

SHIPPING DEPUTY MINISTRY TO THE PRESIDENT

Circular No. 21 / 2019

12 December 2019

SDM 5.13.09

All Registered Owners, Registered Bareboat Charterers, Managers and Representatives of ships flying the Cyprus Flag

To all Recognised Organisations (ROs) and Inspectors of Cyprus Ships

Subject: New Requirements for Maintenance, Thorough Examination, Operational Testing, Overhaul and Repair of Lifeboats and Rescue Boats, Launching Appliances and Release Gear (MSC.402(96)) and Guidelines on Safety during Abandon Ship Drills Using Lifeboats (MSC.1/Circ.1578).

I refer to the above subject and the attachments and I wish to clarify the policy adopted by the Shipping Deputy Ministry to the President ("SDM") in response to these important International Maritime Organization (IMO) instruments.

2. The Maritime Safety Committee adopted the IMO Resolution MSC.402(96) on the requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear in conjunction with the IMO Resolution MSC.404(96) which, among others, amends the Regulations 3 and 20 of Chapter III of the International Convention on the Safety of Life at Sea 1974, as amended ("SOLAS Convention").

These amendments are coming into force on January 01, 2020.

- 3. In the amended Regulations 3 and 20 of Chapter III of the SOLAS Convention, the requirements for periodic servicing and maintenance of lifeboats, launching appliances and on-load release gear contained in the Guidelines MSC.1/Circ.1206/Rev.1, "Measures to prevent accidents with lifeboats", will be replaced by the mandatory IMO Resolution MSC.402(96).
- 4. Thus, as from **January 01, 2020**, the maintenance, thorough examination, operational testing, overhaul and repair of **lifeboats** (including free-fall lifeboats), **rescue boats and fast rescue boats** and **launching appliances** and **on-load and off-load release gear** for lifeboats (including primary and secondary means of launching appliances for free-fall lifeboats), rescue boats, fast rescue boats and davit-launched liferafts shall be carried out in accordance with the requirements of the IMO Resolution MSC.402(96).
- 5. Pursuant to the IMO Resolution MSC.402(96), the weekly and monthly inspections and routine maintenance as specified in the equipment maintenance manual(s) shall be conducted by an authorised service provider or by shipboard personnel under the direction of a senior ship's officer in accordance with the maintenance manual(s).



Furthermore, the Annual thorough examinations and operational tests or the Fiveyearly thorough examinations, overhauls, overload operational tests and repairs shall be conducted by either:

- i. the manufacturer (an Original Equipment Manufacturer does not need to be authorised to service its own equipment),
- ii. **the manufacturer acting as a service provider** (when it is servicing equipment that is not its own) or **a service provider** authorised by an Administration of an IMO SOLAS Contracting Government or by their ROs in accordance with the IMO Resolution MSC.402(96),
- the manufacturer acting as a service provider or a service provider holding an Approval Certificate of a Service Supplier¹ issued by a RO recognised by the Government of the Republic of Cyprus in accordance with latest Procedural Requirements for Service Suppliers IACS UR Z 17 corresponding to the IMO Resolution MSC.402(96)².

For all the above options, service personnel shall be certified appropriately by the manufacturer or by an authorised service provider for each make and type of the equipment to be worked on. An authorised service provider can only certify its own personnel.

6. In cases where a manufacturer is no longer in business or no longer provides technical support the SDM may issue, on case by case basis, authorisation³ for a service provider based on their prior authorisation for the equipment and/or long-term experience and demonstrated expertise as an authorised service provider.

For such cases only, the SDM must be informed in writing and the SDM's consent must be obtained prior the performance of either the Annual thorough examinations and operational tests or the Five-yearly thorough examinations, overhauls, overload operational tests and repairs.

Applications⁴ for a case by case authorisation, accompanied by the supporting documentation, will be examined only if are received from the Company⁵ of the ship.

- 7. Evidence of the above stated authorisations shall be made available on board to the surveyor of the Recognised by the Government of the Republic of Cyprus Organization, carrying out the appropriate Safety Equipment Survey on our behalf and be attached to the service reports.
- 7.1. The Five-yearly thorough examinations, overhauls and operational tests should be done in the presence of a surveyor (MSC.1/Circ.1618).
- 7.2. A service provider certificate issued under MSC.1/Circ.1277 "Interim Recommendation on Conditions for Authorisation of Service Providers for Lifeboats, Launching Appliance and On-Load Release Gear" in accordance with IACS UR Z 17 will remain valid after January 01, 2020 up until its expiry date, but in no case later than 30

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¹ lists of approved authorised service providers are maintained by the ROs

² ROs are hereby delegated the authority to ensure that the service providers appointed to service equipment onboard Cyprus Flagged Ships meets the IMO Resolution MSC.402(96)

³ the validity of the authorisation is for a single inspection on a specific ship

⁴ using the application form prescribed by SDM Circular 15/2015 (available for download at: www.dms.gov.cy)

⁵ as defined in the ISM Code, Part A, Reg. 1.1.2

June 2020. Resolution MSC.402(96) must be applied to certificates issued on or after 1 January 2020.

8. The SDM will not certify any service provider not based and operating in Cyprus. Service providers based and operating in Cyprus, may apply to any of the ROs authorised by the Government of the Republic of Cyprus for obtaining certification in accordance with the IMO Resolution MSC.402(96).

