### RESOLUTION A.174(VI)

### AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960

The Assembly,

Recognizing the need to improve safety of life at sea,

Noting Article 16(i) of the Convention on the Inter-Governmental Maritime Consultative Organization, concerning the functions of the Assembly with regard to regulations relating to maritime safety,

Noting further that Article IX of the International Convention for the Safety of Life at Sea, 1960, in paragraphs (b), (d), (e), (g) and (h), provides for procedures of amendment involving participation of the Organization,

Having considered certain amendments to the International Convention for the Safety of Life at Sea, 1960, forming the subject of recommendations adopted by the Maritime Safety Committee at its seventeenth and nineteenth sessions in accordance with Article IX of that Convention, and directed towards improvement of requirements for fireman's outfits and personal equipment in cargo ships, for the specification of a lifebuoy and for lifejackets, for radio installations and shipborne navigational equipment,

Adopts the following eight amendments to the Regulations and Safety Certificates annexed to the International Convention for the Safety of Life at Sea, 1960, each of which amendments shall be communicated for acceptance to Contracting Governments in accordance with Article IX(d) of the Convention:

- (a) The replacement of Regulation 65(j) of Chapter II by a new Regulation, the text of which is at Annex I to this Resolution;
- (b) the replacement of Regulation 21(f) of Chapter III by a new Regulation, together with a footnote to that Regulation, and the replacement of Regulation 22 of Chapter III by a new Regulation. The text of this amendment is at Annex II to this Resolution;
- (c) the replacement of Regulation 2(c) of Chapter IV by a new Regulation, the text of which is at Annex III to this Resolution;
- (d) the replacement of Regulations 9(e), 9(h)(i), 13(c), 13(f), 15(a), 15(b), 15(f) and 15(g) of Chapter IV by new Regulations. The text of this amendment is at Annex IV to this Resolution;
- (e) the renumbering of existing paragraphs (a)-(g) of Regulation 11 of Chapter IV to (a)(i)-(a)(vii), and the addition of a new paragraph (b) to this Regulation, and the addition of a new paragraph (f) to Regulation 12 of Chapter V. The text of this amendment is at Annex V to this Resolution;
- (f) the addition of a new Regulation 21 of Chapter V, the text of which is at Annex VI to this Resolution:

- (g) the replacement of sub-paragraphs (i) and (ii) of paragraph (b) of Regulation 7 of Chapter I by new sub-paragraphs, and the replacement of Regulations 8 and 9 of Chapter I by new Regulations. The text of this amendment is at Annex VII to this Resolution;
- (h) the replacement of Parts VI and VIII of the Passenger Ship Safety Certificate, Part V of the Cargo Ship Safety Equipment Certificate, Part I of the Cargo Ship Safety Radiotelegraphy Certificate, Parts VII and IX of the Nuclear Passenger Ship Safety Certificate and Parts VII and IX of the Nuclear Cargo Ship Safety Certificate by new Parts. The text of this amendment is at Annex VIII to this Resolution,

Requests the Secretary-General of the Organization, in conformity with Article IX(b)(i), to communicate, for purposes of acceptance, certified copies of this Resolution and its Annexes, to all Contracting Governments to the International Convention for the Safety of Life at Sea, 1960, together with copies to all Members of the Organization, and

Invites all governments concerned to accept each of the amendments at the earliest possible date.

### ANNEX I

AMENDMENT TO REGULATION 65 OF CHAPTER II OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960

### Regulation 65

Paragraph (j) is replaced by the following:

- (j) Fireman's Outfits and Personal Equipment:
  - (i) A cargo ship, whether new or existing, shall carry at least two fireman's outfits complying with the requirements of Regulation 63 of this Chapter. Furthermore, Administrations may require in large cargo ships additional sets of personal equipment and in tankers and special ships such as factory ships additional fireman's outfits.
  - (ii) For each fireman's outfit which includes a self-contained breathing apparatus as provided in Regulation 63(b) of this Chapter, spare charges shall be carried on a scale approved by the Administration.
  - (iii) The fireman's outfits and personal equipment shall be stored so as to be easily accessible and ready for use and, where more than one fireman's outfit and set of personal equipment are carried, they shall be stored in widely separated positions.

