



# TUVALU SHIP REGISTRY

*Singapore Operations Office:*

10 Anson Road #25-16, International Plaza, Singapore 079903

Tel: (65) 6224 2345 Fax: (65) 6227 2345

Email: info@tvship.com Website: www.tvship.com

## MARINE CIRCULAR

### MC-6/2020/1

09/2024

**FOR:** Ship Owners, Ship Managers, Ship Operators, Ship Masters, Ship Officers, Recognized Organizations

**SUBJECT: REQUIREMENTS FOR LIFE-SAVING APPLIANCES AND EQUIPMENT**

#### DEFINITIONS:

The following abbreviations stand for:

- "FPD" – Fall Preventer Devices
- "FPSO" – Floating Production, Storage, and Offloading Unit
- "FSU" – Floating Storage Unit
- "IACS" – International Association of Classification Societies
- "IMO" – International Maritime Organization
- "LSA" – Life-Saving Appliance
- "LSA Code" – International Life-Saving Appliances Code, as amended
- "MODU" – Mobile Offshore Drilling Unit
- "MOU" – Mobile Offshore Unit
- "MSC" – Maritime Safety Committee (IMO)
- "RO" – Recognized Organization as defined by IMO Resolution A.789(19).
- "SOLAS" – International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended

The term "Administration" shall mean Tuvalu Ship Registry

#### PURPOSE:

This marine circular provides the requirements for LSA and equipment with regards to maintenance, through examination, operational testing, overhaul, and repair.

#### REFERENCES:

- (a) SOLAS
- (b) LSA Code
- (c) IMO MSC.1/Circ.1047 – Guidelines for monthly shipboard inspection of immersion suits and anti-exposure suits by ships' crews, 28 May 2002
- (d) IMO MSC/Circ.1114 – Guidelines for periodic testing of Immersion Suit and Anti-Exposure Suit seams and closures, 25 May 2004
- (e) IMO MSC.1/Circ.1278 – Guidance on wearing Immersion Suits in totally enclosed lifeboats, 23 May 2008
- (f) IMO MSC.1/Circ.1392 – Guidelines for Evaluation and Replacement of Lifeboat Release and Retrieval Systems, 27 May 2011, and Corr.1, 9 October 2015
- (g) IMO MSC.1/Circ.1419 – Guidelines for the Standardization of Lifeboat Control Arrangements, 13 June 2012
- (h) IMO Resolution MSC.402(96) – Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear, 19 May 2016
- (i) IMO Resolution MSC.404(96) – Amendments to the international convention for the safety of life at sea, 1974, as amended, 19 May 2016
- (j) IMO MSC.1/Circ.1490/Rev.1 – Revised Unified Interpretation of SOLAS Regulation III/31.1.4, 25 November 2016

- (k) IMO MSC.1/Circ.1578 – Guidelines on Safety During Abandon Ship Drills Using Lifeboats, 19 June 2017
- (l) IMO MSC.1/Circ.1597 – Unified Interpretation of Paragraph 4.4.8.1 of the LSA Code, 7 December 2018
- (m) IMO MSC.1/Circ.1205/Rev.1 – Revised Guidelines for Developing Operating and Maintenance Manuals for Lifeboat Systems, 26 June 2019
- (n) IMO MSC.1/Circ.1618 – Unified Interpretations of SOLAS Chapter III, 26 June 2019
- (o) Tuvalu Marine Circular MC-7/2011/1, Maintenance & Testing Requirements of Fire-fighting Systems
- (p) Tuvalu Marine Circular MC-2/2012/1, Approval of Shipboard Equipment and Service Providers

#### **APPLICATION:**

This marine circular applies to all Tuvalu flagged vessels, MODUs and MOUs subject to SOLAS, including commercial / dual-purpose yachts of 500 GT and above.

#### **BACKGROUND:**

From 01 January 2020, the standards for maintenance, thorough examination, operational testing, overhaul and repair of the following LSA and equipment are to be in accordance with IMO Resolution MSC.402(96):

- (a) Lifeboats (including free-fall lifeboats), rescue boats and fast rescue boats.
- (b) Launching appliances as well as on-load and off-load release gears for lifeboats (including primary and secondary means of launching appliances for free-fall lifeboats), rescue boats, fast rescue boats and davit-launched life rafts.

