

# **PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR SAFETY OF LIFE AT SEA OF 1 NOVEMBER 1974**

*(London, 17 February 1978)*

THE PARTIES TO THE PRESENT PROTOCOL,

BEING Parties to the International Convention for the Safety of Life at Sea, 1974, done at London on 1 November 1974,

RECOGNIZING the significant contribution which can be made by the above-mentioned Convention to the promotion of the safety of ships and property at sea and the lives of persons on board,

RECOGNIZING also the need to improve further the safety of ships, particularly tankers,

CONSIDERING that this objective may best be achieved by the conclusion of a Protocol Relating to the International Convention for the Safety of Life at Sea, 1974,

HAVE AGREED as follows:

## **Article I**

### **General obligations**

The Parties to the present Protocol undertake to give effect to the provisions of the present Protocol and the Annex hereto which shall constitute an integral part of the present Protocol. Every reference to the present Protocol constitutes at the same time a reference to the Annex hereto.

## **Article II**

### **Application**

1. The provisions of Articles II, III (other than paragraph (a)), IV, VI(b), (c) and (d), VII and VIII of the International Convention for the Safety of Life at Sea, 1974 (hereinafter referred to as "the Convention") are incorporated in the present Protocol, provided that references in those Articles to the Convention and to Contracting Governments shall be taken to mean references to the present Protocol and to the Parties to the present Protocol, respectively.
2. Any ship to which the present Protocol applies shall comply with the provisions of the Convention, subject to the modifications and additions set out in the present Protocol.

3. With respect to the ships of non-parties to the Convention and the present Protocol, the Parties to the present Protocol shall apply the requirements of the Convention and the present Protocol as may be necessary to ensure that no more favourable treatment is given to such ships.

### **Article III**

#### **Communication of information**

The Parties to the present Protocol undertake to communicate to, and deposit with, the Secretary-General of the Inter-Governmental Maritime Consultative Organization (hereinafter referred to as "the Organization"), a list of nominated surveyors or recognized organizations which are authorized to act on their behalf in the administration of measures for safety of life at sea for circulation to the Parties for information of their officers. The Administration shall therefore notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations.

### **Article IV**

#### **Signature, ratification, acceptance, approval and accession**

1. The present Protocol shall be open for signature at the Headquarters of the Organization from 1 June 1978 to 1 March 1979 and shall thereafter remain open for accession. Subject to the provisions of paragraph 3 of this Article, States may become Parties to the present Protocol by:
  - (a) signature without reservation as to ratification, acceptance or approval; or
  - (b) signature subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or
  - (c) accession.
2. Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General of the Organization.
3. The present Protocol may be signed without reservation, ratified, accepted, approved or acceded to only by States which have signed without reservation, ratified, accepted, approved or acceded to the Convention.

### **Article V**

#### **Entry into force**

1. The present Protocol shall enter into force six months after the date on which not less than fifteen States, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant shipping, have become Parties to it in accordance with Article IV of the present Protocol, provided however that the present Protocol shall not enter into force before the Convention has entered into force.
2. Any instrument of ratification, acceptance, approval or accession deposited after the date on which the present Protocol enters into force shall take effect three months after the date of deposit.
3. After the date on which an amendment to the present Protocol is deemed to have been accepted under Article VIII of the Convention, any instrument of ratification, acceptance, approval or accession deposited shall apply to the present Protocol as amended.

## **Article VI**

### **Denunciation**

1. The present Protocol may be denounced by any Party at any time after the expiry of five years from the date on which the present Protocol enters into force for that Party.
2. Denunciation shall be effected by the deposit of an instrument of denunciation with the Secretary-General of the Organization.
3. A denunciation shall take effect one year, or such longer period as may be specified in the instrument of denunciation, after its receipt by the Secretary-General of the Organization.
4. A denunciation of the Convention by a party shall be deemed to be a denunciation of the present Protocol by that Party.

## **Article VII**

### **Depositary**

1. The present Protocol shall be deposited with the Secretary-General of the Organization (hereinafter referred to as "the Depositary").
2. The Depositary shall:
  - (a) inform all States which have signed the present Protocol or acceded thereto of:

- (i) each new signature or deposit of an instrument of ratification, acceptance, approval or accession, together with the date thereof;
  - (ii) the date of entry into force of the present Protocol;
  - (iii) the deposit of any instrument of denunciation of the present Protocol together with the date on which it was received and the date on which the denunciation takes effect;
- (b) transmit certified true copies of the present Protocol to all States which have signed the present Protocol or acceded thereto.
3. As soon as the present Protocol enters into force, a certified true copy thereof shall be transmitted by the Depositary to the Secretariat of the United Nations for registration and publication in accordance with Article 102 of the Charter of the United Nations.

