CCS Circular

China Classification Society
(2012) Circ. No. 12 Total No.174
January 20, 2012 (Total pages: 4+30)

To: Relevant departments of CCS Headquarters, Plan approval centers, CCS surveyors, relevant shipyards, designers and shipping companies

Notice of Implementation of Republic of Cyprus DMS Circular No.35/2011

DMS of Republic of Cyprus recently issued Circular No.35/2011, provided measures to prevent accidents with lifeboats. The requirements are to be implemented when conducting survey.

Attachments: DMS Circular No.35/2011

This Circular/Classification Information is published on CCS website (www.ccs.org.cn) and is to be forwarded by CCS branches to relevant shipyards, designers and shipping companies in relevance to their business area.

Please contact Classed Ship in Service Dept. of the Headquarters in case of any unclarity during the implementation of this Circular.

REPUBLIC OF CYPRUS

MINISTRY OF COMMUNICATIONS AND WORKS

DEPARTMENT OF MERCHANT SHIPPING
LEMESOS

Circular No. 35/2011

26 September 2011

All registered Owners, registered Bareboat Charterers, Managers and Representatives of ships registered in Cyprus

All Recognized Organizations

Subject: **Measures to prevent accidents with lifeboats**

The Maritime Safety Committee, at its eighty-ninth session (May 2011) (the Committee), adopted, through resolution MSC.317(89)[1] and with a view to preventing accidents with lifeboats, amendments to SOLAS regulation III/1.5 and has introduced new requirements for lifeboat release and retrieval systems. In association with the aforesaid amendments, the Committee has also adopted resolution MSC.320(89)[2] which contains amendments to the Life Saving Appliances Code (LSA Code), which set out requirements for the design and construction of lifeboat release and retrieval systems, and resolution MSC.321(89)[3] which sets out related amendments to the Revised recommendation on testing of life-saving appliances (resolution MSC.81(70)). Furthermore and in association with these, the Committee has approved circular MSC.1/Circ. 1392[4] on Guidelines for Evaluation and Replacement of Lifeboat Release and Retrieval Systems and MSC.1/Circ.1393[5] on Early application of new SOLAS regulation III/1.5.

2 The amendments to SOLAS regulation III/1.5 will enter into force on 1 July 2013 and will require on-load release mechanisms installed on all ships, i.e. new and existing cargo and passenger ships, that do not comply with the requirements of the LSA Code, as amended by resolution MSC.320(89), to be replaced no later than the first scheduled dry-docking of the ship after 1 July 2014 but no later than 1 July 2019, with equipment which comply with the requirements of the LSA Code, as amended by resolution MSC.320(89).

[1] A copy of resolution MSC.317(89) is attached as Annex 1.
[2] A copy of resolution MSC.320(89) is attached as Annex 2.
[3] A copy of resolution MSC.321(89) is attached as Annex 3.
[4] A copy of MSC.1/Circ.1392 is attached as Annex 4.
[5] A copy of MSC.1/Circ.1393 is attached as Annex 5.

Kyllinis Street, Mesa Geitonia, 4007 Lemesos, Postal Address: P.O.Box 56193, 3305 Lemesos, Cyprus
Telephone: +357 25848100, Telefax: +357 25848200,
E-mail : maritimeadmin@dms.mcw.gov.cy, *Web page* http://www.shipping.gov.cy

3 With a view to preventing further accidents with lifeboats and notwithstanding the fact that the amendments to SOLAS regulation III/1.5 have not yet entered into force, taking into account the recommendations set out in MSC.1 circulars 1392 and 1393, the on-load release and retrieval systems installed on ships which will be flying the Cyprus flag and constructed:

.1 on or after 1 July 2014, shall comply with the requirements of the LSA Code, as amended by resolution MSC.320(89);

.2 on or after 20 May 2011 but before 1 July 2014, shall comply with the requirements of the LSA Code, as amended by resolution MSC.320(89), preferably by the date of completion of the initial survey required by SOLAS regulation I/7(a)(i) or I/8(a)(i), as the case may be, or, at the latest, within one year after the date on which the ship is put into service.

Such ships shall employ, for each lifeboat release and retrieval system, fall preventer devices in accordance with the MSC.1/Circ.1327[6] on Guidelines for the fitting and use of fall preventer devices, until the systems installed on board comply with the requirements of SOLAS regulation III/1.5.

4 Notwithstanding the fact that the amendments to SOLAS regulation III/1.5 have not yet entered into force, with a view to preventing further accidents involving lifeboats installed on ships flying the Cyprus flag already in service, registered owners, registered bareboat charterers, managers and operators of ships in service flying the Cyprus flag should:

.1 evaluate, at the earliest opportunity and at the latest by 1 July 2013, the existing lifeboat release and retrieval systems, taking into account the guidance provided in MSC.1/Circ.1392 and should put in place the necessary plans and arrangements for ensuring compliance with the requirements of SOLAS regulation III/1.5, as soon as possible; and

.2 employ for each existing lifeboat release and retrieval system, fall preventer devices in accordance with the MSC.1/Circ.1327, on Guidelines for the fitting and use of fall preventer devices, until the systems installed on board comply with the requirements of SOLAS regulation III/1.5.

5 In relation to paragraph 4.2, the recognized organizations are required to ascertain and document the fitting of fall preventer devices, in accordance with the MSC.1/Circ.1327, on all ships flying the Cyprus flag during the first survey (initial, renewal or annual) required by SOLAS regulation I/7(a) or I/8(a), as the case may be, which they will be carrying out on or after 1 January 2012.

[6] A copy of MSC.1/Circ.1327 is attached as Annex 6.

6 Ships whose flag will be transferred to that of Cyprus, should employ fall preventer devices in accordance with the MSC.1/Circ.1327, no later than the date of completion of the transfer of flag surveys.

6.1 However, the Department is willing to consider, until 31 December 2012, written requests from the registered owners, registered bareboat charterers or the Company (as defined in SOLAS chapter IX and the ISM Code) operating such ships, for deferment of the requirement to fit fall preventer devices for a period not exceeding three months from the date of completion of the transfer of flag surveys. Such requests should be accompanied by the proposals and arrangements for fitting the fall preventer devices.

Serghios S. Serghiou
Director
Department of Merchant Shipping

cc. Permanent Secretary, Ministry of Communications and Works
Permanent Secretary, Ministry of Foreign Affairs
Offices of the Department of Merchant Shipping abroad
Diplomatic Missions, Consular Posts and Honorary Consular Officers of the Republic
Cyprus Shipping Council Unions of Cypriot Shipowners Cyprus Bar Association
Inspectors of Cyprus ships

Attachments:

Annex 1 - Resolution MSC.317(89)
Annex 2 – Resolution MSC.320(89)
Annex 3 – Resolution MSC.321(89)
Annex 4 – MSC.1/Circ.1392
Annex 5 – MSC.1/Circ.1393
Annex 6 – MSC.1/Circ.1327

REPUBLIC OF CYPRUS
MINISTRY OF COMMUNICATIONS AND WORKS

DEPARTMENT OF MERCHANT SHIPPING
LEMESOS

Circular No. 35/2011

26 September 2011

All registered Owners, registered Bareboat Charterers, Managers and Representatives of ships registered in Cyprus

All Recognized Organizations

Subject: **Measures to prevent accidents with lifeboats**

The Maritime Safety Committee, at its eighty-ninth session (May 2011) (the Committee), adopted, through resolution MSC.317(89)[1] and with a view to preventing accidents with lifeboats, amendments to SOLAS regulation III/1.5 and has introduced new requirements for lifeboat release and retrieval systems. In association with the aforesaid amendments, the Committee has also adopted resolution MSC.320(89)[2] which contains amendments to the Life Saving Appliances Code (LSA Code), which set out requirements for the design and construction of lifeboat release and retrieval systems, and resolution MSC.321(89)[3] which sets out related amendments to the Revised recommendation on testing of life-saving appliances (resolution MSC.81(70)). Furthermore and in association with these, the Committee has approved circular MSC.1/Circ. 1392[4] on Guidelines for Evaluation and Replacement of Lifeboat Release and Retrieval Systems and MSC.1/Circ.1393[5] on Early application of new SOLAS regulation III/1.5.

