TECHNICAL CIRCULAR No. 029 of 17th October 2011

To:	All Surveyors
Applicable to flag:	All Flags
Subject:	MSC 89th Session 11-20 May 2011
Reference:	SAFETY-SOLAS Chapter III

Introduction

IMO's Maritime Safety Committee (MSC) met at the Organization's London Headquarters for its 89th session from 11 to 20 May 2011. Although discussions on antipiracy measures occupied much of the discussion, several amendments to SOLAS, including retroactive measures, were adopted. One of the more significant amendments, as presented below, concerns the enhancement of life boat release systems on new and, possibly, existing ships.

LIFEBOAT ON-LOAD RELEASE SYSTEMS

SOLAS Amendments - Retroactive

The Committee adopted resolution MSC.317(89),which contains a new SOLAS Chapter III regulation 1.5 that requires all lifeboat on-load release and retrieval mechanisms, not complying with new sub-paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code resolution MSC.320(89), to be replaced with equipment that complies with the Code by the first scheduled out-of-water drydocking after 1 July 2014, but not later than 1 July 2019. Existing lifeboat on-load release mechanisms will be required to undergo an evaluation (design assessment and testing) in accordance with MSC.1/Circ.1392, to determine if they comply with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code. Results of the evaluation will be maintained on IMO's web site. Release systems which are found to not comply with these new provisions will need to be replaced, or be modified, to achieve compliance in the time frame noted above.

SOLAS Amendments – New Ships

Based on the clarification provided in MSC.1/Circ.1393, ships constructed on or after 1July 2014 are to be fitted with lifeboat release systems that comply with the new LSA Code requirements as contained in resolution MSC.320(89).

LSA Code and Lifeboat Testing Revisions

New Ships Several new LSA Code requirements were adopted by MSC.320(89) for lifeboat release systems that are installed on new ships constructed on or after 1 July 2014. These include the requirements listed under the next section for "New and Existing Ships". Additionally, safety factors for the hydrostatic interlock and operating cables are specified. Testing requirements for new lifeboat on-load release mechanisms are contained in the newly adopted resolution MSC.321(89). Among the new tests are requirements to fully load and release the mechanism 50 times, repeatedly.

New and Existing Ships

Resolution MSC.320(89) also contains three new sub-paragraphs 4.4.7.6.4 to 4.4.7.6.6 that apply to new and existing on-load release mechanisms:

• hook stability - the release mechanism is to be designed so that, when it is fully reset in the closed position, the weight of the lifeboat does not cause any force to be transmitted to the operating mechanism;

• locking devices – are to be designed so that they cannot turn to open due to forces from the hook load; and

• hydrostatic interlock - if provided, it is required to automatically reset upon lifting the boat from the water.

Design assessment and testing requirements for evaluation of existing hooks installed on ships constructed before 1 July 2014 are contained in MSC.1/Circ.1392.

Evaluation of On-Load Release Systems

MSC.1/Circ.1392 provides "Guidelines for Evaluation and Replacement of Lifeboat Release and Retrieval Systems". In order to meet the timeframe required by the SOLAS amendment, noted above, for replacement/modification of non-compliant release system, the evaluation of existing lifeboat release and retrieval systems is to be completed no later than 1 July 2013. Until such time as the existing systems are either:

• found compliant with the LSA Code;

• modified and found compliant with the LSA

Code; or
• replaced by a new compliant system, it is recommended to fit fall preventer devices(FPDs), in accordance with the “Guidelines for the fitting and use of fall preventer devices” (MSC.1/Circ.1327) when so instructed by the
vessel’s flag Administration.
The circular requires the following steps in the evaluation a release system:
• Design review - necessary documentation and information for the release system is submitted to the Administration/Class Society by the manufacturer pursuant to determining compliance with the three specific
requirements in paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code as summarized above;
• Performance test - After satisfactory review of the design review documentation, a performance test conducted by the manufacturer is to be witnessed by the Administration/Class Society using the test specified in appendix 1 to these Guidelines. The tests include: **(1)** tests to check for compliance with new sub-paragraphs 4.4.7.6.4 to 4.4.7.6.6; **(2)** the hook assembly, while disconnected from the operating mechanism, is to be tested 10 times with cyclic loading from zero load to 1.1 times the safe working load, at a nominal 10 seconds per cycle, and then **(3)** the cable and operating mechanism is be reconnected to the hook assembly and it is to be demonstrated that the system operates satisfactorily under its safe working load.
The actuation force should be no less than 100 N and no more than 300 N. In addition, any interlocks, including hydrostatic interlocks, where fitted, indicators and handles are to be verified that they still function and are correctly positioned in accordance with the operation and safety instruction from the original equipment manufacturer. If any unintended release or opening of the system occurs or any component fails during testing, the system is to be reported as having "failed" and needs to be replaced or modified to be compliant.
• Reporting of Results - The Administration is to report to IMO the results of each evaluation (pass, fail or pass with modification) including the details of the system, name of the organization carrying out the evaluation and details of the evaluation. From the IMO database, a determination of the acceptability of existing systems onboard ships can be determined.
• Overhaul Examination - Every system found to be compliant is to be subject to an overhaul examination according to annex 1 to the Measures to prevent accidents with lifeboats (MSC.1/Circ.1206/Rev.1) by the manufacturer or by one of their representatives, no later than the first scheduled dry-docking after 1 July 2014.

