

TECHNICAL CIRCULAR 179/2018

To: Owners, Technical Managers, Deputy Registrars, Fleet Managers and Surveyors

Subject: Fire fighter's portable radiotelephone apparatus

Date: 24th June 2018

Summary

This Circular aims to inform technical managers about the requirements detailed in SOLAS Ch. II-2 Regulation 10.10.4 with regard to the fire fighter's portable equipment for communication, due to the amendments issued in the IMO Resolution MSC.338 (91) (attached below).

Applicability:

All cargo ships of 500 Gross Tonnage and above. All passenger ships, irrespectively from the Gross Tonnage.

Required Actions:

All the above ships flying Cook Islands Flag constructed **on or after 1 July 2014** shall carry on board a minimum of two two-way portable radiotelephone apparatus for each **fire party**.

Those portable apparatus shall be of an explosion-proof type or intrinsically safe.

Ships constructed **before 1 July 2014** shall comply with the above requirements not later than the first statutory survey **after 1 July 2018**.

Cook Islands Flag Administration, considering also SOLAS Ch. II-2 Regulation 10.10.3, shall request the aforementioned two-way portable radiotelephone apparatus to be stored in the same easily accessible location of the fire fighter's outfit, and when more than one set of personal equipment is carried, they shall be stored in widely separated positions.

The fire-fighter's radio may have a coloured housing to distinguish the radio from other radios on board used either for normal operations and for emergency use, such as portable GMDSS VHFs, which are typically yellow or orange.

With regard to the minimum fire fighter's outfit to be carried on board commercial vessels, as above listed, Cook Islands Flag Administration shall refer to the followings:

All ships: at least two fire fighter's outfit (ref. SOLAS Ch. II-2 Regulation 10.10.2.1);
 Passenger ships: additional outfit depending on the length of passenger spaces, number of decks, etc. (ref. SOLAS Ch. II-2 Regulation 10.10.2.2);



- *Tankers*: two additional fire fighter's outfits (ref. SOLAS Ch. II-2 Regulation 10.10.2.2).

Standard references and criteria:

Being not yet issued any specific technical requirements or performance standards from the IMO with regard to the above two-way portable radiotelephone apparatus, other than "*being of an explosion-proof type or intrinsically safe*", Cook Islands Flag Administration shall refer as guidelines, but not limited to, to the following standards:

- IEC 60079-0:2017 Explosive atmospheres – Part 0:Equipment – General requirements;

- IEC 60079-11:2011 Explosive atmospheres – Part 11: Equipment protection by intrinsic safety "i";

- IEC 60945 Maritime navigation and radio communication equipment and systems – General requirements – Methods of testing and required test results;

- Radio Equipment Directive (RED) 2014/53/EU;

- ATEX Directive 2014/34/EU;

- UL 913 Standard for Intrinsically Safe Apparatus and Associated Apparatus for

Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations, as amended.

Other equivalent standards shall be submitted for review to the Technical Department of Cook Islands Flag Administration at technical@maritimecookislands.com.

Instruction to surveyors

Maritime Cook Islands surveyors and appointed surveyors of Recognised Organisations acting on behalf of Cook Islands Flag Administration shall **annually** check, while carrying out the statutory surveys (related to *Cargo Ship Safety Construction* and *Passenger Ship Safety* certificates) at least the followings:

- The **Certificate of Conformity (or Declaration of Conformity)**, or *equivalent document*, providing the compliance of the two-way portable radiotelephone apparatus for the use in potentially explosive atmospheres;

- Storage of the two-way portable radiotelephone apparatus;

- Working of the two-way portable radiotelephone apparatus in a satisfactorily condition;

- Condition and maintenance of batteries;

- Condition and maintenance of spare batteries, if any;

- Working condition of the batteries charger(s), if any.

If you have any comments or if you need assistance, don't hesitate to contact the Technical Department at <u>technical@maritimecookislands.com</u>

The Circular is to be kept onboard vessel in the Circular Compilation.

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

RESOLUTION MSC.338(91) (adopted on 30 November 2012)

AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO Article VIII(b) of the International Convention for the Safety of Life at Sea (SOLAS), 1974 (hereinafter referred to as "the Convention"), concerning the amendment procedure applicable to the annex to the Convention, other than to the provisions of chapter I thereof,

HAVING CONSIDERED, at its ninety-first session, amendments to the Convention, proposed and circulated in accordance with Article VIII(b)(i) thereof,

1. ADOPTS, in accordance with Article VIII(b)(iv) of the Convention, amendments to the Convention, the text of which is set out in the annex to the present resolution;

2. DETERMINES, in accordance with Article VIII(b)(vi)(2)(bb) of the Convention, that the said amendments shall be deemed to have been accepted on 1 January 2014, unless, prior to that date, more than one third of the Contracting Governments to the Convention or Contracting Governments the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments;

3. INVITES SOLAS Contracting Governments to note that, in accordance with Article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 July 2014 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with Article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Contracting Governments to the Convention;

5. ALSO REQUESTS the Secretary-General to transmit copies of this resolution and its annex to Members of the Organization which are not Contracting Governments to the Convention.

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

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ANNEX

AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

CHAPTER II-1 CONSTRUCTION - STRUCTURE, SUBDIVISION AND STABILITY, MACHINERY AND ELECTRICAL INSTALLATIONS

Part A-1 Structure of ships

1 The following new regulation 3-12 is added after the existing regulation 3-11:

"Regulation 3-12 – Protection against noise

- 1 This regulation shall apply to ships of 1,600 gross tonnage and above:
 - .1 for which the building contract is placed on or after 1 July 2014; or
 - .2 in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 January 2015; or
 - .3 the delivery of which is on or after 1 July 2018,

unless the Administration deems that compliance with a particular provision is unreasonable or impractical.

- 2 On ships delivered before 1 July 2018 and:
 - contracted for construction before 1 July 2014 and the keels of .1 which are laid or which are at a similar stage of construction on or after 1 January 2009 but before 1 January 2015; or
 - in the absence of a building contract, the keels of which are .2 laid or which are at a similar stage of construction on or after 1 January 2009 but before 1 January 2015,

measures shall be taken to reduce machinery noise in machinery spaces to acceptable levels as determined by the Administration. If this noise cannot be sufficiently reduced the source of excessive noise shall be suitably insulated or isolated or a refuge from noise shall be provided if the space is required to be manned. Ear protectors shall be provided for personnel required to enter such spaces, if necessary.