2 The amendments to SOLAS regulation III/1.5 will enter into force on 1 July 2013 and will require on-load release mechanisms installed on all ships, i.e. new and existing cargo and passenger ships, that do not comply with the requirements of the LSA Code, as amended by resolution MSC.320(89), to be replaced no later than the first scheduled dry-docking of the ship after 1 July 2014 but no later than 1 July 2019, with equipment which comply with the requirements of the LSA Code, as amended by resolution MSC.320(89).

[1] A copy of resolution MSC.317(89) is attached as Annex 1.
[2] A copy of resolution MSC.320(89) is attached as Annex 2.
[3] A copy of resolution MSC.321(89) is attached as Annex 3.
[4] A copy of MSC.1/Circ.1392 is attached as Annex 4.
[5] A copy of MSC.1/Circ.1393 is attached as Annex 5.

Kyllinis Street, Mesa Geitonia, 4007 Lemesos, Postal Address: P.O.Box 56193, 3305 Lemesos, Cyprus
Telephone: +357 25848100, Telefax: +357 25848200,
E-mail : maritimeadmin@dms.mcw.gov.cy, Web page http://www.shipping.gov.cy

3 With a view to preventing further accidents with lifeboats and notwithstanding the fact that the amendments to SOLAS regulation III/1.5 have not yet entered into force, taking into account the recommendations set out in MSC.1 circulars 1392 and 1393, the on-load release and retrieval systems installed on ships which will be flying the Cyprus flag and constructed:

.1 on or after 1 July 2014, shall comply with the requirements of the LSA Code, as amended by resolution MSC.320(89);

.2 on or after 20 May 2011 but before 1 July 2014, shall comply with the requirements of the LSA Code, as amended by resolution MSC.320(89), preferably by the date of completion of the initial survey required by SOLAS regulation I/7(a)(i) or I/8(a)(i), as the case may be, or, at the latest, within one year after the date on which the ship is put into service.

Such ships shall employ, for each lifeboat release and retrieval system, fall preventer devices in accordance with the MSC.1/Circ.1327[6] on Guidelines for the fitting and use of fall preventer devices, until the systems installed on board comply with the requirements of SOLAS regulation III/1.5.

4 Notwithstanding the fact that the amendments to SOLAS regulation III/1.5 have not yet entered into force, with a view to preventing further accidents involving lifeboats installed on ships flying the Cyprus flag already in service, registered owners, registered bareboat charterers, managers and operators of ships in service flying the Cyprus flag should:

.1 evaluate, at the earliest opportunity and at the latest by 1 July 2013, the existing lifeboat release and retrieval systems, taking into account the guidance provided in MSC.1/Circ.1392 and should put in place the necessary plans and arrangements for ensuring compliance with the requirements of SOLAS regulation III/1.5, as soon as possible; and

.2 employ for each existing lifeboat release and retrieval system, fall preventer devices in accordance with the MSC.1/Circ.1327, on Guidelines for the fitting and use of fall preventer devices, until the systems installed on board comply with the requirements of SOLAS regulation III/1.5.

5 In relation to paragraph 4.2, the recognized organizations are required to ascertain and document the fitting of fall preventer devices, in accordance with the MSC.1/Circ.1327, on all ships flying the Cyprus flag during the first survey (initial, renewal or annual) required by SOLAS regulation I/7(a) or I/8(a), as the case may be, which they will be carrying out on or after 1 January 2012.

---

[6] A copy of MSC.1/Circ.1327 is attached as Annex 6.

6 Ships whose flag will be transferred to that of Cyprus, should employ fall preventer devices in accordance with the MSC.1/Circ.1327, no later than the date of completion of the transfer of flag surveys.

6.1 However, the Department is willing to consider, until 31 December 2012, written requests from the registered owners, registered bareboat charterers or the Company (as defined in SOLAS chapter IX and the ISM Code) operating such ships, for deferment of the requirement to fit fall preventer devices for a period not exceeding three months from the date of completion of the transfer of flag surveys. Such requests should be accompanied by the proposals and arrangements for fitting the fall preventer devices.

Serghios S. Serghiou
Director
Department of Merchant Shipping

cc. Permanent Secretary, Ministry of Communications and Works
Permanent Secretary, Ministry of Foreign Affairs
Offices of the Department of Merchant Shipping abroad
Diplomatic Missions, Consular Posts and Honorary Consular Officers of the Republic
Cyprus Shipping Council
Unions of Cypriot Shipowners
Cyprus Bar Association
Inspectors of Cyprus ships

Attachments:

Annex 1 - Resolution MSC.317(89)
Annex 2 – Resolution MSC.320(89)
Annex 3 – Resolution MSC.321(89)
Annex 4 – MSC.1/Circ.1392
Annex 5 – MSC.1/Circ.1393
Annex 6 – MSC.1/Circ.1327

File:

TEN 5.13.09, TEN 4.28.03.5 and TEN 16.17.18

AK/NLCh/

ANNEX 1

RESOLUTION MSC.317(89)
(adopted on 20 May 2011)

ADOPTION OF 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 FURTHER article VIII(b) of the International Convention for the Safety of Life at Sea (SOLAS), 1974 (hereinafter referred to as "the Convention"), concerning the amendment procedure applicable to the Annex to the Convention, other than to the provisions of chapter I thereof,

HAVING CONSIDERED, at its eighty-ninth session, amendments to the Convention, proposed and circulated in accordance with article VIII(b)(i) thereof,

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;

2. 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 2012, 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 their objections to the amendments;

3. INVITES SOLAS Contracting Governments to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2013 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with 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. FURTHER REQUESTS 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.

ANNEX

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

CHAPTER III
LIFE-SAVING APPLIANCES AND ARRANGEMENTS

Regulation 1 – Application

The following new paragraph 5 is added after the existing paragraph 4:

> "5 Notwithstanding paragraph 4.2, for all ships, not later than the first scheduled dry-docking after 1 July 2014, but not later than 1 July 2019, lifeboat on-load release mechanisms not complying with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the Code shall be replaced with equipment that complies with the Code.*

* Refer to the Guidelines for evaluation and replacement of lifeboat release and retrieval systems (MSC.1/Circ.1392)."

***

ANNEX 2

RESOLUTION MSC.320(89)
(adopted on 20 May 2011)

ADOPTION OF AMENDMENTS TO THE INTERNATIONAL LIFE-SAVING APPLIANCE (LSA) CODE

THE MARITIME SAFETY COMMITTEE,

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

NOTING resolution MSC.48(66), by which it adopted the International Life-Saving Appliance Code (hereinafter referred to as "the LSA Code"), which has become mandatory under chapter III of the International Convention for the Safety of Life at Sea, 1974 (hereinafter referred to as "the Convention"),

NOTING ALSO article VIII(b) and regulation III/3.10 of the Convention concerning the procedure for amending the LSA Code,

HAVING CONSIDERED, at its eighty-ninth session, amendments to the LSA Code, 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 LSA Code, the text of which is set out in the Annex to the present resolution;

2. DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the amendments shall be deemed to have been accepted on 1 July 2012, 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 their objections to the amendments;

3. INVITES Contracting Governments to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2013 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with 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. FURTHER REQUESTS 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.

