

SUB-COMMITTEE ON SHIP SYSTEMS AND
EQUIPMENT
2nd session
Agenda item 19

SSE 2/19/3
15 December 2014
Original: ENGLISH

ANY OTHER BUSINESS

Requirements for periodic servicing and maintenance of lifeboats and rescue boats, launching appliances and release gear

Submitted by Liberia, Panama, ICS, BIMCO, IFSMA, INTERTANKO, CLIA,
INTERCARGO, IPTA, IMCA, INTERFERRY, ITF and the NI

SUMMARY

Executive summary: This document provides proposals for further consideration by the Sub-Committee based on the conclusion of the Maritime Safety Committee that solutions noted during MSC 93 could be used to remove the identified inconsistencies and ensuing confusion. The proposed amendments particularly address the scope of maintenance and servicing that may be carried out on specific life-saving appliances by specified ship's personnel.

Strategic direction: 5.1

High-level action: 5.1.2

Planned output: 5.1.2.1

Action to be taken: Paragraph 14

Related documents: MSC 92/26/Add.2 and MSC 93/22

Introduction

1 The Maritime Safety Committee, at its ninety-third session, noted a number of inconsistencies between the requirements of the draft amendments to SOLAS regulations III/3 and III/20 and the draft MSC resolution on *Requirements for periodic servicing and maintenance of lifeboats and rescue boats, launching appliances and release gear*.

2 The draft amendments to SOLAS regulation III/20 make use of phrases that are unclear in their intent to describe maintenance requirements and the personnel required to carry out this maintenance.

3 In connection to the above, MSC 93 agreed that proposed solutions to resolve the inconsistencies would require consideration by the second session of the Sub-Committee under "Any other business".

4 This document makes proposals for consideration by the Sub-Committee based on the views expressed in paragraph 3.27 of MSC 93/22 which the Committee agreed could be the basis for solving the issue.

Discussion

5 Paragraph 4.1 of the draft MSC resolution on *Requirements for periodic servicing and maintenance of lifeboats and rescue boats, launching appliances and release gear* allows shipboard personnel to carry out "weekly and monthly and routine maintenance"; however, paragraph 4.2 states that "all other inspection, servicing and repair" shall be carried out by personnel appropriately trained and certified. The precise distinction between weekly and monthly and routine maintenance and what constitutes "all other inspection, servicing and repair" remains unclear. Consequently, the demarcation between work that may be carried out by shipboard personnel and that which "shall be conducted by servicing personnel" remains unclear.

6 MSC 93 noted a lack of clarity in draft amended SOLAS regulation III/20 regarding the use of the term "periodic servicing". This term is not used in paragraphs 11.1 to 11.4 but is introduced in paragraph 11.5, which states that with the exception of the required weekly and monthly inspection, periodic servicing and maintenance shall be carried out in accordance with the Requirements for periodic servicing and maintenance.

7 It remains unclear what the scope of "periodic servicing" is, and whether this is limited to the five yearly overhaul of on-load release gear and automatic hooks for davit-launched liferafts as this element is the only requirement, other than the annual examination and testing, which has a defined servicing interval. Furthermore, paragraph 5.3 of the draft Requirements refers to "annual servicing"—again the scope of this is unexplained and is otherwise undefined.

The use of undefined terms has led to confusion, it is suggested that use of such terms is avoided particularly when a specified period between defined service activities has not been established. It is suggested that only easily understandable terms such as examination, maintenance, overhaul and repair, as used in paragraphs 3.1 and 3.2 of the draft Requirements, are included.

8 Paragraph 3.1 of the draft Requirements, states that "the thorough examination, operational testing, repair and overhaul of equipment shall be carried out in accordance with SOLAS regulation III/20 by service providers authorized by them that are qualified in these operations for each make and type of equipment for which they provide the service."

The co-sponsors consider that operational testing, repair and overhaul of equipment referenced in SOLAS regulation III/20 is frequently within the competence of properly trained personnel familiar with the system/appliance, such as shipboard personnel and that to always require such personnel to be qualified for each make and type of equipment for which they provide the service is an onerous measure that sets inappropriate precedents. Ship's engineers are considered to be competent to operationally test, repair and overhaul many different types of complex safety critical equipment without there being any corresponding requirements for them to be additionally qualified with what would in effect become an equipment type rating.