3 Ships shall be constructed to reduce onboard noise and to protect personnel from the noise in accordance with the Code on noise levels on board ships, adopted by the Maritime Safety Committee by resolution MSC.337(91), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of Article VIII of the present Convention concerning the amendment procedures applicable to the annex other than chapter I. For the purpose of this regulation,

although the Code on noise levels on board ships is treated as a mandatory instrument, recommendatory parts as specified in chapter I of the Code shall be treated as non-mandatory, provided that amendments to such recommendatory parts are adopted by the Maritime Safety Committee in accordance with its Rules of Procedure.

4 Notwithstanding the requirements of paragraph 1, this regulation does not apply to types of ships listed in paragraph 1.3.4 of the Code on noise levels on board ships.

Part C **Machinery installations**

2 The existing regulation 36 is deleted and left blank.

CHAPTER II-2 CONSTRUCTION – FIRE PROTECTION, FIRE DETECTION AND FIRE EXTINCTION

Part A General

Regulation 1 – Application

In the existing paragraph 2.4, the following new subparagraphs are added after the 3 existing subparagraph .6:

- ".7 cargo ships of 500 gross tonnage and upwards and passenger ships constructed on or after 1 February 1992 but before 1 July 2002 need not with regulation 19.3.3 provided that they comply comply with regulation 54.2.3 as adopted by resolution MSC.13(57); and
- cargo ships of 500 gross tonnage and upwards and passenger ships .8 constructed on or after 1 September 1984 but before 1 July 2002 need not comply with regulations 19.3.1, 19.3.5, 19.3.6, 19.3.9, provided that they comply with regulations 54.2.1, 54.2.5, 54.2.6, 54.2.9 as adopted by resolution MSC.1(XLV)."
- 4 The following new paragraph 2.5 is added:

"2.5 Ships constructed before 1 July 2012 shall also comply with regulation 10.10.1.2, as adopted by resolution MSC.338(91)."

Part C Suppression of fire

Regulation 9 – Containment of fire

5 In table 9.3, column (11) (Special category and ro-ro spaces), row (2) (Corridors), the symbol "A-15" is replaced by the symbol "A-30 ^g ".

6 In table 9.3, column (11) (Special category and ro-ro spaces), row (4) (Stairways), the symbol "A-15" is replaced by the symbol "A-30 ^g ".

7 In table 9.3, column and row (11) (Special category and ro-ro spaces), the symbol "A-0" is replaced by the symbol "A-30 ^g ".

8 In table 9.4, column (11) (Special category and ro-ro spaces), row (1) (Control stations), the symbol "A-30" is replaced by the symbol "A-60^g".

9 In table 9.4, column (11) (Special category and ro-ro spaces), row (2) (Corridors), the symbol "A-0" is replaced by the symbol "A-30 ^g".

10 In table 9.4, column (11) (Special category and ro-ro spaces), row (4) (Stairways), the symbol "A-0" is replaced by the symbol "A-30 g ".

11 In table 9.4, column and row (11) (Special category and ro-ro spaces), the symbol "A-0" is replaced by the symbol "A-30 ^g ".

12 In table 9.4, column (2) (Corridors), row (11) (Special category and ro-ro spaces), the symbol "A-15" is replaced by the symbol "A-30 ^g".

13 In table 9.4, column (4) (Stairways), row (11) (Special category and ro-ro spaces), the symbol "A-15" is replaced by the symbol "A-30 g ".

14 In table 9.4, column (6) (Machinery spaces of category A), row (11) (Special category and ro-ro spaces), the symbol "A-30" is replaced by the symbol "A-60^g".

15 In table 9.4, a new note is added as follows:

" ^g Ships constructed before 1 July 2014 shall comply, as a minimum, with the previous requirements applicable at the time the ship was constructed, as specified in regulation 1.2."

16 In table 9.5, column and row (11) (Ro-ro and vehicle spaces), the symbol "*" is replaced by the symbol "A- 30^{j} ".

17 In table 9.6, column (11) (Ro-ro and vehicle spaces), row (10) (Open decks), the symbol "*" is replaced by the symbol "A- 0^{j} ".

18 In table 9.6, column and row (11) (Ro-ro and vehicle spaces), the symbol "*^h" is replaced by the symbol "A- 30^{j} ".

19 In table 9.6, column (10) (Open decks), row (11) (Ro-ro and vehicle spaces), the symbol "*" is replaced by the symbol "A-0^j".

20 In table 9.6, the existing text of note "h" is replaced with the word "deleted".

- 21 In table 9.6, a new note is added as follows:
 - " ^j Ships constructed before 1 July 2014 shall comply, as a minimum, with the previous requirements applicable at the time the ship was constructed, as specified in regulation 1.2."

22 Paragraphs 6.2 and 6.3 are deleted and the subsequent paragraphs are renumbered accordingly.

Regulation 10 – Fire fighting

- 23 In paragraph 5.6.3, the existing subparagraph .1 is replaced by the following:
 - ".1 the fire hazard portions of internal combustion machinery or, for ships constructed before 1 July 2014, the fire hazard portions of internal combustion machinery used for the ship's main propulsion and power generation;"
- 24 The existing paragraph 10.1 is replaced by the following:
 - "10.1 Types of firefighter's outfits
 - .1 Fire-fighter's outfits shall comply with the Fire Safety Systems Code: and
 - .2 Self-contained compressed air breathing apparatus of fire-fighter's outfits shall comply with paragraph 2.1.2.2 of chapter 3 of the Fire Safety Systems Code by 1 July 2019."
- 25 After the existing paragraph 10.3, the following new paragraph is added:
 - "10.4 Fire-fighter's communication

For ships constructed on or after 1 July 2014, a minimum of two two-way portable radiotelephone apparatus for each fire party for fire-fighter's communication shall be carried on board. Those two-way portable radiotelephone apparatus shall be of an explosion-proof type or intrinsically safe. Ships constructed before 1 July 2014 shall comply with the requirements of this paragraph not later than the first survey after 1 July 2018."