ANNEX

AMENDMENTS TO THE INTERNATIONAL LIFE-SAVING APPLIANCES (LSA) CODE

CHAPTER IV
SURVIVAL CRAFT

1 In paragraph 4.4.7.6, the following new subparagraphs .2 to .6 are inserted after the existing subparagraph .1:

".2 notwithstanding subparagraph .7.2 the mechanism shall only open when the release mechanism is operated with the boat fully waterborne or, if the boat is not waterborne, by multiple, deliberate and sustained action which shall include the removal or bypassing of safety interlocks designed to prevent premature or inadvertent release;

.2.1 the mechanism shall not be able to open due to wear, misalignment and unintended force within the hook assembly or operating mechanism, control rods or cables as may be connected to, or form part of the hook assembly and with trim of up to 10º and a list of up to 20º either way; and

.2.2 the functional criteria of 4.4.7.6.2 and 4.4.7.6.2.1 apply for the range of loads, representing 0% to 100% of the safe working load of the lifeboat release and retrieval system for which it may be approved;

.3 unless a release mechanism is of the load over centre type, which is held fully closed by the weight of the lifeboat, the hook assembly shall be designed so that the moveable hook component is kept fully closed by the hook locking parts capable of holding its safe working load under any operational conditions until the hook locking part is deliberately caused to open by means of the operating mechanism. For designs utilizing the tail of the movable hook component and cam either directly or indirectly securing the tail of the movable hook component, the hook assembly shall continue to be closed and hold its safe working load through rotation of the cam of up to 45 degrees in either direction, or 45 degrees in one direction if restricted by design, from its locked position;

.4 to provide hook stability, the release mechanism shall 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;

.5 locking devices shall be designed so that they can not turn to open due to forces from the hook load; and

.6 if a hydrostatic interlock is provided, it shall automatically reset upon lifting the boat from the water."

2 In paragraph 4.4.7.6, the existing subparagraph .2 is replaced by the following:

".7 the mechanism shall have two release capabilities: normal (off-load) release capability and on-load release capability:

.7.1 normal (off-load) release capability shall release the lifeboat when it is waterborne or when there is no load on the hooks, and not require manual separation of the lifting ring or shackle from the jaw of the hook; and

.7.2 on-load release capability shall release the lifeboat with a load on the hooks. This release mechanism shall be provided with a hydrostatic interlock unless other means are provided to ensure that the boat is waterborne before the release mechanism can be activated. In case of failure or when the boat is not waterborne, there shall be a means to override the hydrostatic interlock or similar device to allow emergency release. This interlock override capability shall be adequately protected against accidental or premature use. Adequate protection shall include special mechanical protection not normally required for off-load release, in addition to a danger sign. The protection shall be deliberately destroyed by applying a suitable minimum force, for instance by breaking a protection glass or translucent cover. A label or thin wire seal is not considered sufficiently robust. To prevent a premature on-load release, on-load operation of the release mechanism shall require multiple, deliberate and sustained action or actions by the operator;".

3 In paragraph 4.4.7.6, the existing subparagraph .3 is renumbered as subparagraph .8 and the words "without excessive force" are replaced by the words ", and any indicators shall not indicate the release mechanism is reset".

4 In paragraph 4.4.7.6, the following new subparagraph .9 is inserted after the renumbered subparagraph 8:

".9 all components of the hook unit, release handle unit, control cables or mechanical operating links and the fixed structural connections in a lifeboat shall be of material corrosion resistant in the marine environment without the need for coatings or galvanizing. Design and manufacturing tolerances shall be such that anticipated wear throughout the service life of the mechanism shall not adversely affect its proper functioning. Mechanical operating links such as control cables shall be waterproof and shall have no exposed or unprotected areas;".

5 In paragraph 4.4.7.6, the existing subparagraphs .4 to .8 are renumbered as subparagraphs .10 to .14, respectively.

6 In paragraph 4.4.7.6, in the renumbered subparagraph .10, the word "clearly" is replaced by the word "unambiguously".

7 In paragraph 4.4.7.6, in the renumbered subparagraph .14, the words "the load-bearing components of the release mechanism and" are added at the beginning and the words "of the release mechanism" are deleted.

8 In paragraph 4.4.7.6, the following new subparagraphs .15 and .16 are inserted after the renumbered subparagraph .14:

".15 a hydrostatic interlock shall be designed for a factor of safety of not less than 6 times maximum operating force based on the ultimate strength of the materials used;

.16 the operating cables shall be designed for a factor of safety of not less than 2.5 times maximum operating force based on the ultimate strength of the materials used; and".

9 In paragraph 4.4.7.6, the existing subparagraph .9 is renumbered as subparagraph .17 and in the renumbered subparagraph .17, the references to paragraphs "4.4.7.6.2.2 and 4.4.7.6.3" are replaced by the references to paragraphs "4.4.7.6.7, 4.4.7.6.8 and 4.4.7.6.15".

10 In paragraph 4.4.7.6, the referenced subparagraph .9 is replaced by .17.

***

ANNEX 3

RESOLUTION MSC.321(89)
(adopted on 20 May 2011)

ADOPTION OF AMENDMENTS TO THE REVISED RECOMMENDATION ON TESTING OF LIFE-SAVING APPLIANCES (RESOLUTION MSC.81(70)), 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 resolution A.689(17) entitled "Testing of life-saving appliances", by which the Assembly, at its seventeenth session, adopted the Recommendation on testing of life-saving appliances,

RECALLING FURTHER that the Assembly, when adopting resolution A.689(17), authorized the Committee to keep the Recommendation on testing of life-saving appliances under review and to adopt, when appropriate, amendments thereto,

NOTING resolution MSC.81(70), by which, at its seventieth session, it adopted the Revised recommendation on testing of life-saving appliances, introducing more precise provisions for the testing of life-saving appliances based on the requirements of the International Life-Saving Appliances (LSA) Code,

RECOGNIZING the need to appropriately align the relevant provisions of the Revised recommendation on testing of life-saving appliances with the associated amendments to the LSA Code adopted by resolution MSC.320(89),

HAVING CONSIDERED, at its eighty-ninth session, proposed amendments to the Revised recommendation on testing of life-saving appliances, prepared by the Sub-Committee on Ship Design and Equipment at its fifty-fifth session,

1. ADOPTS amendments to the Revised recommendation on testing of life-saving appliances (resolution MSC.81(70)), the text of which is set out in the Annex to the present resolution;

2. RECOMMENDS Governments to apply the annexed amendments when testing life-saving appliances.

ANNEX

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

1 The existing paragraphs 6.9.3 and 6.9.4 are replaced by the following:

"6.9.3 With the operating mechanism disconnected it should be demonstrated when the lifeboat is loaded with its full complement of persons and equipment and towed at speeds of 5 knots that the moveable hook component stays closed. Furthermore, with the operating mechanism connected, it should be demonstrated that the lifeboat when loaded with its full complement of persons and equipment when towed at speeds of 5 knots can be released. Both of the above should be demonstrated as follows as follows:

.1 a force equal to 25% of the safe working load of the hook should be applied to the hook in the lengthwise direction of the boat at an angle of 45° to the vertical. This test should be conducted in the aftward as well as the forward direction;

.2 a force equal to the safe working load of the hook should be applied to the hook in an athwartships direction at an angle of 20° to the vertical. This test should be conducted on both sides; and

.3 a force equal to the safe working load of the hook should be applied to the hook in a direction halfway between the positions of tests 1 and 2 (i.e. 45° to the longitudinal axis of the boat in plan view) at an angle of 33° to the vertical. This test should be conducted in four positions.

There should be no damage as a result of these tests.