### ANNEX II

# AMENDMENTS TO CHAPTER III OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960

### Regulation 21

Paragraph (f) is replaced by the following text and footnote:

(f) The self-igniting lights required by paragraph (e) of this Regulation shall be such that they cannot be extinguished by water. They shall be capable of burning for not less than 45 minutes and shall have a luminous intensity of not less than 2 candelas in all directions of the upper hemisphere. The lights shall be kept near the lifebuoys to which they belong, with the necessary means of attachment. Self-igniting lights used in tankers shall be of an approved electric battery type.\*

### Regulation 22

Regulation 22 is replaced by the following:

- (a) Ships shall carry for every person on board a lifejacket of an approved type and, in addition, unless these lifejackets can be adapted for use by children, a sufficient number of lifejackets suitable for children. Each lifejacket shall be suitably marked showing that it has been approved by the Administration.
- (b) In addition to the lifejackets required by paragraph (a) there shall be carried on passenger ships lifejackets for 5 per cent of the total number of persons on board. These lifejackets shall be stowed in a conspicuous place on deck.

<sup>\*</sup> The following ranges of visibilities of the light might be expected in given atmospheric conditions.

Atmospheric transmissivity factor	Meteorological range of visibility (nautical miles)	Range of visibility of the light (nautical miles)
0.3	2.4	0,96
0.4	3.3	1.05
0.5	4.3	1.15
0.6	5.8	1.24
0.7	8.4	1.34
0.8	13.4	1.45
0.9	28.9	1.57

- (c) An approved lifejacket shall comply with the following requirements:
  - (i) It shall be constructed with proper workmanship and materials.
  - (ii) It shall be so constructed as to eliminate so far as possible all risk of its being put on incorrectly, except that it shall be capable of being worn inside out.
  - (iii) It shall be capable of lifting the face of an exhausted or unconscious person out of the water and holding it above the water with the body inclined backwards from its vertical position.
  - (iv) It shall be capable of turning the body in the water from any position to a safe floating position with the body inclined backwards from its vertical position.
    - (v) It shall not be adversely affected by oil or oil products.
  - (vi) It shall be of a highly visible colour.
  - (vii) It shall be fitted with an approved whistle, firmly secured by a cord.
  - (viii) The buoyancy of the lifejacket required to provide the foregoing performance shall not be reduced by more than 5 per cent after 24 hours submergence in fresh water.
- (d) A lifejacket, the buoyancy of which depends on inflation, may be permitted for use by the crews of all ships except passenger ships and tankers provided that:
  - (i) It has two separate inflatable compartments;
  - (ii) It is capable of being inflated both mechanically and by mouth;and
  - (iii) It complies with the requirements of paragraph (c) with either compartment inflated separately.
- (e) Lifejackets shall be so placed as to be readily accessible and their position shall be plainly indicated.

### ANNEX III

AMENDMENT TO REGULATION 2 OF CHAPTER IV OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960

### Regulation 2

Paragraph (c) is replaced by the following:

(c) "Radio officer" means a person holding at least a first or second class radiotelegraph operator's certificate, or a radiocommunication operator's general certificate for the maritime mobile service, complying with the provisions of the Radio Regulations, who is employed in the radiotelegraph station of a ship which is provided with such a station in compliance with the provisions of Regulation 3 or Regulation 4 of this Chapter.

### ANNEX IV

## AMENDMENTS TO REGULATIONS 9, 13 AND 15 OF CHAPTER IV OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960

### Regulation 9

Paragraphs (e) and (h)(i) are replaced by the following:

- (e) The main and reserve transmitters shall be capable of transmitting on the radiotelegraph distress frequency using a class of emission assigned by the Radio Regulations for that frequency. In addition, the main transmitter shall be capable of transmitting on at least two working frequencies in the authorized bands between 405 kc/s and 535 kc/s, using classes of emission assigned by the Radio Regulations for these frequencies. The reserve transmitter may consist of a ship's emergency transmitter, as defined in and limited in use by the Radio Regulations.
- (h) (i) The main and reserve receivers shall be capable of receiving the radiotelegraph distress frequency and the classes of emission assigned by the Radio Regulations for that frequency.