ROs may issue an authorisation document to a service provider based and operating in Cyprus on the SDM's behalf in accordance with the IMO Resolution MSC.402(96) provided that:

- i. the SDM's consent will be obtained prior to any audit or issuance of any authorisation document,
- ii. the latest IACS Procedural Requirements IACS UR Z 17 corresponding to the IMO Resolution MSC.402(96) for Service Suppliers will be followed and fulfilled.

The authorisation issued by the ROs on our behalf shall be limited to each make and type of equipment to be serviced. The definition of "make and type" is understood as the following:

- i. Make of equipment: name of equipment's manufacturer,
- ii. Type of equipment: type/model of equipment or series of equipment if there is no difference in maintenance and examination but not the kind of equipment such as "lifeboats" or "launching appliances" or "on load release gears" etc.
- 9. Finally, the SDM wishes to bring to your attention MSC.1/Circ.1578 "Guidelines on Safety during Abandon Ship Drills Using Lifeboats" (MSC.1/Circ.1578 is attached hereto for your ease of reference).
- 9.1. The Maritime Safety Committee approved the MSC.1/Circ.1578 and its appendix "Guidelines for Simulated Launching of Freefall Lifeboats during Drills" following the amalgamation of annex 1 to the Measures to prevent accidents with lifeboats (MSC.1/Circ.1206/Rev.1) and the Interim Recommendation on conditions for authorisation of service providers for lifeboats, launching appliances and on-load release gear (MSC.1/Circ.1277) in the Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear (resolution MSC.402(96)), which revoked annex 1 to MSC.1/Circ.1206/Rev.1.
 - 10. This circular supersedes Circular No. 02/2007 issued on February 09, 2007.
 - 11. This Circular must be placed on board ships flying the Cyprus Flag.

For further enquiries, please contact the Shipping Deputy Ministry to the President at shipsafety@dms.gov.cy.

Attachments:

- Resolution MSC.404(96) Amendments to The International Convention For The Safety Of Life At Sea 1974, as Amended.
- Resolution MSC.402(96) / Corr.1 Requirement For Maintenance, Thorough Examination, Operational Testing, Overhaul And Repair Of Lifeboats And Rescue Boats, Launching Appliances And Release Gear.
- MSC.1/Circ.1578 Guidelines on Safety During Abandon Ship Drills Using Lifeboats

Costas Iacovou
Permanent Secretary
Shipping Deputy Ministry to the President

Cc: -Maritime Offices of the Shipping Deputy Ministry abroad

- -Cyprus Shipping Chamber
- -Cyprus Union of Shipowners
- -Cyprus Bar Association

RESOLUTION MSC.404(96) (adopted on 19 May 2016)

AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, AS AMENDED

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO article VIII(b) of the International Convention for the Safety of Life at Sea, 1974 ("the Convention"), concerning the amendment procedure applicable to the annex to the Convention, other than to the provisions of chapter I,

HAVING CONSIDERED, at its ninety-sixth session, amendments to the Convention proposed and circulated in accordance with article VIII(b)(i) of the Convention,

- 1 ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the Convention the text of which is set out in the annex to the present resolution;
- DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the said amendments shall be deemed to have been accepted on 1 July 2019, unless, prior to that date, more than one third of the Contracting Governments to the Convention, or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have notified the Secretary-General of their objections to the amendments;
- 3 INVITES Contracting Governments to the Convention to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2020 upon their acceptance in accordance with paragraph 2 above;
- 4 REQUESTS the Secretary-General, for the purposes of article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Contracting Governments to the Convention;
- 5 REQUESTS ALSO the Secretary-General to transmit copies of this resolution and its annex to Members of the Organization, which are not Contracting Governments to the Convention.

PART G SPECIAL REQUIREMENTS

Regulation 18 – Helicopter facilities

- 4 A new paragraph 2.3 is added after the existing paragraph 2.2, as follows:
 - "2.3 Notwithstanding the requirements of paragraph 2.2 above, ships constructed on or after 1 January 2020, having a helicopter landing area, shall be provided with foam firefighting appliances which comply with the relevant provisions of chapter 17 of the Fire Safety Systems Code."

and the subsequent paragraphs are renumbered accordingly.

- 5 The renumbered paragraph 2.4 is replaced with the following text:
 - "2.4 Notwithstanding the requirements of paragraph 2.2 or 2.3 above, ro-ro passenger ships without helidecks shall comply with regulation III/28."
- 6 A new paragraph 5.1.6 is added after the existing paragraph 5.1.5 as follows:
 - ".6 in lieu of the requirements of paragraphs 5.1.3 through 5.1.5, on ships constructed on or after 1 January 2020 having a helideck, foam firefighting appliances which comply with the provisions of the Fire Safety Systems Code."

and the remaining paragraphs are renumbered accordingly.

CHAPTER III LIFE-SAVING APPLIANCES AND ARRANGEMENTS

PART A GENERAL

Regulation 3 – Definitions

- 7 The following new paragraph 25 is added after the existing paragraph 24:
 - "25 Requirements for maintenance, thorough examination, operational testing, overhaul and repair means the Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear, adopted by the Maritime Safety Committee of the Organization by resolution MSC.402(96), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article VIII of the present Convention concerning the amendment procedures applicable to the annex other than chapter I."

