



Office of  
Deputy Commissioner  
of Maritime Affairs

THE REPUBLIC OF LIBERIA  
LIBERIA MARITIME AUTHORITY

Marine Notice

SAF-001  
Rev. 06/12

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

**SUBJECT: Lifesaving Equipment**

**Reference: (a) Maritime Regulation 2.35  
(b) SOLAS 1978, as amended, Chapter III  
(c) LSA Code, as amended  
(d) MSC Circular 1114  
(e) MSC.1/ Circ. 1243  
(f) MSC.1/Circ. 1278  
(g) ILO Convention 92 and 133**

**Supersedes: Marine Notice SAF-001, dated 04/05**

**PURPOSE:**

This Notice provides guidance interpretation and clarification of the Liberian Administration's policy regarding Lifesaving Appliances (excluding survival craft) aboard Liberian Flag vessels. Marine Notice SAF-004 provides guidance regarding lifeboat drills and SAF-005 provides guidance regarding servicing of Lifeboats and Survival Craft.

**APPLICABILITY:**

This Notice applies to Owners, Masters, Ship Officers and authorized Recognized Organization (RO) (the vessel's Classification Society which has been recognized and authorized to act on behalf of the Liberian Administration) and addresses several SOLAS requirements which have been established by the Office of the Deputy Commissioner.

**REQUIREMENTS:**

**1.0 Certification**

1.1 All lifesaving appliances are to be reviewed for compliance with the appropriate SOLAS regulation and acceptability by the RO of the vessel at the time of installation and their condition verified at all subsequent safety equipment surveys. Any substandard or unapproved appliances or equipment are to be replaced. All survival craft are to be equipped as prescribed in reference (b) complying with the requirements of reference (c).

- 1.2 Safety equipment and other materials or equipment approved by a major maritime authority, such as the Ministries of Transport, Maritime Safety Agencies, or Maritime Directorates of Australia, Brazil, Canada, China, France, Germany, Italy, South Korea Norway, Russian Federation, the UK, the USA or by an IACS member on behalf of a National Maritime Authority are acceptable for vessels registered with the Republic of Liberia. The Administration will also accept equipment that has been approved under the EU Marine Equipment Directive.
- 1.3 Manufacturers of lifesaving appliances are responsible for ensuring that the standards of life-saving appliances and arrangements are in accordance with the requirements of the reference (c) and for providing documentation that these standards are met.

## **2.0 Lifejackets**

- 2.1 For ships built on or after 1 July 1998, if the adult lifejackets provided are not designed to fit persons weighing up to 140 kg and with a chest girth of up to 1,750 mm, a sufficient number of suitable accessories shall be available on board to allow such persons to be properly fitted and secured with the lifejackets provided.
- 2.2 Lifejackets installed on board after 01 July 2010 shall:
  - .1 be provided in three sizes: infant, child and adult and shall be marked by either weight or height, or by both weight and height;
  - .2 be provided with a releasable buoyant line or other means to secure it to a lifejacket worn by another person in the water;
  - .3 be provided with a suitable means to allow a rescuer to lift the wearer from eth water into a survival craft or rescue boat.
- 2.2 Inflatable life jackets are to be serviced annually at approved servicing facilities. Servicing facilities approved by a State which is Party to the SOLAS Convention, and acceptable to the vessel RO or servicing facilities that has been approved by a Liberian RO on behalf of a Party to the SOLAS Convention, are acceptable to the Administration, provided, the approvals are in compliance with reference (c). Vessel Owners and Agents should consult closely with the RO when selecting a service station to ensure that the service station meets the requirements of IMO Resolutions.
- 2.3 A sufficient number of additional lifejackets shall be provided for persons on watch for use of remotely locates survival craft stations The designated lifejackets provided for persons on watch shall be stowed on the bridge, in the engine room and other manned work stations (reference (e)).

## **3.0 Immersion Suits and Thermal Protective Aids**

- 3.1 Inspection, Testing and Repairing of Immersion Suits:
  - .1 Monthly and annual visual inspection: Selected and trained members of the crew may conduct the monthly and annual visual inspection of the immersion suits on board the vessel.

