 18 of Chapter V of SOLAS requires type approved navigation systems that conform to appropriate performance standards.		
MSC.452(99)	Revised performance standards for integrated navigation systems (INS) (Resolution MSC.252(83))		
MSC.128(75)	Performance standards for a bridge navigational watch alarm system (BNWAS)		
	Note A BNWAS installed after 30 June 2003 must conform to performance standards not inferior to those mentioned in MSC.128(75), Annex.		
A.343(IX)	Recommendation on methods of measuring noise levels at listening posts		
MSC.86(7 0), Annex I	Recommendation on performance standards for sound reception systems		
MSC.95(7 2)	Performance standards for daylight signalling lamps		

	equipment) 2016 Compilati	ler 27 (Safety of navigation and radio ion no.3, Compilation date: 1 January 2020 sue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
	Chapter	equipment for vessels to which IV of SOLAS does not apply ion 25(2))	Schedule 2 Radio installations and equipment – regulated Australian vessels to which Chapter IV of SOLAS does not apply (subsection 28(3))	Schedule heading and Note updated to better capture intent.
which Chapter IV of SOLAS does not apply that AMSA considers meet the			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 would meet the functional requirements mentioned in subsection 28(2)	

1 Australian coastal voyages (sea area A3):

Example 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, unless AMSA considers this unnecessary given the nature of the vessel's operations.

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.

Example 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

1 Australian coastal voyages (sea areas A2 and 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 mentioned in paragraph (a); 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.

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

'Example' reworded to 'Arrangement' to avoid perception that the two examples/arrangements presented are the only option.

(h) text removed as it implies an exemption. Exemptions are addressed at S7.

Arrangement B Note for paragraphs (g) and (h) deleted as requirements in MO25 will be removed, through consequential amendments.

	ext of Marine Order 27 (Safety of navigation and radio 2) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
(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	(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	
(e)	Ship earth station for a recognised mobile satellite service capable of receiving Maritime Safety Information (MSI) using enhanced group calling; and	installation mentioned in paragraph (c); and (e) Ship earth station for a recognised mobile satellite service capable of receiving Maritime Safety Information	
(f)	A 406 MHz EPIRB; and	(MSI) using enhanced group calling; and	
(g)	Hand held VHF radiotelephone apparatus fitted with VHF channels 6, 13, 16 and 67; and	(f) A 406 MHz EPIRB; and(g) Hand held VHF radiotelephone apparatus fitted with VHF	
(h)	9 GHz radar transponder(s) or an AIS-SART , unless AMSA considers this unnecessary given the nature of the vessel's operations.	channels 6, 13, 16 and 67; and (h) 9 GHz radar transponder(s) or an AIS-SART.	
tran requ — li that han	e for paragraphs (g) and (h) in Examples 1 and 2 Radar sponders and hand held VHF radiotelephone units are also uired to be carried on a vessel for Marine Order 25 (Equipment fesaving) 2014. AMSA will take account of the requirements of Order when considering the number of radar transponders and d held VHF radiotelephone units required to meet the functional uirements of subsection 25(2).		

	sting text of Marine Order 27 (Safety of navigation and radio lipment) 2016 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011		New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
2	International voyages (a) Items listed in Example-1A or 1B; and (b) a NAVTEX receiver when operating in a NAVTEX area.	2	International voyages (a) Items listed in Arrangement 1A or 1B; and (b) a NAVTEX receiver when operating in a NAVTEX area.	Minor wording update
3	Voyages in sea area A4 (a)—Items listed in Example 1B; and (b)—HF narrow-band direct-printing equipment.	3	Voyages in sea area A4 Items listed in Arrangement 1B	Minor wording update
Sch	edule 4 Station frequencies for GMDSS distress and safety communications (subsection 26(3))			Schedule removed. This information is available at Appendix 15 of the Radio Regulations.

A — Distress and Safety	As above. Schedule removed. Information
	available at Radio
	Regulations, Appendix
	15.

	16 Compi	Order 27 (Safety of navigation and illation no.3, Compilation date: 1 Jar 2020 7 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on chang
Vessel Transmit Frequency	Vessel Receiv e Freque ncy	Remarks		
⊥ A.1 Radioteleph		encies		
2182 kHz	2182 kHz	The IMO no longer recommends the monitoring of MF frequency 2182 kHz by international sea going vessels for distress and safety. In Australia, coast radio stations and volunteer marine rescue organisations do not continuously monitor 2182 kHz.		
4125 kHz	4125 kHz			
6215 kHz	6215 kHz			
8291 kHz	8291 kHz			
12290 kHz	12290 kHz			
16420 kHz	16420 kHz			
156.800 MHz	156.80 0 MHz	VHF Marine channel 16		
156.375 MHz	156.37 5 MHz	VHF Marine channel 67 — supplementary distress for Australia only		
\.2 Digital Sele	ctive Callin	ng (DSC) frequencies		
2187.5 kHz	2187.5 kHz			
4 207.5 kHz	4207.5 kHz			
6312.0 kHz	6312.0 kHz			