6.9.4 A release mechanism should be conditioned and tested as follows:

.1 the lifeboat release and retrieval system and the longest used connection cable/linkage associated with the system should be mounted and adjusted according to instructions from the original equipment manufacturer and then loaded to 100% of its safe working load and released. Load and release should be repeated 50 times. During the 50 releases, the lifeboat release and retrieval system should be released simultaneously from each fall to which it is connected without any binding or damage to any part of the lifeboat release and retrieval system. The system should be considered as "failed" if any failure during the conditioning or unintended release occurs when load is applied but the system has not yet been operated;

.2 the lifeboat release and retrieval system should then be disassembled, the parts examined and wear recorded. The release and retrieval system should then be reassembled;

.3 the hook assembly, whilst disconnected from the operating mechanism, should then 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; unless the release mechanism has been specifically designed to operate as an off-load hook with on-load capability using the weight of the boat to close the hook, in this case the cyclic load should be from no more than 1% to 1.1 times the SWL. For cam-type designs, the test should be carried out at an initial cam rotation of 0º (fully reset position), and repeated at 45º in either direction, or 45º in one direction if restricted by design. The specimen should remain closed during the test. The system should be considered as "failed" if any failure during this test or any unintended release or opening occurs; and

.4 the cable and operating mechanism should then be reconnected to the hook assembly; and the lifeboat release and retrieval system should then be demonstrated to operate satisfactorily under its safe working load. The actuation force should be no less than 100 N and no more than 300 N, if a cable is used it should be the maximum length specified by the manufacturer, and secures in the same manner it would be secured in the lifeboat. The demonstration should verify that any interlocks, indicators and handles are still functioning and are correctly positioned in accordance with the operation and safety instruction from the original equipment manufacturer. The release mechanism is deemed to have passed the testing under paragraph 6.9.4 when the tests have been conducted successfully. The system should be considered as "failed" if any failure during this test or any unintended release or opening occurs.

6.9.5 A second release mechanism should be tested as follows:

.1 the actuation force of the release mechanism should be measured loaded with 100% of its safe working load. The actuation force should be no less than 100 N and no more than 300 N. If a cable is used, it should be of the maximum length specified by the manufacturer, and secured in the same manner it would be secured in a lifeboat. The demonstration should verify that any interlocks, indicators and handles are still functioning and are correctly positioned in accordance with the operation and safety instruction from the original equipment manufacturer; and

.2 the release mechanism should be mounted on a tensile strength testing device. The load should be increased to at least six times the working load of the release mechanism without failure of the release mechanism."

2 The existing paragraphs 6.9.5 and 6.9.6 are renumbered as 6.9.6 and 6.9.7, respectively.

3 In paragraph 6.11.3, the referenced paragraph number "6.9.4" is replaced with "6.9.3".

4 In paragraphs 7.1.1 and 7.4.1, the referenced paragraph numbers "6.9.5" and "6.9.6" are replaced by "6.9.6" and "6.9.7", respectively.

5 In paragraphs 7.2.1, 7.3.1, 7.5 and 7.6, the referenced paragraph numbers "6.9.1 to 6.9.4" are replaced by "6.9.1 to 6.9.5".

***

INTERNATIONAL MARITIME ORGANIZATION

E

4 ALBERT EMBANKMENT
LONDON SE1 7SR
Telephone: +44 (0)20 7735 7611 Fax: +44 (0)20 7587 3210

MSC.1/Circ.1392
27 May 2011

GUIDELINES FOR EVALUATION AND REPLACEMENT OF LIFEBOAT RELEASE AND RETRIEVAL SYSTEMS

1 The Maritime Safety Committee, at its eighty-ninth session (11 to 20 May 2011), approved the Guidelines for evaluation and replacement of lifeboat release and retrieval systems, set out in the annex, as per SOLAS regulation III/1.5, following the recommendations made by the Sub-Committee on Ship Design and Equipment, at its fifty-fifth session, and the *Ad Hoc* Working Group on Lifeboat Release Hooks (16 to 18 March 2011).

2 Member Governments are invited to use the annexed Guidelines when applying SOLAS regulation III/1.5, as adopted by resolution MSC.317(89), and to bring them to the attention of all parties concerned.

3 Member Governments, shipowners and manufacturers of lifeboat release and retrieval systems are also strongly urged, pending the entry into force of SOLAS regulation III/1.5, to use the annexed Guidelines to evaluate existing lifeboat release and retrieval systems at the earliest available opportunity.*

4 Member Governments are strongly urged to ensure that all ships fitted with on-load release systems for lifeboats, are equipped with fall preventer devices as per paragraph 6 of these Guidelines at the earliest available opportunity.

5 Member Governments are encouraged to consider the results of evaluations reported to the Organization by other Member Governments on types of existing lifeboat release and retrieval systems.

***

* Reference is made to MSC.1/Circ.1393 on Early application of new SOLAS regulation III/1.5.

PIRACY IMO ORCHESTRATING THE RESPONSE

ANNEX

GUIDELINES FOR EVALUATION AND REPLACEMENT OF LIFEBOAT RELEASE AND RETRIEVAL SYSTEMS

General

1 New SOLAS regulation III/1.5, which is expected to enter into force on 1 January 2013, requires that for all ships, on-load release mechanisms* not complying with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code, as amended by resolution MSC.320(89) (hereinafter called "the LSA Code"), be replaced or modified not later than the next scheduled dry-docking after 1 July 2014, but not later than 1 July 2019.

2 Considering that paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code represent important safety improvements, manufacturers should carry out a self assessment of their types of existing lifeboat release and retrieval systems in accordance with these Guidelines at the earliest available opportunity.

3 An Administration, or a recognized organization acting on its behalf, should carry out a design review to check that the type of existing lifeboat release and retrieval systems comply with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code and should witness the performance test to check that it is performed in accordance with appendix 1 of these Guidelines. This evaluation should be completed not later than 1 July 2013 and the report should be submitted in accordance with paragraph 14 below.

4 Administrations, or recognized organizations acting on their behalf, should, when applying SOLAS regulation III/1.5, ensure that an evaluation of the type of existing lifeboat release and retrieval system is undertaken, for compliance with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code, in accordance with these Guidelines.

5 A flowchart of the lifeboat release and retrieval system evaluation process, is set out in appendix 2.

6 On each ship, fall preventer devices in accordance with the Guidelines for the fitting and use of fall preventer devices (FPDs) (MSC.1/Circ.1327) should be employed for each existing lifeboat release and retrieval system until the system is:

.1 found compliant with the LSA Code; or

.2 modified and found compliant with the LSA Code; or

.3 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; or

.4 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; or

.5 replaced by a new lifeboat release and retrieval system.

---

* For the purpose of these Guidelines, the expression "on-load release mechanism" has been replaced by "lifeboat release and retrieval system" (see paragraph 9.1).

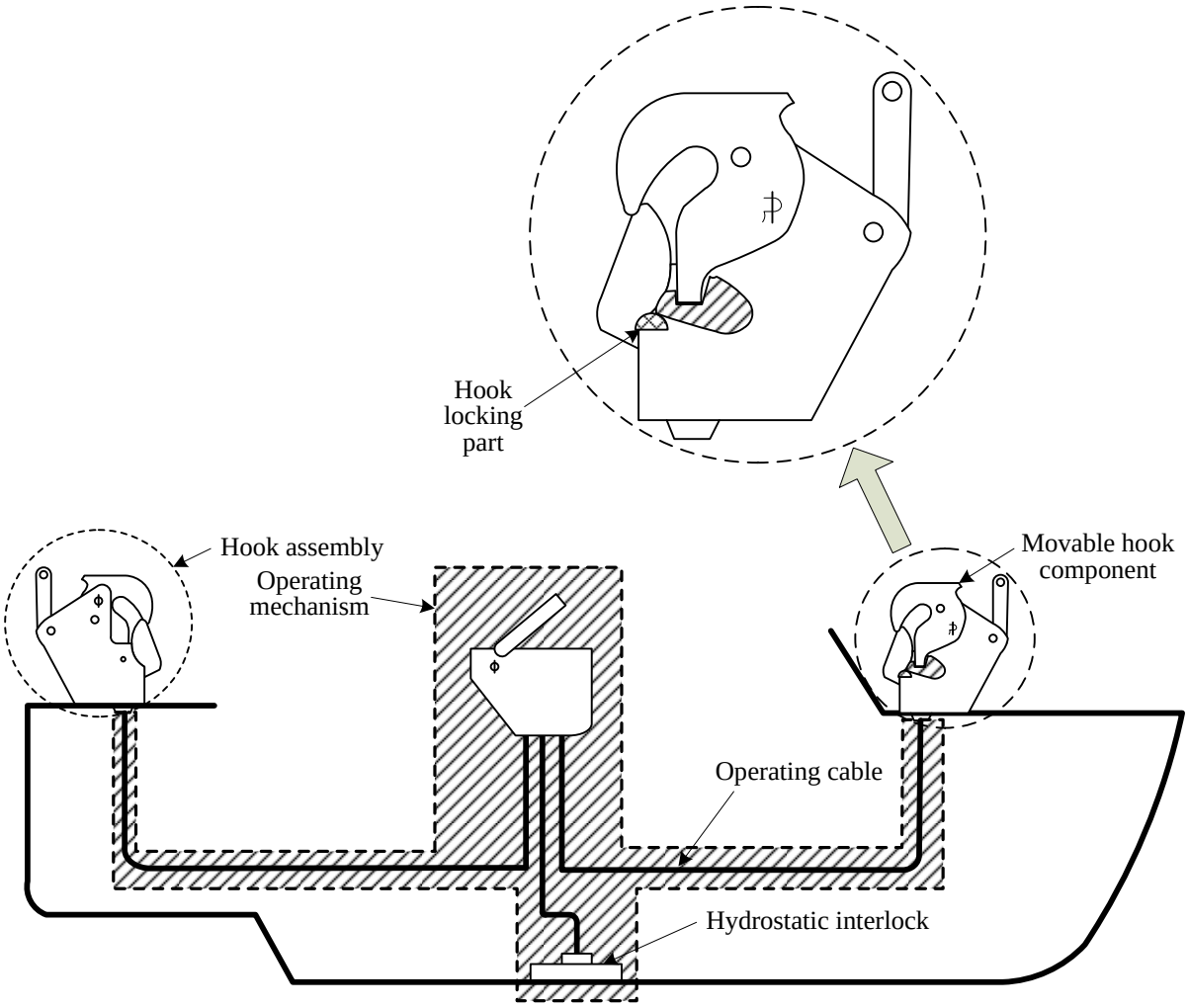
Modifications

7 A lifeboat release and retrieval system that has been determined to be non-compliant in accordance with these Guidelines may be modified to comply with the requirements of the revised paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code and the requirements of the existing applicable Code, provided that the modified release and retrieval system is evaluated in accordance with these Guidelines.

8 A type of lifeboat release and retrieval system that, after modification, complies with the requirements of the revised paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code and the requirements of the existing applicable Code should be identified as a system compliant after modification and reported as such. The report should include both the identification of the original type and the modified type.

Definitions

9 For the purpose of these Guidelines, the definitions given hereunder should apply, in accordance with the following figure.



Lifeboat release and retrieval system

9.1 *Lifeboat release and retrieval system* is the means by which the lifeboat is connected to, and released from, the lifeboat falls for lowering, launch and retrieval. It comprises the hook assembly and operating mechanism.

9.2 *Hook assembly* is the mechanism, attached to the lifeboat, which connects the lifeboat to the lifeboat falls.

9.3 *Movable hook component* is that part of the hook assembly in direct contact with the connection with the lifeboat falls which moves to enable release from the falls.

9.4 *Hook locking part* is the component(s) within a hook assembly which holds the movable hook component in the closed position until activated by the operating mechanism to release the hook. This activation may be performed through other components within the hook assembly.

9.5 *Operating mechanism* is the means by which the operator activates the opening, or release, of the movable hook component. It includes the operating handle, linkages/cables and hydrostatic interlock, if fitted.

9.6 *Type*, in relation to the design of a lifeboat release and retrieval system, means an identical lifeboat release and retrieval system of given safe working load, make and model (thus any change to the materials of construction, design arrangement or dimensions constitutes a change of type).

9.7 *On-load release* is the action of opening the lifeboat release and retrieval system whilst there is load on the hook assemblies.

9.8 *Evaluation* is a design review and a performance test of a type of lifeboat release and retrieval system.

9.9 *Manufacturer*, with respect to existing lifeboat release and retrieval systems, is:

.1 the original equipment manufacturer; or

.2 a manufacturer of lifeboat release and retrieval systems who has taken on the responsibility for a range or type of lifeboat release and retrieval system; or

.3 any other person or entity which has taken responsibility for a range or type of lifeboat release and retrieval system when the original manufacturer no longer exists or supports the equipment.

9.10 *Modifications* are changes to the design of an approved lifeboat release and retrieval system which may affect compliance with the original approval requirements or the prescribed conditions for the use of the product.

9.11 *New lifeboat release and retrieval system* is a lifeboat release and retrieval system that has been approved in accordance with paragraph 4.4.7.6 of chapter IV of the LSA Code, as amended by resolution MSC.320(89).

9.12 *Existing lifeboat release and retrieval system* is a lifeboat release and retrieval system that has not been approved in accordance with paragraph 4.4.7.6 of chapter IV of the LSA Code, as amended by resolution MSC.320(89).

9.13 *Company* means company as defined in SOLAS regulation IX/1.2.

Design review

10 Documentation and information for each type of lifeboat release and retrieval system should be submitted to the Administration, or recognized organization acting on its behalf, in order that an assessment can be carried out to determine compliance with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code. The manufacturer should submit the approval certificate, along with all associated supporting design calculations, plans and testing documentation to the Administration or recognized organization acting on its behalf. The design information should include the specification and the installation instructions for the complete operating system as well as all safety instructions regarding the operating system and any interlocks provided. Any submission for testing of a lifeboat release and retrieval system that cannot be supported with the above-mentioned information should not be eligible for testing against the requirements of the LSA Code.

11 If the outcome of the design review is non-compliance with the applicable paragraphs of the LSA Code, the lifeboat release and retrieval system should be replaced or modified to be made compliant.

Performance test

12 After a successful completion of the design review, a performance test should be conducted by the manufacturer for each type of lifeboat release and retrieval systems for compliance with paragraphs 4.4.7.6.4 to 4.4.7.6.6 of the LSA Code, using the test specified in appendix 1 to these Guidelines. The performance test should be witnessed by the Administration or a recognized organization acting on its behalf.

13 Should any part of the lifeboat release and retrieval system fail at any stage during the test specified in paragraphs 1 to 4 of appendix 1, this type of lifeboat release and retrieval system should be deemed to be non-compliant and reported as such.

Reporting of the results of evaluation of existing lifeboat release and retrieval system

14 The Administration should report the results of each type of existing lifeboat release and retrieval system evaluation carried out in accordance with these Guidelines to the Organization, based on the reporting procedure, as set out in appendix 3.

15 Depending on the outcome of the evaluation, every lifeboat release and retrieval system should be categorized as being either compliant, compliant after modification or non-compliant. Thereafter:

.1 systems categorized as being compliant, or compliant after modification, may remain in service; and

.2 every system categorized as being non-compliant should be replaced with a new system or modified to be made compliant.

