

SUB-COMMITTEE ON SHIP SYSTEMS AND
EQUIPMENT
5th session
Agenda item 10

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**REQUIREMENTS FOR ONBOARD LIFTING APPLIANCES
AND ANCHOR HANDLING WINCHES**

Comments on document SSE 5/10

Submitted by ICS

SUMMARY

Executive summary: This document comments on the report of the Correspondence Group on Onboard Lifting Appliances and Anchor Handling Winches contained in document SSE 5/10 (Japan)

Strategic direction:

High-level action:

Output: OW 34

Action to be taken: Paragraph 14

Related document: SSE 5/10

INTRODUCTION

1 This document is submitted in accordance with the provisions of paragraph 6.12.5 of the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5), and comments on document SSE 5/10 (Japan), which provides the report of the Correspondence Group on Onboard Lifting Appliances and Anchor Handling Winches.

DISCUSSION

Development of goal- and function-based SOLAS regulations (ToR 1)

Treatment of repairs and modifications of existing equipment

2 A definition of "Repairs, alterations or modification of a major character of an onboard lifting appliance or anchor handling winch" (SSE 5/10, paragraph 25 and annex 1) is necessary in order to clarify the extent to which existing onboard lifting appliances and anchor handling winches (OLAW) that undergo repair, alterations or modifications may become subject to the requirements of draft new SOLAS regulation II-1/3-13.

3 The proposed text for the definition and draft new SOLAS regulation II-1/2.[34] can be considered to be ambiguous regarding what constitutes a repair, alteration or modification of a major character. Such ambiguity exists because:

- .1 new draft SOLAS regulation II-1/2.[34].1 does not include a minimum threshold value to provide the definition of a substantial alteration of the lifting capacity of the appliance, nor does it refer to how that capacity is to be measured;
- .2 new draft SOLAS regulation II-1/2.[34].2 may be incompatible with the need for the regulation to encourage proper and effective maintenance to preserve the design life of OLAW. This provision could require existing OLAW to have a specified design life to support the consistent application of new draft SOLAS regulation II-1/3-13.2;
- .3 new draft SOLAS regulation II-1/2.[34].3 may contradict the explicit provisions in new draft SOLAS regulation II-1/3-13.2 on "Applicable requirements to existing equipment" by providing for retroactive application in certain undefined circumstances;
- .4 new draft SOLAS regulation II-1/2.[34].4 may not provide sufficient clarity on the extent to which the primary loading bearing structure needs to be altered for the new draft SOLAS regulation II-1/3-13 to apply, or an explanation of what constitutes a change in functionality; and
- .5 new draft SOLAS regulation II-1/2.[34] may not adequately consider the particular circumstances of repairs, alterations or modifications recommended by the manufacturer either to preserve the design life of the equipment or to address design, manufacturer, fabrication or other issues identified in the appliance during its design life.

4 In order to address the above-mentioned comments, it is proposed that an alternative text for new draft SOLAS regulation II-1/2.[34] be developed, based on the following¹:

"[[34] *Repairs, alterations or modification of a major character of an existing onboard lifting appliance or anchor handling winch means repairs, alterations or modifications which are not recommended by the manufacturer and which:*

- .1 ~~substantially alters the lifting capacity~~ safe working load of the appliance by more than [10] percent of the safe working load of the original appliance; or
- .2 ~~the intent of which, in the opinion of the Administration, is substantially to prolong the life of the appliance; or~~
- .3.2 ~~which otherwise so alters the functionality of the lifting appliance in such a way that, if it were a new appliance is converted from a use or purpose to which the present regulation does not apply, it would become subject to relevant provisions of the present regulation not applicable to it as an existing appliance~~ to a new use or purpose to which the present regulation does apply; or

¹ Tracked changes are created using "strikeout" for deleted text and "grey shading" to highlight all modifications and new insertions, including deleted text.

~~4.3~~ which alters the construction of the primary load bearing structure of the appliance or the way in which the appliance is installed on board the ship or functionality."

Treatment of loose gear brought from shore-side

5 ICS shares the concerns raised regarding the definition of loose gear in new draft SOLAS regulation II-1/2.[33] and the potential inclusion of loose gear that is brought from the shore-side at the time of cargo operations and which cannot be controlled by ships (SSE 5/10, paragraphs 46 to 48). ICS recommends that the Sub-Committee confirm that loose gear supplied from the shore-side is outside the scope of this work and is also excluded from the provisions of new draft SOLAS regulation II-1/3-13.

6 This recommendation reflects the fact that loose gear supplied from shore is provided for temporary use by an organization other than the Company² and is not permanently and exclusively provided by the Company for use on board a particular ship. Consequently, the Company is not in a position to ensure adequate inspection, testing, maintenance and replacement of such loose gear and it would be unreasonable to require the Company to become responsible for this equipment.

7 The exclusion of loose gear brought from the shore-side from the provisions of new draft SOLAS regulation II-1/3-13 could be achieved by either:

- .1 accepting the proposal in paragraph 32 of document SSE 5/10 for the inclusion of the phrase "ship's equipment" in the definition of "loose gear" in new draft SOLAS regulation II-1/2.[33];
- .2 improving the consistency of the provisions relating to loose gear within the Tier IV requirements in annex 1 to document SSE 5/10. In this regard, the phrase "loose gear provided as ships equipment" used in new draft SOLAS regulation II-1/3-13.5.4 would be used instead of the phrase "loose gear" in new draft SOLAS regulations II-1/3-13.5.5, II-1/3-13.5.6 and II-1/3-13.5.9; or
- .3 using the same method proposed in subparagraph .2 above, but with an amended phrase "loose gear permanently provided on board" used in new draft SOLAS regulations II-1/3-13.5.4, II-1/3-13.5.5, II-1/3-13.5.6 and II-1/3-13.5.9.

8 Notwithstanding the recommendation outlined above:

- .1 loose gear brought from shore for use during a lifting operation should have been tested appropriately. A certificate or similar document demonstrating that such a test has been carried out satisfactorily should be presented to the ship's master, or an authorized representative, before its use on board the ship and to any port State control officer on request; and
- .2 inadequate inspection, testing, maintenance and replacement of loose gear provided from the shore-side could undermine the intent and purpose of the new draft SOLAS requirements. Consequently, it is proposed that port States require loose gear provided by ports and port service providers to be inspected, tested, maintained and replaced by them to a standard at least equivalent to that embodied in the new draft SOLAS regulation II-1/3-13.

² As defined in SOLAS regulation IX/1.2

Development of the draft guidelines (ToR 2)

9 The comments provided below on the development of new draft guidelines for onboard lifting appliances and anchor handling winches are made without prejudice to the discussion anticipated on the need for the guidelines (SSE 5/10, paragraph 57)³.

"Onboard Lifting Appliances" section

10 In order to ensure that all components of OLAW satisfy the safety and functional performance of the Administration, it is proposed that failure mode analysis be incorporated into paragraph 3.1.1.1 of annex 2 to document SSE 5/10 as follows:

"3.1.1.1 ...to satisfy the strength, capacity [, safety] and functional performance required by the Administration, taking account of failure mode analysis and, the environmental conditions under which the appliances will be operated,..."

11 Furthermore, the following items of equipment should be added to the list in paragraph 3.1.1.1.4, as follows:

".4 all machinery components including winches, hydraulic and electric motors, reduction gears, brakes, hydraulic and pneumatic systems, hydraulic cylinders and pressure vessels;..."

12 Whilst recognizing that training contributes to safe operations involving OLAW, ICS considers that an explicit reference to the STCW Convention and ISM Code in paragraph 3.5.1.1 of the new draft guidelines in annex 2 to document SSE 5/10 may be misleading. To ensure that the guidance is aligned with the appropriate and applicable elements of the STCW Convention and ISM Code, it is proposed that this paragraph is amended to read:

"3.5.1.1 Shipboard personnel ~~who operates~~ assigned to specific duties for the operation of onboard lifting appliances should be trained and qualified ~~[in accordance with STCW and the ISM Code]~~ and authorized by the Company familiarized with the relevant equipment."

13 The responsibility for ensuring adequate training of shore-based personnel should be held by the shore-based company providing the personnel. Responsibility for authorization to use onboard lifting appliances and supervision of the shipboard aspects of the lifting or winching operation should remain with the Company. Furthermore, section 6 (Resource and personnel) of the ISM Code embodies a requirement for establishing procedures for "familiarization" rather than "instruction". Consequently, it is proposed that paragraphs 3.5.1.2 and 3.5.1.3 be amended as follows:

"3.5.1.2 Shore-based personnel who operates onboard lifting appliances should be trained and qualified ~~[and authorized]~~ by the shore-side company;

....

3.5.1.3 Prior to commencing lifting operations, shore-based personnel ~~Operators should receive appropriate instruction in the safe operation of~~ should be familiarized with the lifting appliances and winches involved.

ACTION REQUESTED OF THE SUB-COMMITTEE

14 The Sub-Committee is invited to consider the comments provided above and take action as appropriate.

³ Tracked changes are created using "strikeout" for deleted text and "grey shading" to highlight all modifications and new insertions, including deleted text.