# REPUBLIC OF THE MARSHALL ISLANDS



# **Life Saving Appliances and Systems**

MARITIME ADMINISTRATOR

Jan/2020 MN 2-011-37

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**REFERENCES** 

## REPUBLIC OF THE MARSHALL ISLANDS

MARITIME ADMINISTRATOR

**Marine Notice** 

No. 2-011-37

Jan/2020

TO: ALL SHIPOWNERS, OPERATORS, MASTERS AND OFFICERS OF MERCHANT SHIPS, AND RECOGNIZED ORGANIZATIONS

**SUBJECT:** Life Saving Appliances and Systems

- (a) International Convention for the Safety of Life at Sea, 1974 (SOLAS), Consolidated Edition 2014
- (b) International Life-Saving Appliance (LSA) Code, as amended<sup>1</sup>
- (c) IMO Resolution MSC.402(96), Requirements for maintenance, through examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear, adopted 19 May 2016
- (d) IMO Resolution MSC.404(96), Amendments to the International Convention for the Safety of Life at Sea, 1974, as amended, adopted 19 May 2016
- (e) IMO MSC.1/Circ.1047, Guidelines for monthly shipboard inspection of immersion suits and anti-exposure suits by ships' crews, dated 28 May 2002
- (f) IMO MSC/Circ.1114, Guidelines for periodic testing of Immersion Suit and Anti-Exposure Suit seams and closures, dated 25 May 2004
- (g) IMO MSC.1/Circ.1205/Rev.1, Revised Guidelines for Developing Operating and Maintenance Manuals for Lifeboat Systems, dated 26 June 2019
- (h) IMO MSC.1/Circ.1278, Guidance on wearing Immersion Suits in totally enclosed lifeboats, dated 23 May 2008
- (i) IMO MSC.1/Circ.1392, Guidelines for evaluation and replacement of Lifeboat release and retrieval systems, dated 27 May 2011, and Corr.1, dated 9 October 2015
- (j) IMO MSC.1/Circ.1419, Guidelines for the Standardization of Lifeboat Control Arrangements, dated 13 June 2012
- (k) IMO MSC.1/Circ.1490/Rev.1, Revised Unified Interpretation of SOLAS Regulation III/31.1.4, dated 25 November 2016
- (I) IMO MSC.1/Circ.1578, Guidelines on Safety During Abandon Ship Drills Using Lifeboats, dated 19 June 2017
- (m) IMO MSC.1/Circ.1597, Unified Interpretation of Paragraph 4.4.8.1 of the LSA Code, dated 7 December 2018
- (n) IMO MSC.1/Circ.1618, Unified Interpretations of SOLAS Chapter III, dated 26 June 2019

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<sup>&</sup>lt;sup>1</sup> See *Life-Saving Appliances, including LSA Code*, 2017 Edition, published by the International Maritime Organization, for a consolidated version.

- (o) RMI Marine Notice <u>2-011-14</u>, Maintenance and Inspection of Fire-Protection Systems and Appliances
- (p) RMI <u>Technical Circular 1/Rev.6</u>, Shipboard Equipment and Service Provider Approvals, dated 6 November 2019.
- (q) RMI <u>Technical Circular 4/Rev.5</u>, Issuance of Certificates and Documents of Compliance by Recognized Organizations, dated 27 February 2017

#### **PURPOSE**

This Marine Notice provides the Republic of the Marshall Islands (RMI) Maritime Administrator's (the "Administrator") clarifications for Life Saving Appliances (LSA). It implements the requirements for their maintenance, through examination, operational testing, overhaul, and repair. It also implements requirements for authorized service providers and identifies the circumstances in which shipboard personnel may carry out maintenance and inspections.

MN 2-011-5 (Rev./Jan 2017)<sup>2</sup> and Technical Circular 20 (29 February 2016)<sup>3</sup> were merged into MN 2-011-37 (Rev.7/14)<sup>4</sup>, which was updated and retitled, *Lifesaving Appliances and Systems*. This updated Marine Notice 2-011-37 with a Jan 2020 revision date is being published in advance of its effective date so that ship owners, ship operators and vessel crew can ensure compliance with the new service provider requirements that are provided below. Beginning 1 January 2020 MN 2-011-5 and Technical Circular 20 are revoked. Also, Rev.7/14 of MN 2-011-37 is superseded.