One-time follow-up overhaul examination

16 Not later than the first scheduled dry-docking after 1 July 2014, every lifeboat release and retrieval system of a type found to be compliant in respect of the existing lifeboat release and retrieval system evaluation should 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. The examination also includes verification that

the system examined is of the same type as the system that passed the evaluation and is suitable for the ship.

17 The scope of the overhaul examination should also include a detailed assessment of the condition of the components of the lifeboat release and retrieval system to observe the extent of wear, corrosion, erosion and other types of material degradation that may have occurred. Upon satisfactory completion of the overhaul examination, the manufacturer or one of their representatives should issue a factual statement to confirm this, for retention on board.

Procedure for replacement of non-compliant lifeboat release and retrieval systems

18 The procedure outlined below should be followed in all cases where a lifeboat is to be fitted with replacement lifeboat release and retrieval systems with on-load release capability. It is noted that every lifeboat, complete with lifeboat release and retrieval system, is type-approved at manufacture and it is important to recognize that a lifeboat which is retro-fitted with a replacement lifeboat release and retrieval system to the satisfaction of the Administration should be regarded as offering a level of safety which is higher than that of the original installation.

19 Companies should, where possible, select replacement equipment acceptable to the lifeboat manufacturer. However, in cases where the lifeboat manufacturer is unable to offer a suitable replacement lifeboat release and retrieval system, the Company may select an alternative lifeboat release and retrieval system, with the agreement, if possible, of the lifeboat manufacturer.

20 The replacement equipment should be approved by the Administration or a recognized organization acting on its behalf, under the provisions of the LSA Code. Prior to the installation commencing, the Company should submit to the Administration, or a recognized organization acting on its behalf, for review and approval, as a minimum the following information:

.1 the proposed replacement equipment including approval certification;

.2 the engineering analysis of the replacement installation including:

.1 drawings of the original lifeboat release and retrieval system arrangement;

.2 detailed drawings showing clearly the proposed changes (e.g., position of suspension, lifeboat release and retrieval system, fixed structural connections of the release mechanism, link plates, including materials used for nuts and bolts with regard to strength and corrosion resistance); and

.3 if the drawings show that forces and/or force couples will change and/or the lifeboat release and retrieval system fixed structural connections of the release mechanism will change, calculation of static forces including a safety factor of 6, according to the LSA Code, from lifeboat release and retrieval system into lifeboat structure, including tension and shear forces in bolts, link plates, welds and keel shoe(s);

.3 considering that a lifeboat release and retrieval system does not consist just of the hook assemblies themselves, but also of release handles, cabling, etc., in the lifeboat, the evaluation of a replacement hook assembly other than that originally provided in the lifeboat should include such factors as loadings of the release handle on the console, efficiency of any hydrostatic interlock in light and

loaded conditions, whether the size/configuration of the replacement equipment would affect the stability or seating space of the lifeboat, and its compatibility with its launching appliance;

.4 amended operating and training manuals; and

.5 identification of the person(s) responsible for design appraisal, installation work and post-installation testing and evidence of their competence.

21 The Administration, or a recognized organization acting on its behalf, may allow that hook fixed structural connections of the release mechanism and supporting structure which are not made of material corrosion resistant in the marine environment, as required by paragraph 4.4.7.6.9 of the LSA Code, need not be replaced if they are in a good condition and installed in a sheltered position inside the lifeboat.

22 A copy of the engineering drawing(s) approved by the Administration, or by the recognized organization acting on its behalf, should be used during installation and testing and retained on board.

23 The installation should be carried out by the manufacturer or by one of their representatives. All work carried out should be witnessed by the Administration, or by a recognized organization acting on its behalf. Valid operating and safety instructions should be posted at the operating position and adjacent to the lifeboat release and retrieval system(s).

24 Post-installation testing should be carried out by the manufacturer or by one of their representatives and comprise the following:

.1 1.1 x load and simultaneous release test according to the Revised recommendation on testing of life-saving appliances (resolution MSC.81(70)), part 2, paragraph 5.3.1, or an equivalent method acceptable to the Administration;

.2 load test according to the Revised recommendation on testing of life-saving appliances (resolution MSC.81(70)), part 2, paragraph 5.3.4, as amended by resolution MSC.226(82), if the fixed structural connections of the release mechanism of the lifeboat is modified; and

.3 if the lifeboat is also a rescue boat and/or is installed on a cargo ship of 20,000 gross tonnage or above, the 5 knots installation test should be carried out, in accordance with the Revised recommendation on testing of life-saving appliances (resolution MSC.81(70)), part 2, paragraph 5.4.

25 All tests should be witnessed by the Administration, or by a recognized organization acting on its behalf, which should also verify that the installation complies in all respects with the documentation submitted by the Company and approved by the Administration, or a recognized organization acting on its behalf.

26 Following completion of installation testing, the Administration, or a recognized organization acting on its behalf, should issue a Statement of Acceptance, using the template set out in appendix 4, to the Company, for retention on board.

APPENDIX 1

TEST REQUIREMENTS FOR THE EVALUATION OF LIFEBOAT RELEASE AND RETRIEVAL SYSTEMS

A release and retrieval system should be conditioned and tested as follows:

.1 the lifeboat release and retrieval system and the longest used connection cable/linkage associated with the system should be mounted and adjusted according to instructions from the original equipment manufacturer and then loaded to 100% of its safe working load and released. Load and release should be repeated 50 times. During the 50 releases, the lifeboat release and retrieval system should be released simultaneously from each fall to which it is connected without any binding or damage to any part of the lifeboat release and retrieval system. The system should be considered as "failed" if any failure during the conditioning or unintended release occurs when load is applied but the system has not yet been operated;

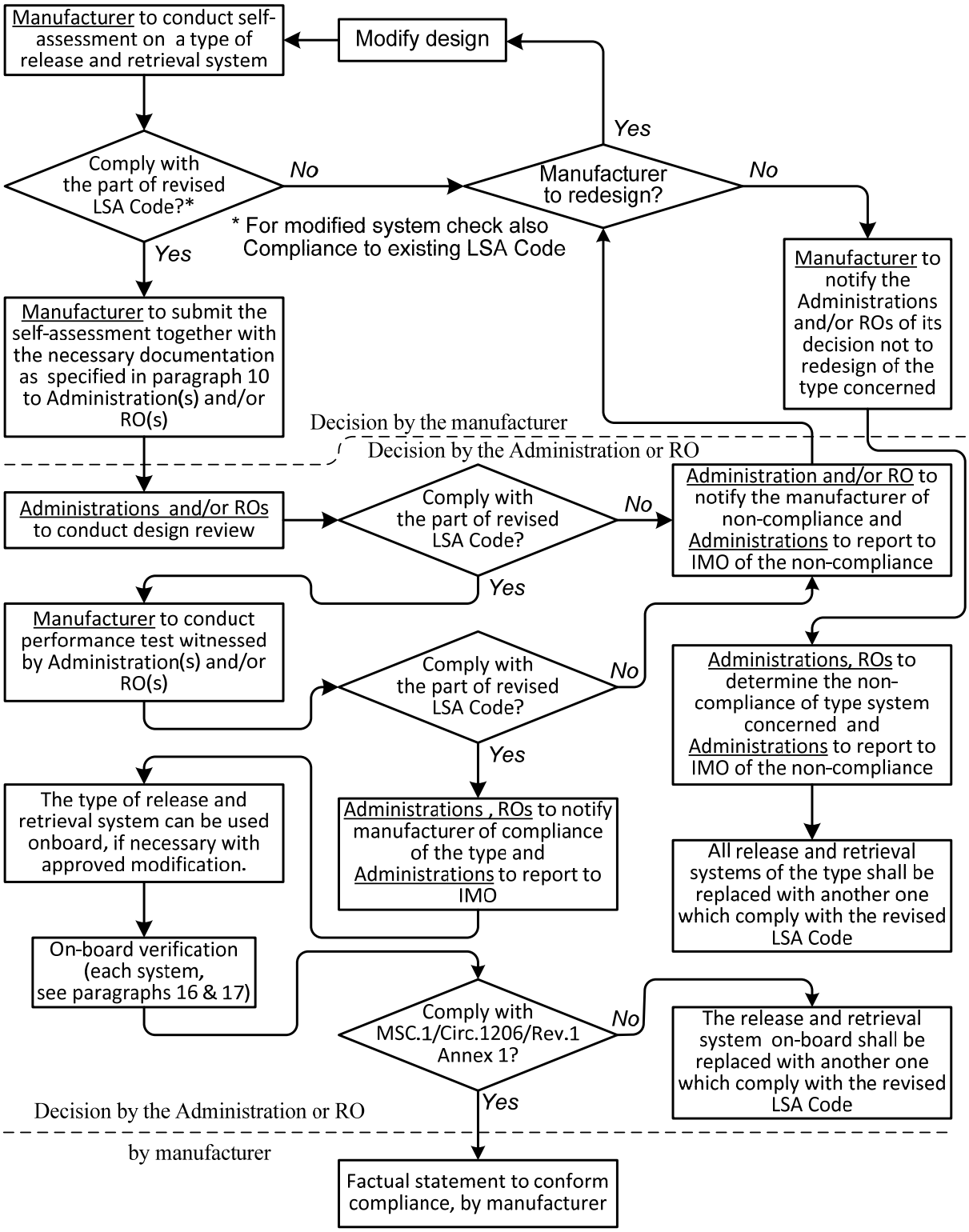
.2 the lifeboat release and retrieval system should then be disassembled, the parts examined and wear recorded. The release and retrieval system should then be reassembled;