PART B REQUIREMENTS FOR SHIPS AND LIFE-SAVING APPLIANCES

Regulation 20 – Operational readiness, maintenance and inspections

- 8 The existing paragraph 3.1 is replaced with the following text:
 - "3.1 Maintenance, testing and inspections of life-saving appliances shall be carried out in a manner having due regard to ensuring reliability of such appliances."
- 9 The existing paragraph 11 is replaced with the following text:
 - "11 Maintenance, thorough examination, operational testing, overhaul and repair of lifeboats, rescue boats and fast rescue boats, launching appliances and release gear
 - 11.1 Launching appliances shall be:
 - .1 subject to a thorough examination at the annual surveys required by regulations I/7 or I/8, as applicable; and
 - .2 upon completion of the examination referred to in paragraph 11.1.1, subjected to a dynamic test of the winch brake at maximum lowering speed. The load to be applied shall be the mass of the survival craft or rescue boat without persons on board, except that, at intervals of at least once every five years, the test shall be carried out with a proof load equal to 1.1 times the weight of the survival craft or rescue boat and its full complement of persons and equipment.
 - 11.2 Lifeboat and rescue boat release gear, including fast rescue boat release gear and free-fall lifeboat release systems, shall be:
 - .1 subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8;
 - .2 in case of on-load release gear, operationally tested under a load of 1.1 times the total mass of the boat when loaded with its full complement of persons and equipment whenever the release gear is overhauled. Such overhauling and operational test shall be carried out at least once every five years;* and
 - .3 notwithstanding paragraph 11.2.2, the operational testing of free-fall lifeboat release systems shall be performed either by free fall launch with only the operating crew on board or by a test without launching the lifeboat carried out based on Requirements for maintenance, thorough examination, operational testing, overhaul and repair.

Refer to *Recommendation on testing of life-saving appliances* (resolution A.689(17)), as amended. For life-saving appliances installed on board on or after 1 July 1999, refer to *Revised Recommendations on testing of life-saving appliances* (resolution MSC.81(70)), as amended.

- 11.3 Davit-launched liferaft automatic release hooks shall be:
 - subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8; and
 - .2 operationally tested under a load of 1.1 times the total mass of the liferaft when loaded with its full complement of persons and equipment whenever the automatic release hook is overhauled. Such overhauling and operational test shall be carried out at least once every five years.*
- 11.4 Lifeboats and rescue boats, including fast rescue boats, shall be subject to a thorough examination and operational test during the annual surveys required by regulations I/7 and I/8.
- 11.5 The thorough examination, operational testing and overhaul required by paragraphs 11.1 to 11.4 and the maintenance and repair of equipment specified in paragraphs 11.1 to 11.4 shall be carried out in accordance with the Requirements for maintenance, thorough examination, operational testing, overhaul and repair, and the instructions for onboard maintenance as required by regulation 36.

Refer to Recommendation on testing of life-saving appliances (resolution A.689(17)), as amended. For life-saving appliances installed on board on or after 1 July 1999, refer to Revised Recommendations on testing of life-saving appliances (resolution MSC.81(70)), as amended."

RESOLUTION MSC.402(96) (adopted on 19 May 2016)

REQUIREMENTS FOR MAINTENANCE, THOROUGH EXAMINATION, OPERATIONAL TESTING, OVERHAUL AND REPAIR OF LIFEBOATS AND RESCUE BOATS, LAUNCHING APPLIANCES AND RELEASE GEAR

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO the *Measures to prevent accidents with lifeboats* (MSC.1/Circ.1206/Rev.1) and the *Interim recommendation on conditions for authorization of service providers for lifeboats, launching appliances and on-load release gear* (MSC.1/Circ.1277) approved by it,

RECOGNIZING the need to establish a uniform, safe and documented standard for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats (including free-fall lifeboats) and rescue boats (including fast rescue boats), launching appliances and release gear,

NOTING that, by resolution MSC.404(96), it adopted amendments to regulations III/3 and III/20 of the International Convention for the Safety of Life at Sea, 1974 ("the Convention"), concerning maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear,

NOTING ALSO that the aforementioned regulation III/20 of the Convention provides that the maintenance, thorough examination, operational testing, overhaul and repair shall be carried out in accordance with the Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear ("the Requirements"),

HAVING CONSIDERED, at its ninety-sixth session, the recommendation made by the Sub-Committee on Ship Systems and Equipment, at its third session,

- 1 ADOPTS the Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear, the text of which is set out in the annex to the present resolution;
- 2 INVITES Contracting Governments to the Convention to note that the Requirements will take effect on 1 January 2020 upon entry into force of the associated amendments to regulations III/3 and III/20 of the Convention;
- 3 ALSO INVITES Contracting Governments to the Convention to take measures they consider appropriate to ensure that national manufacturers of equipment certified under chapter III of the Convention for installation and use on board ships undertake to ensure that equipment, instructions, specialized tools, spare parts, training and accessories, as required, are available to independent service providers in a timely and cost-effective manner;
- 4 REQUESTS the Secretary-General to transmit certified copies of this resolution and the text of the Requirements contained in the annex to all Contracting Governments to the Convention:

5 REQUESTS ALSO the Secretary-General to transmit copies of this resolution and the annex to all Members of the Organization which are not Contracting Governments to the Convention.

