



Life-Saving Appliances - Lifeboats and Rescue Boats - Fitting of 'Fall Preventer Devices' to Reduce the Danger of Accidental Hook Release

**Notice to all Shipowners, Masters, Deck Officers, Recognised Organisations,
Manufacturers of lifeboats and launching appliances and Training establishments**

This notice replaces MGN 445 (M+F)

Summary

- New requirements from the International Maritime Organization (IMO), have introduced standards for all Lifeboat Release and Retrieval Systems (LRRS), including those installed on existing ships.
- Existing systems that do not comply with the revised LSA Code as per SOLAS III/1.5, must be replaced by the first scheduled dry-docking after 1 July 2014, and not later than 1 July 2019.
- A flow chart illustrating valuation of existing Lifeboat Release and Retrieval System (LRRS) is included as Appendix 2 to MSC.1/Circ.1392
- The MCA strongly urges that all UK vessels fitted with lifeboat on-load release systems should be equipped with fall preventer devices (FPD) pending the evaluation of the systems for compliance with the requirements of the revised LSA Code.
- This notice is applicable to davit launched lifeboats fitted with on-load release hooks, and any similar on-load release systems if fitted to rescue boats. FPDs should be fitted in accordance with MSC.1/Circ.1327 'Guidelines for the fitting and use of fall preventer devices (FPDs)' and MSC.1/Circ.1466 'Unified Interpretation on Fall Preventer Devices'

1. Background

1.1 The Maritime Safety Committee at its 89th session adopted MSC Resolution 317(89), introducing new requirements under SOLAS regulation III/1.5 for Lifeboat Release and Retrieval Systems (LRRS). The requirements apply to on-load release mechanisms installed on all ships, i.e. both new and existing cargo and passenger ships. The Committee also adopted MSC Resolutions 320(89) and 321(89) which contain amendments to the Life Saving Appliances (LSA) Code requirements and for the testing and approval of LRRS.



1.2 In addition, the Committee approved circular MSC.1/Circ.1392 'Guidelines for Evaluation and Replacement of Lifeboat Release and Retrieval Systems', and the associated Corrigendum 1 to that Circular. New SOLAS regulation III/1.5 requires that for existing ships lifeboat on-load release mechanisms that do not comply with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the revised LSA Code are to be replaced or modified not later than the first scheduled dry-docking of the ship after 1 July 2014, but in no case later than 1 July 2019.

1.3 MSC.1/Circ.1445 provides explanation of the first scheduled dry-docking term in the context of SOLAS regulation III/1.5, which is "first scheduled out of water survey of the ship's outer bottom". This explanation clarifies that the on-load release mechanism need not be compliant during an in-water survey, should this occur before a dry-docking.

1.4 In accordance with MSC.1/Circ.1392, the MCA strongly urges that all UK vessels fitted with lifeboat on-load release systems should be equipped with FPDs pending the evaluation of the systems for compliance with the requirements of the revised LSA Code. FPDs should be fitted in accordance with MSC.1/Circ.1327 'Guidelines for the fitting and use of fall preventer devices (FPDs)' and MSC.1/Circ.1466 'Unified Interpretation on Fall Preventer Devices'.

2. Fitting and Using an FPD

2.1 On each UK vessel, FPDs in accordance with MSC.1/Circ.1327 and MSC.1/Circ.1466 should be employed for each existing lifeboat release and retrieval system until the system is:

- .1 Evaluated and found compliant with LSA Code; or
- .2 Modified and found compliant with LSA Code; or
- .3 replaced by a new lifeboat release and retrieval system compliant with LSA Code; or
- .4 found compliant with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code and paragraphs 16 and 17 (overhaul examination) of MSC.1/Circ.1392; or
- .5 modified and found compliant with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code and paragraphs 16 and 17 (overhaul examination) of these Guidelines.