.3 the hook assembly, whilst disconnected from the operating mechanism, should then 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; unless the release and retrieval system has been specifically designed to operate as an off-load hook with on-load capability using the weight of the boat to close the hook, in this case the cyclic load should be from no more than 1% to 1.1 times the SWL; and

.4 the cable and operating mechanism should then be reconnected to the hook assembly; and the lifeboat release and retrieval system should then be demonstrated to operate satisfactorily under its safe working load. The actuation force should be no less than 100 N and no more than 300 N, if a cable is used it should be the maximum length specified by the manufacturer, and secures in the same manner it would be secured in the lifeboat. The demonstration should verify that any interlocks, including hydrostatic interlocks, where fitted, indicators and handles are still functioning and are correctly positioned in accordance with the operation and safety instruction from the original equipment manufacturer.
The release and retrieval system is deemed to have passed the testing under this appendix when the tests have been conducted successfully. The system should be considered as "failed" if any failure during this test or any unintended release or opening occurs.

APPENDIX 2

EXISTING LIFEBOAT RELEASE AND RETRIEVAL SYSTEM EVALUATION PROCESS FLOW CHART



APPENDIX 3

INFORMATION ON THE EVALUATION OF EXISTING LIFEBOAT RELEASE AND RETRIEVAL SYSTEMS TO BE REPORTED

The following information should be provided for each lifeboat release and retrieval system:

Manufacturer's Details	**Name**
	Address
	E-mail address
Lifeboat release and retrieval system	**Type (see paragraph 9.6) and identification**
In case of modification	**Original type and identification**
	Details of modification
Specification of type (e.g., Maximum Safe Working Load (SWL))	
Details of the Administration, or recognized organization acting on its behalf, undertaking the evaluation of the lifeboat release and retrieval system	**Name**
	Address
	E-mail address
Evaluation report details	**No.**
	Date
Evaluation result	**Compliant / Non-compliant / Compliant after modification**
Report information	**Link to the relevant report (url)**
Reported by	**Name of the Administration**

APPENDIX 4

STATEMENT OF ACCEPTANCE OF THE INSTALLATION OF REPLACEMENT RELEASE AND RETRIEVAL SYSTEM TO AN EXISTING LIFEBOAT

*Issued in accordance with the provisions of regulation I/5 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended, under the authority of [Administration]**

Name of ship:
Port of registry:
IMO Number:

Lifeboat details:
Replacement release and retrieval system details:

Lifeboat identity	Lifeboat serial number	Release and retrieval system serial number (fwd)	Release and retrieval system serial number (aft)
No.1 (Stbd)			
No.2 (Port)			

The above release and retrieval system has been installed and tested under the supervision of the [Administration, or a recognized organization authorized to act on its behalf]*, as documented in Survey report no...; certificate no.... dated ... and [installation] drawing(s) no(s) ... dated ... .

This statement is to confirm that:

.1 The replacement release and retrieval system meets the relevant requirements of the LSA Code, chapter IV, section 4.4.7.6.

.2 The replacement release and retrieval system construction and the equipment of the above-mentioned ship was found to comply with the provisions of SOLAS regulation III/4 when tested in accordance with the Revised recommendation on testing of life-saving appliances (resolution MSC.81(70)), part 2, section 5.3.1. [The test required by paragraph 5.3.4 is waived as impracticable for this replacement procedure.]*

.3 The validity of the relevant Safety Certificate is not affected by the installation of the replacement release and retrieval system.

.4 The installation of the replacement release and retrieval system offers a level of safety which is at least as effective as the original manufacturer's equipment.

The [Administration, or a recognized organization authorized to act on its behalf]* certifies that this Statement of Acceptance augments and supersedes the affected sections of the original lifeboat approval certification. The statement must be kept on board the ship with all other relevant documentation at all times.

…….. …… (Stamp)
(Date)

---

* Insert as appropriate.

INTERNATIONAL MARITIME ORGANIZATION

E

4 ALBERT EMBANKMENT
LONDON SE1 7SR
Telephone: +44 (0)20 7735 7611 Fax: +44 (0)20 7587 3210

MSC.1/Circ.1393
27 May 2011

EARLY APPLICATION OF NEW SOLAS REGULATION III/1.5

1 The Maritime Safety Committee, at its eighty-ninth session (11 to 20 May 2011), adopted, by resolution MSC.317(89), new SOLAS regulation III/1.5 and, by resolution MSC.320(89), related amendments to chapter IV of the LSA Code, which are expected to enter into force on 1 January 2013. The Committee also approved the associated Guidelines for evaluation and replacement of lifeboat release and retrieval systems (MSC.1/Circ.1392).

2 In light of the provision of the new SOLAS regulation III/1.5, the Committee agreed that:

.1 for ships constructed on or after 1 July 2014, on-load release and retrieval systems shall comply with the LSA Code, as amended by resolution MSC.320(89); and

.2 Member Governments are encouraged to ensure that ships constructed on or after 20 May 2011 but before 1 July 2014, on-load release and retrieval systems comply with the LSA Code, as amended by resolution MSC.320(89).

3 In order for parties concerned to take relevant actions with regard to paragraph 2 above, Member Governments are encouraged to initiate, at the earliest opportunity, approval processes for new on-load release and retrieval systems, which comply with the LSA Code, as amended by resolution MSC.320(89).

4 In adopting the aforementioned amendments, the Committee agreed to the recommendation by the Sub-Committee on Ship Design and Equipment, at its fifty-fifth session (21 to 25 March 2011), that parties concerned should be encouraged to take necessary action to evaluate existing lifeboat release and retrieval systems, based on the aforementioned Guidelines, at the earliest available opportunity, pending the entry into force of new SOLAS regulation III/1.5.