9 Paragraph 4.1 of the draft Requirements states that work carried out by ships personnel "shall be conducted under the direct supervision of a senior ship's officer".

The co-sponsors consider that this requirement is impractical and would surely impose an unnecessary burden on the chief/first engineer who should not be required to oversee a junior engineer assigned, for example, to check the oil level of a lifeboat engine, as the scope of this wording implies. It is suggested that the draft text is amended to "shall be conducted under the direction of a senior officer". This amendment would specify the appropriate level of oversight.

10 Draft amendments to SOLAS chapter III (MSC92/26/Add.2) include replacing existing paragraph 11.2 of regulation 20 with the following:

- "11.2 Lifeboat or rescue boat release gear, including fast rescue boat release gear and free-fall lifeboat release systems, shall be:
- .1 maintained in accordance with instructions for on-board maintenance as required by regulation 36;
 - .2 subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8 by properly trained personnel familiar with the system;
 - .3 in case of on-load release gear, operationally tested under a load of 1.1 times the total mass of the boat when loaded with its full complement of persons and equipment whenever the release gear is overhauled. Such overhauling and test shall be carried out at least once every five years¹; and
 - .4 notwithstanding subparagraph .3 above, the operational testing of free-fall lifeboat release systems shall be performed either by free-fall launch with only the operating crew on board or by a simulated launching carried out based on guidelines developed by the Organization²."

MSC 93 noted that with regard to the above requirement, three relevant activities could be identified:

- .1 maintenance that could be carried out by the ship's crew;
- .2 annual thorough examination and operational test, which could be carried out by properly trained personnel familiar with the system/appliance, such as a shipboard person or an authorised service provider; and
- .3 repair and overhaul of equipment, which should be carried out by the manufacturer or authorised service provider.

11 The co-sponsors consider that with regard to SOLAS regulation III/20:

- .1 maintenance may appropriately be carried out by shipboard personnel;

¹ Refer to the *Recommendation on Testing of life-saving appliances*, adopted by the Organization by resolution A.689(17). For life-saving appliances installed on board on or after 1 July 1999, refer to the *Revised recommendation on testing of life-saving appliances*, adopted by the Organization by resolution MSC.81(70).

² Refer to the *Guidance on safety during abandon ship drills using lifeboats* (MSC/Circ.1136).

- .2 annual thorough examination and operational testing may appropriately be carried out by properly trained personnel familiar with the system/appliance, such as shipboard personnel or an authorised service provider; and
- .3 that it is appropriate for the operational testing and overhaul referenced in draft SOLAS chapter III regulation 20.11.2.3 to be carried out by the manufacturer or authorised service provider.

Proposal

In this proposal to further amend the draft amendments to SOLAS regulation III/20 as well as the draft MSC resolution on *Requirements for periodic servicing and maintenance of lifeboats and rescue boats, launching appliances and release gear* coloured text has been used to identify existing requirements (black), text approved by MSC 92 (purple) and amendments now proposed (red). Texts proposed for deletion have been "struck out" and all modifications and new insertions, including deleted text have been "grey shaded".

12 Regulation III/20 - Operational readiness, maintenance and inspections

11 ~~Periodic servicing of launching appliances and on-load release gear~~ ~~Periodic servicing of lifeboats, rescue boats and fast rescue boats, launching appliances and release gear~~ ~~Maintenance, thorough examination, operational testing, repair and overhaul of lifeboat, liferaft, rescue boat and fast rescue boat launching appliances, on-load release gear and release systems³~~

11.1 Launching appliances shall be:

- .1 maintained in accordance with instructions for on-board maintenance as required by regulation 36;
- .2 subject to a thorough examination at the annual surveys required by regulations I/7 or I/8, as applicable; and
- .3 upon completion of the examination referred to in .2 subjected to a dynamic test of the winch brake at maximum lowering speed. The load to be applied shall be the mass of the survival craft or rescue boat without persons on board, except that, at intervals not exceeding five years, the test shall be carried out with a proof load equal to 1.1 times the weight of the survival craft or rescue boat and its full complement of persons and equipment.