2.2 The MCA recognises the responsibility of the Master to make decisions with respect to safety, as set out in the ISM Code 5.2, and consequently the use of FPD should be advocated by the ship Owner/Management Company and Master. In such cases procedures for use, inspection and maintenance are to be available and documented in the ship's Safety Management System (SMS) and training documents.

2.3 Subject to 2.2 above, the professional judgement of the Master is necessary in deciding the occasions and circumstances when FPDs are used, including those not listed in 2.1. However, the FPD manufacturer's limitations for use should be taken into account when making this decision.

2.4 Decisions relating to the fitting and use of FPDs should be documented in the vessel's SMS and training manual. Where a different procedure is followed during routine drills compared with an abandon ship situation, this should be clearly described.



2.5 UK Port State Control officers should rely on the ship's Master, SMS and training documents as a guide to the individual vessel's operations regarding the fitting and use of FPDs.

2.6 In the event that an FPD cannot be fitted, then other mitigating safety measures should be taken such as those in MSC.1/Circ.1326 "Clarification of SOLAS Regulation III/19" whereby assigned operating crew should not be required to be on board lifeboats during launching. In such cases procedures are to be available and documented in the ship's Safety Management System (SMS) and training documents.

2.7 Where locking pins are provided as an FPD, the pins should be designed so that they have a minimum factor of safety of 6 as per the LSA Code, paragraph 6.1.1.6. Where existing on-load release hooks are drilled to provide a locking pin insertion point, the strength of the hooks should continue to satisfy the relevant requirements in the LSA Code and in the *Revised recommendation on testing of life-saving appliances* (resolution MSC.81 (70), part 2, paragraph 5.3.1) and should comply with the requirements of the *Guidelines for the fitting and use of fall preventer devices (FPDs)* (MSC.1/Circ.1327, paragraph 2.1). The modification of the hook in this respect should be acceptable to the manufacturer of the hook.

2.8 Where strops or slings with fittings (e.g. shackles) are used as an FPD, the following test requirements should be considered:

- .1 environment tests as set out in resolution MSC. 81(70), part 1, paragraph 1.2.1 or equivalent;
- .2 tests for rot-proof, colour-fast and resistant to deterioration from exposure to sunlight and that they are not unduly affected by seawater, oil or fungal attack as set out in resolution MSC 81(70), part 1, paragraph 2.4, or equivalent;
- .3 prototype test to a factor of safety of 6; and
- .4 a factory acceptance test of 2.2 x SWL.

Note: The factor of safety should be based upon the SWL, which should be not less than the total weight of the lifeboat when loaded with its full complement of persons and equipment.

2.9 It is the responsibility of the lifeboat and davit manufacturer to confirm that the attachment eye is suitable for the use of the proposed FPD. If the lifeboat and/or davit manufacturer is no longer available, the suitability should be determined by an independent service provider.

2.10 The guidance contained in this document should be followed on-board all UK vessels fitted with lifeboat on-load release systems by their next Safety Equipment Survey.

3. Type approval and Modification of LRRS to Accommodate an FPD

3.1 No modification of a LRRS or a lifeboat on-board a ship can be made, unless the Notified Body authorised to carry out the approval under the Marine Equipment Directive (MED) Regulations has agreed the change. Only the manufacturer of the equipment may make proposals for changes to their equipment. Any unauthorised modifications to either the LRRS or lifeboat will be seen as a change to the equipment and, subsequently, its compliance to the LSA Code, resulting in invalidating the approval and requiring the equipment to be retested and approved.

3.2 Where changes involve modifications to individual type approved components of the system such as an on-load release mechanism, the manufacturer should contact the



Notified Body that approved the equipment, to verify that the changes are acceptable, and if any additional tests are required for the equipment. Where changes are made that have been agreed by the Notified Body, they must be fully documented in the technical file.

3.3 For information on the approval of marine equipment and Notified Bodies appointed by the United Kingdom, Merchant Shipping Notice (MSN) 1734 should be consulted. For pre MED equipment approved by a Nominated Body or the MSA as detailed in MSN 1735, the MCA should be contacted for advice.