#### **BACKGROUND**

SOLAS III/3 and III/20 were amended by IMO Resolution MSC.404(96) on the maintenance, thorough examination, operational testing, overhaul and repair of lifeboats, rescue boats, launching appliances and release gear. The standards for carrying out these functions are contained in IMO Resolution MSC.402(96) and address SOLAS III/20 and III/36. Both the SOLAS amendments and standards, which are referred to as "the Requirements," take effect on 1 January 2020.

#### **APPLICABILITY**

This Marine Notice applies beginning 1 January 2020 to:

- all ships and mobile offshore units (MOUs) subject to SOLAS; and
- Commercial Yachts and Yachts Engaged in Trade of 500 GT or more, Passenger Yachts and Private Yachts Limited Charter as regulated under the RMI Yacht Code (MI-103).

<sup>&</sup>lt;sup>2</sup>This Marine Notice is titled *Life-Saving Appliances and Equipment*.

<sup>&</sup>lt;sup>3</sup>This Technical Circular was titled *On-Load Release Mechanisms fitted to Rescue Boats*.

<sup>&</sup>lt;sup>4</sup>This version of Marine Notice 2-011-37 was titled *Life Boat Equipment Requirements, Maintenance, and Servicing*.

#### **DEFINITIONS**

Refer to IMO Resolution MSC.402(96) for definitions of:

- authorized service provider;
- manufacturer;
- off-load release mechanism;
- on-load release mechanism; and
- repair and overhaul.

#### REQUIREMENTS

#### 1.0 Survival Craft Stowage

Survival craft must be stowed according to SOLAS Regulation III/13. This includes "in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in less than 5 min."

## 2.0 Lifesaving Appliance Falls

#### 2.1 Falls

As required by SOLAS III/20.4, falls used for launching lifesavings appliances must be inspected periodically with special regard for areas passing through sheaves. Deteriorating falls must be renewed as necessary or at intervals of not more than five (5) years, whichever is the earlier. The intermediate turning of the falls end for end is not required.

#### 2.2 Wire rope terminations

All primary load-bearing wire rope terminations must be formed by wedge sockets, class-approved resin or white metal sockets, swaged or spelter fittings or other suitable alternative method approved by Class. This includes falls for lifeboats, rescue boats and davit-launched life rafts as well as hanging-off pendants and recovery strops.

#### 2.3 Wire rope grips

Wire rope grips, such as bulldog grips, are not acceptable for any primary load-bearing terminations. Where wire rope grips are found to have been used on primary load-bearing terminations, arrangements must be made for their replacement.

#### 3.0 Lifeboats

#### 3.1 On-Load Release Hooks

- 3.1.1 Ships must be fitted with LSA Code-compliant lifeboat on-load release mechanisms as required by SOLAS III/1.5, taking into consideration MSC.1/Circ. 1392 and Corr.1.
- 3.1.2 When applying LSA Code paragraph 4.4.7.6 on fitting release mechanisms, MSC.1/Circ.1419 must be considered.
- 3.1.3 When selecting new or replacement lifeboat on-load release hooks, the Administrator advises ship owners or operators to select designs incorporating a permanent secondary safety system<sup>5</sup>. Where a new or replacement lifeboat on-load release hook incorporating a permanent secondary safety system cannot be obtained, ship owners/operators may select fail safe and innovative hook designs with characteristics that ensure the system cannot be released unintentionally or by the force of gravity. Where fall preventer devices are used, they must be done so in accordance with <a href="MSC.1/Circ. 1392">MSC.1/Circ. 1392</a> and <a href="Corr.1">Corr.1</a>. See paragraph 6 of this Circular in particular.
- 3.1.4 Ship's Masters must ensure that when a lifeboat on-load release hook with a secondary safety system is fitted, this is used during all drills (both launch and recovery) and when the lifeboat has crew or other personnel aboard. After the drill finishes, the secondary safety system must be removed or disengaged.

#### 3.2 Air Cylinders

Lifeboat air cylinder inspection and maintenance must be performed according to RMI Marine Notice <u>2-011-14</u>. Air cylinders in totally-enclosed lifeboats must undergo maintenance and inspection following the requirements for Self-Contained Breathing Apparatus cylinders in that Notice, where applicable<sup>6</sup>.