- .2 Air Pressure Test: Seams and closures of immersion suits shall be tested in accordance with the guidance found in reference (d) (copy attached as Appendix I) as follows:
- Immersion suits less than 10 years old once every three years, and
  - Immersion suits over 10 years old every other year.
  - All repairs shall be completed by an authorized repair facility.
- .3 Air test by ship's crew: Although reference (d) states it is preferable to have the air pressure test conducted at a suitable shore-based facility equipped to make any repairs in accordance with the manufacturer's recommendation, allowances are given for the air pressure test to be conducted on board, provided the ship has suitable equipment to conduct the test and the test crew is properly trained. If the ship operator elects to conduct the air test of the immersion suits on board they may do so, provided:
1. The ship is in possession of the manufacturer's Immersion Suit Service Manual and any necessary Test Kit(s).
  2. The selected crew members shall be trained in the procedures and instructions in the manufacturer's Service Manual regarding the monthly, annual, and three year tests and inspections of the immersion suits on board the vessel as laid down in reference (d). A company training course may be used to satisfy this requirement.
  3. Procedures for the monthly, annual, and three year testing and inspection of the immersion suits shall be incorporated into the company's Safety Management System provided to the ship and in the vessel's safety management manual.
  4. The annual and three year inspection and testing of the immersion suits requiring the air pressure test shall be performed to the satisfaction of the attending class surveyor.
  5. The results of the inspections shall be recorded in the vessels official logbook and any safety equipment inspection logbook maintained by the vessel.
  6. Annual and three year inspection and testing of the immersion suits by the crew shall be to the satisfaction of the attending class surveyor and would be acceptable for meeting the Safety Equipment Certificate annual survey requirements.
- 3.2 For purposes of Regulations III/7.3, III/22.4.1.2, III/32.3.2.3 and III/32.3.3.3 of reference (b), the Administration defines warm climates as being that between 32° North and 32° South latitudes. For vessels, other than bulk carriers operating exclusively within this trading zone, immersion suits and thermal protective aids will not be required. However, the thermal protective aids described in Sections 4.1.5.1.24, 4.4.8.31, and 5.1.2.2.13 of reference (c), are an integral part of survival craft and rescue boat equipment and must be provided regardless of vessel route.
- 3.3 The Administration defines cold climates as the areas of operation above 50° N and 50° S latitudes. For the prolonged operation of vessels with open lifeboats in cold climates, the Office of the Deputy Commissioner requires that immersion suits constructed in accordance with LSA Code Section 2.3 be provided for all persons on board.
- 3.4 Existing cargo ships subject to these regulations, and any new cargo ships constructed after 1 July 2006, shall carry immersion suits for every person on board, no later than the first safety equipment survey on or after 1 July 2006. In addition, any ship subject to this regulation shall also provide additional immersion suits to allow quick access for individuals working at some distances from where their immersion suits are stowed. This

would be similar to the protection afforded by the requirement for an additional liferaft fitted forward and/or aft as required by SOLAS Regulation III/31.1.4, and the additional lifejackets required by Regulation III/7.2.2 of reference (b).

- .1 As an example, in addition to the immersion suit for every person carried on board the ship, shall be required to carry at least two additional immersion suits of adequate size near the additional liferaft(s) when remotely located either forward or aft, so that the immersion suits may be readily available to crew working out on deck away from the accommodation block (reference (e)). See part 5 and Appendix II to determine “remote locations.”
- .2 A number of additional immersion suits may also be required at other locations, if the vessels class society surveyor determines that there are remote watch or work stations, which are located in a place, that in an emergency it is unreasonable to expect him or her to acquire the assigned immersion suit.
- .3 Form E of the Cargo Ship Safety Equipment Certificate: The total number of immersion suits on board is required to be listed in section 2.8.8.1 of Form E to the Cargo Ship Safety Equipment Certificate (SEC). This number should include the immersion suits required for every person on board and the additional required for any watch or work stations which are considered "remote locations". Thus, in most cases, the number of immersion suits in section 2.8.8.1 should be more than the number listed in section 2.1. of Form E.

