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**GUIDELINES FOR PERIODIC SERVICING AND MAINTENANCE OF LIFEBOATS,
LAUNCHING APPLIANCES AND ON-LOAD RELEASE GEAR**

- 1 The Maritime Safety Committee, at its sixty-second session (24 to 28 May 1993), approved Guidelines on inspection and maintenance of lifeboat on-load release gear, issued as MSC/Circ.614.
- 2 Recognizing the experience gained since the approval of the Guidelines by MSC 62 and that the implementation of expanded and improved guidelines could contribute towards a reduction of the incidence of accidents with lifeboats, the Maritime Safety Committee, at its seventy-seventh session (28 May to 6 June 2003), approved the Guidelines for periodic servicing and maintenance of lifeboats, launching appliances and on-load release gear, set out in the annex, which could also be used for the periodic servicing and maintenance of liferafts, rescue boats and fast rescue boats and their launching appliances and on-load release gear.
- 3 Member Governments are invited to give effect to the annexed Guidelines as soon as possible and to bring them to the attention of shipowners, ship operators, ship personnel, surveyors, manufacturers and all others concerned with the inspection and maintenance of lifeboats, liferafts, rescue boats and fast rescue boats and their launching appliances and on-load release gear.
- 4 This circular supersedes MSC/Circ.614.

ANNEX

GUIDELINES FOR PERIODIC SERVICING AND MAINTENANCE OF LIFEBOATS, LAUNCHING APPLIANCES AND ON-LOAD RELEASE GEAR

General

- 1 The objective of these Guidelines is to establish a uniform, safe and documented performance of periodic servicing and maintenance of lifeboats, launching appliances and on-load release gear.
- 2 These Guidelines relate to the application of the ISM Code to periodic servicing and maintenance of lifeboat arrangements and should therefore be reflected in procedures developed for a ship under that Code.
- 3 These Guidelines can also be used for the periodic servicing and maintenance of liferafts, rescue boats and fast rescue boats and their launching appliances and release gear.
- 4 Detailed guidance regarding some procedures covered by these Guidelines is provided in the appendix.

SOLAS regulations

- 5 The Guidelines relate to the requirements contained in:
 - .1 SOLAS regulation III/20 - Operational readiness, maintenance and inspections; and
 - .2 SOLAS regulation III/36 - Instructions for on-board maintenance.

Responsibility

- 6 The company* is responsible for servicing and maintenance onboard its ships in accordance with SOLAS regulation III/20 and for the establishment and implementation of health, safety and environment (HSE) procedures covering all activities during servicing and maintenance.
- 7 The personnel carrying out servicing and maintenance are responsible for the performance of the work as authorized in accordance with the system specified in paragraph 9.
- 8 The above personnel is also responsible for complying with HSE instructions and procedures.
- 9 Where satisfied with an organization's ability to carry out these functions, the Administration may authorize such organization to perform the functions of the manufacturer as assigned under these Guidelines, if the manufacturer is unable to provide the service.

Authorization

- 10 Where these Guidelines require certification of servicing personnel, such certification should be issued by the manufacturer in accordance with an established system for training and authorization.

* For the purpose of these Guidelines, "company" is as defined in SOLAS regulation IX/1.2.

Qualification levels

11 Weekly and monthly inspections, and routine maintenance as defined by the manufacturer, should be conducted under the direct supervision of a senior ship's officer in accordance with the instructions provided by the manufacturer.

12 All other inspections, servicing and repair should be conducted by the manufacturer's representative or a person appropriately trained and certified by the manufacturer for the work to be done.

Reports and records

13 All reports and checklists should be correctly filled out and signed by the person who carries out the inspection and maintenance work and should also be signed by the company's representative.

14 Records of inspections, servicing, repairs and maintenance should be updated and filed onboard the ship.

15 When repairs, thorough servicing and annual servicing are completed, a statement confirming that the lifeboat arrangements remain fit for purpose should be issued by the manufacturer's representative.

