



Life-Saving Appliances - Means of Recovery of Persons from the Water by Ships and Boats - Acceptance of Recovery Equipment

Notice to all Ship Operators, Life-saving Equipment Manufacturers, Masters, Fishing Vessel Skippers, Small Craft Operators, Pleasure Vessel Owners, Recognised Organisations, Certifying Authorities, Notified Bodies, Nominated Bodies and Surveyors.

Summary

This note informs of a new SOLAS Regulation requiring all SOLAS ships to have arrangements for the recovery of persons from the water which should follow IMO guidelines, and establishes the need for Non-SOLAS UK ships and boats (e.g. fishing vessels and small craft) to equally observe these international provisions as industry guidance. This notice also establishes the process through which novel equipment intended for the recovery of persons from the water may be accepted for use on UK ships. Nothing in the SOLAS amendment or UK policy requires that additional equipment is to be carried on ships; the requirement is only about having a plan and procedure to use equipment.

1. Introduction

- 1.1 The International Maritime Organization (IMO) has developed a new regulation for the International Convention for the Safety of Life at Sea, 1974 (SOLAS), which entered into force on 1st July 2014 and introduces new requirements for ships to develop plans and procedures for means of recovery.
- 1.2 Ship operators are advised to study the contents of this MGN, as applicable to their ship type. Manufacturers of new means of recovery equipment are advised to follow the guidance on obtaining approval for any non SOLAS approved equipment before installation on UK ships. Type approval bodies are advised to apply the technical performance standards described in this Note for any non-SOLAS products being approved for use on UK registered SOLAS ships. Operators and managers of non-SOLAS vessels such as pleasure vessels and work boats are advised to follow the non-mandatory guidance at Section 5 of this Note.



2. Mandatory Requirements for SOLAS Ships Only

- 2.1 The new SOLAS Regulation III/17-1 sets a requirement for all ships within the scope of SOLAS '74 (SOLAS Ships) to have ship-specific plans and procedures for recovery of persons from the water, taking into account IMO guidelines, which are repeated at Annex 1 to this Notice.
- 2.2 The new regulation will also require those plans and procedures to identify the equipment intended to be used for recovery purposes and measures to be taken to minimize the risk to shipboard personnel involved in recovery operations. Ro-ro passenger ships which comply with the existing SOLAS Regulation III/26.4 for means of rescue will be deemed to comply with this new regulation.
- 2.3 It should be noted that all SOLAS compliant vessels built after 1 July 1986 are required to carry at least one rescue boat, which may be deemed by the ship as the means of recovery (though other means may also be considered) but consideration must still be given by the ship operator to the need for ship-specific procedures for recovery of persons.
- 2.4 SOLAS Ships constructed before 1st July 2014 are required to comply with this requirement by the first periodical or renewal safety equipment survey of the ship carried out after 1 July 2014, whichever comes first.
- 2.5 It should also be noted that IMO paper DE55/INF.5 provides examples of the types of equipment available to assist with the recovery of persons besides the SOLAS prescribed carriage requirements in existing statutory requirements such as rescue boats.

