## RESOLUTION MSC.207(81) (adopted on 18 May 2006)

# 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-first 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 January 2010, 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 July 2010 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 APPLIANCE (LSA) CODE

### CHAPTER I GENERAL

- 1 The existing subparagraph .2 of paragraph 1.2.2 is replaced by the following:
  - ".2 not be damaged in stowage throughout the air temperature range -30°C to +65°C and, in the case of personal life-saving appliances, unless otherwise specified, remain operational throughout the air temperature range -15°C to +40°C;"
- 2 The existing subparagraph .6 of paragraph 1.2.2 is replaced by the following:
  - ".6 be of international or vivid reddish orange, or a comparably highly visible colour on all parts where this will assist detection at sea;"

## CHAPTER II PERSONAL LIFE-SAVING APPLIANCES

- 3 The words "sufficient to operate the quick-release arrangement" in paragraph 2.1.1.7 are replaced by the words "of not less than 4 kg".
- In paragraph 2.1.3, the word "and" is moved from the end of subparagraph .4 to the end of subparagraph .5, and the following new subparagraph .6 is added:
  - ".6 be provided with a quick-release arrangement that will automatically release and activate the signal and associated self-igniting light connected to a lifebuoy having a mass of not more than 4 kg."
- 5 The existing section 2.2 is replaced by the following:

### "2.2 Lifejackets

- 2.2.1 *General requirements for lifejackets*
- 2.2.1.1 A lifejacket shall not sustain burning or continue melting after being totally enveloped in a fire for a period of 2 s.
- 2.2.1.2 Lifejackets shall be provided in three sizes in accordance with table 2.1. If a lifejacket fully complies with the requirements of two adjacent size ranges, it may be marked with both size ranges, but the specified ranges shall not be divided. Lifejackets shall be marked by either weight or height, or by both weight and height, according to table 2.1

Lifejacket marking	Infant	Child	Adult
User's size:			
Weight (kg)	less than 15	15 or more but less than 43	43 or more
Height (cm)	less than 100	100 or more but less than 155	155 or more

Table 2.1 – Lifejacket sizing criteria

- 2.2.1.3 If an adult lifejacket is not designed to fit persons weighing up to 140 kg and with a chest girth of up to 1,750 mm, suitable accessories shall be available to allow it to be secured to such persons.
- 2.2.1.4 The in-water performance of a lifejacket shall be evaluated by comparison to the performance of a suitable size standard reference lifejacket, i.e. reference test device (RTD) complying with the recommendations of the Organization.\*
- 2.2.1.5 An adult lifejacket shall be so constructed that:
  - at least 75% of persons who are completely unfamiliar with the lifejacket can correctly don it within a period of 1 min without assistance, guidance or prior demonstration;
  - .2 after demonstration, all persons can correctly don it within a period of 1 min without assistance;
  - .3 it is clearly capable of being worn in only one way or inside-out and, if donned incorrectly, it is not injurious to the wearer;
  - .4 the method of securing the lifejacket to the wearer has quick and positive means of closure that do not require tying of knots;
  - .5 it is comfortable to wear; and
  - .6 it allows the wearer to jump into the water from a height of at least 4.5 m while holding on to the lifejacket, and from a height of at least 1m with arms held overhead, without injury and without dislodging or damaging the lifejacket or its attachments.
- 2.2.1.6 When tested according to the recommendations of the Organization on at least 12 persons, adult lifejackets shall have sufficient buoyancy and stability in calm fresh water to:

<sup>\*</sup> Refer to the Revised Recommendation on testing of life-saving appliances (resolution MSC.81(70)), as amended.