Part E **Operational requirements**

Regulation 15 – Instructions, onboard training and drills

26 After the existing paragraph 2.2.5, the following new paragraph is added:

> "2.2.6 An onboard means of recharging breathing apparatus cylinders used during drills shall be provided or a suitable number of spare cylinders shall be carried on board to replace those used."

Part G Special requirements

Regulation 20 – Protection of vehicle, special category and ro-ro spaces

27 Paragraphs 6.1.1 and 6.1.2 are replaced by the following:

"(The requirements of paragraphs 6.1.1 and 6.1.2 shall apply to ships constructed on or after 1 July 2014. Ships constructed before 1 July 2014 shall comply with the previously applicable requirements of paragraphs 6.1.1 and 6.1.2.)

6.1.1 Vehicle spaces and ro-ro spaces, which are not special category spaces and are capable of being sealed from a location outside of the cargo spaces, shall be fitted with one of the following fixed fire-extinguishing systems:

- .1 a fixed gas fire-extinguishing system complying with the provisions of the Fire Safety Systems Code;
- .2 a fixed high-expansion foam fire-extinguishing system complying with the provisions of the Fire Safety Systems Code; or
- .3 a fixed water-based fire fighting system for ro-ro spaces and special category spaces complying with the provisions of the Fire Safety Systems Code and paragraphs 6.1.2.1 to 6.1.2.4.

6.1.2 Vehicle spaces and ro-ro spaces not capable of being sealed and special category spaces shall be fitted with a fixed water-based fire-fighting system for ro-ro spaces and special category spaces complying with the provisions of the Fire Safety Systems Code which shall protect all parts of any deck and vehicle platform in such spaces. Such a water-based fire-fighting system shall have:

- .1 a pressure gauge on the valve manifold;
- .2 clear marking on each manifold valve indicating the spaces served;
- .3 instructions for maintenance and operation located in the valve room: and
- .4 a sufficient number of drainage valves to ensure complete drainage of the system."

CHAPTER III LIFE-SAVING APPLIANCES AND ARRANGEMENTS

Part B **Requirements for ships and life-saving appliances**

28 After existing regulation 17, the following new regulation 17-1 is inserted:

"Regulation 17-1 Recovery of persons from the water

All ships shall have ship-specific plans and procedures for recovery of persons from the water, taking into account the guidelines developed by the Organization. The plans and procedures shall identify the equipment intended to be used for recovery purposes and measures to be taken to minimize the risk to shipboard personnel involved in recovery operations. Ships constructed before 1 July 2014 shall comply with this requirement by the first periodical or renewal safety equipment survey of the ship to be carried out after 1 July 2014, whichever comes first.

2 Ro-ro passenger ships which comply with regulation 26.4 shall be deemed to comply with this regulation.

APPENDIX CERTIFICATES

All the forms of certificates and records of equipment contained in the appendix to the annex are replaced by the following:

FORM OF SAFETY CERTIFICATE FOR PASSENGER SHIPS

PASSENGER SHIP SAFETY CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment for Passenger Ship Safety (Form P)

(Official seal)

for an/a short1 international voyage

(State)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

Particulars of ship²

Name of ship
Distinctive number or letters
Port of registry
Gross tonnage
Sea areas in which ship is certified to operate (regulation IV/2)
IMO Number
Date of build:
Date of building contract
Date on which keel was laid or ship was at similar stage of construction
Date of delivery
Date on which work for a conversion or an alteration or modification of a major character was commenced (where applicable)

All applicable dates shall be completed.

THIS IS TO CERTIFY:

- 1 That the ship has been surveyed in accordance with the requirements of regulation I/7 of the Convention.
- 2 That the survey showed that:
- 2.1 the ship complied with the requirements of the Convention as regards:
 - the structure, main and auxiliary machinery, boilers and other pressure vessels; .1
 - .2 the watertight subdivision arrangements and details;
 - .3 the following subdivision load lines:

Subdivision load lines assigned and marked on the ship's side amidships (regulation II-1/18) ³	Freeboard	To apply when the spaces in which passengers are carried include the following alternative spaces
P1		
P2		
P3		

- 2.2 the ship complied with the requirements of the Convention as regards structural fire protection, fire safety systems and appliances and fire control plans;
- 2.3 the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Convention;

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- 2.4 the ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;
- 2.5 the ship complied with the requirements of the Convention as regards radio installations;
- 2.6 the functioning of the radio installations used in life-saving appliances complied with the requirements of the Convention;
- 2.7 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;
- 2.8 the ship was provided with lights, shapes, means of making sound signals and distress signals, in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;
- 2.9 in all other respects the ship complied with the relevant requirements of the Convention;
- 2.10 the ship was/was not¹ subjected to an alternative design and arrangements in pursuance of regulation(s) II-1/55 / II-2/17 / III/38¹ of the Convention;
- 2.11 a Document of approval of alternative design and arrangements for machinery and electrical installations/fire protection/life-saving appliances and arrangements¹ is/is not¹ appended to this Certificate.
- 3 That an Exemption Certificate has/has not¹ been issued.

This certificate is valid until

(Date of issue)

(Signature of authorized official issuing the certificate)

¹ Delete as appropriate.

² Alternatively, the particulars of the ship may be placed horizontally in boxes.

³ For ships constructed before 1 January 2009, the applicable subdivision notation "C.1, C.2 and C.3" should be used.

