



TECHNICAL CIRCULAR No. 226 of 26th October 2014

To:	All Surveyors/Auditors
Applicable to flag:	All Flags
Subject:	Life Saving Appliances – Launching Appliances
Reference:	SOLAS III/16 & 17

Life Saving Appliances – Launching Appliances

SOLAS Regulations III/16 and III/17 require, for most survival craft and rescue boats respectively, launching appliances that comply with section 6.1 of the Life Saving Appliances [LSA] Code. This section of the Code requires launching appliances to "...be so arranged that the fully equipped survival craft or rescue boat it serves can be safely launched against unfavorable conditions of trim of up to 10° and a list of up to 20° either way."

Please note that:

- (i) All survival craft and rescue boats are to be above the waterline and be capable of being safely launched when the vessel is under a combined 10° trim and 20° list either way.
- (ii) The 10° trim and 20° list conditions are to be considered at the range of operating drafts for the vessel (lightest afloat operating draft to the load line draft).
- (iii) Rotation may be taken about the center of flotation of the vessel.

For an oil tanker, gas carrier or chemical tanker, if the maximum final angle of equilibrium after flooding is determined to be greater than 20° calculated in accordance with the applicable damage stability criteria, the ships' lifeboat launching appliances shall be capable of operating at the final angle of heel on the lower side of the ship, taking into consideration the final damaged waterline of the ship (refer to LSA Code, section 6.1.1.2).

The vessel's flag state must then be contacted for their concurrence, as acceptance of launching appliances meeting list and/or trim angles less than that required would be considered as an equivalent arrangement.

NOTE 1: The 'greatest launching height' of a free-fall lifeboat is to be measured from the lightest seagoing condition as defined in SOLAS III/3.13. Determination of the ability of the lifeboat to be safely launched against a trim of up to 10° and list of up to 20° either way, as required by LSA Code paragraphs 4.7.3.1 and 6.1.1.1, need not assume a launching height greater than this 'greatest launching height.'

To permit the review of the arrangements based on the above approach, the following will be required:

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Structural members and all blocks, falls, pad eyes, links, fastenings and all other equipment used in connection with launching equipment shall be designed with a factor of safety on the basis of the maximum working load assigned and ultimate strengths of the materials used for construction.

A minimum safety factor of 4.5 shall be applied to all structural members, and a minimum safety factor of 6 shall be applied to falls, suspension chains, links and blocks. The foregoing safety factor is to be applied not only to the structural members of the launching equipment, but to all eye plates, decks, frames, pillars, girders and all other hull structure within the load path.

LSA Code 6.1.1.3 requires that a launching appliance shall not depend on any means other than gravity or stored mechanical power. A launching appliance that utilizes hand slewing only is not considered to depend on "stored mechanical power" and, therefore, is to be considered not in compliance with LSA Code 6.1.1.3. As permitted by LSA Code 6.1.5, the liferaft may be provided with manual operation for turning out the appliance; therefore, the requirement of "store mechanical power" is applicable only to rescue boats. However, certain Flag Administrations are granting the acceptance of manual slewing davits for rescue boats also.

Free-fall Lifeboats with Davit as Primary Means of Launching and Free-fall as Secondary Means of Launching - If the lifeboat manufacturer, designer or shipyard claims that the primary means of launching a free-fall life boat is the davit launching appliance and that the secondary means of launching is the free-fall launch, then such a life boat is to be considered as a davit-launched life boat as per paragraph 6.1.4.7 of Chapter VI of the mandatory LSA Code.

Given the above, such a lifeboat is then subject to SOLAS III/31.1.1 which requires that at least one lifeboat be fitted on each side of the ship and does not allow its placement to be at the stern of the vessel as per SOLAS III/31.1.2.1.

Additionally, the novel life-saving appliance and arrangement requirements of SOLAS Chapter III/ 4.3 shall be fully complied with. This SOLAS Regulation requires that safety standards at least equivalent to the requirements of SOLAS Chapter III be provided and requires Flag Administration acceptance of the proposal. Any proposal by a manufacturer, designer or shipyard to NOT provide an emergency source of energy for the davit launching of the boat must be fully considered in the SOLAS Chapter III/ 4.3 safety and equivalency study.

REFERENCES:

- SOLAS Regulation III/16 & 17

ATTACHMENTS: No.

Kindest Regards,

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