If the total number of immersion suits required for every person on board is less than the total listed in 2.1 of Form E of the current SEC, the Owner/Operator has the option to request the class society to reduce the number in 2.1, or to provide additional immersion suits to match the number in section 2.1. In making this decision, Owners/Operators should consider the possible future need to carry additional persons on board and the requirement to provide additional immersion suits and other life-saving appliances.

- 3.5 Immersion suits and thermal protective aids are to be assigned by the Master. It is recommended that they should be kept in staterooms along with life jackets.
- 3.6 An immersion suit shall be assigned for every person assigned to crew the rescue boat, and shall be readily accessible. The immersion suits required by III/32.3 may be used to comply with the immersion suits required for the rescue boat crew.
- 3.7 For cargo vessels less than 85 meters in length operating above 32° North and 32° South latitudes where only liferafts are carried in accordance with Regulation III/31.1.3 of reference (b), all persons are to be provided with immersion suits.
- 3.8 Reference (f) provides excellent guidance regarding the wearing of immersion suits in totally enclosed lifeboats. 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 lifeboat cannot be embarked on.

**4.0 Extension of servicing requirement for lifesaving equipment:** If suitable service stations are not available at the port of survey for the Inflatable life rafts, inflatable life jackets, marine evacuation systems, and inflated rescue boat an extension of the applicable statutory certificate may be authorized by the Office of the Deputy Commissioner. The vessel operator in need of such an extension should contact our technical department by email at [technical@liscr.com](mailto:technical@liscr.com) or fax +1-703-790-5655.

## **5.0 EPIRB Maintenance Requirements**

5.1 MSC Resolution 152(78) modified Regulation IV/15. 9 of reference (b) to read as follows:

“9. Satellite EPIRBS shall be:

.1 annually tested for all aspects of operational efficiency, with a special emphasis on checking the emission on operational frequencies, coding and registration, at intervals as specified below:

.1 on passenger ships, within three months before the expiry date of the Passenger Ship Safety Certificate; and

.2 on cargo ships, within three months before the expiry date, or three months before or after the anniversary date of the Cargo Ship Safety Radio Certificate.

.2 subject to maintenance at intervals not exceeding five years, to be performed at an approved shore-based maintenance facility.”

**6.0 Short Term Permit To Carry A Number Of Persons In Excess of that allowed by the Safety Equipment certificate:** On occasion, it may be necessary for a vessel to temporarily carry persons on board in excess of the maximum number of persons authorized by the vessel’s Safety Equipment Certificate or MODU/MOU Certificate, as applicable. When physically possible, the installed lifeboats should be recertified to provide the necessary capacity. If the existing lifeboats are already certified to their maximum capacity, the Office of the Deputy Commissioner may allow, for legitimate verifiable reasons, the substitution of inflatable life raft capacity appropriately installed in accordance with regulatory requirements to augment the required lifeboat complement as a temporary measure of equivalency.

6.1 Temporary measures will be limited to the minimum period of time required for the additional persons to be on board, and in general will not exceed three (3) months. This accommodation will only be allowed with the specific approval of the Office of the Deputy Commissioner, provided:

1. The additional persons are limited to a reasonable number,
2. Additional life rafts are installed on the vessel in order to maintain the minimum survival craft capacity for all persons on board.
3. The necessary additional personal life-saving appliances are provided,
4. Immersions suits are provided for the additional persons if the vessel transits above 32 degrees North or 32 degrees South.

5. The vessel does reasonably adhere to the appropriate accommodation provisions of the reference (g).
  6. The vessel's Master shall ensure that the additional persons are briefed on the vessels evacuation and emergency procedures prior to the vessel getting underway.
- 6.2 For the temporary carriage of additional persons for a period of 30 days or more the Recognized Organization that classed the vessel will be instructed to issue the vessel a short term Safety Equipment Certificate authorizing the increase in the maximum number of persons onboard. For periods of less than 30 days the Administration will issue an authorization letter permitting the carriage of the additional persons.
- 6.3 The vessel's Master shall ensure that the procedures in the vessel's approved ship security plan are followed regarding accounting for and identifying all persons on board. The vessel's Master shall ensure that all of the additional persons have proper identification and, if applicable, passports prior to the vessel getting underway with the additional persons on board. The names and identification documents for each additional person must be entered on the vessel's muster list or other appropriate document in accordance with the approved ship security plan. Without this information the vessel may be denied entry into ports with the additional persons on board. When entering a port the ship must notify the port authorities that the additional persons are on board.