3. Process for MCA Acceptance of Recovery Equipment fitted on SOLAS Ships Only

- 3.1 Approval of marine equipment for UK ships is undertaken by Nominated Bodies or Notified Bodies, depending on the type of equipment. However, SOLAS Regulation III/4 is clear that novel life-saving appliances or arrangements have to at least successfully undergo, to the satisfaction of the Administration, evaluation and tests which are in accordance with or are substantially equivalent to IMO recommendations. Equally, where life-saving appliances required by SOLAS Ch. III for which detailed specifications are not included in the IMO Life-saving Appliances Code shall be to the satisfaction of the Administration. For these reasons, the MCA must be satisfied that the means of recovery intended for compliance with SOLAS Reg.III/17-1 are satisfactory.
- 3.2 Further, MSN1735, as referenced by MSN1734 and implemented through the Merchant Shipping (Marine Equipment) Regulations 1999, as amended, explains that where equipment is of a novel nature or subject to significant design changes, or the specifications or testing requirements are not considered to be sufficiently developed or experience of their usage is limited, the MCA will undertake the necessary approval procedure. This MGN outlines the "necessary approval procedure" for recovery equipment.
- 3.3 Type approved equipment which is already placed on board a UK registered SOLAS Ship to comply with a mandatory carriage requirement, other than for compliance with SOLAS Reg.III/17-1 or Reg.III/26.4, may be identified as equipment intended for means of recovery. However, the equipment, fitment arrangements and proposed means of recovery should be assessed by the ship operator in accordance with the guidelines at Annex 1 to this notice, and must be deemed to be fit for purpose and appropriate to the type and size of the vessel by both the ship operator and the attending MCA surveyor for the ship. Such equipment may then be deemed to be equipment fitted to the MCA's satisfaction for the purpose of SOLAS Reg.III/17-1.
- 3.4 Any equipment not already placed on board a UK registered SOLAS Ship to comply with a mandatory carriage requirement, any novel equipment, or any existing equipment rejected by the lead MCA surveyor, which is intended to be used as the means of recovery, is subject to an additional process of MCA acceptance, as follows.



- 3.5 The MCA will only accept equipment which has been assessed and type approved as novel equipment for use as a means of recovery device by one of the Nominated Bodies listed in MSN1735 acting as an independent approval body. The issue of an independent type approval certificate by one of the aforementioned Nominated Bodies, clearly evidencing that the technical specification described at Section 4 of this Notice has been achieved by the equipment for which it is issued, will demonstrate that the equipment meets the technical requirements for means of recovery equipment expected by the MCA.
- 3.6 In addition, practical demonstration of the equipment, its fitting arrangements, and means of recovery may be requested by the attending surveyor to assess whether the equipment safely achieves what is intended. In particular, a man overboard recovery drill may be required to demonstrate the effectiveness of the equipment and procedures in lifting a bulk weight or mannequin of 82.5kg from the water onto the ship in a safe and controlled manner. If the equipment is not fit for purpose then a deficiency may be raised, requiring modifications to be made to the on board arrangements and procedures.
- 3.7 Assuming the MCA is satisfied with the proposals at this stage, a letter of acceptance will be issued to the ship by the MCA, which will clearly specify for which particular use of the recovery equipment the MCA is satisfied. MCA surveyors must also be satisfied that the arrangements, particularly fitting arrangements to the ship, are fit for purpose on a case-by-case and ship-specific basis.

4. Mandatory Technical Specification for Recovery Equipment on SOLAS Ships Only

- 4.1 UK Nominated Bodies should type approve recovery equipment intended for compliance with SOLAS Regulation III/17-1 against all of the requirements of Section 1.2 of Resolution MSC.48(66) in the IMO Life-Saving Appliances Code and any appropriate requirements of Resolution A.520(13), the Code of Practice for Evaluation of Prototype Novel Appliances. These IMO requirements take precedence over any other standard to which the recovery equipment is tested. UK Nominated Bodies should also type approve recovery equipment against any appropriate BS, EN or ISO standards depending on the design of the equipment. The UK Nominated Body should clearly state on the approval certificate which elements of the above referenced requirements have been applied or omitted during testing and approval if it's deemed that one or more may not be appropriate to the type of equipment being tested. These tests must also be supplemented by the Nominated Body with the load testing described below.
- 4.2 The working load of the recovery equipment should be specified by the manufacturer when determining the approved weight range of the product, which should account for the anticipated use. A factor of safety of 6, based on the ultimate tensile strength of the materials used, should be applied for the entire device (when assembled) and associated arrangements for fixing it to the ship. Speed of ascent of the load should also be taken into account when determining the operational weight range of the recovery equipment. Weight range should, therefore, take account of the lower limit of weight for persons ascending; for example, in a case where weight on the device is essential to its safe and successful operation. The operator of the ship to which the recovery equipment is fitted should give due consideration to the means for an incapacitated person to be recovered, so the manufacturer should be clear about the limits of such equipment in its operation to recover incapacitated persons.
- 4.3 Active recovery equipment should incorporate automatic control of speed of ascent to a maximum of 2 metres per second, and automatic recovery of the harness or platform to the recovery point in order to permit successive ascents. In addition, means to stop an ascent and control of swinging motion in ascent should be provided where possible (taking account of the variation in freeboard and tumble-home or flare in ship sides which may be expected). Acceptance of a prototype design may be subject to an extended series of test ascents with a prototype unit to the satisfaction of the MCA.
- 4.4 Acceptance of subsequent units is subject to satisfactory test before dispatch from the manufacturers to a static load test of 2.2 times the working load and a recovery test of 1.5 times the working load,



and to a recovery test after installation on board of 1.1 times the working load. Particulars of the workshop test and the date of test should be clearly and durably marked on the unit. The manufacturers should provide certified material tests for each 300 m of lowering rope or webbing and such rope/webbing should be of sufficient length to reach the water with the ship in the lightest service condition and with an adverse list of 20 degrees. The recovery test of 1.1 times the working load is to be repeated at approximately six monthly intervals by the ship's personnel and noted in the ship's logbook.

4.5 The UK Health and Safety Executive (HSE) publishes detailed guidance on inspecting fall arrest equipment made from webbing or rope, and this should be followed by the ship's crew as part of the inspection regime for the recovery equipment, where appropriate. The HSE advice is available at: www.hse.gov.uk/pubns/indg367.htm

5. Non-mandatory Guidance for Recovery Equipment on Non-SOLAS Ships and Boats

5.1 At the invitation of the IMO's Maritime Safety Committee, the MCA requests that the requirements of SOLAS Regulation III/17-1, and the associated IMO guidelines repeated at Annex 1 to this Notice, should, as far as is practicable, be observed as industry guidance by the owners and operators of non-SOLAS ships, particularly where there is a mandatory requirement for means of recovery from the water.

5.2 For the purpose of this Note, non-SOLAS ships and boats includes:-

- .1 small commercial vessels certificated under the UK Codes of Practice or MGN280;
- .2 other cargo ships of a gross tonnage below 500 engaged on any voyage;
- .3 cargo ships of a gross tonnage of 500 and above not engaged on international voyages;
- .4 passenger ships not engaged on international voyages (including those on inland waters);
- .5 fishing vessels;
- .6 high-speed craft under the 1994 and 2000 HSC Codes;
- .7 dynamically supported craft under the DSC Code;
- .8 special purpose ships under the SPS Code and the 2008 SPS Code;
- .9 mobile offshore drilling units under the 1979, 1989 and 2009 MODU Codes; and
- .10 class XII pleasure vessels.

6. Process for MCA Acceptance of Recovery Equipment for Non-SOLAS Ships

6.1 For the non-SOLAS Ship types listed at 5.2 of this Note the process and technical specification for accepting recovery equipment as described at sections 3 and 4 of this Note need not be applied. In short, the equipment need not be type approved by a Nominated Body. However, for non-SOLAS vessels where there is still a mandatory requirement for means of recovery (for example Section 12.2.2 of MSN1823 for Passenger Ships Operating Solely in UK Categorised Waters and Section 22.8 of MGN280 for Small Commercial Vessels), the attending MCA or CA surveyor may request a man overboard recovery drill to demonstrate the effectiveness of the equipment and procedures in lifting a bulk weight or mannequin of 82.5kg from the water onto the deck in a safe and controlled manner. If the equipment is not fit for purpose then a deficiency may be raised, requiring modifications to be made to the arrangements and procedures. Recovery equipment fitted to non-SOLAS ships which has been assessed in accordance with the process and technical specification described at sections 3 and 4 of this MGN may require less assessment than equipment which has not but it is recognised that proposed arrangements for smaller craft may not be suitable for a process of type approval.

6.2 For the non-SOLAS Ship types listed at 5.2 of this Notice: where there is no mandatory UK requirement for a means of recovery from the water to be approved, and it has been determined that



particular equipment is required to achieve recovery, then such equipment should be assessed by the vessel owner/operator as fit for purpose.

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

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