- .1 lift the mouth of exhausted or unconscious persons by an average height of not less than the average provided by the adult RTD;
- .2 turn the body of unconscious, face-down persons in the water to a position where the mouth is clear of the water in an average time not exceeding that of the RTD, with the number of persons not turned by the lifejacket no greater than that of the RTD;
- .3 incline the body backwards from the vertical position for an average torso angle of not less than that of the RTD minus 5°;
- .4 lift the head above horizontal for an average faceplane angle of not less than that of the RTD minus 5°; and
- .5 return the wearer to a stable face-up position after being destabilized when floating in the flexed foetal position.\*
- 2.2.1.7 An adult lifejacket shall allow the person wearing it to swim a short distance and to board a survival craft.
- 2.2.1.8 An infant or child lifejacket shall perform the same as an adult lifejacket except as follows:
  - .1 donning assistance is permitted for small children and infants;
  - .2 the appropriate child or infant RTD shall be used in place of the adult RTD; and
  - assistance may be given to board a survival craft, but wearer mobility shall not be reduced to any greater extent than by the appropriate size RTD.
- 2.2.1.9 With the exception of freeboard and self-righting performance, the requirements for infant lifejackets may be relaxed, if necessary, in order to:
  - .1 facilitate the rescue of the infant by a caretaker;
  - .2 allow the infant to be fastened to a caretaker and contribute to keeping the infant close to the caretaker;
  - .3 keep the infant dry, with free respiratory passages;
  - .4 protect the infant against bumps and jolts during evacuation; and
  - .5 allow a caretaker to monitor and control heat loss by the infant.

Refer to the illustration on page 11 of the IMO Pocket Guide to Cold Water Survival and to the Revised Recommendation on testing of life-saving appliances (resolution MSC.81(70)), as amended.

- 2.2.1.10 In addition to the markings required by paragraph 1.2.2.9, an infant or child lifejacket shall be marked with:
  - .1 the size range in accordance with paragraph 2.2.1.2; and
  - an "infant" or "child" symbol as shown in the "infant's lifejacket" or "child's lifejacket" symbol adopted by the Organization.\*
- 2.2.1.11 A lifejacket shall have buoyancy which is not reduced by more than 5% after 24 h submersion in fresh water.
- 2.2.1.12 The buoyancy of a lifejacket shall not depend on the use of loose granulated materials.
- 2.2.1.13 Each lifejacket shall be provided with means of securing a lifejacket light as specified in paragraph 2.2.3 such that it shall be capable of complying with paragraphs 2.2.1.5.6 and 2.2.3.1.3.
- 2.2.1.14 Each lifejacket shall be fitted with a whistle firmly secured by a lanyard.
- 2.2.1.15 Lifejacket lights and whistles shall be selected and secured to the lifejacket in such a way that their performance in combination is not degraded.
- 2.2.1.16 A lifejacket shall be provided with a releasable buoyant line or other means to secure it to a lifejacket worn by another person in the water.
- 2.2.1.17 A lifejacket shall be provided with a suitable means to allow a rescuer to lift the wearer from the water into a survival craft or rescue boat.

### 2.2.2 Inflatable lifejackets

A lifejacket which depends on inflation for buoyancy shall have not less than two separate compartments, shall comply with the requirements of paragraph 2.2.1 and shall:

- .1 inflate automatically upon immersion, be provided with a device to permit inflation by a single manual motion and be capable of having each chamber inflated by mouth;
- .2 in the event of loss of buoyancy in any one compartment be capable of complying with the requirements of paragraphs 2.2.1.5, 2.2.1.6 and 2.2.1.7; and
- .3 comply with the requirements of paragraph 2.2.1.11 after inflation by means of the automatic mechanism.

Refer to Symbols related to life-saving appliances and arrangements, adopted by the Organization by resolution A.760(18), as amended.