3.4 The MCA will not approve the modifications made to an on-load release mechanism in order to fit an FPD. This approval must come from the Nominated Body which has previously approved the equipment, having been asked to do so by the manufacturer.

4. Fitting FPDs to the Hook Assembly Hanging-off Arrangements

4.1 The LSA Code requires the minimum strength for the hanging-off arrangement to be the mass of the lifeboat when loaded with its full complement of fuel and equipment plus 1000 kg. If the hanging-off arrangement is designed to this minimum requirement, this may not be suitable for the attachment of a strop type FPD when the lifeboat is fully loaded with its occupants. The possible shock loading of the boat in the event of an inadvertent release could result in much higher dynamic load than the hanging-off arrangement is designed for, causing a subsequent failure.

4.2 For strop type FPDs attached in this way, the lifeboat and davit manufacturer should be contacted to ensure that the fixing of the FPDs will be safe in the event of an inadvertent release, and under which anticipated loading conditions of the lifeboat such an arrangement is permitted. The decision to fit an FPD in this way ultimately lies with the ship Owner/Management Company, who have responsibility to ensure a safe system of work.

5. Consideration of vessel type

5.1 Those conducting training drills and drafting ISM Code procedures should take into account that with certain types of ship such as oil, gas or chemical tankers it may not be possible to use an FPD in an abandon ship situation where the release mechanism of the device is not inside the lifeboat. In such cases, the Master should take this into account when considering when an FPD should be fitted to the lifeboat. Where a different procedure is followed during routine drills compared with an abandon ship situation, this should be clearly described in the ISM Code documentation and training manual.

5.2 On certain types of ship such as passenger vessels, dependant on the Master's decision under paragraph 2.3, the number of FPDs carried on-board need not necessarily be the same as the total number of on-load release mechanisms fitted.

5.3 If the vessel type precludes the fitting of an FPD, such as on vessels using fire protected lifeboats, then other mitigating safety measures should be taken as per paragraph 2.6

6 Reference Documents:

MSC.1/Circ.1327 'Guidelines for the fitting and use of fall preventer devices (FPDs)'



MSC.1/Circ.1392 'Guidelines for Evaluation and Replacement of Lifeboat Release and Retrieval Systems'

MSC.1/Circ.1445 "Clarification of the term "first scheduled dry-docking" as contained in SOLAS Regulation III/1.5, as amended by resolution MSC. 317(89)

MSC.1/Circ.1466 'Unified Interpretation on Fall Preventer Devices' (MSC.1/CIRC.1392 and MSC.1/CIRC.1327)

MSC.1/Circ.1326 "Clarification of SOLAS Regulation III/19"

Resolution MSC. 317(89) – Adoption of Amendments to the International Convention for the Safety of Life at Sea, 1974, as amended, Amendments to the International Convention for the Safety of Life at Sea, 1974, as amended (Chapter III, LSA and arrangements, Regulation 1)

Resolution MSC. 320(89) – Adoption of Amendments to the International Life – Saving Appliances (LSA) Code (Chapter IV, Survival Craft)

Resolution MSC. 321(89) - Adoption of Amendments to the Revised Recommendation on Testing of Life-Saving Appliances (Resolution MSC.81(70)), as amended (Part 1 Prototype tests for life-saving appliances).

More Information

Marine Technology Branch
Maritime and Coastguard Agency
Bay 2/27
Spring Place
105 Commercial Road
Southampton
SO15 1EG

Tel : +44 (0) 23 8032 9100
Fax : +44 (0) 23 8032 9104
e-mail: marinetechnology@mcga.gov.uk

Website Address: www.gov.uk/government/organisations/maritime-and-coastguard-agency

General Inquiries: infoline@mcga.gov.uk

File Ref: MS003/07/189

Published: October 2015
Please note that all addresses and telephone numbers are correct at time of publishing

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