3.3 Lifeboats with Independent Propulsion Systems

The unified interpretation provided in MSC.1/Circ.1597 must be considered when applying LSA Code paragraph 4.4.8.1 to lifeboats equipped with two independent propulsion systems.

<sup>&</sup>lt;sup>5</sup> A secondary safety system is an additional device or design element, independent of the release mechanism which, prevents the on-load release hook from inadvertently opening during launching or recovery of the lifeboat, cannot open until the device is removed or unlocked, and can only be physically employed when the on-load release hook has been correctly reset. A typical example of a secondary safety system is a locking pin inserted into the on-load release hook that can only be inserted when the on-load release hook is correctly reset.

<sup>&</sup>lt;sup>6</sup>This is an RMI National requirement.

#### 3.4 Lifeboat Damage

- 3.4.1 When any lifeboat is damaged, declared unseaworthy, or needs repair and if no replacement boat is readily available, life raft(s) capacity for all the persons on board may be substituted as a temporary measure. This substitution may only take place with the Administrator's approval. The minimum survival craft capacity prescribed by SOLAS Chapter III must be maintained.
- 3.4.2 Where the defective boat is a motorboat and there is no other motor lifeboat on board, the total survival craft capacity provided must include a powered rescue boat meeting the SOLAS III/31.2 requirements.
- 3.4.3 These temporary measures will be limited to the minimum time required for replacement. In general, this will not exceed three (3) months.

## 3.5 Equipment Dispensations

Lifeboat equipment dispensations under LSA Code paragraph 4.4.8.32 will be handled on a case-by-case basis. The exception is MOUs which will be handled as follows:

MOUs will be considered by the Administrator to be engaged on a voyage that permits the food rations (LSA Code, paragraph 4.4.8.12) and fishing tackle (LSA Code paragraph 4.4.8.26) to be dispensed with, provided that they are on station and are served by a standby vessel; or on station and located within 25 kilometers (16 miles) of another manned platform, MOU, or a harbor of safe refuge.

Requests for dispensations must be forwarded to technical@register-iri.com.

#### 4.0 Rescue Boats

SOLAS and the LSA Code do not require boats used solely for rescue to be fitted with on-load release mechanisms; however, many are fitted with these devices. The Administrator believes all on-load release mechanisms should meet the same standards, regardless of whether installed on a lifeboat or rescue boat. Accordingly, the Administrator requires all on-load release mechanisms to comply with LSA Code 4.4.7.6 and to be evaluated according to IMO MSC.1/Circ. 1392 and Corr.1.

#### 5.0 Life Rafts

## 5.1 Stowage and Accessibility

Life rafts provided under SOLAS Regulation III/31.1.4 may be stowed in protected positions, provided they are always readily available. Care must be given to their accessibility when deck cargoes are carried.

#### 5.2 Unified Interpretation

IMO Circular MSC.1/Circ.1490/Rev.1 must be applied to life rafts required by SOLAS Regulation III/31.1.4. This unified interpretation covers:

- .1 stowage arrangements;
- .2 embarkation and embarkation ladders;
- .3 illumination; and
- .4 lifejackets and immersion suits.

## 5.3 Crew Carrying Life Rafts

Where the life raft embarkation and stowage positions are on different decks, the life raft must not be carried by crew negotiating a stairway. Such life rafts must be launched from the stowage deck using the painter to connect it to the relevant deck's embarkation ladder.

#### **6.0** Substituting Inflatable Life Rafts for Lifeboats

It may be necessary to temporarily carry on board more persons than currently authorized. When physically possible, the installed lifeboats must be recertified to provide the necessary capacity. If the existing lifeboats are already certified to their maximum capacity, the Administrator may allow substituting inflatable life raft capacity to increase the required lifeboat complement for legitimate, verifiable reasons.

Where life rafts augment the required lifeboat complement, they must be installed according to regulatory requirements. They will be considered as a temporary measure of equivalency, allowable only with Administrator approval. Such temporary measures will be limited to the minimum time required for the additional persons to be on board and, in general, will not exceed two months.