### **Article VIII**

#### **Languages**

The present Protocol is established in a single original in the Chinese, English, French, Russian and Spanish languages, each text being equally authentic. Official translations in the Arabic, German and Italian languages shall be prepared and deposited with the signed original.

IN WITNESS WHEREOF the undersigned being duly authorized by their respective Governments for that purpose have signed the present Protocol.

DONE AT LONDON this seventeenth day of February One thousand nine hundred and seventy-eight.

[Signatures not reproduced here.]

### **ANNEX**

#### **MODIFICATIONS AND ADDITIONS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974**

#### **CHAPTER I**

#### **GENERAL PROVISIONS**

#### **PART A - APPLICATION, DEFINITIONS, ETC**

#### **Regulation 2**

## **Definitions**

The following paragraph is added to the existing text:

(n) "Age of a ship" means the elapsed period of time determined from the year of build as indicated on the ship's registry papers.

## **PART B - SURVEYS AND CERTIFICATES**

### **Regulation 6**

#### **Inspection and survey**

The existing text of Regulation 6 is replaced by the following:

- (a) The inspection and survey of ships, so far as regards the enforcement of the provisions of the present Regulations and the granting of exemptions therefrom, shall be carried out by officers of the Administration. The Administration may, however, entrust the inspections and surveys either to surveyors nominated for the purpose or to organizations recognized by it.
- (b) The Administration shall institute arrangements for unscheduled inspections to be carried out during the period of validity of the certificate. Such inspections shall ensure that the ship and its equipment remain in all respects satisfactory for the service for which the ship is intended. These inspections may be carried out by the Administration's own inspection services, or by nominated surveyors, or by recognized organizations, or by other Parties upon request of the Administration. Where the Administration, under the provisions of Regulations 8 and 10 of this Chapter, establishes mandatory annual surveys, the above unscheduled inspections shall not be obligatory.
- (c) An Administration nominating surveyors or recognizing organizations to conduct inspections and surveys as set forth in paragraphs (a) and (b) of this Regulation shall as a minimum empower any nominated surveyor or recognized organization to:
  - (i) require repairs to a ship, and
  - (ii) carry out inspections and surveys if requested by the appropriate authorities of a Port State.

The Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to nominated surveyors or recognized organizations.

- (d) When a nominated surveyor or recognized organization determines that the condition of the ship or its equipment does not correspond substantially with the particulars of the certificate or is such that the ship is not fit to proceed to sea without danger to the ship, or persons on board, such surveyor or organization shall immediately ensure that corrective action is taken and shall in due course notify the Administration. If such corrective action is not taken the relevant certificate should be withdrawn and the Administration shall be notified immediately; and, if the ship is in the port of another Party, the appropriate authorities of the Port State shall also be notified immediately. When an officer of the Administration, a nominated surveyor or recognized organization has notified the appropriate authorities of the Port State, the Government of the Port State concerned shall give such officer, surveyor or organization any necessary assistance to carry out their obligations under this Regulation. When applicable, the Government of the Port State concerned shall ensure that the ship shall not sail until it can proceed to sea, or leave port for the purpose of proceeding to the appropriate repair yard, without danger to the ship or persons on board.
- (e) In every case, the Administration shall fully guarantee the completeness and efficiency of the inspection and survey, and shall undertake to ensure the necessary arrangements to satisfy this obligation.

### **Regulation 7**

#### **Surveys of passenger ships**

The existing text of paragraph (b)(iii) is replaced by the following:

- (iii) A survey either general or partial, according to the circumstances, shall be made after a repair resulting from investigations prescribed in Regulation 11 of this Chapter, or whenever any important repairs or renewals are made. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory, and that the ship complies in all respects with the provisions of the Convention and the present Protocol and of the International Regulations for Preventing Collisions at Sea in force, and of the laws, decrees, orders and regulations promulgated as a result thereof by the Administration.

### **Regulation 8**

#### **Surveys of life-saving appliances and other equipment of cargo ships**

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

- (a) 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, the fire-extinguishing appliances and the inert gas system of cargo

ships to which Chapters II-1, II-2, III and V of the Convention and the present Protocol apply, shall be subject to initial and subsequent surveys as prescribed for passenger ships in Regulation 7 of Chapter I of the Convention and the present Protocol 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, mechanical pilot hoists, lights, shapes 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 Convention and the present Protocol and, where applicable, the International Regulations for Preventing Collisions at Sea in force.