## 2.2.3 Lifejacket lights

### 2.2.3.1 Each lifejacket light shall:

- .1 have a luminous intensity of not less than 0.75 cd in all directions of the upper hemisphere;
- have a source of energy capable of providing a luminous intensity of 0.75 cd for a period of at least 8 h;
- .3 be visible over as great a segment of the upper hemisphere as is practicable when attached to a lifejacket; and
- .4 be of white colour.
- 2.2.3.2 If the light referred to in paragraph 2.2.3.1 is a flashing light, it shall, in addition:
  - .1 be provided with a manually operated switch; and
  - .2 flash at a rate of not less than 50 flashes and not more than 70 flashes per minute with an effective luminous intensity of at least 0.75 cd."
- The word "The" in the beginning of paragraph 2.3.1.1 is replaced by the word "An".
- 7 The existing subparagraph .1 of paragraph 2.3.1.1 is replaced by the following:
  - ".1 it can be unpacked and donned without assistance within 2 min, taking into account donning of any associated clothing\*, donning of a lifejacket if the immersion suit must be worn in conjunction with a lifejacket to meet the requirements of paragraph 2.3.1.2, and inflation of orally inflatable chambers if fitted;"
- 8 The existing subparagraph .3 of paragraph 2.3.1.1 is replaced by the following:
  - ".3 it will cover the whole body with the exception of the face, except that covering for the hands may be provided by separate gloves which shall be permanently attached to the suit;"
- 9 The existing paragraph 2.3.1.2 is replaced by the following:
  - "2.3.1.2 An immersion suit on its own, or worn in conjunction with a lifejacket if necessary, shall have sufficient buoyancy and stability in calm fresh water to:
    - .1 lift the mouth of an exhausted or unconscious person clear of the water by not less than 120 mm; and

<sup>\*</sup> Refer to paragraph 3.1.3 of the Recommendation on testing of life-saving appliances, adopted by the Maritime Safety Committee of the Organization by resolution MSC.81(70), as amended.

- .2 allow the wearer to turn from a face-down to a face-up position in not more than 5 s."
- In paragraph 2.3.1.3.3, the words "or its attachments," are inserted between the words "the immersion suit" and "or being injured".
- 11 In paragraph 2.3.1.4, the number "2.2.1.8" is replaced by "2.2.1.14".
- The following new paragraphs 2.3.1.5 and 2.3.1.6 are inserted after the existing paragraph 2.3.1.4:
  - "2.3.1.5 An immersion suit which has buoyancy and is designed to be worn without a lifejacket shall be provided with a releasable buoyant line or other means to secure it to a suit worn by another person in the water.
  - 2.3.1.6 An immersion suit which has buoyancy and is designed to be worn without a lifejacket shall be provided with a suitable means to allow a rescuer to lift the wearer from the water into a survival craft or rescue boat."
- 13 The existing paragraph 2.3.1.5 is replaced by the following:
  - "2.3.1.7 If an immersion suit is to be worn in conjunction with a lifejacket, the lifejacket shall be worn over the immersion suit. Persons wearing such an immersion suit shall be able to don a lifejacket without assistance. The immersion suit shall be marked to indicate that it must be worn in conjunction with a compatible lifejacket."
- 14 The following new paragraph 2.3.1.8 is added:
  - "2.3.1.8 An immersion suit shall have buoyancy which is not reduced by more than 5% after 24 h submersion in fresh water and does not depend on the use of loose granulated materials."
- 15 The existing paragraph 2.3.3 is deleted.
- The word "The" in the beginning of paragraph 2.4.1.1 is replaced by the word "An".
- 17 The existing subparagraph .3 of paragraph 2.4.1.1 is replaced by the following:
  - ".3 covers the whole body except, where the Administration so permits, the feet; covering for the hands and head may be provided by separate gloves and a hood, both of which shall be permanently attached to the suit;"
- The existing paragraph 2.4.1.2 is deleted and paragraphs 2.4.1.3 and 2.4.1.4 are renumbered as paragraphs 2.4.1.2 and 2.4.1.3 respectively.
- The words "or its attachments," are inserted between the words "the suit" and "or being injured" in subparagraph .2 of the renumbered paragraph 2.4.1.2.

- The renumbered paragraph 2.4.1.3 is replaced by the following:
  - "2.4.1.3 An anti-exposure suit shall be fitted with a light complying with the requirements of paragraph 2.2.3 such that it shall be capable of complying with paragraphs 2.2.3.1.3 and 2.4.1.2.2, and the whistle prescribed by paragraph 2.2.1.14."
- The existing subparagraph .2 of paragraph 2.4.2.1 is replaced by the following:
  - ".2 be so constructed that, when worn as marked and following one jump into the water which totally submerges the wearer, the suit continues to provide sufficient thermal protection to ensure that when it is worn in calm circulating water at a temperature of 5°C, the wearer's body core temperature does not fall at a rate of more than 1.5°C per hour, after the first 0.5 h."

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