RECORD OF EQUIPMENT FOR PASSENGER SHIP SAFETY (FORM P)

RECORD OF EQUIPMENT FOR COMPLIANCE WITH THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

1 Particulars of ship

Name of ship Distinctive number or letters Number of passengers for which certified Minimum number of persons with required qualifications to operate the radio installations

2 Details of life-saving appliances

1 Total number of persons for which life-saving appliances are provided			
		Port Side	Starboard side
2	Total number of lifeboats		
2.1	Total number of persons accommodated by them		
2.2	Number of partially enclosed lifeboats (regulation III/21 and LSA Code, section 4.5)		
2.3	Number of self-righting partially enclosed lifeboats (regulation III/43 ¹)		
2.4 2.5	Number of totally enclosed lifeboats (regulation III/21 and LSA Code, section 4.6) Other lifeboats		
2.5 2.5.1			
	Number		
2.5.2	Туре		
3	Number of motor lifeboats (included in the total lifeboats shown above)		
3.1	Number of lifeboats fitted with searchlights		
4	Number of rescue boats		
4.1	Number of boats which are included in the total lifeboats shown above		
4.2	Number of boats which are fast rescue boats		
5	Liferafts		
5.1	Those for which approved launching appliances are required		
5.1.1	Number of liferafts		
5.1.2	Number of persons accommodated by them		
5.2	Those for which approved launching appliances are not required		
5.2.1	Number of liferafts		
5.2.2	Number of persons accommodated by them		
6	Number of Marine Evacuation Systems (MES)		
6.1	Number of liferafts served by them		
6.2	Number of persons accommodated by them		
7	Buoyant apparatus		
7.1	Number of apparatus		
7.2	Number of persons capable of being supported		

Details of life-saving appliances (continued)

8	Number of lifebuoys	
9	Number of lifejackets (total)	
9.1	Number of adult lifejackets	
9.2	Number of child lifejackets	
9.3	Number of infant lifejackets	
10	Immersion suits	
10.1	Total number	
10.2	Number of suits complying with the	
	requirements for lifejackets	
11	Number of anti-exposure suits	
12	Number of thermal protective aids ²	
13	Radio installations used in life-saving	
	appliances	
13.1	Number of search and rescue locating devices	
13.1.1	Radar search and rescue transponders (SART)	
13.1.2	AIS search and rescue transmitters (AIS-SART)	
13.2	Number of two-way VHF radiotelephone	
	apparatus	•••••

3 Details of radio facilities

2

	Item	Actual provision
1	Primary systems	
1.1	VHF radio installation	
1.1.1	DSC encoder	
1.1.2	DSC watch receiver	
1.1.3	Radiotelephony	
1.2	MF radio installation	
1.2.1	DSC encoder	
1.2.2	DSC watch receiver	
1.2.3	Radiotelephony	
1.3	MF/HF radio installation	
1.3.1	DSC encoder	
1.3.2	DSC watch receiver	
1.3.3	Radiotelephony	
1.3.4	Direct-printing radiotelegraphy	
1.4	Inmarsat ship earth station	
2	Secondary means of alerting	
3	Facilities for reception of maritime safety information	
3.1	NAVTEX receiver	
3.2	EGC receiver	
3.3	HF direct-printing radiotelegraph receiver	
4	Satellite EPIRB	
4.1	COSPAS–SARSAT	
5	VHF EPIRB	
6	Ship's search and rescue locating device	
6.1	Radar search and rescue transponder (SART)	
6.2	AIS search and rescue transmitter (AIS- SART)	

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED - 12 -

Methods used to ensure availability of radio facilities (regulations IV/15.6 and 15.7) 4

- Duplication of equipment 4.1
- 4.2 Shore-based maintenance
- 4.3 At-sea maintenance capability.....

5 Details of navigational systems and equipment

	Item	Actual provision
1.1	Standard magnetic compass	
1.2	Spare magnetic compass ³	
1.3	Gyro-compass ³	
1.4	Gyro-compass heading repeater ³	
1.5	Gyro-compass bearing repeater ³	
1.6	Heading or track control system ³	
1.7	Pelorus or compass bearing device ³	•••••
1.8 1.9	Means of correcting heading and bearings Transmitting heading device (THD) ³	••••••
2.1	Nautical charts/Electronic chart display and	
2.1	information system (ECDIS) ⁴	
2.2	Back-up arrangements for ECDIS	
2.3	Nautical publications	
2.4	Back-up arrangements for electronic nautical	
	publications	••••••
3.1	Receiver for a global navigation satellite	
	system/terrestrial radionavigation system ^{3'4}	
3.2	9 GHz radar ³	
3.3	Second radar (3 GHz/9 GHz ⁴) ³	
3.4	Automatic radar plotting aid (ARPA) ³	
3.5	Automatic tracking aid ³	
3.6	Second automatic tracking aid ³	
3.7	Electronic plotting aid ³	
4.1	Automatic identification system (AIS)	
4.2	Long-range identification and tracking system	
5	Voyage data recorder (VDR)	
6.1	Speed and distance measuring device (through the water) ³	
6.2	Speed and distance measuring device (over the ground in the forward and athwartships direction) ³	
7	Echo-sounding device ³	
8.1	Rudder, propeller, thrust, pitch and operational mode indicator ³	
8.2	Rate-of-turn indicator ³	
9	Sound reception system ³	
10	Telephone to emergency steering position ³	
11	Daylight signalling lamp ³	
12	Radar reflector ³	
13	International Code of Signals	
14	IAMSAR Manual, Volume III	
15	Bridge navigational watch alarm system (BNWAS)	

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED - 13 -

THIS IS TO CERTIFY that this Record is correct in all respects.

Issued at

(Place of issue of the Record)

(Date of issue)

..... (Signature of duly authorized official issuing the Record)

¹ Refer to the 1983 amendments to SOLAS (MSC.6(48)), applicable to ships constructed on or after 1 July 1986, but before 1 July 1998.

² Excluding those required by the LSA Code, paragraphs 4.1.5.1.24, 4.4.8.31 and 5.1.2.2.13.

³ Alternative means of meeting this requirement are permitted under regulation V/19. In case of other means they shall be specified.

⁴ Delete as appropriate.

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED - 14 -

FORM OF SAFETY CONSTRUCTION CERTIFICATE FOR CARGO SHIPS

CARGO SHIP SAFETY CONSTRUCTION CERTIFICATE

(Official seal)

(State)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

Particulars of ship¹

ame of ship	
istinctive number or letters	
ort of registry	
ross tonnage	
eadweight of ship (metric tons) ²	
/O Number	

Type of ship³

Bulk carrier
Oil tanker
Chemical tanker
Gas carrier
Cargo ship other than any of the above

Date of build:

Date of building contract
Date on which keel was laid or ship was at similar stage of construction
Date of delivery
Date on which work for a conversion or an alteration or modification of a major character
was commenced (where applicable)

All applicable dates shall be completed.