11.2 ~~Lifeboat or rescue boat release gear, including fast rescue boat release gear and free-fall lifeboat release systems, shall be:~~

- .1 ~~maintained in accordance with instructions for on-board maintenance as required by regulation 36;~~
- .2 ~~subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8 by properly trained personnel familiar with the system;~~

³ ~~On load release gear and release systems are considered to include all associated linkages between the attachment device – usually but not necessarily, a hook – and the operating lever at the helmsman's position. The activation method may include mechanical or hydraulic operation.~~

.3 in case of on-load release gear, operationally tested under a load of 1.1 times the total mass of the boat when loaded with its full complement of persons and equipment whenever the release gear is overhauled. Such overhauling and test shall be carried out at least once every five years⁴; and

.4 notwithstanding subparagraph .3 above the operational testing of free-fall lifeboat release systems shall be performed either by free-fall launch with only the operating crew on board or by a simulated launching carried out based on guidelines developed by the Organization.⁵

11.3 Davit-launched liferaft automatic release hooks shall be:

.1 maintained in accordance with instructions for on-board maintenance as required by regulation 36;

.2 subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8 by properly trained personnel familiar with the system; and

.3 operationally tested under a load of 1.1 times the total mass of the liferaft when loaded with its full complement of persons and equipment whenever the automatic release hook is overhauled. Such over-hauling and test shall be carried out at least once every five years.

11.4 Lifeboats or rescue boats, including fast rescue boats, shall be:

.1 maintained in accordance with instructions for onboard maintenance as required by regulation 36, and

.2 subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8 by properly trained personnel familiar with the appliance.

11.5 ~~The periodic servicing maintenance, thorough examination, operational testing, repair and overhaul and maintenance~~ required by paragraphs 11.1 to 11.4, other than weekly and monthly inspection required by paragraphs 6 and 7 of this regulation, shall be carried out in accordance with the ~~Requirements for periodic servicing and specific procedures for servicing and maintenance~~⁶.

13 Requirements for periodic servicing and maintenance of lifeboats and rescue boats, launching appliances and release gear.

⁴ Refer to the *Recommendation on Testing of life-saving appliances*, adopted by the Organization by resolution A.689(17). For life-saving appliances installed on board on or after 1 July 1999, refer to the *Revised recommendation on testing of life-saving appliances*, adopted by the Organization by resolution MSC.81(70).

⁵ Refer to the *Guidelines on safety during abandon ship drills using lifeboats* (MSC/Circ.1136).

⁶ Refer to MSC.1/Circ.1206/Rev.1 – Appendix – Specific procedures for Maintenance and Servicing.

3 AUTHORIZATION

3.1 ~~Administrations shall ensure that the thorough examination, operational testing, repair and overhaul of equipment shall be carried out in accordance with SOLAS regulation III/20 by service providers authorized by them that are qualified in these operations for each make and type of equipment for which they provide the service.~~ Administrations shall ensure that when service providers conduct the thorough examination, operational testing, repair and overhaul of equipment that shall be carried out in accordance with SOLAS regulation III/20, they are qualified in these operations for each make and type of equipment for which they provide the service.

3.2 Service providers carrying out the thorough examination, operational testing, repair and overhaul of equipment shall be authorized for each make and type of equipment in accordance with section 7.

4 QUALIFICATION LEVELS AND CERTIFICATION

4.1 ~~Weekly and monthly inspections and routine maintenance as specified in the equipment maintenance manual(s) may be carried out by the shipboard personnel and shall be conducted under the direct supervision of a senior ship's officer in accordance with the maintenance manual(s).~~ Weekly and monthly inspections and routine maintenance as specified in the equipment maintenance manual(s)⁷ may be carried out by shipboard personnel and shall be conducted under the direction of a senior ship's officer in accordance with the maintenance manual(s).

4.2 When shipboard personnel conduct maintenance, thorough examination, operational testing, repair and overhaul of equipment that shall be carried out in accordance with SOLAS regulation III/20, they shall be qualified and familiar with the system/appliance.

4.2.4.3 All other inspections, thorough examination, operational testing, servicing, and repair and overhaul shall be conducted by personnel appropriately trained and certified for the work to be done in accordance with section 8.

4.3.4.4 Where these Requirements call for certification of servicing personnel, such certification shall be issued by the service provider in accordance with an established system for training and certification in accordance with paragraph 8.

Action requested of the Sub-Committee

14 The Sub-Committee is invited to consider the proposals in paragraphs 12 and 13, and decide as appropriate.

⁷ Appropriate equipment maintenance manuals should be provided onboard for the use of shipboard personnel.