ANNEX

REQUIREMENTS FOR MAINTENANCE, THOROUGH EXAMINATION, OPERATIONAL TESTING, OVERHAUL AND REPAIR OF LIFEBOATS AND RESCUE BOATS, LAUNCHING APPLIANCES AND RELEASE GEAR

1 GENERAL

- 1.1 The objective of these Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear (the Requirements) is to establish a uniform, safe and documented standard for maintenance, thorough examination, operational testing, overhaul and repair of the equipment specified in paragraph 2.1.
- 1.2 The detailed procedures covered by these Requirements are provided in section 6.
- 1.3 These Requirements relate to the following regulations:
 - .1 SOLAS regulation III/20 Operational readiness, maintenance and inspections; and
 - .2 SOLAS regulation III/36 Instructions for on-board maintenance.
- 1.4 The Company shall ensure that maintenance, thorough examination, operational testing, overhaul and repair on board its ships is conducted in accordance with these Requirements and SOLAS regulation III/20. The Company shall establish and implement health, safety and environment (HSE) procedures covering all activities set out in these Requirements.
- 1.5 The personnel carrying out maintenance, thorough examination, operational testing overhaul and repair as described in paragraphs 4.2 and 4.3 shall be certified by an authorized service provider in accordance with the requirements specified in section 8. When performing such activities on board ships they shall comply with instructions and procedures established by the Company.

2 APPLICATION

- 2.1 These Requirements shall apply to the maintenance, thorough examination, operational testing, overhaul and repair of:
 - .1 lifeboats (including free-fall lifeboats), rescue boats and fast rescue boats; and
 - .2 launching appliances and on-load and off-load release gear for lifeboats (including primary and secondary means of launching appliances for free-fall lifeboats), rescue boats, fast rescue boats and davit-launched liferafts.
- 2.2 For the purpose of these Requirements:
 - .1 Authorized service provider means an entity authorized by the Administration in accordance with section 3 and section 7.
 - .2 *Equipment* means the aforementioned equipment to which the Requirements apply.

- .3 *Manufacturer* means the original equipment manufacturer or any entity which has taken legal and legitimate responsibilities for equipment when the original equipment manufacturer no longer exists or supports the equipment.
- .4 Off-load release mechanism means a release mechanism which releases the survival craft/rescue boat/fast rescue boat when it is waterborne or when there is no load on the hooks.
- .5 On-load release mechanism means a release mechanism which releases the survival craft/rescue boat/fast rescue boat with load on the hooks.
- .6 Repair means any activities requiring disassembly of equipment, or any other activities outside the scope of the instructions for on-board maintenance and for emergency repair of life-saving appliances prepared in accordance with SOLAS regulations III/36.2 and III/35.3.18, respectively.
- .7 Overhaul means a periodical activity defined by the manufacturer that proves continued fitness for purpose for a defined period subject to correct maintenance.

3 AUTHORIZATION

- 3.1 Administrations shall ensure that the thorough examination, operational testing, repair and overhaul of equipment (see paragraphs 4.2 and 4.3) shall be carried out in accordance with SOLAS regulation III/20 by service providers authorized in accordance with section 7.
- 3.2 The requirements in section 7 shall equally apply to manufacturers when they are acting as authorized service providers.

4 QUALIFICATION LEVELS AND CERTIFICATION

- 4.1 Weekly and monthly inspections and routine maintenance as specified in the equipment maintenance manual(s), shall be conducted by authorized service providers, or by shipboard personnel under the direction of a senior ship's officer in accordance with the maintenance manual(s).
- 4.2 Annual thorough examinations and operational tests, as described in section 6.2, shall be conducted by certified personnel of either the manufacturer or an authorized service provider in accordance with section 7 and section 8. The service provider may be the ship operator provided that it is authorized in accordance with section 3 and section 7.
- 4.3 Five-year thorough examination, any overhaul, overload operational tests, as described in section 6.3, and repair shall be conducted by certified personnel of either the manufacturer or an authorized service provider in accordance with section 7 and section 8.

5 REPORTS AND RECORDS

- 5.1 All reports and checklists shall be completed and signed by the person who carries out the inspection and maintenance work and countersigned by the Company's representative or the ship's master.
- 5.2 Records of maintenance, thorough examination, operational testing, overhaul and repair shall be updated and filed on board the ship for the service life of the equipment.

5.3 When thorough examination, operational testing, overhaul and repair are completed, a statement confirming that the lifeboat arrangements remain fit for purpose shall be promptly issued by the manufacturer or authorized service provider that conducted the work. A copy of valid documents of certification and authorization as appropriate shall be included with the statement.

6 SPECIFIC PROCEDURES FOR INSPECTION, MAINTENANCE, THOROUGH EXAMINATION, OPERATIONAL TESTING, OVERHAUL AND REPAIR

6.1 Maintenance manuals

- 6.1.1 Any inspection, maintenance, thorough examination, operational testing, overhaul and repair shall be carried out according to the maintenance manuals and associated technical documentation developed by the manufacturer.
- 6.1.2 A full set of maintenance manuals and associated technical documentation as specified in paragraph 6.1.1 shall be available on board.
- 6.1.3 The maintenance manuals and associated technical documentation as specified in paragraph 6.1.1 shall include the items listed in sections 6.2 and 6.3 as a minimum and shall be kept up to date by the Company taking into account relevant information provided by the manufacturer.

6.2 Annual thorough examination and operational test

- 6.2.1 All items listed in checklists for the weekly/monthly inspections required by SOLAS regulations III/20.6 and III/20.7 also form the first part of the annual thorough examination.
- 6.2.2 Records of inspections and routine on-board maintenance carried out by the ship's crew and the applicable certificates for the equipment shall be reviewed.
- 6.2.3 For lifeboats (including free-fall lifeboats), rescue boats and fast rescue boats, the following items shall be thoroughly examined and checked for satisfactory condition and operation:
 - .1 condition of the boat structure including fixed and loose equipment (including a visual examination of the external boundaries of the void spaces, as far as practicable);
 - .2 engine and propulsion system;
 - .3 sprinkler system, where fitted;
 - .4 air supply system, where fitted;
 - .5 manoeuvring system;
 - .6 power supply system;
 - .7 bailing system;
 - .8 fender/skate arrangements; and
 - .9 rescue boat righting system, where fitted.