#### 7.0 Immersion Suits and Thermal Protective Aids

#### 7.1 General

Immersion suits must comply with LSA Code Chapter II §2.3. Thermal protective aids must comply with LSA Code Chapter II §2.5.

## 7.2 Assignment

- 7.2.1 An immersion suit must be provided for every person on board the ship, unless expressly provided otherwise by SOLAS. Immersion suits and thermal protective aids must be assigned by the Master. The Administrator recommends stowing them in staterooms along with life jackets.
- 7.2.2 An appropriately-sized immersion suit must be provided for every person assigned to crew the rescue boat or assigned to the marine evacuation system party according to SOLAS Regulation III/7.3. An immersion suit provided under this requirement may be used to comply with §7.2.1 of this Notice.
- 7.2.3 Additional immersion suits must be provided for each person on watch or at any normal work location<sup>7</sup> that is remote from where immersion suits are normally stowed as required by SOLAS III/32.3.3. At a minimum, additional suits must be provided at the navigation bridge and the engine control room for all those standing watch in these locations.
- 7.2.4 Two immersion suits and two lifejackets must be provided at locations where remotely located survival craft are stowed in accordance with SOLAS Regulation III/31.1.4 and as detailed in IMO Circular MSC.1/Circ.1490/Rev.1.

#### 7.3 Warm Climates

SOLAS contains provisions for exempting vessels, other than bulk carriers, as defined in Regulation IX/1, that are constantly engaged on voyages in warm climates from the requirement to carry immersion suits and/or thermal protective aids. The Administrator considers voyages in warm climates to be between 30° North and 30° South latitudes. The thermal protective aids required by LSA Code §4.1.5.1.24, §4.4.8.31, and §5.1.2.2.13, however, are an integral part of survival craft and rescue boat equipment and must be provided regardless of the vessel's route. Procedures for granting the exemption are found in RMI Technical Circular 4.

7.4 Wearing Immersion Suits in Totally Enclosed Spaces

The Administrator concurs fully with IMO Circular MSC.1/Circ.1278 and highlights paragraph 4 which recommends that:

In general, immersion suits should not be worn when boarding totally-enclosed lifeboats. While abandon ship drills are a good opportunity to examine and demonstrate the use of immersion suits, crew training during these drills should emphasize that immersion suits are intended primarily to ensure thermal protection in cases where the totally-enclosed lifeboats cannot be embarked on.

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<sup>&</sup>lt;sup>7</sup> For the purposes of this paragraph, a "normal work location" is one where a crewmember regularly works. Examples include but are not limited to: control rooms, machine shops, workshops, galleys, offices, and remote lookout positions. A work location is "remote" if it is not near the primary survival craft or the normal stowage position of the individually-assigned immersion suits which could not reasonably be retrieved in the event of an emergency.

#### 7.5 Vacuum Packed Immersion Suits

The Administrator will accept vacuum packed immersion suits provided all of following are adhered to:

- 7.5.1 The manufacturer's instructions for monthly inspection are provided on board. This must cover and satisfy the inspection procedure following SOLAS regulation III/20.7.
- 7.5.2 The interval for opening, inspecting, and testing must follow the manufacturer's recommendation, but must not exceed 10 years.
- 7.5.3 If on inspection the vacuum pack for the immersion suit is damaged, the immersion suit must be inspected according to MSC/Circ.1047 or sent to an approved service station for that purpose.
- 7.5.4 A sufficient number of immersion suits, whether vacuum packed or standard packaged, must be available for use by the ships' crew during drills.

#### 7.6 Immersion Suit Testing and Repairs

The periodic immersion suit testing must be conducted according to IMO Circulars MSC/Circ.1047 and MSC/Circ.1114. Suits less than 10 years old must be tested at intervals not exceeding three years. Suits older than 10 years, or which have seams or closures that are in questionable condition may be required to be tested more frequently.

Immersion suit air tests may be conducted on board ship, if suitable equipment is available. Any necessary repairs must be conducted by an approved service provider according to the manufacturer's recommendations.

