# **RESOLUTION MSC.24(60)**

# (adopted on 10 April 1992)

# ADOPTION OF AMENDMENTS TO CHAPTER II-2 OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

#### FIRE SAFETY MEASURES FOR EXISTING PASSENGER SHIPS

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, 1974, hereinafter referred to as "the Convention", concerning the procedures for amending the Annex to the Convention, other than the provisions of chapter I,

BEING CONCERNED about recent serious fire casualties resulting in the loss of human life,

RECOGNIZING that there is a compelling and urgent need to improve the fire safety measures for existing passenger ships,

HAVING CONSIDERED at its sixtieth 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, the 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 amendments shall be deemed to have been accepted on 1 April 1994 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 per cent 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 October 1994 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 the resolution to Members of the Organization which are not Contracting Governments to the Convention.

#### **ANNEX**

# AMENDMENTS TO CHAPTER II-2 OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

# **Regulation 1 - Application**

- 1 Existing paragraph 3 is renumbered as paragraph 3.1 and the following new paragraph 3.2 is inserted after paragraph 3.1:
  - "3.2 Notwithstanding the provisions of paragraph 3.1, passenger ships carrying more than 36 passengers when undergoing repairs, alterations, modifications and outfitting related thereto shall comply with the following:
    - .1 all materials introduced to these ships shall comply with the requirements with regard to material applicable to ships constructed on or after 1 October 1994; and
    - .2 all repairs, alterations, modifications and outfitting related thereto involving the replacement of material of 50 tonnes or above, other than that required by regulation 41-1, shall comply with the requirements applicable to such ships constructed on or after 1 October 1994."

- 2 The following new paragraphs 22-1 and 22-2 are inserted after existing paragraph 22:
  - "22-1 "Central control station" is a control station in which the following control and indicator functions are centralized:
    - .1 fixed fire detection and alarm system;
    - .2 automatic sprinklers , fire detection and alarm system;
    - .3 fire door indicator panel;
    - .4 fire door closure;
    - .5 watertight door indicator panel;
    - .6 watertight door opening and closing;
    - .7 ventilation fans;
    - .8 general/fire alarm;
    - .9 communication systems including telephones; and
    - .10 microphone to public address system.
  - 22-2 "Continuously manned central control station" is a central control station which is continuously manned by a responsible member of the crew."

## Regulation 17 - Fireman's outfit

3 The following sentence is added at the end of existing paragraph 1.2.2:

"In passenger ships carrying more than 36 passengers, at least two spare charges for each breathing apparatus shall be provided, and all air cylinders for breathing apparatus shall be interchangeable".

4 The following sentence is added at the end of existing paragraph 3.1.1:

"In passenger ships carrying more than 36 passengers, two additional fireman's outfit shall be provided for each main vertical zone".

5 The following sentence is added at the end of existing paragraph 4:

"At least two fireman's outfits shall be stored in each main vertical zone".

6 The following new regulations 41-1 and 41-2 are inserted after existing regulation 41:

### "Regulation 41-1

Upgrading of passenger ships carrying more than 36 passengers constructed before 1 October 1994

- 1 This regulation shall apply to passenger ships carrying more than 36 passengers constructed before 1 October 1994.
- 2 Passenger ships which do not comply with all the requirements of chapter II-2 applicable to ships constructed on or after 25 May 1980 (requirements of chapter II-2 of the International Convention for the Safety of Life at Sea, 1974, as adopted by the International Conference on Safety of Life at Sea, 1974, applicable to new passenger ships) shall comply with the following:
  - .1 paragraph 1 of regulation 41-2 not later than 1 October 1994; and
  - .2 paragraphs 2, 3, 4 and 5 of regulation 41-2, not later than 1 October 1997; and
  - .3 paragraph 6 of regulation 41-2 not later than 1 October 2000; and
  - .4 all the requirements of chapter II-2 applicable to ships constructed on or after 25 May 1980 (requirements of chapter II-2 of the International Convention for the Safety of Life at Sea, 1974, as adopted by the International Conference on Safety of Life at Sea, 1974, applicable to new passenger ships), not later than 1 October 2010.
- 3 Passenger ships which comply with all the requirements applicable to ships constructed on or after 25 May 1980 (applicable requirements of chapter II-2 of the International Convention for the Safety of Life at Sea, 1974, as amended

by resolutions MSC.1(XLV), MSC.6(48), MSC.11(55), MSC.12(56), MSC.13(57) and MSC.22(59)) shall comply with the following:

- .1 paragraph 1 of regulation 41-2 not later than 1 October 1994; and
- .2 paragraphs 2 and 4 of regulation 41-2 not later than 1 October 1997; and
- .3 paragraph 6 of regulation 41-2 not later than 1 October 2000; and
- .4 paragraph 5 of regulation 41-2 not later than 1 October 2005 or 15 years after the date of construction of the ships, whichever is later.
- 4 For the purpose of this regulation, passenger ships complying in their entirety with all the requirements of part H of chapter II contained in amendments to the International Convention for the Safety of Life at Sea, 1960, adopted by the Assembly of the Organization by resolution A.122(V), may be regarded as passenger ships complying with the requirements applicable to passenger ships constructed on or after 25 May 1980 (requirements of chapter II-2 of the International Convention for the the Safety of Life at Sea, 1974, as adopted by the International Conference on Safety of Life at Sea, 1974, applicable to new passenger ships).

## Regulation 41-2

Requirements for passenger ships carrying more than 36 passengers constructed before 1 October 1994

- 1.1 Plans and booklets required by regulation 20 shall provide the information regarding fire protection, fire detection and fire extinction based on the guidelines developed by the Organization\*.
  - \* Reference is made to the guidelines to be developed by the Organization.
- 1.2 Each member of the fire patrol shall be provided with a two-way portable radiotelephone apparatus.
- 1.3 Water fog applicators shall be provided as required in regulations 7.6, 17.3.2 and 37.1.5.1.
- 1.4 Portable foam applicators shall be provided as required in regulations 7.1.2, 7.2.2 and 37.1.5.2.
- 1.5 All hose nozzles provided shall be of an approved dual-purpose type (i.e. spray/jet type) incorporating a shutoff.
- 2 All accommodation and service spaces, stairway enclosures and corridors shall be equipped with a smoke detection and alarm system of an approved type and complying with the requirements of regulation 13. Such system need not be fitted in private bathrooms, and spaces having little or no fire risk such as voids and similar spaces. Detectors operated by heat instead of smoke shall be installed in galleys.
- 3 Smoke detectors connected to the smoke detection and alarm system shall also be fitted above ceilings in stairways and corridors in the areas where ceilings are of combustible construction.
- 4.1 Hinged fire doors in stairway enclosures, main vertical zone bulkheads and galley boundaries which are normally kept open shall be self-closing and be capable of release from a central control station and from a position at the door.
- 4.2 A panel shall be placed in a continuously manned central control station to indicate whether the fire doors on stairway enclosures, main vertical zone bulkheads and galley boundaries are closed.
- 4.3 Exhaust ducts from galley ranges where grease or fat is likely to accumulate and which pass through accommodation spaces or spaces containing combustible materials shall be constructed of "A" class divisions. Each galley range exhaust duct shall be fitted with:
  - .1 a grease trap readily removable for cleaning, unless an alternative grease removal process is fitted;
  - .2 a fire damper located in the lower end of the duct;
  - .3 arrangements operable from within the galley for shutting off the exhaust fans;
  - .4 fixed means for extinguishing a fire within the duct; and
  - .5 suitably located hatches for inspection and cleaning.
- 4.4 Only public toilets, lifts, lockers of non-combustible materials providing storage for safety equipment and open information counters may be located within the stairway enclosure boundaries. Other existing spaces within the stairway enclosure:
  - .1 shall be emptied, permanently closed and disconnected from the electrical system: or
  - .2 shall be separated from the stairway enclosure by the provision of "A" class divisions in accordance with regulation 26. Such spaces may have direct access to stairway enclosures by the provision of "A" class doors in accordance with regulation 26, and subject to a sprinkler system being provided in these spaces. However, cabins shall not directly

open into the stairway enclosure.