#### **CONTENTS:**

##### **1. Stowage of Survival Craft**

Survival craft must be stowed according to SOLAS 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. Lifesaving Appliance Falls**

- 2.1. Falls used for launching lifesavings appliances shall be inspected periodically in accordance with SOLAS III/20.4, with special regard for areas passing through sheaves, and renewed when 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. All terminations of primary load-bearing wire rope must be formed by wedge sockets, [RO](#) approved resin or white metal sockets, swaged or spelter fittings or other suitable alternative method approved by [RO](#). This includes falls for lifeboats, rescue boats and davit launched liferafts as well as hanging off pendants and recovery strops.
- 2.3. 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 are to be made for their replacement.

##### **3. Lifeboats**

###### **3.1. On-Load Release Hooks**

- 3.1.1. Vessels must be fitted with lifeboat on-load release mechanisms that are compliant to the LSA Code as required by SOLAS III/1.5, taking into consideration IMO MSC.1/Circ. 1392 and Corr.1.
- 3.1.2. IMO MSC.1/Circ.1419 must be considered when applying LSA Code paragraph 4.4.7.6 on fitting release mechanisms.

- 3.1.3. The use of fall preventer devices shall be done in accordance with IMO MSC.1/Circ. 1392 and Corr.1.
  - 3.1.4. Where secondary safety systems are fitted to lifeboat on-load release hooks, the ship's Master must ensure that it is used during all drills (both launch and recovery), and when the lifeboat has crew or other personnel on board, and subsequently disengaged or removed after the drill is complete.
  - 3.1.5. When selecting new or replacement lifeboat on-load release hooks, ship owners / operators are recommended to select designs incorporating a permanent secondary safety system, or fail safe and innovative hook designs with characteristics that ensure the system cannot be released unintentionally or by the force of gravity.
- 3.2. Lifeboat air cylinders inspection and maintenance shall be done in accordance with Tuvalu Marine Circular MC-7/2011/1.
  - 3.3. Lifeboats equipped with two independent propulsion systems should consider the unified interpretation provided in IMO MSC.1/Circ.1597 when applying LSA Code paragraph 4.4.8.1.
  - 3.4. Lifeboat Damage
    - 3.4.1. Liferaft capacity covering all the persons on board may be substituted as a temporary measure when there is no replacement readily available. 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 requirements of SOLAS III/31.2.
    - 3.4.3. Authorization for the above temporary measure is required from the Administration, which should not exceed three (3) months. All requests for authorization shall be made to [technical@tvship.com](mailto:technical@tvship.com)
  - 3.5. Lifeboat equipment dispensations under LSA Code paragraph 4.4.8.32 will be handled on a case-by-case basis, with the exception of MOU/MODU where food rations (LSA Code, paragraph 4.4.8.12) and fishing tackle (LSA Code paragraph 4.4.8.26) may 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 or a harbor of safe refuge. All requests for dispensations shall be made to [technical@tvship.com](mailto:technical@tvship.com)

#### **4. Rescue Boats**

In view that most rescue boats are fitted with on-load release mechanisms even though not required by both SOLAS and the LSA Code, the Administration requires all on-load release mechanisms, regardless if fitted on a lifeboat or rescue boat, to meet the same standards and comply with LSA Code 4.4.7.6, taking into consideration IMO MSC.1/Circ. 1392 and Corr.1.

#### **5. Liferrafts (SOLAS III/31.1.4)**

- 5.1. Liferrafts may be stowed in protected positions, provided they are always readily available. Care must be given to their accessibility when deck cargo is carried.
- 5.2. IMO Circular MSC.1/Circ.1490/Rev.1 covering stowage arrangements, embarkation and disembarkation ladders, illumination; and lifejackets and immersion suits must be applied.
- 5.3. Where the liferaft embarkation and stowage positions are on different decks, the liferaft must not be carried by crew negotiating a stairway. Such liferafts must be launched from the stowage deck using the painter to connect it to the relevant deck's embarkation ladder.

## 6. Substituting Inflatable Liferafts for Lifeboats

- 6.1. When possible, the installed lifeboats must be recertified to provide for the necessary increase in capacity when there is a need to temporarily carry on board more persons than currently certified.
- 6.2. However, if the existing lifeboats are already certified to their maximum capacity, and where there are supporting reasons present, the Administration may authorize substituting with inflatable liferaft capacity to increase the required lifeboat complement. This will be considered as a temporary measure of equivalency subject to approval by the Administration, and limited to the minimum time required for the additional persons to be on board.