5 Member Governments, shipyards and shipowners are invited to take account of this circular and bring it to the attention of all parties concerned. In particular, manufacturers are urged to evaluate existing lifeboat release and retrieval systems at the earliest available opportunity, in accordance with the aforementioned Guidelines.

PIRACY IMO ORCHESTRATING THE RESPONSE

INTERNATIONAL MARITIME ORGANIZATION
4 ALBERT EMBANKMENT
LONDON SE1 7SR

Telephone: 020 7735 7611
Fax: 020 7587 3210

IMO

E

Ref. T4/3.01

MSC.1/Circ.1327
11 June 2009

GUIDELINES FOR THE FITTING AND USE OF FALL PREVENTER DEVICES (FPDs)

1 The Maritime Safety Committee, at its eighty-sixth session (27 May to 5 June 2009), approved the Guidelines for the fitting and use of fall preventer devices (FPDs), set out in the annex, following the recommendations made by the Sub-Committee on Ship Design and Equipment, at its fifty-second session.

2 The use of FPDs should be considered as an interim risk mitigation measure, only to be used in connection with existing on-load release hooks, at the discretion of the master, pending the wide implementation of improved hook designs with enhanced safety features.

3 Member Governments are invited to use the annexed Guidelines when approving the use of fall preventer devices (FPDs), and to bring them to the attention of all parties concerned.

***

ANNEX

GUIDELINES FOR THE FITTING AND USE OF FALL PREVENTER DEVICES (FPDs)

1 Background

1.1 In 1986, on-load release hooks for lifeboats and rescue boats were made mandatory in the SOLAS Convention, in response to Norway's worst offshore accident in March 1980, when the **Alexander Kielland** platform in the North Sea Ekofisk field capsized, killing 123 of the 212 persons on board. These then new SOLAS requirements were considered an important step forward in lifeboat design.

1.2 Some deaths in that accident were attributed to the fact that the lifeboat had no means of release when its weight was on the hook and falls. Therefore, on-load release systems were seen to offer benefits.

1.3 Since the IMO requirements for all ships to be fitted with on-load release systems came into force, there have been a number of serious accidents during drills and servicing.

1.4 Many of these accidents were attributed to either lack of maintenance, poor design or inadequate training. Failures of equipment can result in the premature opening of the on-load hook mechanism, causing the lifeboat to fall from the davits unexpectedly, even with three safety interlocks provided for in the design.

1.5 A number of current designs of on-load release hooks are designed to open under the effect of the lifeboat's own weight and often need to be held closed by the operating mechanism. This means that any defects or faults in the operating mechanism, errors by the crew or incorrect resetting of the hook after being previously operated, can result in premature release.

1.6 A "Fall Preventer Device" (FPD) can be used to minimize the risk of injury or death by providing a secondary alternate load path in the event of failure of the on-load hook or its release mechanism or of accidental release of the on-load hook. However, FPDs should not be regarded as a substitute for a safe on-load release mechanism.

2 Design and operation of FPDs

2.1 Locking pins

The following points should be considered when utilizing locking pins as FPDs:

.1 existing on-load release hooks fitted to ships should **not** be modified by drilling to provide a locking pin insertion point, unless approved by the Administration in accordance with paragraph 4, as this may significantly reduce the strength of the hook;

.2 locking pins should have clear operational instructions located near the insertion point of the locking pin and be colour coded so that it is clear where the pins are to be inserted;

.3 locking pins should be designed so that they cannot be inadvertently inserted in the wrong place;

.4 locking pins should be confirmed to be in place prior to turning out the lifeboat and during descent to the water;

.5 strict procedures, including a warning notice at the release handle, should be in place to ensure that the locking pin is removed before the release mechanism is activated. The handle of the locking pin should be coloured red or a suitable contrasting safety colour and prominently marked with a warning that it must be removed before activating the release mechanism;

.6 the removal of the pin should be achievable quickly and easily without posing any risk to the operating crew designated to carry out the task once the lifeboat has reached the water;

.7 if the removal of the pins requires opening of the lifeboat hatch it should be readily achievable by the operating crew at each device from within the craft;

.8 once the on-load release hooks have been connected to recover the lifeboat, the locking pins should be re-inserted before the boat is hoisted clear of the water. The locking pins should be designed so that they do not interfere with either the lifting or re-stowing of the lifeboat into the davits; and

.9 where provided, fall preventer locking pins should not be used for any other purpose and should be fitted to the lifeboat at all times.

2.2 Strops or slings

Wires or chains should not be used as FPDs, as they do not absorb shock loads. The following points should be considered when synthetic strops or slings are used as FPDs:

.1 where FPDs are synthetic strops or slings and no modifications are required to the lifeboat, the on-load release hook or launching equipment, a functional test should be carried out. The functional test should demonstrate, to the satisfaction of the Administration, that the equipment performs without interfering in the operation of the lifeboat or launching equipment. Strops or slings should be of resilient fibre in construction;

.2 the strops or slings should be issued with an appropriate certificate documenting a tensile strength which provides for a factor of safety of at least six, based on the total weight of the lifeboat when loaded with its full complement of persons and equipment. The strops or slings should be inspected before use and thoroughly inspected by ship's crew every six months. The material of the strop or sling should be rot-proof, corrosion-resistant, not be unduly affected by seawater, oil or fungal attack, and UV resistant. The strops or slings should be permanently marked with the date of entry into service;

.3 strict procedures, including a warning notice at the release handle, should be in place to ensure that the strops or slings are removed before the release mechanism is activated;

.4 the attachment point of the strop or sling to the on-load release hook and the davit falls block should be clearly marked and designed so that any connection device such as shackles cannot be connected to either the wrong part of the block or the wrong part of the on-load release hook;

.5 the release of the strops or slings should be achievable quickly and easily without posing any risk to the operating crew designated to carry out the task once the lifeboat has reached the water. If the release of the strops or slings requires opening of the lifeboat hatch it should be readily achievable by the operating crew at each device from within the craft. Once detached, the strops or slings should not interfere with the operation of the on-load release gear or the propeller;

.6 once the on-load release hooks have been connected to recover the lifeboat, the strops or slings should be reattached to the lifeboat before the boat is hoisted clear of the water. The strops or slings should be designed so that they do not interfere with either the lifting or re-stowing of the lifeboat into the davits;

.7 a strop or sling used as an FPD should be sized and arranged to allow the transfer of load from the hook mechanism to the strop with minimal movement (drop) of the boat in the event of a release mechanism failure. Should a fall preventer strop or sling be subject to an unintentional dynamic shock loading, then the strop or sling should be replaced and the associated attachment points inspected. In such cases, the Administration should be informed as soon as possible and the master should provide a full report of the circumstances of the incident; and

.8 where provided, fall preventer strops or slings should not be used for any other purpose and should be fitted to the lifeboat at all times.

3 Drills, testing, inspections and maintenance of lifeboats and launching appliances

3.1 The ship's master or the officer in charge of any lifeboat lowering or lifting operation should ensure that, where provided, lifeboat FPDs are properly in place before commencing any drill, testing, inspection or maintenance where persons are in the lifeboat.

3.2 The ship's operating crew should be familiar with the operation of the FPD fitted to the lifeboat on their ship. The procedure to be followed should be contained in the ISM Code documentation and the ship's training manual.

3.3 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 application of paragraphs 2.1.9 or 2.2.8. 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.

4 Modification of existing approved on-load hooks already fitted to a ship to incorporate FPDs

The shipowner or original equipment manufacturer should contact the Administration for approval before any modification, such as modifying existing lifeboats and hooks for oil and chemical tankers so that FPDs can be released from within the lifeboat, is made to a hook, lifeboat or davit to accommodate the use of FPDs. Any retesting of any equipment should be agreed and witnessed by the Administration or a recognized organization appointed by them and documented in the relevant approval file.