THIS IS TO CERTIFY:

- 1. That the ship has been surveyed in accordance with the requirements of regulation I/10 of the Convention.
- 2. That the survey showed that the condition of the structure, machinery and equipment as defined in the above regulation was satisfactory and the ship complied with the relevant requirements of chapters II-1 and II-2 of the Convention (other than those relating to fire safety systems and appliances and fire control plans).
- 3. That an Exemption Certificate has/has not³ been issued.
- 4. That the ship was/was not³ subjected to an alternative design and arrangements in pursuance of regulation(s) II-1/55/II-2/17³ of the Convention.
- 5. That a Document of approval of alternative design and arrangements for machinery and electrical installations/fire protection³ is/is not³ appended to this Certificate.

This certificate is valid until	
Completion date of the survey on wl	hich this certificate is based:
Issued at	(Place of issue of certificate)
(Date of issue)	(Signature of authorized official issuing the certificate)

¹ Alternatively, the particulars of the ship may be placed horizontally in boxes.

² For oil tankers, chemical tankers and gas carriers only.

³ Delete as appropriate.

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED - 16 -

FORM OF SAFETY EQUIPMENT CERTIFICATE FOR CARGO SHIPS

CARGO SHIP SAFETY EQUIPMENT CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment for Cargo Ship Safety (Form E)

(Official seal)

(State)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

Particulars of ship¹

Name of ship	
Distinctive number or letters	
Port of registry	
Gross tonnage	
Deadweight of ship (metric tons) ²	
Length of ship (regulation III/3.12)	
IMO Number	

Type of ship³

Bulk carrier Oil tanker Chemical tanker Gas carrier Cargo ship other than any of the above

Date on which keel was laid or ship was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced

THIS IS TO CERTIFY:

- 1 That the ship has been surveyed in accordance with the requirements of regulation I/8 of the Convention.
- 2 That the survey showed that:
- the ship complied with the requirements of the Convention as regards fire safety systems 2.1 and appliances and fire control plans;
- the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were 2.2 provided in accordance with the requirements of the Convention;
- 2.3 the ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;
- 2.4 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;

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- 2.5 the ship was provided with lights, shapes and means of making sound signals and distress signals in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;
- 2.6 in all other respects the ship complied with the relevant requirements of the Convention;
- 2.7 the ship was/was not³ subjected to an alternative design and arrangements in pursuance of regulation(s) II-2/17 / III/38³ of the Convention;
- 2.8 a Document of approval of alternative design and arrangements for fire protection/ life-saving appliances and arrangements³ is/is not³ appended to this Certificate.
- 3 That the ship operates in accordance with regulation III/26.1.1.1⁴ within the limits of the trade area
- 4 That an Exemption Certificate has/has not³ been issued.

This certificate is valid until		
Completion date of the survey	on which this certificate is based:	(dd/mm/yyyy)
Issued at	(Place of issue of certificate)	
(Date of issue)	(Signature of authorized official issuing the cert	tificate)

¹ Alternatively, the particulars of the ship may be placed horizontally in boxes.

² For oil tankers, chemical tankers and gas carriers only.

³ Delete as appropriate.

⁴ Refer to the 1983 amendments to SOLAS (MSC.6(48)), applicable to ships constructed on or after 1 July 1986, but before 1 July 1998 in the case of self-righting partially enclosed lifeboat(s) on board.

RECORD OF EQUIPMENT FOR CARGO SHIP SAFETY (FORM E)

RECORD OF EQUIPMENT FOR COMPLIANCE WITH THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

1 Particulars of ship

Name of ship Distinctive number or letters

2 Details of life-saving appliances

1 Total number of persons for which life-saving appliances are provided			
		Port side	Starboard side
2	Total number of lifeboats		
2.1	Total number of persons accommodated by them		
2.2	Number of self-righting partially enclosed lifeboats (regulation III/43 ¹)		
2.3	Number of totally enclosed lifeboats (regulation III/31 and LSA Code, section 4.6)		
2.4	Number of lifeboats with a self-contained air support system (regulation III/31 and LSA Code, section 4.8)		
2.5 2.6	Number of fire-protected lifeboats (regulation III/31 and LSA Code, section 4.9) Other lifeboats		
2.6.1	Number		
2.6.2			
	Type		
2.7	Number of free-fall lifeboats		
2.7.1	Totally enclosed (regulation III/31 and LSA Code, section 4.7) Self-contained		
2.7.2	(regulation III/31 and LSA Code, section 4.8) Fire-protected		
3	(regulation III/31 and LSA Code, section 4.9) Number of motor lifeboats (included in the		
3.1	total lifeboats shown above)		
-	Number of lifeboats fitted with searchlights Number of rescue boats		
4		•••••	
4.1	Number of boats which are included in the total lifeboats shown above		
5	Liferafts		
5.1	Those for which approved launching appliances are required		
5.1.1	Number of liferafts		
5.1.2	Number of persons accommodated by them		

2 Details of life-saving appliances (continued)

5.2	Those for which approved launching appliances	
	are not required	
5.2.1	Number of liferafts	
5.2.2	Number of persons accommodated by them	
5.3	Number of liferafts required by	
	regulation III/31.1.4	
6	Number of lifebuoys	
7	Number of lifejackets	
8	Immersion suits	
8.1	Total number	
8.2	Number of suits complying with the	
	requirements for lifejackets	
9	Number of anti-exposure suits	
10	Radio installations used in life-saving	
	appliances	
10.1	Number of search and rescue locating devices	
10.1.1	Radar search and rescue transponders (SART)	
10.1.2	AIS search and rescue transmitters (AIS-SART)	
10.2	Number of two-way VHF radiotelephone	
	apparatus	