APPENDIX

SPECIFIC PROCEDURES FOR MAINTENANCE AND SERVICING

1 GENERAL

1.1 Any inspection, servicing and repair should be carried out according to the system for inspection and services developed by the manufacturer.

1.2 A full set of maintenance manuals and associated documentation issued by the manufacturer should be available on board for use in all operations involved in the inspection, maintenance, adjustment and re-setting of the lifeboat and associated equipment, such as davits and release gear.

1.3 The manufacturer's system for inspection and services should include the following items as a minimum.

2 THOROUGH EXAMINATION

2.1 As items listed in checklists for the weekly/monthly inspections also form the first part of the thorough examination, the inspection of these items should be performed by the ships' crew in the presence of the manufacturer's representative or a person appropriately trained and certified by the manufacturer for the work to be done.

2.2 Inspection and maintenance records of inspections and routine maintenance carried out by the ship's crew and the applicable certificates for the launching appliances and equipment should be available.

2.3 Repairs and replacement of parts should be carried out in accordance with the manufacturer's requirements and standards.

Lifeboat

2.4 The following items should be examined and checked for satisfactory condition and operation:

- .1 condition of lifeboat structure including fixed and loose equipment;
- .2 engine and propulsion system;
- .3 sprinkler system, where fitted;
- .4 air supply system, where fitted;
- .5 manoeuvring system;
- .6 power supply system; and
- .7 bailing system.

Release gear

2.5 The following should be examined for satisfactory condition and operation:

- .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 the lifeboat and the safety of personnel in the lifeboat. All inspection and maintenance operations on this equipment should therefore be carried out with the utmost care.
- 2 No maintenance or adjustment of the release gear should be undertaken while the hooks are under load.
- 3 Hanging-off pennants may be used for this purpose but should not remain connected at other times, such as when the lifeboat is normally stowed and during training exercises.

2.6 Operational test of on-load release function:

- .1 position the lifeboat partially into 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 mechanism; and
- .3 reset the on-load release mechanism.

2.7 Operational test of off-load release function:

- .1 position the lifeboat fully waterborne;
- .2 operate the off-load release gear;
- .3 reset the on-load release gear; and
- .4 recover the lifeboat to the stowed position and prepare for operational readiness.

Note:

Prior to hoisting, check that the release gear is completely and properly reset. The final turning-in of the lifeboat should be done without any persons on board.

Davit

2.8 The following items should be examined for satisfactory condition and operation:

- .1 davit structure, in particular with regard to corrosion, misalignments, deformations and excessive free play;
- .2 wires and sheaves, possible damages such as kinks and corrosion;
- .3 lubrication of wires, sheaves and moving parts;
- .4 functioning of limit switches;
- .5 stored power systems; and
- .6 hydraulic systems.

Winch

2.9 The following items should be examined for satisfactory condition and operation:

- .1 open and inspect brake mechanism;
- .2 replace brake pads, if necessary;
- .3 remote control system; and
- .4 power supply system.

3 DYNAMIC WINCH BRAKE TEST

3.1 Annual operational testing should preferably be done by lowering the empty boat. When the boat has reached its maximum lowering speed and before the boat enters the water, the brake should be abruptly applied.

3.2 Five-yearly operational testing should be done by lowering the boat loaded to a proof load of 1.1 times the maximum working load of the winch, or equivalent load. When the boat has reached its maximum lowering speed and before the boat enters the water, the brake should be abruptly applied.

3.3 Following these tests, the brake pads and stressed structural parts should be re-inspected.

Note:

In loading the boat for this test, precautions should be taken to ensure that the stability of the boat is not adversely affected by free surface effects or the raising of the centre of gravity.

4 OVERHAUL OF ON-LOAD RELEASE GEAR

Overhaul of on-load release gear includes:

- .1 dismantling of hook release units;
- .2 examination with regard to tolerances and design requirements;
- .3 adjustment of release gear system after assembly;
- .4 operational test as per above and with a load according to SOLAS regulation III/20.11.2.3; and
- .5 examination of vital parts with regard to defects and cracks.

Note:

Non-destructive examination (NDE) techniques, such as dye penetrants (DPE), may be suitable.