MISCELLANEOUS

Stability Computers

Draft amendments to SOLAS II-1/8-1, which introduce a new mandatory requirement for new passenger ships to have onboard stability computers or access to shore-based support, were approved at this session of MSC and are scheduled for adoption at MSC 90 in May 2012. The purpose is to provide operational information to the Master for facilitating the safe return to port after a flooding casualty. The computer is to have the capability to assess the consequences after a flooding casualty in order to provide the master with information for decision making to improve the survivability of the ship for safe return-to-port.
It is expected that MSC 90 will agree that new ships will be ships constructed on or after 1

January 2014. The Guidelines to implement this new requirement, which remain to be finalized, recommend that at least two independent stability computers are provided and that they should be approved by the Administration.

Free-Fall Life Boat Periodic Testing

Draft revisions to SOLAS III/20 were approved which explicitly allow for free-fall lifeboat release systems to be operationally tested by a simulated launching device with only the operating crew onboard the boat as an alternative to an actual free-fall launch.

After adoption of the above SOLAS revisions, which is scheduled to take place in May 2012, an MSC circular will be issued which recommends early implementation of the simulated launching test before they officially enter into force.

Onboard Blending of Liquid Cargoes

Draft revisions to SOLAS VI/5 were approved which, subject to adoption by MSC 90 in May 2012, will prohibit the physical blending of bulk liquid cargoes during sea voyages (blending while in port is accepted).

Physical blending utilizes the ship's cargo pumps and piping system to circulate onboard two or more different cargoes with the intent to achieve a cargo with a new product designation. This processing refers to any deliberate chemical process whereby a chemical reaction between the ship's cargoes or cargo and any other substance which results in a cargo with a new product designation.

A proposal to prohibit production processing which results in a new product during sea voyages will be evaluated by MSC’s technical working group before adoption by MSC 90.

Major Conversions Clarified

The Committee approved a new MSC Circular that identifies the application of SOLAS, MARPOL and Load Line construction requirements to single hull tankers converting to double hull tankers or to bulk carriers.

The identified requirements address permanent means of access for/in??? substantially new structures, ballast tanks coatings, towing and mooring equipment, the provision of a free-fall lifeboat for bulk carriers, minimum bridge visibility, fuel oil tank protection, additional safety measures for bulk carriers under SOLAS Chapter XII and the approach to determine the assigned freeboard. This Circular is the culmination of work by several Sub-Committees based on an original proposal circulated by IACS.

As the Circular also addresses the application of the provisions of MARPOL to such conversions, it is subject to approval by MEPC 62.

Cargo Oil Tank Coating M&R

Guidelines for the maintenance and repair (short, medium and long term) of coatings applied to crude oil cargo tanks in oil tankers under the provisions of resolution MSC.288(87) were approved and are contained in MSC.1/Circ.1399. The Guidelines take into account that minor coating restoration work would be regularly performed by a ship's crew using normal shipboard means and tools to maintain GOOD or FAIR conditions.

However, restoring a FAIR or POOR condition of coatings to a GOOD condition for the long term is recognized in the Guidelines as being usually carried out in dry-dock where specialized preparation, manpower and equipment are needed. The above three ratings are based on the percentage breakdown of coatings, locally, complete and at edges and weld lines. Details to maintain coatings in "GOOD" and "FAIR" conditions for short, medium and

long term periods are also provided.

Application of the BWT Coating Standard

IMO responded to the IACS submission which brought IMO's attention to the condition that the application of the Ballast Water Tank (BWT) Performance Standard for Protective Coatings, PSPC, to wing void spaces in ore carriers or combination carriers were not being applied in a uniform manner. This has occurred because wing void spaces in ore carriers or combination carriers are legally considered as a double side skin space to which the BWT PSPC applies. Based on the technical background leading to the development of the BWT PSPC, IACS considered that it applied to the typical narrow double-side spaces arranged in some bulk carriers and not to the wide void wing spaces found on ore carriers and combination carriers. However, the Committee concluded otherwise and in light of this decision, IACS will require application of PSPC as per resolution MSC.215(82) to these wing voids, unless instructed otherwise by the flag Administration.

NEW INITIATIVES

Measures to prevent loss of containers

Based on the estimates by the Journal of the Netherlands Institute of Registered Insurance Experts that 10,000 containers are damaged during sea transport of which 3,000 to 4,000 are washed overboard annually, the Committee agreed to a new effort which is aimed to reduce the above damages and loses which amount to $500 to $700 million. The two-year effort will take into account the research project *Lashing@Sea* and will primarily address:

• strengthened lashing gear,
• verification of proper weight used on the
shipboard loading computers,
• adequate stacking of containers, and
• feedback instrument for the crew of container ships.

Periodic Launching of Lifeboats on MODUs

The Committee, recognizing the significant difference between the environmental conditions in the offshore area of operation for Mobile Offshore Drilling Units relative to more benign conditions associated with sheltered waters where commercial ships carryout the required launching of lifeboats, agreed to a new proposal to develop an alternative procedure for such drills. The principles of the proposal call for a revision to the 2009 MODU Code which include theoretical training session at the lifeboat station; periodic lowering of the lifeboat to just above the waterline; and testing each lifeboat according to the provisions of SOLAS at least once a year.

REFERENCES:

SOLAS CH. III

ATTACHMENTS:

No.

Kindest Regards,
Cosmin Bozenovici
Naval Architect – Conarina Technical Head Office