### Regulation 13

Paragraphs (c) and (f) are replaced by the following:

- (c) The transmitter shall be capable of transmitting on the radiotelegraph distress frequency using a class of emission assigned by the Radio Regulations for that frequency, and, in the bands between 4,000 kc/s and 27,500 kc/s, of transmitting on the radiotelegraph frequency, and of using a class of emission, assigned by the Radio Regulations for survival craft. However, the Administration may permit the transmitter to be capable of transmitting on the radiotelephone distress frequency, and of using a class of emission, assigned by the Radio Regulations for that frequency, as an alternative or in addition to transmission on the radiotelegraph frequency assigned by the Radio Regulations for survival craft in the bands between 4,000 kc/s and 27,500 kc/s.
- (f) The receiver shall be capable of receiving the radiotelegraph distress frequency and the classes of emission assigned by the Radio Regulations for that frequency. If the transmitter is capable of transmitting on the radiotelephone distress frequency the receiver shall also be capable of receiving that frequency and a class of emission assigned by the Radio Regulations for that frequency.

### Regulation 15

Paragraphs (a), (b), (f) and (g) are replaced by the following:

(a) The radiotelephone installation shall include transmitting and receiving equipment and appropriate sources of energy (referred to in the following paragraphs as "the transmitter", "the receiver" and "the source of energy" respectively).

- (b) The transmitter shall be capable of transmitting on the radiotelephone distress frequency and on at least one other frequency in the bands between 1,605 kc/s and 2,850 kc/s, using the classes of emission assigned by the Radio Regulations for these frequencies. In normal operation a double sideband transmission or a single sideband transmission with full carrier (i.e. A3H) shall have a depth of modulation of at least 70 per cent at peak intensity. Modulation of a single sideband transmission with reduced or suppressed carrier (A3A, A3J) shall be such that the intermodulation products shall not exceed the values given in the Radio Regulations.
- (f) The receiver required by paragraph (a) of this Regulation shall be capable of receiving the radiotelephone distress frequency and at least one other frequency available for maritime radiotelephone stations in the bands between 1,605 kc/s and 2,850 kc/s, using the classes of emission assigned by the Radio Regulations for these frequencies. In addition the receiver shall permit the reception of such other frequencies, using the classes of emission assigned by the Radio Regulations, as are used for the transmission by radiotelephony of meteorological messages and such other communications relating to the safety of navigation as may be considered necessary by the Administration. The receiver shall have sufficient sensitivity to produce signals by means of a loudspeaker when the receiver input is as low as 50 microvolts.
- (g) The receiver used for maintaining watch on the radiotelephone distress frequency shall be preset to this frequency, or so arranged that setting to the frequency may be carried out in a rapid and precise manner and that, when set to this frequency, the receiver shall not easily be detuned accidentally. The use of a separate single channel watch receiver for the radiotelephone distress frequency fulfills this requirement.

#### ANNEX V

AMENDMENTS TO REGULATION 11 OF CHAPTER IV AND REGULATION 12 OF CHAPTER V OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960

Regulation 11 of Chapter IV

Existing paragraphs (a)-(g) are renumbered (a)(i)-(a)(vii) and a new paragraph (b) is added as follows:

- (b) (i) Radio equipment for homing on the radiotelephone distress frequency shall be capable of taking direction-finding bearings on that frequency without ambiguity of sense within an arc of 30 degrees on either side of the bow.
  - (ii) When installing and testing the equipment referred to in this paragraph due regard should be given to the relevant recommendation of the International Radio Consultative Committee (CCIR).
  - (iii) All reasonable steps shall be taken to ensure the homing capability required by this paragraph. In cases where due to technical difficulties the homing capability cannot be achieved, Administrations may grant to individual ships exemptions from the requirements of this paragraph.

## Regulation 12 of Chapter V (as amended by Resolution A.146(ES.IV))

A new paragraph (f) is added as follows:

(f) All ships of 1,600 tons gross tonnage and upwards, the keel of which is laid on or after the date of coming into force of this paragraph, when engaged on international voyages, shall be fitted with radio equipment for homing on the radiotelephone distress frequency complying with the relevant provisions of Regulation 11, paragraph (b) of Chapter IV.

### ANNEX VI

AMENDMENT TO CHAPTER V OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960

A new Regulation is added as follows:

Regulation 21

International Code of Signals

All ships which in accordance with the present Convention are required to carry a radiotelegraph or a radiotelephone installation shall carry the International Code of Signals. This publication shall also be carried by any other ship which in the opinion of the Administration has a need to use it.

### ANNEX VII

AMENDMENTS TO REGULATIONS 7, 8 AND 9 OF CHAPTER I OF THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960

### Regulation 7

Paragraphs (b)(i) and (b)(ii) are replaced by the following:

(b) (i) The survey before the ship is put in service shall include a complete inspection of its structure, machinery and equipments, including the outside of the ship's bottom and the inside and outside of the boilers. This survey shall be such as to ensure that the arrangements, material, and scantlings of the structure, boilers and other pressure vessels and their appurtenances, main and auxiliary machinery, electrical installation, radio installation, radiotelegraph installations in motor lifeboats, portable radio apparatus for survival craft, life-saving appliances, fire detecting and extinguishing appliances, radar, echo-sounding device, gyro-compass, pilot ladders and other equipments, fully comply with the requirements of the present Convention, and of the laws, decrees, orders and regulations promulgated as a result thereof by the Administration for ships of the service for which it is intended. The survey shall

also be such as to ensure that the workmanship of all parts of the ship and its equipments is in all respects satisfactory, and that the ship is provided with the lights, means of making sound signals and distress signals as required by the provisions of the present Convention and the International Collision Regulations.

(b) (ii) The periodical survey shall include an inspection of the structure, boilers and other pressure vessels, machinery and equipments, including the outside of the ship's bottom. The survey shall be such as to ensure that the ship, as regards the structure, boilers and other pressure vessels and their appurtenances, main and auxiliary machinery, electrical installation, radio installation. radiotelegraph installations in motor lifeboats, portable radio apparatus for survival craft, life-saving appliances, fire detecting and extinguishing appliances, radar, echo-sounding device, gyrocompass, pilot ladders and other equipments is in satisfactory condition and fit for the service for which it is intended, and that it complies with the requirements of the present Convention, and of the laws, decrees, orders and regulations promulgated as a result thereof by the Administration. The lights and means of making sound signals and the distress signals carried by the ship shall also be subject to the above-mentioned survey for the purpose of ensuring that they comply with the requirements of the present Convention and of the International Collision Regulations.

The existing text of Regulation 8 is replaced by the following:

### Regulation 8

Surveys of Life-Saving Appliances and other Equipment of Cargo Ships

The life-saving appliances, except a radiotelegraph installation in a motor lifeboat or a portable radio apparatus for survival craft, the echo-sounding device, the gyro-compass, and the fire extinguishing appliances of cargo ships to which Chapters II, III and V of the present Regulations apply shall be subject to initial and subsequent surveys as provided for passenger ships in Regulation 7 of this Chapter with the substitution of 24 months for 12 months in sub-paragraph (a)(ii) of that Regulation. The fire control plans in new ships and the pilot ladders, lights and means of making sound signals carried by new and existing ships shall be included in the surveys for the purpose of ensuring that they comply fully with the requirements of the present Convention and, where applicable, the International Collision Regulations.

The existing text of Regulation 9 is replaced by the following:

### Regulation 9

Surveys of Radio and Radar Installations of Cargo Ships

The radio and radar installations of cargo ships to which Chapters IV and V of the present Regulations apply and any radiotelegraph installation in a motor lifeboat or portable radio apparatus for survival craft which is carried in compliance with the requirements of Chapter III of the present Regulations shall be subject to initial and subsequent surveys as provided for passenger ships in Regulation 7 of this Chapter.