#### 8.0 SOLAS III/20 and III/36

8.1 Operational readiness, maintenance and inspections

Beginning 1 January 2020, the Company<sup>8</sup> must ensure that a) maintenance, b) thorough examination, c) operational testing, d) overhaul, and e) repair of the following equipment is conducted according to SOLAS III/20, SOLAS III/36, the LSA Code and IMO Resolution MSC. 402(96):

- .1 lifeboats (including free-fall lifeboats);
- .2 rescue boats and fast rescue boats: and

,

<sup>&</sup>lt;sup>8</sup> **Company** means the owner of the ship or any other organization or person such as the manager, or the bareboat charter, who has assumed the responsibility for operation of the ship from the shipowner and who, on assuming such responsibility has agreed to take over all duties and responsibilities imposed by the International Safety Management Code.

.3 launching appliances and release gear (on-load and off-load) for lifeboats\*, rescue boats, fast rescue boats and davit-launched liferafts.

\*This includes the primary and secondary means of launching appliances for free-fall lifeboats.

The Company must also establish and implement health, safety and environment (HSE) procedures covering the activities set out in IMO Resolution MSC. 402(96).

## 8.2 Inspections and Maintenance

The Company must ensure that the following inspections and maintenance activities are addressed in the HSE procedures, taking IMO Resolution MSC. 402(96) and MSC.1/Circ. 1578 into account, and that they are carried out by the appropriate entities.

### 8.2.1 Inspections and Routine Maintenance Table

Interval (§ references are to MSC. 402(96))	Conducting Entity	
Weekly Inspections (§4.1 and §6.1)	Authorized service provider or shipboard personnel under the direction of a senior ship's officer in accordance with the maintenance manual(s)	
Monthly Inspections (§4.1 and §6.1)	Authorized service provider or shipboard personnel under the direction of a senior ship's officer in accordance with the maintenance manual(s)	
Routine Maintenance as specified in the equipment maintenance manual (§4.1 and §6.1)	Authorized service provider or shipboard personnel under the direction of a senior ship's officer in accordance with the maintenance manual(s)	
Annual thorough examination and operational test (§4.2 and §6.2)	Certified personnel of either the manufacturer or an authorized service provider  The service provider may be the ship operator, if authorized under §3 and §7	
Five-year thorough examination, any overhaul, overload operational tests (§4.3 and §6.3)	Certified personnel of either the manufacturer or an authorized service provider in attendance of RO Surveyor. (See MSC.1/Circ. 1618.)	

- 8.2.2 All reports and checklists must be signed by the person carrying out the inspection and maintenance work and countersigned by the Company's representative or ship's Master.
- 8.2.3 A statement confirming that lifeboat arrangements remain fit for purpose must be promptly issued by the manufacturer or authorized service provider that conducted the maintenance work. The statement must include any relevant, valid documents of certification and authorization.
- 8.2.4 The relevant maintenance manuals and associated technical documentation developed by the manufacturer must be kept up-to-date by the Company and available on board. Refer to <a href="MSC.1/Circ.1205/Rev.1">MSC.1/Circ.1205/Rev.1</a> for developing operation and maintenance manuals for lifeboat systems.

8.2.5 Where timely servicing of the above life saving equipment cannot be accomplished either by the original equipment manufacturer OEM or an authorized service provider certified for "each make and type of equipment" as required by IMO Resolution MSC.402(96), a short-term certificate must be requested from the relevant RO. See also Marine Notice 2-011-4.

## 9.0 Service Provider Approvals

See RMI <u>Technical Circular 1</u> for details on shipboard equipment and authorized service providers, including manufacturers.

#### 10.0 SOLAS III/20.8

#### 10.1 Equipment Servicing

SOLAS requires inflatable life rafts, inflatable life jackets, marine evacuation systems, and inflated rescue boats to be serviced at approved servicing facilities.

- 10.1.1 Before endorsing or issuing the Cargo Ship Safety Equipment Certificate, the RO surveyors must be satisfied that the servicing has been completed satisfactorily. The surveyor's attendance during servicing is not mandatory because they are taken ashore.
- 10.1.2 For passenger ships with their unique voyage conditions, annually servicing large numbers of required life rafts may impose difficulties. The Administrator therefore endorses life raft servicing in smaller, more manageable groups throughout the certification year. The servicing sequence must ensure that no life raft will exceed a 12-month servicing interval.
- 10.1.3 The servicing interval and procedures for inflatable rescue boats must be according to the manufacturer's requirements. The facility performing the servicing must be an approved service provider as detailed in RMI Technical Circular 1.