- 6.2.4 For release gear of lifeboats (including free-fall lifeboats), rescue boats, fast rescue boats and liferafts, the following shall be thoroughly examined for satisfactory condition and operation after the annual operational test of the winch brake with the empty boat or equivalent load, as required by paragraph 6.2.10:
 - .1 operation of devices for activation of release gear;
 - .2 excessive free play (tolerances);
 - .3 hydrostatic interlock system, where fitted;
 - .4 cables for control and release; and
 - .5 hook fastening.
 - Notes: 1 The setting and maintenance of release gear are critical operations with regard to maintaining the safe operation of lifeboats (including free-fall lifeboats), rescue boats, fast rescue boats and davit launched liferafts. Utmost care shall be taken when carrying out all inspection and maintenance operations on the equipment.
 - 2 No maintenance or adjustment of the release gear shall be undertaken while the hooks are under load.
- 6.2.5 The operational test of davit-launched lifeboats' and rescue boats' on-load release function shall be carried out as follows:
 - .1 position the boat partially in the water such that the mass of the boat is substantially supported by the falls and the hydrostatic interlock system, where fitted, is not triggered;
 - .2 operate the on-load release gear;
 - .3 reset the on-load release gear; and
 - .4 examine the release gear and hook fastening to ensure that the hook is completely reset and no damage has occurred.
- 6.2.6 The operational test of davit-launched lifeboats' and rescue boats' off-load release function shall be carried out as follows:
 - .1 position the boat so that it is fully waterborne;
 - .2 operate the off-load release gear;
 - .3 reset the off-load release gear; and
 - .4 recover the boat to the stowed position and prepare for operational readiness.

During the test, prior to hoisting, it shall be checked that the release gear is completely and properly reset. The final turning-in of the boat shall be done without any persons on board.

- 6.2.7 The operational test of the free-fall lifeboat release function shall be carried out as follows:
 - engage the arrangements for the test without launching the lifeboat, required by paragraph 4.7.6.4 of the LSA Code, as specified in the manufacturer's operating instructions;
 - .2 if required to be on board, ensure that the operator is properly seated and secured in the seat location from which the release mechanism is to be operated;
 - .3 operate the release mechanism to release the lifeboat;
 - .4 reset the lifeboat in the stowed configuration;
 - .5 repeat the procedures referred to in .2 to .4 above, using the back-up release mechanism, if applicable;
 - remove the arrangements for the test without launching the lifeboat, required by paragraph 4.7.6.4 of the LSA Code; and
 - .7 verify that the lifeboat is in the ready to launch stowed configuration.
- 6.2.8 The operational test of the davit-launched liferaft automatic release function shall be carried out as follows:
 - .1 manually release the hook with a load of 150 kg on the hook;
 - .2 automatically release the hook with a dummy weight of 200 kg on the hook when it is lowered to the ground; and
 - .3 examine the release hook and hook fastening to ensure that the hook is completely reset and no damage has occurred.

If a raft is used for the test instead of a dummy weight, the automatic release function shall release the raft when waterborne.

- 6.2.9 For launching appliances for lifeboats (including free-fall lifeboats), rescue boats, fast rescue boats and liferafts, the following items shall be examined for satisfactory condition and operation:
 - davit or other launching structures, in particular with regard to corrosion, misalignments, deformation and excessive free play;
 - .2 wires and sheaves, possible damage such as kinks and corrosion;
 - .3 lubrication of wires, sheaves and moving parts; and
 - .4 if applicable:
 - .1 functioning of limit switches;
 - .2 stored power systems;
 - .3 hydraulic systems; and

- .5 for winches:
 - .1 inspecting the braking system in accordance with winch manual;
 - .2 replacing brake pads, when necessary;
 - .3 winch foundation; and
 - .4 if applicable:
 - .1 remote control system; and
 - .2 power supply system.
- 6.2.10 For winches of the launching appliances for lifeboats (including free-fall lifeboats), rescue boats, fast rescue boats and liferafts, annual operational testing shall be done by lowering the empty craft or boat or equivalent load. When the craft has reached its maximum lowering speed and before the craft enters the water, the brake shall be abruptly applied. Following these tests, the stressed structural parts shall be reinspected where the structure permits the reinspection.

6.3 Five-year thorough examination, overhaul and overload operational tests

- 6.3.1 The five-year operational test of the winches of the launching appliances shall be carried out with a proof load equal to 1.1 times the weight of the survival craft or rescue boat and its full complement of persons and equipment. When the proof load has reached its maximum lowering speed, the brake shall be abruptly applied.
- 6.3.2 Following these tests, the stressed structural parts shall be reinspected where the structure permits the reinspection.
- 6.3.3 The operational tests and overhaul at five-year intervals of release gear for lifeboats (including free-fall lifeboats), rescue boats, fast rescue boats and liferafts shall include:
 - .1 dismantling of hook release units;
 - .2 examinations with regard to tolerances and design requirements;
 - .3 adjustment of release gear system after assembly;
 - .4 operational tests as per paragraphs 6.2.5, 6.2.6, 6.2.7 or 6.2.8 above, as applicable, but with a load equal to 1.1 times the weight of the survival craft or rescue boat and its full complement of persons and equipment; and
 - .5 examinations of vital parts with regard to defects and cracks.
- 6.3.4 Any other overhaul if required shall be carried out in accordance with paragraph 6.3.3.