## 7. Immersion Suits and Thermal Protective Aids

- 7.1. Refer to LSA Code II/2.3 and LSA Code II/2.5 for the general requirements for Immersion Suits and Thermal Protective Aids respectively.
- 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 ship's Master.
  - 7.2.2. According to SOLAS III/7.3, 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. An immersion suit provided under this requirement may be used to comply with section 7.2.1 of this Circular.
  - 7.2.3. According to SOLAS III/32.3.3, additional immersion suits must be provided for each person on watch or at any normal work location that is remote from where immersion suits are normally stowed. At a minimum, additional immersion 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 MSC.1/Circ.1490/Rev.1.
- 7.3. Warm Climates (voyages between 30° North and 30° South latitudes)
  - 7.3.1. 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 thermal protective aids required by LSA Code IV/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.
  - 7.3.2. Authorization for exemption on the above shall be made to [technical@tvship.com](mailto:technical@tvship.com)
- 7.4. Immersion Suits in Totally Enclosed Spaces

In accordance with paragraph 4 of IMO MSC.1/Circ.1278, 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.
- 7.5. Vacuum Packed Immersion Suits are accepted 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 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 IMO 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 crew during drills.

7.6. Immersion Suit Testing and Repairs

- 7.6.1. The periodic immersion suit testing must be conducted according to IMO MSC/Circ.1047 and IMO MSC/Circ.1114.
- 7.6.2. Suits less than 10 years old must be tested at intervals not exceeding three years.
- 7.6.3. Suits older than 10 years, or which have seams or closures that are in questionable condition may be required to be tested more frequently.
- 7.6.4. Immersion suit air tests may be conducted on board vessel if suitable equipment is available.
- 7.6.5. Any necessary repairs must be conducted by an approved service provider according to the manufacturer's recommendations.

**8. Operational readiness, maintenance and inspections (SOLAS III/20) and Instructions for on-board maintenance (SOLAS III/36)**

8.1. Inspections and Maintenance

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

8.1.1. Inspections and Routine Maintenance Table

<b>Interval (References are to MSC. 402(96))</b>	<b>Conducting Entity</b>
<b>Weekly Inspections</b> (sections 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) and associated technical documentation developed by the manufacturer
<b>Monthly Inspections</b> (sections 4.1 and 6.1)	
<b>Routine Maintenance as specified in the equipment maintenance manual</b> (sections 4.1 and 6.1)	
<b>Annual thorough examination and operational test</b> (sections 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 sections 3 and 7
<b>Five-year thorough examination, any overhaul, overload operational tests</b> (sections 4.3 and 6.3)	Certified personnel of either the manufacturer or an authorized service provider in the presence of a RO surveyor. (See Annex of IMO MSC.1/Circ. 1618)

- 8.1.2. All reports and checklists must be completed and signed by the person carrying out the inspection and maintenance work and countersigned by the Company's representative or the ship's Master.
- 8.1.3. A statement confirming that lifeboat arrangements remain fit for purpose must be promptly issued by the manufacturer or authorized service provider that conducted the work. The statement shall include any relevant, valid documents of certification and authorization.

- 8.1.4. 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 IMO MSC.1/Circ.1205/Rev.1 for developing operation and maintenance manuals for lifeboat systems.
- 8.1.5. 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), authorization for postponement may be granted by the Administration for the [RO](#) to issue a short-term certificate.

## **9. Approval for Service Provider and shipboard equipment**

Refer to Tuvalu Marine Circular MC-2/2012/1.

## **10. Servicing of Equipment (SOLAS III/20.8)**

Inflatable liferafts, inflatable life jackets, marine evacuation systems, and inflated rescue boats are to be serviced at approved servicing facilities.

- 10.1. Before endorsing or issuing the Cargo Ship Safety Equipment Certificate, the [RO](#) surveyor must be satisfied that the servicing has been completed satisfactorily. The surveyor's attendance during servicing is not mandatory because they are taken ashore.
- 10.2. For passenger ships with their unique voyage conditions, annually servicing large numbers of required liferafts may impose difficulties. Therefore, liferaft servicing may be performed in smaller, more manageable groups throughout the certification year. The servicing sequence must ensure that no liferaft will exceed a 12-month servicing interval.
- 10.3. The servicing interval and procedures for inflatable rescue boats must be according to the manufacturer's requirements and at the facility of an approved service provider.

Yours sincerely,

Deputy Registrar  
Tuvalu Ship Registry