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**IMO**

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Ref. T4/3.01

MSC/Circ.1114  
25 May 2004

## **GUIDELINES FOR PERIODIC TESTING OF IMMERSION SUIT AND ANTI-EXPOSURE SUIT SEAMS AND CLOSURES**

1 The Maritime Safety Committee, at its seventy-eighth session (12 to 21 May 2004), recognizing that shipboard inspections of immersion suits and anti-exposure suits carried out in accordance with SOLAS regulation III/20.7 and MSC/Circ.1047 may not be adequate to detect deterioration of seams and closures of the suits due to adhesive ageing, and having considered the recommendation made by the Sub-Committee on Ship Design and Equipment at its forty-sixth session, approved the Guidelines for periodic testing of immersion suit and anti-exposure suit seams and closures, as set out in the annex.

2 Member Governments are invited to bring the annexed Guidelines to the attention of all parties concerned.

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## ANNEX

### **GUIDELINES FOR PERIODIC TESTING OF IMMERSION SUIT AND ANTI-EXPOSURE SUIT SEAMS AND CLOSURES**

1 Research performed by several Member Governments has demonstrated that the seams and closures of immersion suits and anti-exposure suits experience deterioration over time. The rate and severity of deterioration may vary widely, depending upon the specific components and procedures employed in the manufacture of the suit and the conditions under which the suit is stored. However, even under ideal conditions, the materials and adhesives used have a finite service life and will inevitably experience a reduction in strength and/or loss of watertightness with age.

2 The Guidelines for monthly shipboard inspection of immersion suits and anti-exposure suits (MSC/Circ.1047) are very helpful in identifying obvious problems with a suit, but do not adequately address deterioration of seams and closures (zippers, etc.) which may not be readily apparent by visual inspection. Such deterioration can be detected by pressurization of the suit with air, and testing of the seams and closures for leaks with a soapy water solution.

3 To ensure the maintenance of adequate strength and watertightness of seams and closures of immersion suits and anti-exposure suits with age, it is recommended that each suit be subjected to an air pressure test such as the following, at intervals not exceeding three years, or more frequently for suits over ten years of age:

.1 A suitable head piece, fitted with a means to inject air into the suit, should be inserted into the face orifice of the suit and secured so as to minimize leakage around the face seal. A low-pressure monitoring device, either integral to the fitting for air injection or as a separate device, should also be inserted. If the suit is fitted with detachable gloves and/or boots, the wrists and/or cuffs should be sealed by inserting a short length of suitable diameter plastic pipe and securing the gloves and/or boots with suitable wire ties or hose clamps. The zipper should be fully zipped, and any face flap closed. The suit should then be inflated to a pressure of 0.7 to 1.4 kPa (0.1 to 0.2 psi). If an auxiliary inflatable means of buoyancy is provided, it should be inflated through the oral valve to a pressure of 0.7 kPa (0.1 psi) or until firm to the touch.

.2 Each seam and closure of the suit - and each seam, oral tube and attachment points and joint or valve of any auxiliary inflatable means of buoyancy - should then be covered with a soapy water solution containing enough soap to produce bubbles (if leakage is noted at a foot valve to the extent that air pressure cannot be maintained, the valves should be sealed for the test).

.3 If leaks are revealed by the propagation of bubbles at seams or closures, the leaking areas should be marked and, after cleaning the suit thoroughly with fresh water and drying it, repaired in accordance with the suit manufacturer's recommendations.