3 Details of navigational systems and equipment

	Item	Actual provision
1.1	Standard magnetic compass ²	
1.2	Spare magnetic compass ²	
1.3	Gyro-compass ²	
1.4	Gyro-compass heading repeater ²	
1.5	Gyro-compass bearing repeater ²	
1.6	Heading or track control system ²	
1.7	Pelorus or compass bearing device ²	
1.8	Means of correcting heading and bearings	
1.9	Transmitting heading device (THD) ²	
2.1	Nautical charts/Electronic chart display and information system (ECDIS) ³	
2.2	Back-up arrangements for ECDIS	
2.3	Nautical publications	
2.4	Back-up arrangements for electronic nautical publications	
3.1	Receiver for a global navigation satellite system/terrestrial radionavigation system ^{2, 3}	
3.2	9 GHz radar ²	
3.3	Second radar (3 GHz/9 GHz ³) ²	
3.4	Automatic radar plotting aid (ARPA) ²	
3.5	Automatic tracking aid ²	
3.6	Second automatic tracking aid ²	
3.7	Electronic plotting aid ²	

3 **Details of navigational systems and equipment** (continued)

	Item	Actual provision
4.1	Automatic identification system (AIS)	
4.2	Long-range identification and tracking system	
5.1	Voyage data recorder (VDR) ³	
5.2	Simplified voyage data recorder (S-VDR) ³	
6.1	Speed and distance measuring device (through the water) ²	
6.2	Speed and distance measuring device (over the ground in the forward and athwartships direction) ²	
7	Echo-sounding device ²	
8.1	Rudder, propeller, thrust, pitch and operational mode indicator ²	
8.2	Rate-of-turn indicator ²	
9	Sound reception system ²	
10	Telephone to emergency steering position ²	
11	Daylight signalling lamp ²	
12	Radar reflector ²	
13	International Code of Signals	
14	IAMSAR Manual, Volume III	
15	Bridge navigational watch alarm system (BNWAS)	

THIS IS TO CERTIFY that this Record is correct in all respects.

(Date of issue)

(Signature of duly authorized official issuing the Record)

¹ Refer to the 1983 amendments to SOLAS (MSC.6(48)), applicable to ships constructed on or after 1 July 1986, but before 1 July 1998.

² Alternative means of meeting this requirement are permitted under regulation V/19. In case of other means, they shall be specified.

³ Delete as appropriate.

FORM OF SAFETY RADIO CERTIFICATE FOR CARGO SHIPS

CARGO SHIP SAFETY RADIO CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment for Cargo Ship Safety Radio (Form R)

(Official seal)

(State)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

Particulars of ship¹

lame of ship
Distinctive number or letters
Port of registry
Gross tonnage
Sea areas in which ship is certified to operate (regulation IV/2)
MO Number
Date on which keel was laid or ship was at a similar stage of construction or,
where applicable, date on which work for a conversion or an alteration or
nodification of a major character was commenced

THIS IS TO CERTIFY:

- That the ship has been surveyed in accordance with the requirements of regulation I/9 of the 1 Convention.
- 2 That the survey showed that:
- 2.1 the ship complied with the requirements of the Convention as regards radio installations;
- 2.2 the functioning of the radio installations used in life-saving appliances complied with the requirements of the Convention.
- 3 That an Exemption Certificate has/has not² been issued.

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED - 22 -

 This certificate is valid until

 Completion date of the survey on which this certificate is based:

 Issued at

 (Place of issue of certificate)

 (Date of issue)

 (Signature of authorized official issuing the certificate)

¹ Alternatively, the particulars of the ship may be placed horizontally in boxes.

² Delete as appropriate.

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED - 23 -

RECORD OF EQUIPMENT FOR CARGO SHIP SAFETY RADIO (FORM R)

RECORD OF EQUIPMENT FOR COMPLIANCE WITH THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

1 Particulars of ship

Name of ship	
Distinctive number or letters	
Minimum number of persons with required qualifications to operate the radio installations	

2 Details of radio facilities

	Item	Actual provision
1	Primary systems	
1.1	VHF radio installation	
1.1.1	DSC encoder	
1.1.2	DSC watch receiver	
1.1.3	Radiotelephony	
1.2	MF radio installation	
1.2.1	DSC encoder	
1.2.2	DSC watch receiver	
1.2.3	Radiotelephony	
1.3	MF/HF radio installation	
1.3.1	DSC encoder	
1.3.2	DSC watch receiver	
1.3.3	Radiotelephony	
1.3.4	Direct-printing telegraphy	
1.4	Inmarsat ship earth station	
2	Secondary means of alerting	
3	Facilities for reception of maritime safety information	
3.1	NAVTEX receiver	
3.2	EGC receiver	
3.3	HF direct-printing radiotelegraph receiver	
4	Satellite EPIRB	
4.1	COSPAS-SARSAT	
5	VHF EPIRB	
6	Ship's search and rescue locating device	
6.1	Radar search and rescue transponder (SART)	
6.2	AIS search and rescue transmitter (AIS-SART)	

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED - 24 -

3	Methods used to ensure availability of radio facilities (regulations IV/15.6 and 15.7)
3.1	Duplication of equipment
3.2	Shore-based maintenance
3.3	At-sea maintenance capability

THIS IS TO CERTIFY that this Record is correct in all respects.

(Date of issue)

(Signature of duly authorized official issuing the Record)

$\begin{array}{c} \text{RESOLUTION MSC.338(91)} \\ (adopted on 30 November 2012) \\ \text{AMENDMENTS TO THE INTERNATIONAL CONVENTION} \\ \text{FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED} \\ \textbf{-25 -} \end{array}$

FORM OF EXEMPTION CERTIFICATE

EXEMPTION CERTIFICATE

(Official seal)

(State)

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

by

1

(name of the State)

(person or organization authorized)

Particulars of ship¹

Distinctive number or letters Port of registry Gross tonnage	
THIS IS TO CERTIFY:	
	ed by regulationements of
	of the Convention.
Conditions, if any, on which the Exemption 0	•
Voyages, if any, for which the Exemption Ce	-
	subject Certificate,
to which this certificate is attached, remaining	,
	f issue of certificate)
	nature of authorized official issuing the certificate)

Alternatively, the particulars of the ship may be placed horizontally in boxes.