### ANNEX VIII

# AMENDMENTS TO CERTAIN SAFETY CERTIFICATES APPENDED TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960

### PASSENGER SHIP SAFETY CERTIFICATE

Parts VI and VIII are replaced by the following:

VI. That the ship complied with the requirements of the Regulations as regards radiotelegraph installations, viz.:

	Requirements of Regulations	Actual Provision
Hours of listening by operator		
	•••	•••
Number of operators	•••	•••
Whether auto alarm fitted	•••	•••
Whether main installation fitted	•••	•••
Whether reserve installation fitted		
Whether main and reserve trans- mitters electrically separated or combined		
Whether direction-finder and/or radio equipment for homing on the radiotelephone distress frequency fitted		
Whether radar fitted		
Number of passengers for which certificated		

VIII. That the ship complied with the requirements of the Regulations as regards fire-detecting and fire-extinguishing appliances, radar, echosounding device and gyro-compass and was provided with navigation lights and shapes, pilot ladder, and means of making sound signals, and distress signals in accordance with the provisions of the Regulations and also the International Collision Regulations.

### CARGO SHIP SAFETY EQUIPMENT CERTIFICATE

Part V is replaced by the following:

V. That the inspection showed that the ship complied with the requirements of the said Convention as regards fire-extinguishing appliances and fire control plans, echo-sounding device and gyro-compass and was provided with navigation lights and shapes, pilot ladder, and means of making sound signals and distress signals, in accordance with the provisions of the Regulations and the International Collision Regulations.

### CARGO SHIP SAFETY RADIOTELEGRAPHY CERTIFICATE

### Part I is replaced by the following:

I. That the above-mentioned ship complies with the provisions of the Regulations annexed to the Convention referred to above as regards radio-telegraphy and radar:

	Requirements of Regulations	Actual Provision
Hours of listening by operator		• • •
Number of operators		• • •
Whether auto alarm fitted		• • •
Whether main installation fitted		•••
Whether reserve installation fitted		•••
Whether main and reserve trans- mitters electrically separated or combined		•••
Whether direction-finder and/or radio equipment for homing on the radiotelephone distress frequency fitted		
• •		•••
Whether radar fitted	•••	•••

### NUCLEAR PASSENGER SHIP SAFETY CERTIFICATE

Parts VII and IX are replaced by the following:

VII. That the ship complied with the requirements of the Regulations as regards radiotelegraph installations, viz.:

	Requirements of Regulations	Actual Provision
Hours of listening by operator		
Number of operators	• • •	•••
Whether auto alarm fitted	•••	• • •
Whether main installation fitted	•••	
Whether reserve installation fitted		•••
Whether main and reserve trans- mitters electrically separated or combined		
Whether direction-finder and/or radio equipment for homing on the radiotelephone distress frequency fitted		
Whether radar fitted		
Number of passengers for which certificated	•••	

IX. That the ship complied with the requirements of the Regulations as regards fire-detecting and fire-extinguishing appliances, radar echosounding device and gyro-compass and was provided with navigation lights and shapes, pilot ladder, and means of making sound signals and distress signals in accordance with the provisions of the Regulations and also the International Collision Regulations.

### NUCLEAR CARGO SHIP SAFETY CERTIFICATE

Parts VII and IX are replaced by the following:

VII. That the ship complied with the requirements of the Regulations as

regards radiotelegraph installations viz.:

	Requirements of Regulations	Actual Provision
Hours of listening by operator		•••
Number of operators		•••
Whether auto alarm fitted		•••
Whether main installation fitted		•••
Whether reserve installation fitted		•••
Whether main and reserve trans- mitters electrically separated or combined		•••
Whether direction-finder and/or radio equipment for homing on the radiotelephone distress frequency fitted		
Whether radar fitted		•••

IX. That the inspection showed that the ship complied with the requirements of the said Convention as regards fire-extinguishing appliances, radar, echosounding device and gyro-compass and was provided with navigation lights and shapes, pilot ladder, and means of making sound signals and distress signals in accordance with the provisions of the Regulations and the International Collision Regulations.

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