- 4.5 Spaces other than public spaces, corridors, public toilets, special category spaces, other stairways required by regulation 28.1.5, open deck spaces and spaces covered by paragraph 4.4.2 are not permitted to have direct access to stairway enclosures.
- 4.6 Existing machinery spaces of category (10) described in regulation 26.2.2 and existing back offices for information counters which open directly into the stairway enclosure may be retained, provided that they are protected by smoke detectors and that back offices for information counters contain only furniture of restricted fire risk.
- 4.7 In addition to the emergency lighting required by regulations II-1/42 and III/11.5, the means of escape including stairways and exits shall be marked, at all points of the escape route including angles and intersections, by lighting or photoluminescent strip indicators placed not more than 0.3 m above the deck. The marking must enable passengers to identify all routes of escape and readily identify the escape exits. If electric illumination is used, it shall be supplied by the emergency source of power and it shall be so arranged that the failure of any single light, or cut in a lighting strip, will not result in the marking being ineffective. Additionally, all escape route signs and fire equipment location markings shall be of photoluminescent material. The Administration shall ensure that such lighting or photoluminescent equipment has been evaluated, tested and applied in accordance with the guidelines developed by the Organization\*.
  - \* Reference is made to the guidelines to be developed by the Organization.
- 4.8 A general emergency alarm system shall be provided. The alarm shall be audible throughout all the accommodation and normal crew working spaces and open decks, and its sound pressure level shall comply with the standard developed by the Organization\*\*. The alarm shall continue to function after it has been triggered until it is manually turned off or is temporarily interrupted by a message on the public address system.
  - \*\* Reference is made to the Code on Alarms and Indicators adopted by the Organization by resolution A.686(17).
- 4.9 A public address system or other effective means of communication shall be available and audible throughout the accommodation, public and service spaces, control stations and open decks.
- 4.10 Furniture in stairway enclosures shall be limited to seating. It shall be fixed, limited to six seats on each deck in each stairway enclosure, be of restricted fire risk, and shall not restrict the passenger escape route. The Administration may permit additional seating in the main reception area within stairway enclosures, if it is fixed, non-combustible, and does not restrict the passenger escape route. Furniture shall not be permitted in passenger and crew corridors forming escape routes in cabin areas. In addition to the above, lockers of non-combustible material, providing storage for safety equipment required by regulations, may be permitted.
- 5 Accommodation and service spaces, stairway enclosures and corridors shall be fitted with an automatic sprinkler, fire detection and fire alarm system complying with the requirements of regulation 12 or the guidelines developed by the Organization\* for an approved equivalent sprinkler system. A sprinkler system need not be fitted in private bathrooms and spaces having little or no fire risk such as voids and similar spaces.
  - \* Reference is made to the guidelines to be developed by the Organization.
- 6.1 All stairways in accommodation and service spaces shall be of steel frame construction except where the Administration sanctions the use of other equivalent material, and shall be within enclosures formed of "A" class divisions, with positive means of closure at all openings, except that:
  - .1 a stairway connecting only two decks need not be enclosed, provided the integrity of the deck is maintained by proper bulkheads or doors in one 'tween-deck space. When a stairway is closed in one 'tween-deck space, the stairway enclosure shall be protected in accordance with the tables for decks in regulation 26;
  - .2 stairways may be fitted in the open in a public space, provided they lie wholly within such public space.
- 6.2 Machinery spaces of category A shall be fitted with a fixed fire-extinguishing system complying with the requirements of regulation 7.
- 6.3 Ventilation ducts passing through divisions between main vertical zones shall be equipped with a fail-safe automatic closing fire damper which shall also be capable of being manually closed from each side of the division. In addition, fail-safe automatic closing fire dampers with manual operation from within the enclosure shall be fitted to all ventilation ducts serving both accommodation and service spaces and stairway enclosures where they pierce such enclosures. Ventilation ducts passing through a main fire zone division without serving spaces on both sides or passing through a stairway enclosure without serving that enclosure need not be fitted with dampers provided that the ducts are constructed and insulated to A-60 standard and have no openings within the stairway enclosure or in the trunk on the side which is not directly served.
- 6.4 Special category spaces and ro-ro cargo spaces shall comply with the requirements of regulations 37 and 38, respectively.
- 6.5 All fire doors in stairway enclosures, main vertical zone bulkheads and galley boundaries which are normally kept open shall be capable of release from a central control station and from a position at the door."

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