FORM OF NUCLEAR PASSENGER SHIP SAFETY CERTIFICATE

NUCLEAR PASSENGER SHIP SAFETY CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment for Passenger Ship Safety (Form P)

(Official seal)

(State)

for an / a short1 international voyage

Issued under the provisions of the INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

Particulars of ship²

Name of ship	
Distinctive number or letters	
Port of registry	
Gross tonnage	
Sea areas in which ship is certified to operate (regulation IV/2)	
IMO Number	

Date of build:

Date of building contract
Date on which keel was laid or ship was at similar stage of construction
Date of delivery
Date on which work for a conversion or an alteration or modification of a major character
was commenced (where applicable)

All applicable dates shall be completed.

THIS IS TO CERTIFY:

- 1 That the ship has been surveyed in accordance with the requirements of regulation VIII/9 of the Convention.
- 2 That the ship, being a nuclear ship, complied with all the requirements of chapter VIII of the Convention and conformed to the Safety Assessment approved for the ship; and that:
- 2.1 the ship complied with the requirements of the Convention as regards:
 - .1 the structure, main and auxiliary machinery, boilers and other pressure vessels, including the nuclear propulsion plant and the collision protective structure;
 - .2 the watertight subdivision arrangements and details;
 - .3 the following subdivision load lines:

Subdivision load lines assigned and marked on the ship's side amidships (regulation II-1/18) ³	Freeboard	To apply when the spaces in which passengers are carried include the following alternative spaces
P1		
P2		
P3		

- 2.2 the ship complied with the requirements of the Convention as regards structural fire protection, fire safety systems and appliances and fire control plans;
- 2.3 the ship complied with the requirements of the Convention as regards radiation protection systems and equipment;
- the life-saving appliances and the equipment of the lifeboats, liferafts and rescue 2.4 boats were provided in accordance with the requirements of the Convention;
- the ship was provided with a line-throwing appliance and radio installations used in 2.5 life-saving appliances in accordance with the requirements of the Convention;
- 2.6 the ship complied with the requirements of the Convention as regards radio installations;
- 2.7 the functioning of the radio installations used in life-saving appliances complied with the requirements of the Convention;
- 2.8 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;
- 2.9 the ship was provided with lights, shapes, means of making sound signals and distress signals, in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;
- 2.10 in all other respects the ship complied with the relevant requirements of the Convention;
- the ship was/was not¹ subjected to an alternative design and arrangements in pursuance of 2.11 regulation(s) II-1/55 / II-2 /17 / III/381 of the Convention;
- a Document of approval of alternative design and arrangements for machinery and 2.12 electrical installations/fire protection/life-saving appliances and arrangements¹ is/is not¹ appended to this Certificate.

This certificate is valid until

Issued at

(Place of issue of certificate)

(Date of issue)

..... (Signature of authorized official issuing the certificate)

¹ Delete as appropriate.

² Alternatively, the particulars of the ship may be placed horizontally in boxes.

³ For ships constructed before 1 January 2009, the applicable subdivision notation "C.1, C.2 and C.3" should be used.

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED - 28 -

FORM OF NUCLEAR CARGO SHIP SAFETY CERTIFICATE

NUCLEAR CARGO SHIP SAFETY CERTIFICATE

This Certificate shall be supplemented by a Record of Equipment for Cargo Ship Safety (Form C)

(Official seal)

(State)

Issued under the provisions of the

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, as amended

under the authority of the Government of

(name of the State)

by

(person or organization authorized)

Particulars of ship¹

lame of ship
Distinctive number or letters
Port of registry
Gross tonnage
Deadweight of ship (metric tons) ²
ength of ship (regulation III/3.12)
Sea areas in which ship is certified to operate (regulation IV/2)
MO Number

Type of ship³ Bulk carrier Oil tanker Chemical tanker Gas carrier Cargo ship other than any of the above

Date of build:

Date of building contract
Date on which keel was laid or ship was at similar stage of construction
Date of delivery
Date on which work for a conversion or an alteration or modification of a major character
was commenced (where applicable)

All applicable dates shall be completed.

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THIS IS TO CERTIFY:

- 1 That the ship has been surveyed in accordance with the requirements of regulation VIII/9 of the Convention.
- 2 That the ship, being a nuclear ship, complied with all the requirements of chapter VIII of the Convention and conformed to the Safety Assessment approved for the ship; and that:
- 2.1 the condition of the structure, machinery and equipment as defined in regulation I/10 (as applicable to comply with regulation VIII/9), including the nuclear propulsion plant and the collision protective structure, was satisfactory and the ship complied with the relevant requirements of chapter II-1 and chapter II-2 of the Convention (other than those relating to fire safety systems and appliances and fire control plans);
- 2.2 the ship complied with the requirements of the Convention as regards fire safety systems and appliances and fire control plans;
- 2.3 the life-saving appliances and the equipment of the lifeboats, liferafts and rescue boats were provided in accordance with the requirements of the Convention;
- 2.4 the ship was provided with a line-throwing appliance and radio installations used in life-saving appliances in accordance with the requirements of the Convention;
- 2.5 the ship complied with the requirements of the Convention as regards radio installations;
- 2.6 the functioning of the radio installations used in life-saving appliances complied with the requirements of the Convention;
- 2.7 the ship complied with the requirements of the Convention as regards shipborne navigational equipment, means of embarkation for pilots and nautical publications;
- 2.8 the ship was provided with lights, shapes, means of making sound signals and distress signals, in accordance with the requirements of the Convention and the International Regulations for Preventing Collisions at Sea in force;
- 2.9 in all other respects the ship complied with the relevant requirements of the regulations, so far as these requirements apply thereto;
- 2.10 the ship was/was not³ subjected to an alternative design and arrangements in pursuance of regulation(s) II-1/55 / II-2/17 / III/38³ of the Convention;
- 2.11 a Document of approval of alternative design and arrangements for machinery and electrical installations/fire protection/life-saving appliance and arrangements³ is/is not³ appended to this Certificate.

This certificate is valid until		
Completion date of the survey o	n which this certificate is based:	(dd/mm/yyyy)
Issued at		
	(Place of issue of certificate)	
(Date of issue)	(Signature of authorized of	ficial issuing the certificate)

¹ Alternatively, the particulars of the ship may be placed horizontally in boxes.