7 REQUIREMENTS FOR AUTHORIZATION OF SERVICE PROVIDERS

- 7.1 Authorization as required by paragraph 3.1 shall include, as a minimum, demonstration of:
 - .1 employment and documentation of personnel certified in accordance with a recognized national, international or industry standard as applicable, or a manufacturer's established certification programme. In either case, the certification programme shall comply with section 8 for each make and type of equipment for which service is to be provided;
 - .2 availability of sufficient tools, and in particular any specialized tools specified in the manufacturer's instructions, including portable tools as needed for work to be carried out on board ship;
 - .3 access to appropriate parts and accessories as specified for maintenance and repair;
 - .4 availability of the manufacturer's instructions for repair work involving disassembly or adjustment of on-load release mechanisms and davit winches; and
 - .5 a documented and certified quality system, which covers at least the following:
 - .1 code of conduct for personnel involved in the relevant activity;
 - .2 maintenance and calibration of measuring tools and gauges;
 - .3 training programmes for personnel;
 - .4 supervision and verification to ensure compliance with operational procedures;
 - .5 recording and reporting of information;
 - .6 quality management of subsidiaries and agents;
 - .7 job preparation; and
 - .8 periodic review of work process procedures, complaints, corrective actions and issuance, maintenance and control of documents.

Note: A documented quality system complying with the most current version of the ISO 9000 series and including the above items would be considered acceptable.

- 7.2 The Administration shall ensure that information regarding authorized service providers is made available.
- 7.3 In cases where a manufacturer is no longer in business or no longer provides technical support, the Administration may authorize service providers for the equipment on the basis of prior authorization for the equipment and/or long-term experience and demonstrated expertise as an authorized service provider.

- 7.4 Issuance and maintenance of authorization document:
 - upon successful initial audit of a service provider, an authorization document shall be issued by the Administration defining the scope of services provided (e.g. makes and types of equipment). The expiry date shall be clearly written on the document;
 - .2 the Administration shall ensure that work continues, e.g. by periodic audit, to be carried out in accordance with these Requirements, and shall withdraw the authorization of service providers who are not in compliance; and
 - .3 the Administration may accept or recognize service providers authorized by other Administrations or by their Recognized Organizations.

8 REQUIREMENTS FOR CERTIFICATION OF PERSONNEL

8.1 Personnel for the work specified in paragraphs 4.2 and 4.3 shall be certified by the manufacturer or authorized service provider for each make and type of the equipment to be worked on in accordance with the provisions in this section.

8.2 Education and training

- 8.2.1 Initial certification shall be issued only to personnel having completed education, training and competence assessment. Education shall address, as a minimum:
 - .1 relevant rules and regulations, including international conventions;
 - .2 design and construction of lifeboats (including free-fall lifeboats), rescue boats and fast rescue boats, including on-load release gear and launching appliances;
 - .3 causes of lifeboat and rescue boat accidents;
 - .4 education and practical training in the procedures specified in section 6 for which certification is sought;
 - .5 detailed procedures for thorough examination, operational testing, repair and overhaul of lifeboat (including free-fall lifeboats), rescue boats and fast rescue boats, launching appliances and on-load release gear, as applicable;
 - .6 procedures for issuing a report of service and statement of fitness for purpose based on paragraph 5.3; and
 - .7 work, health and safety issues while conducting activities on board.
- 8.2.2 Training shall include practical technical training on thorough examination, operational testing, maintenance, repair and overhaul techniques using the equipment for which the personnel are to be certified. The technical training shall include disassembly, reassembly, correct operation and adjustment of the equipment. Classroom training shall be supplemented by field experience in the operations for which certification is sought, under the supervision of a certified person.
- 8.2.3 Prior to issuance of certification, a competency assessment shall be satisfactorily completed, using the equipment for which the personnel are to be certified.

8.3 Validity of certificates and renewal

- 8.3.1 Upon completion of training and competency assessment, a certificate shall be issued defining the level of qualification and the scope of the certification (i.e. makes and types of equipment and specifically state which activities in paragraphs 4.2 and 4.3 are covered by the certification). The expiry date shall clearly be written on the certificate and shall be three years from the date of issue. The validity of any certificate shall be suspended in the event of any shortfall in performance and only revalidated after a further competency assessment.
- 8.3.2 A competency assessment shall be conducted to renew the certification. In cases where refresher training is found necessary a further assessment shall be carried out after completion.



MARITIME SAFETY COMMITTEE 96th session Agenda item 25 MSC 96/25/Add.1/Corr.1 31 March 2017 Original: ENGLISH

REPORT OF THE MARITIME SAFETY COMMITTEE ON ITS NINETY-SIXTH SESSION

Corrigendum

ANNEX 1

RESOLUTION MSC.402(96) (adopted on 19 May 2016)

REQUIREMENTS FOR MAINTENANCE, THOROUGH EXAMINATION, OPERATIONAL TESTING, OVERHAUL AND REPAIR OF LIFEBOATS AND RESCUE BOATS, LAUNCHING APPLIANCES AND RELEASE GEAR

ANNEX

REQUIREMENTS FOR MAINTENANCE, THOROUGH EXAMINATION, OPERATIONAL TESTING, OVERHAUL AND REPAIR OF LIFEBOATS AND RESCUE BOATS, LAUNCHING APPLIANCES AND RELEASE GEAR

- 1 The footnote in paragraphs 6.2.10 and 6.3.2 is deleted.
- 2 The following footnote is inserted at the end of paragraph 6.3.1 and after the word "equipment" in paragraph 6.3.3.4:
 - "4 If a craft or boat is used for this test, precautions should be taken to ensure that the stability of the craft or boat is not adversely affected by free surface effects or the raising of the centre of gravity when loading the craft or boat."



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MSC.1/Circ.1578 19 June 2017

GUIDELINES ON SAFETY DURING ABANDON SHIP DRILLS USING LIFEBOATS

- The Maritime Safety Committee, at its eighty-first session (10 to 19 May 2006), recalled that, at its seventy-ninth session (1 to 10 December 2004), it had endorsed the intention of the Sub-Committee on Ship Design and Equipment, in cooperation with the Sub-Committee on Standards of Training and Watchkeeping, to develop further guidance as envisioned in the *Accidents with lifeboats* (MSC/Circ.1049) and, accordingly, approved the *Guidance on safety during abandon ship drills using lifeboats* (MSC/Circ.1136).
- The Committee also recalled that the guidance developed for lifeboats has relevance, in general, for emergency drills related to other life-saving systems and should be taken into account when such drills are conducted. In connection with MSC/Circ.1136, and recognizing the need to provide a basic outline of essential steps to safely carry out simulated launching of free-fall lifeboats in accordance with SOLAS regulation III/19.3.4.4, and having considered the proposals made by the Sub-Committee on Ship Design and Equipment, at its forty-seventh session, the Committee also approved the *Guidelines for simulated launching of free-fall lifeboats* (MSC/Circ.1137).
- Having considered the need to update the above Guidance and Guidelines, and having considered the proposals made by the Sub-Committee on Fire Protection, at its fiftieth session, to consolidate the numerous circulars on the subject of measures to prevent accidents with lifeboats in order to better serve the mariner, the Committee, at its eighty-first session, approved the *Guidelines on safety during abandon ship drills using lifeboats*, as set out in annex 2 to the *Measures to prevent accidents with lifeboats* (MSC.1/Circ.1206/Rev.1).
- The Committee, at its ninety-eighth session (7 to 16 June 2017), approved the Guidelines on safety during abandon ship drills using lifeboats, following the amalgamation of annex 1 to the Measures to prevent accidents with lifeboats (MSC.1/Circ.1206/Rev.1) and the Interim Recommendation on conditions for authorization of service providers for lifeboats, launching appliances and on-load release gear (MSC.1/Circ.1277) in the Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear (resolution MSC.402(96)), which revoked annex 1 to MSC.1/Circ.1206/Rev.1.
- 5 Member States are invited to give effect to the annexed Guidelines and to bring them to the attention of shipowners, ship operators, ship-vetting organizations, ship personnel, surveyors, manufacturers and all other parties concerned.
- This circular supersedes annex 2 to MSC.1/Circ.1206/Rev.1.



ANNEX

GUIDELINES ON SAFETY DURING ABANDON SHIP DRILLS USING LIFEBOATS

1 GENERAL

1.1 Introduction

- 1.1.1 It is essential that seafarers are familiar with the life-saving appliances on board their ships and that they have confidence that the appliances provided for their safety will work and will be effective in an emergency. Frequent periodic shipboard drills are necessary to achieve this
- 1.1.2 Crew training is an important component of drills. As a supplement to initial shore-based training, onboard drills and training will familiarize crew members with the ships' appliances and the associated procedures. The objective of drill and training is to develop appropriate crew competencies, enabling effective and safe utilization of the equipment required by the 1974 SOLAS Convention, as amended (SOLAS). The time limits set out in SOLAS for ship abandonment should be considered as a secondary objective when conducting drills.

1.2 Drill frequency

Experience has shown that holding frequent drills makes the crew more familiar with the life-saving appliances on board their ships and increases their confidence that the appliances will work and will be effective in an emergency. Drills give the opportunity to gain experience in the use of the safety equipment in cooperation. The ability to cope with an emergency and handle the situation is improved by frequent drills. However, frequent crew changes sometimes make it difficult to ensure that all on board have the opportunity to participate in drills when the minimum required drills are conducted only. Therefore, consideration needs to be given to scheduling drills as necessary to ensure all on board have an early opportunity to become familiar with the ship appliances and systems.

1.3 Drills must be safe

- 1.3.1 Abandon ship drills should be planned, organized and performed in accordance with relevant shipboard requirements of occupational safety and health so that the recognized risks are minimized.
- 1.3.2 Drills provide an opportunity to verify that the life-saving appliances are working and that all associated equipment is in place, in good working order and ready for use.
- 1.3.3 Before conducting drills, it should be checked that the lifeboat and its equipment have been maintained in accordance with the ship's maintenance manuals and any associated technical documentation, as well as noting all the precautionary measures necessary. Abnormal conditions of wear and tear or corrosion should be reported to the responsible officer immediately.

1.4 Emphasis on learning

Drills should be conducted with an emphasis on learning and be viewed as a learning experience, not just as a task to meet a regulatory requirement to conduct drills. Whether they are emergency drills required by SOLAS or additional special drills conducted to enhance

the competence of the crew members, they should be carried out at safe speed. During drills, care should be taken to ensure that persons on board familiarize themselves with their duties and with the equipment. If necessary, pauses should be made during the drills to explain especially difficult elements. The experience of the crew is an important factor in determining how fast a drill or certain drill elements should be carried out.

1.5 Planning and organizing drills

- 1.5.1 SOLAS requires that drills shall, as far as practicable, be conducted as if there was an actual emergency. This means that the entire drill should, as far as possible, be carried out, while ensuring that the drill can be performed in such a way that it is safe in every respect. Consequently, elements of the drill that may involve unnecessary risks need special attention or may be excluded from the drill.
- 1.5.2 In preparing for a drill, those responsible should review the manufacturer's instruction manual to ensure that a planned drill is conducted properly. Those responsible for the drill should ensure that the crew is familiar with the guidance provided in the life-saving appliances instruction manuals.
- 1.5.3 Lessons learned in the course of a drill should be documented and made a part of the follow-up shipboard training discussions and the planning of the next drill session.
- 1.5.4 The lowering of a boat with its full complement of persons is an example of an element of a drill that may, depending on the circumstances, involve an unnecessary risk. Such drills should only be carried out if special precautions are observed.

2 ABANDON SHIP DRILLS

2.1 Introduction

It is important that the crew who operate safety equipment on board are familiar with the functioning and operation of such equipment. SOLAS requires that sufficiently detailed manufacturers' training manuals and instructions be carried on board, which should be easily understood by the crew. Such manufacturers' manuals and instructions should be accessible for everyone on board and observed and followed closely when preparing and conducting drills.

2.2 Guidance to the shipowner

- 2.2.1 The shipowner should ensure that new safety equipment on board the company's ships has been approved and installed in accordance with the provisions of SOLAS and the International Life-Saving Appliances (LSA) Code.
- 2.2.2 Procedures for holding safe drills should be included in the Safety Management System (SMS) of the shipping companies. Detailed procedures for elements of drills that involve a special risk should be evident from workplace assessments adjusted to the relevant life-saving appliance.
- 2.2.3 Personnel carrying out maintenance and repair work on lifeboats should be qualified accordingly.²

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¹ Refer to SOLAS regulation III/19.3.1.

Refer to the Requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear, adopted by resolution MSC.402(96).

2.3 Lifeboats lowered by means of falls

- 2.3.1 During drills, everyone participating should be alert for potentially dangerous conditions or situations and should bring them to the attention of the responsible person for appropriate action. Feedback and recommendations to the shipowner, the Administration and the system manufacturer are important elements of the marine safety system.
- 2.3.2 When drills are to be performed with persons on board the lifeboat, it is recommended that the boat be lowered and recovered without any persons on board first to ascertain that the arrangement functions correctly. In this case, the boat should then be lowered into the water with only the number of persons on board necessary to operate the boat.³
- 2.3.3 To prevent lashings or gripes from getting entangled, proper release should be checked before swinging out the davit.

2.4 Free-fall lifeboats

- 2.4.1 The monthly drills with free-fall lifeboats should be carried out according to the manufacturer's instructions, so that the persons who are to enter the boat in an emergency are trained to embark the boat, take their seats in a correct way and use the safety belts; as well as being instructed on how to act during launching into the sea.
- 2.4.2 When the lifeboat is free-fall launched as part of a drill, this should be carried out with the minimum personnel required to manoeuvre the boat in the water and to recover it. The recovery operation should be carried out with special attention, bearing in mind the high-risk level of this operation. Where permitted by SOLAS⁴, simulated launching should be carried out in accordance with the manufacturer's instructions, taking due note of the Guidelines for simulated launching of free-fall lifeboats, as set out in the appendix.

Refer to the Clarification of SOLAS regulation III/19 (MSC.1/Circ.1326 and Corr.1).

⁴ Refer to SOLAS regulation III/20.11.2.

APPENDIX

GUIDELINES FOR SIMULATED LAUNCHING OF FREE-FALL LIFEBOATS DURING DRILLS

1 Definition

Simulated launching carried out during drills, in accordance with SOLAS regulation III/19, is a means of training the crew in the free-fall release procedure of free-fall lifeboats without the physical activation of the release mechanism.

2 Purpose and scope

The purpose of these Guidelines is to provide a basic outline of essential steps to safely carry out simulated launching. These Guidelines are general; the lifeboat manufacturer's instruction manual should always be consulted before conducting simulated launching. Simulated launching should only be carried out with lifeboats and launching appliances designed to accommodate it, and for which the manufacturer has provided instructions. All persons involved should be familiar with the manufacturers' instructions and the activation of the release mechanism. Manuals, posters and signs may be used to assist familiarization and the conduct of drills. Simulated launching should be carried out under the supervision of a responsible person who should be an officer experienced in such procedures and be conducted without the physical activation of the free-fall release system. Testing of release systems should be separate to and not carried out during simulated launching drills.

3 Conduct of drills – typical simulated launching sequence (SOLAS regulation III/19)

- 3.1 Check equipment and documentation to ensure that all components of the lifeboat and launching appliance are in good operational condition.
- 3.2 Ensure that all personnel involved in the drill are familiar with the operating manuals, posters and signs.
- 3.3 Ensure that the restraining device(s) provided by the manufacturer for simulated launching are installed and secure and that the free-fall release mechanism is fully and correctly engaged.
- 3.4 Establish and maintain good communication between the assigned operating crew and the responsible person.
- 3.5 Disengage lashings, gripes, etc. installed to secure the lifeboat for sea or for maintenance, except those required for simulated free-fall.
- 3.6 Participating crew board the lifeboat and fasten their seatbelts under the supervision of the responsible person.
- 3.7 All crew disembark the lifeboat.
- 3.8 Return the lifeboat to the condition it was in prior to step provided in paragraph 3.4. Ensure that the lifeboat is returned to its normal stowed condition. Remove any restraining and/or recovery devices used only for the simulated launch procedure.
