

SUB-COMMITTEE ON SHIP SYSTEMS AND
EQUIPMENT
7th session
Agenda item 9

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

Comments on the report of the OLAW Correspondence Group

Submitted by IACS

SUMMARY

Executive summary: This document comments on the report of the Correspondence Group on Onboard Lifting Appliances and Anchor Handling Winches (OLAW) and contains proposals in respect of the SWL and test load of existing lifting appliances, requirements for certification of lifting appliances, a standard form for documenting the record of testing and thorough examination, and definitions for the terms "maximum line pull", "static bollard pull", "brake holding force" and "brake holding capacity"

Strategic direction, if applicable: Other work

Output: OW 34

Action to be taken: Paragraph 9

Related documents: SSE 6/WP.5 and SSE 7/9

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 Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.1) and provides comments on document SSE 7/9 (Japan), which contains the report of the Correspondence Group on Onboard Lifting Appliances and Anchor Handling Winches (OLAW).

2 IACS has participated in the Correspondence Group, as well as, in the past Working and Correspondence Groups on OLAW, and would like to thank the respective Coordinators and Chairs for their work in progressing the output.

Discussion

Safe working load

3 With reference to paragraph 3.2.1.3.*bis* of the draft Guidelines for Lifting Appliances (LA guidelines) (SSE 7/9, annex 1), IACS considers that a number of issues regarding the safe working load (SWL) for existing lifting appliances still need to be clarified. In particular, clarification of the methodology for determining SWL by the company (as defined by SOLAS regulation IX/1) is necessary, as well as of the use of SWL to determine the test load, considering that the design information on the lifting appliance would not be available to the company. In this respect, IACS recommends that SWL and the applicable test load be determined by the manufacturer or a specialized service provider, and be verified by the Administration or a classification society which is recognized by the Administration, in accordance with the requirements of SOLAS regulation XI-1/1.

Certification of lifting appliances

4 IACS notes that paragraph 3.3.1 of the draft LA guidelines provides for certification of such appliances, whereas the draft SOLAS regulation II-1/3-13 (SSE 6/WP.5, annex) does not require that certification. Considering that the purpose of the draft LA guidelines is to support the application of draft SOLAS regulation, the requirement for certification of lifting appliances should be stipulated in the draft SOLAS regulation II-1/3-13, so as to permit the draft LA guidelines to elaborate on the process for certification of lifting appliances, especially existing lifting appliances. Based on the above, IACS would propose that the text appearing in paragraph 3.3.1 of the draft LA guidelines be moved to the draft SOLAS regulation II-1/3-13, and, therefore, be removed from the draft LA guidelines.

Application of certification to existing lifting appliances

5 Paragraph 3.3.1 of the draft LA guidelines addresses certification of the lifting appliance before it is put in use for the first time. However, since existing lifting appliances have already been in operation, it may not be possible to follow this guidance for such appliances. Therefore, for the certification of existing lifting appliances, IACS proposes to add a separate provision, with the use of the words "no later than the date of the first renewal survey", to the existing wording of paragraph 3.3.1 (or to the draft SOLAS regulation II-1/3-13, depending on the resolution of the discussion in paragraph 4 above), as follows:*

"3.3.1 Before being put into use for the first time, ~~[after installation,]~~ lifting appliances installed on or after [date] ~~[comply with SOLAS regulation [II-1/3-13.2.1.1] [II-1/3-13.2.1 and II-1/3-13.2.4]]~~ should be certified ~~[accepted] [provided with documented evidence]~~ by the Administration or a classification society which is recognized by the Administration in accordance with the provisions of SOLAS Regulation XI-1/1 as compliant with SOLAS regulations ~~[II-1/3-13.2.1.1] [II-1/3-13.2.1 and II-1/3-13.2.4]~~.

3.3.1*bis* Lifting appliances installed before [date] should be certified by the Administration or a classification society which is recognized by the Administration, in accordance with the provisions of SOLAS regulation XI-1/1 as compliant with SOLAS regulations II-1/3-13.2.3 and II-1/3-13.2.4, no later than the date of the first renewal survey on or after [date]."

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

Record of testing and thorough examination

6 To help with the consistency of the records of testing and thorough examination, and in order to enable easy comparison, IACS proposes that a standard format for the record of testing and thorough examination be provided in the draft LA guidelines, as offered in the annex to this document. This proposal is consistent with the model forms and certificates of the Occupational Safety and Health (Dock Work) Convention, 1979 (ILO Convention No.152). Further, IACS proposes that other records/certificates should also be defined at a later stage, e.g. "Register of Ships Lifting Appliances and Cargo Handling Gear", "Record of Testing and Thorough Examination of Loose Gear", "Record of Testing and Thorough Examination of Wire Rope".

Maintenance, inspection and operational testing

7 Since failures of ropes have been a significant cause of accidents on cranes, IACS considers that examples of items requiring particular attention that are listed in paragraph 3.5.1.4 of the draft LA guidelines, should also address ropes. Accordingly, IACS recommends adding the following two sub-paragraphs at the end of paragraph 3.5.1.4:

- .7 damaged, broken, worn or corroded ropes, including their terminations; and
- .8 certification and identification of ropes."

Definitions used in the draft Guidelines for anchor handling winches

8 IACS notes that the draft Guidelines for anchor handling winches (AHW guidelines) (SSE 7/9, annex 2) contains such terms as "brake holding force", "brake holding capacity" and "bollard pull" without defining them in section 2 (Definitions). In order to provide for a global and consistent application and implementation, IACS proposes the following definitions to be included in section 2 of the draft AHW guidelines:

"Maximum line pull is the maximum sustained force the winch is capable of pulling.

Static bollard pull is the maximum sustained pulling force a vessel is capable of generating at maximum power (i.e. 100% *Maximum Continuous Rating (MCR)*) and zero forward speed.

Brake holding force is the maximum force for which the winch brake is designed.

Brake holding capacity is the maximum line pull that the winch brake can withstand without slipping of the brake."

Action requested of the Sub-Committee

9 The Sub-Committee is invited to consider the foregoing and the proposals provided in paragraphs 3 to 8 above, and take action, as appropriate.

ANNEX

RECORD OF TESTING AND THOROUGH EXAMINATION OF LIFTING APPLIANCES

(Official seal)

Name of Ship:

IMO Number:

Official Number:

Call Sign:

Port of Registry:

Name of Owner:

This is to certify that the lifting appliances listed below have been tested and thoroughly examined as required by SOLAS regulation II-1/3-13.

Situation and description of lifting appliance (with distinguishing number or marks, if any) which have been tested and thoroughly examined	Angle to the horizontal or radius at which test load is applied		Test load (tonnes)	Safe Working Load at angle or radius shown (tonnes)
	Angle (degrees)	Radius (metres)		

This record is valid until *(dd/mm/yyyy)*

Completion date of the testing and thorough examination on which this record is based:

Issued at*(place of issue of the record)*

Date of issue *(dd/mm/yyyy)*

Signature of competent person issuing the record

(Seal or stamp of the issuing authority)