² For oil tankers, chemical tankers and gas carriers only.

³ Delete as appropriate.

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED - 30 -

RECORD OF EQUIPMENT FOR CARGO SHIP SAFETY (FORM C)

RECORD OF EQUIPMENT FOR COMPLIANCE WITH THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

1 Particulars of ship

Name of ship Distinctive number or letters Minimum number of persons with required qualifications to operate the radio installations

2 Details of life-saving appliances

1 Total number of persons for which life-saving appliances are provided:			
		Port side	Starboard side
2	Total number of lifeboats		
2.1	Total number of persons accommodated by them		
2.2	Number of self-righting partially enclosed lifeboats (regulation III/43 ¹)		
2.3	Number of totally enclosed lifeboats (regulation III/31 and LSA Code, section 4.6)		
2.4	Number of lifeboats with a self-contained air support system (regulation III/31 and LSA Code, section 4.8)		
2.5	Number of fire-protected lifeboats (regulation III/31 and LSA Code, section 4.9)		
2.6	Other lifeboats		
2.6.1	Number		
2.6.2	Туре		
2.7	Number of free-fall lifeboats		
2.7.1	Totally enclosed (regulation III/31 and LSA Code, section 4.7)		
2.7.2	Self-contained (regulation III/31 and LSA Code, section 4.8)		
2.7.3	Fire-protected (regulation III/31 and LSA Code, section 4.9)		
3	Number of motor lifeboats (included in the total lifeboats shown above)		
3.1	Number of lifeboats fitted with searchlights		
4	Number of rescue boats		
4.1	Number of boats which are included in the total lifeboats shown above		

5	Liferafts	
5.1	Those for which approved launching appliances are required	
5.1.1	Number of liferafts	
5.1.2	Number of persons accommodated by them	
5.2	Those for which approved launching appliances are not required	
5.2.1	Number of liferafts	
5.2.2	Number of persons accommodated by them	
5.3	Number of liferafts required by regulation III/31.1.4	
6	Number of lifebuoys	
7	Number of lifejackets	
8	Immersion suits	
8.1	Total number	
8.2	Number of suits complying with the requirements for lifejackets	
9	Number of anti-exposure suits	
10	Radio installations used in life-saving appliances	
10.1	Number of search and rescue locating devices	
10.1.1	Radar search and rescue transponders (SART)	
10.1.2	AIS search and rescue transmitters (AIS-SART)	
10.2	Number of two-way VHF radiotelephone apparatus	

2 Details of life-saving appliances (continued)

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED - 32 -

3 Details of radio facilities

	Item	Actual provision
1	Primary systems	
1.1	VHF radio installation	
1.1.1	DSC encoder	
1.1.2	DSC watch receiver	
1.1.3	Radiotelephony	
1.2	MF radio installation	
1.2.1	DSC encoder	
1.2.2	DSC watch receiver	
1.2.3	Radiotelephony	
1.3	MF/HF radio installation	
1.3.1	DSC encoder	
1.3.2	DSC watch receiver	
1.3.3	Radiotelephony	
1.3.4	Direct-printing telegraphy	
1.4	Inmarsat ship earth station	
2	Secondary means of alerting	
3	Facilities for reception of maritime safety information	
3.1	NAVTEX receiver	
3.2	EGC receiver	
3.3	HF direct-printing radiotelegraph receiver	
4	Satellite EPIRB	
4.1	COSPAS-SARSAT	
5	VHF EPIRB	
6	Ship's search and rescue locating device	
6.1	Radar search and rescue transponder (SART)	
6.2	AIS search and rescue transmitter (AIS-SART)	

4 *Methods used to ensure availability of radio facilities* (regulations IV/15.6 and 15.7)

4.1	Duplication of equipment
	Shore-based maintenance
4.3	At-sea maintenance capability

Details of navigational systems and equipment

5

	Item	Actual provision
1.1	Standard magnetic compass ²	
1.2	Spare magnetic compass ²	
1.3	Gyro-compass ²	
1.4	Gyro-compass heading repeater ²	
1.5	Gyro-compass bearing repeater ²	
1.6	Heading or track control system ²	
1.7	Pelorus or compass bearing device ²	
1.8	Means of correcting heading and bearings	
1.9	Transmitting heading device (THD) ²	
2.1	Nautical charts/Electronic chart display and information system (ECDIS) ³	
2.2	Back-up arrangements for ECDIS	
2.3	Nautical publications	
2.4	Back-up arrangements for electronic nautical publications	
3.1	Receiver for a global navigation satellite system/terrestrial radionavigation system ^{2, 3}	
3.2	9 GHz radar ²	
3.3	Second radar (3 GHz/9 GHz ³) ²	
3.4	Automatic radar plotting aid (ARPA) ²	
3.5	Automatic tracking aid ²	
3.6	Second automatic tracking aid ²	
3.7	Electronic plotting aid ²	
4.1	Automatic identification system (AIS)	
4.2	Long-range identification and tracking system	
5.1	Voyage data recorder (VDR) ³	
5.2	Simplified voyage data recorder (S-VDR) ³	
6.1	Speed and distance measuring device (through the water) 2	
6.2	Speed and distance measuring device (over the ground in the forward and athwartships direction) ²	
7	Echo-sounding device ²	

5 Details of navigational systems and equipment (continued)

8.1	Rudder, propeller, thrust, pitch and operational mode indicator ²	
8.2	Rate-of-turn indicator ²	
9	Sound reception system ²	
10	Telephone to emergency steering position ²	
11	Daylight signalling lamp ²	
12	Radar reflector ²	
13	International Code of Signals	
14	IAMSAR Manual, Volume III	
15	Bridge navigational watch alarm system (BNWAS)	

THIS IS TO CERTIFY that this Record is correct in all respects.

¹ Refer to the 1983 amendments to SOLAS (MSC.6(48)), applicable to ships constructed on or after 1 July 1986, but before 1 July 1998.

² Alternative means of meeting this requirement are permitted under regulation V/19. In case of other means, they shall be specified.

³ Delete as appropriate.

RESOLUTION MSC.338(91) (adopted on 30 November 2012) AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED