ANNEX 14

RESOLUTION MSC.544(107)
(adopted on 8 June 2023)

AMENDMENTS TO THE REVISED RECOMMENDATION ON TESTING OF LIFE-SAVING APPLIANCES (RESOLUTION MSC.81(70))

THE MARITIME SAFETY COMMITTEE,

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

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

RECALLING FURTHER that, since the adoption of resolution A.689(17), the Committee has amended the Recommendation annexed thereto by resolutions MSC.54(66) and MSC.81(70), and by circulars MSC/Circ.596, MSC/Circ.615 and MSC/Circ.809,

RECOGNIZING the need to ensure that the references in the *Revised recommendation on testing of life-saving appliances* (resolution MSC.81(70)) are kept up to date,

1 ADOPTS the *Amendments to the Revised recommendation on testing of life-saving appliances* (resolution MSC.81(70)), set out in the annex to the present resolution;

2 RECOMMENDS Governments to ensure that life-saving appliances installed on or after 1 January 2029 conform to the amended prototype tests in sections 6 (Lifeboats) and 7 (Rescue boats and fast rescue boats), as set out in the annex to the present resolution;

3 INVITES Contracting Governments to the SOLAS Convention to bring the above amendments to the attention of all parties concerned.

ANNEX

AMENDMENTS TO THE REVISED RECOMMENDATION ON TESTING OF LIFE-SAVING APPLIANCES (RESOLUTION MSC.81(70))

PART 1 – PROTOTYPE TESTS FOR LIFE-SAVING APPLIANCES

2 LIFEJACKETS

2.4 Tests of components other than buoyancy materials

1 The footnote to paragraph 2.4 is replaced by the following:

"* Refer to the recommendations of the International Organization for Standardization, in particular publication ISO 12402-7:2020 Personal flotation devices. Part 7: Materials and components. Safety requirements and test methods."

2.6 Tests for lifejacket buoyancy material

Tensile strength test

2 The footnote to paragraph 2.6.8 is replaced by the following:

" * Refer to the recommendations of the International Organization for Standardization, in particular publication ISO 12402-7:2020, Personal flotation devices. Part 7: Materials and components. Safety requirements and test methods."

3 IMMERSION SUITS

3.2 Thermal protective tests

General

3 Paragraph 3.2.3 is replaced by the following:

"3.2.3 Where human subjects are used, the tests should always be conducted under the supervision of a physician. Emergency resuscitation equipment should be available during all tests. For safety reasons, ECG should be monitored during every test. Testing should be stopped at the wish of the test subjects, if the falling rate of the core temperature is more than 1.5ºC per hour after the first half hour, if the skin temperature of the hand, foot or lumbar region should fall below 10ºC for more than 15 minutes, or if the attending physician considers it advisable."

6 LIFEBOATS

6.10 Lifeboat operational test

Operation of engine and fuel consumption test

4 Paragraph 6.10.1 is replaced by the following:

"6.10.1 The lifeboat should be loaded with weights equal to the mass of its equipment and the number of persons for which the lifeboat is to be approved. The engine should be started and the lifeboat manoeuvred for a period of at least four hours to

demonstrate satisfactory operation. The lifeboat should be run at a speed of not less than 6 knots and, with the powered means of ventilation in operation if fitted, for a period which is sufficient to ascertain the fuel consumption and to establish that the fuel tank has the required capacity. The maximum towing force of the lifeboat should be determined. This information should be used to determine the largest fully loaded liferaft the lifeboat can tow at 2 knots. The fitting designated for towing other craft should be secured to a stationary object by a tow rope. The engine should be operated ahead at full speed for a period of at least two minutes, and the towing force measured and recorded. There should be no damage to the towing fitting or its supporting structure. The maximum towing force of the lifeboat should be recorded on the type approval certificate."

6.14 Additional tests for totally enclosed lifeboats

5 Paragraph 6.14.1 is replaced by the following:

"6.14.1 A suitable means should be provided to rotate the lifeboat about a longitudinal axis to any angle of heel and then release it. The lifeboat, in the enclosed condition, should be incrementally rotated to angles of heel up to and including 180° and should be released. After release, the lifeboat should always return to the upright position without the assistance of the occupants. The ventilation system of either powered or passive type while in operation should not compromise the ability of the lifeboat to self-right under any circumstance. These tests should be conducted in the following conditions of load:"

6 The following new paragraph 6.14.9 is added after existing paragraph 6.14.8:

"*Ventilation performance test*

6.14.9 The ventilation rate required by paragraph 4.6.6.1 of the LSA Code should be measured under moored conditions. The test should be carried out with only the persons necessary on board to perform the test. All entrances and hatches should be kept closed. Ventilation openings should stay open. The measured ventilation rate should not be less than 5 m^3/hour per person for the total number of persons which the lifeboat is permitted to accommodate."

7 RESCUE BOATS AND FAST RESCUE BOATS

7.4 Rigid fast rescue boats

7 Paragraph 7.4.1 is replaced by the following:

"7.4.1 Rigid fast rescue boats should be subjected to the tests prescribed in 6.2 to 6.12 (except 6.3, 6.4.2, 6.5, 6.6.2, 6.7.1, 6.9.6, 6.9.7, 6.10.1), 6.14.1 to 6.14.8 (if a rigid fast rescue boat is self-righting), 7.1.2 to 7.1.4, 7.1.6, 7.1.7 (if a rigid fast rescue boat is not self-righting), 7.1.8, 7.1.9 and 7.2.4.2. In the case of open fast rescue boats, the self-righting test should only be done in the light condition, and 6.14.1.1, 6.14.3, 6.14.4, 6.14.5 and 6.14.9 are not applicable. With regard to 6.14.2, a boat fitted with a helmsman's emergency release switch should be considered to be arranged to stop automatically when inverted."

7.5 Inflated fast rescue boats

8 Paragraph 7.5 is replaced by the following:

"Inflated fast rescue boats should be subjected to the tests prescribed in 6.4.1, 6.6.1, 6.7.2, 6.9.1 to 6.9.5, 6.10 (except 6.10.1), 6.11, 6.12, 6.14.1 to 6.14.8 (if inflated fast rescue boat is self-righting), 7.1.2, 7.1.3, 7.1.6 (if inflated fast rescue boat is equipped with outboard motor), 7.1.7 (if inflated fast rescue boat is not self-righting), 7.1.8, 7.2.2 to 7.2.16 and 7.4.2."

7.6 Rigid/inflated fast rescue boats

9 Paragraph 7.6 is replaced by the following:

"Rigid/inflated fast rescue boats should be subjected to the tests prescribed in 6.2 (for hull), 7.2.14 (for inflated part), 6.4.1, 6.6.1, 6.7.2, 6.9.1 to 6.9.5, 6.10 (except 6.10.1) to 6.12, 6.14.1 to 6.14.8 (if rigid/inflated fast rescue boat it self-righting), 7.1.2 to 7.1.4, 7.1.6 (if rigid/inflated rescue boat is equipped with outboard motor), 7.1.7 (if rigid/inflated fast rescue boat is not self-righting), 7.1.8, 7.2.2 to 7.2.11, 7.2.15, 7.2.16, 7.3.2 and 7.4.2."

APPENDIX 1

ADULT REFERENCE TEST DEVICE (RTD) DESIGN AND CONSTRUCTION

10 Paragraph 2 is replaced by the following:

"**2 MATERIALS**

All materials used should comply with ISO 12402-7:2020."

APPENDIX 2

CHILD REFERENCE TEST DEVICE (RTD) DESIGN AND CONSTRUCTION

11 Paragraph 2 is replaced by the following:

"**2 MATERIALS**

All materials used should comply with ISO 12402-7:2020."

APPENDIX 3

INFANT REFERENCE TEST DEVICE (RTD) DESIGN AND CONSTRUCTION

12 Paragraph 2 is replaced by the following:

"**2 MATERIALS**

All materials used should comply with ISO 12402-7:2020."

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