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ANNEX

MSC/Circ.1114

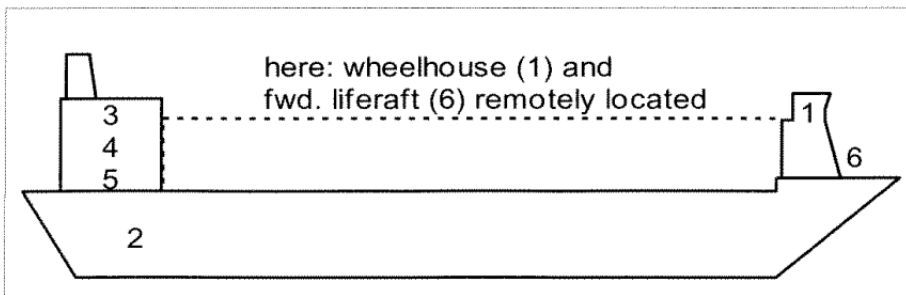
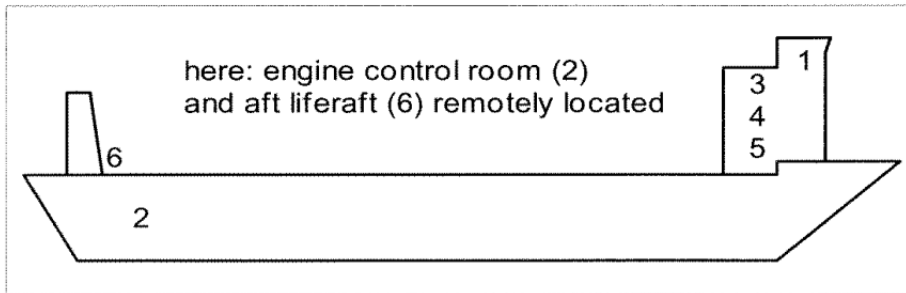
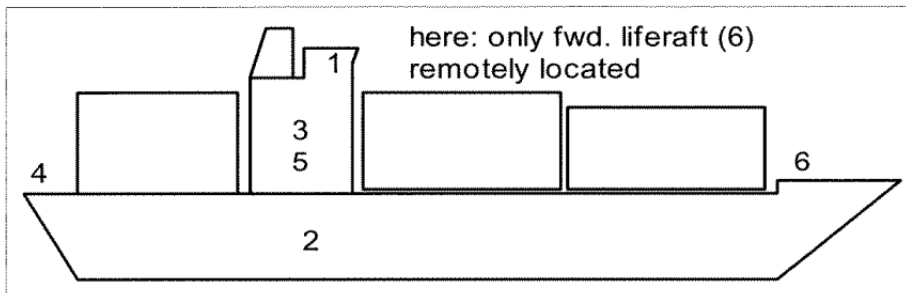
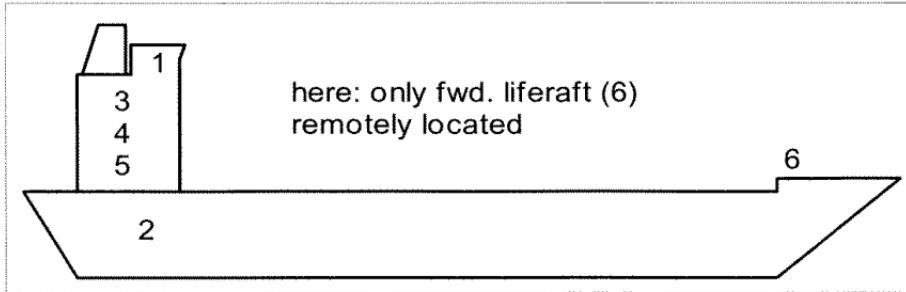
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.4 It is recommended that the air pressure test be performed at a suitable shore-based facility equipped to make any necessary repairs in accordance with the manufacturer's recommendations. In view of the wide variety of materials and adhesives used in immersion suits and anti-exposure suits, it is strongly recommended that any repairs to a suit be carried out by a facility which has access to the original manufacturer's recommended servicing instructions, parts and adhesives, and suitably trained personnel. The air pressure test may be carried out on board ship if suitable equipment is available.

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**Samples for "remotely located" survival craft and/or watch stations:**

- 1 = wheelhouse
- 2 = engine control room
- 3 = crew accommodation with main stowage place(s) of immersion suits
- 4 = lifeboat(s)
- 5 = liferafts
- 6 = add. liferaft acc. to Reg.III/31.1.4



GL-HO-NSF, PZe 2006-04-19