	16 Comp	Order 27 (Safety of navigation and ilation no.3, Compilation date: 1 Jan 2020 7 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
8414.5 kHz	8414.5 kHz			
12577.0 kHz	12577. 0 kHz			
16804.5 kHz	16804. 5 kHz			
156.525 MHz	156.52 5 MHz	VHF marine channel 70		
A.3 Narrow-Ban		Printing Telegraphy (NBDP)		
2174.5 kHz	2174.5 kHz			
4177.5 kHz	4177.5 kHz			
6268.0 kHz	6268.0 kHz			
8376.5 kHz	8376.5 kHz			
12520.0 kHz	12520. 0 kHz			
16695.0 kHz	16695. 0 kHz			
A.4 Air-sea SAF	Commun	ications Radiotelephone		
4125.0 kHz	4125.0 kHz	First preference		
3023.0 kHz	3023.0 kHz	Second preference		
5680.0 kHz	5680.0 kHz	Third preference		
156.300 MHz	156.30 0 MHz	VHF marine channel 6		
A.5 Inter-ship N	avigation	and Safety Communications		
156.650 MHz	156.65 0 MHz	VHF marine channel 13		
A.6 INMARSAT				

equipment) 2016 C	ompilation no.3 2020 MO 27 issue - F2			New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
1626.5 — 153 1645.4 MHz 154 MH			B		
Maritime Safety Info	ormation				
Vessel Transmit Frequency	Vessel Receive Frequency	Remarks			
B.1 HF Narrow-Bar	nd Direct-Printing ed in Australia for	Telegraphy (NBDP) - MSI)			
	4210.0 kHz				
	6314.0 kHz				
	8416.5 kHz				
	12579.0 kHz				
	16806.5 kHz				
B.2 NAVTEX (not u	sed in Australia)				
	518.0 kHz				
	4 90.0 kHz				
	4209.5 kHz				
B.3 INMARSAT					
1626.5 - 1645.5 MHz	1530 – 1544 MHz				
lotes to Marine Or equipment) 201		f navigation and radio		Note	Notes relevant to the compilation draft have been removed as MO2 will be reissued.

	6 Compila	tion no.3, 2020		igation and radio n date: 1 January	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	New Note provided for
Note 1 Marine Order 27 (force under subset in this compilation and radio equipm tables	ection 342(comprise	1) of the A s <i>Marine</i> C	lavigation Ad Order 27 (Sat	ety of navigation	1All 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 .	
Table of Orders Year and number	Regist ration date	FRLI numbe r	Commen cement date	Applicati on, saving or transitio nal provision s		
Marine Order 27 (Safety of navigation and radio equipment) 2016 (MO 2016/9)	24 June 2016	F2016 L0107 7	1 July 2016			
Marine Order 81 (Administration amendment) 2016 (MO 2016/18)	12 Decem ber 2016	F2016 L0191 5	13 Decembe r 2016			
Marine Orders (Navigation Act) Administrative Amendment Order 2017 (MO 2017/5)	10 Octobe r 2017	F2017 L0133 6	11 October 2017			
Marine Order 27 (Safety of navigation and radio equipment) Amendment Order 2019 (MO 2019/7)	14 Novem ber 2019	F2019 L0146 4	1 January 2020			

	f Marine Order 27 (Safety of navigation and radio 16 Compilation no.3, Compilation date: 1 January 2020 MO 27 issue - F2020C00011	New text as modified by draft Marine Order 27 (Safety of navigation and radio equipment) 2023 MO 27 issue 230905A	Notes on changes
Table of amend	ments		
ad. = added or	inserted am. = amended rep. = repealed rs. =		
Provision affected	How affected		
1A	rep. Legislation Act 2003, s 48D		
1B	rep. Legislation Act 2003, s 48C		
4	am. MO 2016/18; am MO 2019/7		
24	am. 2019/7		
26	am. MO 2016/18; am. MO 2017/5; am. MO 2019/		
28	am MO 2019/7		
33	am MO 2019/7		
36	am MO 2019/7		
40	am MO 2019/7		
43	am MO 2019/7		
Schedule 2	am MO 2019/7		
Schedule 3	am MO 2019/7		
Schedule 4	am MO 2019/7		

Consequential Amendments

Marine Orders 1 and 25:

Consequential amendments will be required to *Marine Order 1 (Administration) 2013*, *Marine Order 25 (Equipment – lifesaving) 2014* and *Marine Order 31 (SOLAS and non-SOLAS certification) 2019* as a result of the new Marine Order 27.

Marine Order 1 (MO1):

The definition of EPIRB requires updating to reflect the SOLAS definition. Rather than having the definition of EPIRB in multiple marine orders, MO1 will be amended to include the new definition. MO27 will then refer to MO 1 for the definition of EPIRB.

Marine Order 25 (MO25):

In a similar way, the definition of EPIRB will be deleted from MO 25. MO25 will also be amended to refer to MO1 for the definition of EPIRB.

MO25 s48 will also require amending to remove reference to provisions of SOLAS Chapter III (Life-saving Appliances and Arrangements) that have, through IMO Resolution MSC.496(105), been moved into SOLAS Chapter IV. Consequential amendments to MO25 will avoid duplication in marine order requirements.

MO25 s51 will also require amending to remove reference to s48.

Marine Order 31 (MO31)

MO31 requires amendment to update mention of Marine Order 27 (2016) at Schedule 1 SOLAS certificates — criteria for issue and conditions, Schedule 2 Non-SOLAS certificates — criteria for issue and conditions and Schedule 3 Inspection and maintenance plans — criteria and conditions for approval