- (b) Intermediate surveys shall be made for tankers of ten years of age and over, within three months before or after the anniversary date of the Cargo Ship Safety Equipment Certificate, to ensure that equipment specified in paragraph (a) of this Regulation has been maintained in accordance with Regulation 11 of this Chapter and that it is in good working condition. Such intermediate surveys shall be endorsed on the Cargo Ship Safety Equipment Certificate issued in accordance with Regulation 12(a)(iii) of Chapter I of the Convention.

### **Regulation 10**

#### **Surveys of hull, machinery and equipment of cargo ships**

The existing text of Regulation 10 is replaced by the following:

- (a) The hull, machinery and equipment (other than items in respect of which Cargo Ship Safety Equipment Certificates, Cargo Ship Safety Radiotelegraphy Certificates or Cargo Ship Radiotelephony Certificates are issued) of a cargo ship shall be surveyed on completion and thereafter in such a manner as the Administration may consider necessary in order to ensure that their condition is in all respects satisfactory and at the following intervals:
  - (i) at intervals specified by the Administration but not exceeding five years (periodical surveys);
  - (ii) in addition to such periodical surveys a tanker of ten years of age and over shall undergo a minimum of one intermediate survey during the period of validity of its Cargo Ship Safety Construction Certificate. In cases where only one such intermediate survey is carried out in any one certificate validity period, it shall be held not before six months prior to, nor later than six months after, the half-way date of the certificate's period of validity.
- (b) The initial and periodical survey shall be such as to ensure that the arrangements, material and scantlings of the structure, boilers and other pressure vessels, their appurtenances, main and auxiliary machinery including steering gear and

associated control systems, electrical installation and other equipment are in all respects satisfactory for the service for which the ship is intended. Such surveys shall, in the case of tankers, also include inspection of the outside of the ship's bottom, pump rooms, cargo and bunker piping systems, vent piping, pressure vacuum valves and flame screens.

- (c) The intermediate survey of tankers of ten years of age and over shall include inspection of steering gear equipment and associated control systems, pump rooms, cargo and bunker piping systems on deck and in pump rooms, vent piping, pressure vacuum valves and flame screens, the electrical installations in dangerous zones, and the outside of the ship's bottom. In addition to the visual inspection of the electrical installation, the insulation resistance of the electrical equipment in dangerous zones is to be tested. If, upon examination, there should be any doubt as to the condition of the piping, extra measures, such as pressure tests and thickness determination, shall be taken as necessary. Such intermediate surveys shall be endorsed on the Cargo Ship Safety Construction Certificate issued in accordance with Regulation 12 (a)(ii) of Chapter I of the Convention.
- (d) A survey, either general or partial according to the circumstances, shall be made when required after an investigation prescribed in Regulation 11 of this Chapter, or whenever any important repairs or renewals are made. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory, and that the ship is fit to proceed to sea without danger to the ship or persons on board.

### **Regulation 11**

#### **Maintenance of conditions after survey**

The existing text of Regulation 11 is replaced by the following:

- (a) The condition of the ship and its equipment shall be maintained to conform with the provisions of the Convention and the present Protocol to ensure that the ship in all respects will remain fit to proceed to sea without danger to the ship or persons on board.
- (b) After any survey of the ship under Regulations 6, 7, 8, 9 or 10 of Chapter I of the Convention and the present Protocol has been completed, no change shall be made in the structural arrangement, machinery, equipment and other items covered by the survey, without the sanction of the Administration.
- (c) Whenever an accident occurs to a ship or a defect is discovered, either of which affects the safety of the ship or the efficiency or completeness of its life-saving appliances or other equipment, the master or owner of the ship shall report at the earliest opportunity to the Administration, the nominated surveyor or recognized



organization responsible for issuing the relevant certificate, who shall cause investigations to be initiated to determine whether a survey, as required by Regulations 6, 7, 8, 9 or 10 of Chapter I of the Convention and the present Protocol, is necessary. If the ship is in a port of another Party, the master or owner shall also report immediately to the appropriate authorities of the Port State and the nominated surveyor or recognized organization shall ascertain that such a report has been made.

## **Regulation 14**

### **Duration and validity of certificates**

The existing text of Regulation 14 is replaced by the following:

- (a) Certificates other than the Cargo Ship Safety Construction Certificate, the Cargo Ship Safety Equipment Certificate and any Exemption Certificate shall be issued for a period not exceeding 12 months. The Cargo Ship Safety Construction Certificate shall be issued for a period not exceeding five years. The Cargo Ship Safety Equipment Certificate shall be issued for a period not exceeding 24 months. Exemption Certificates shall not be valid for longer than the period of the certificates to which they refer.
- (b) No extension of the five-year period of validity of the Cargo Ship Safety Construction Certificate shall be permitted.
- (c) If a survey takes place within two months before the end of the period for which a Cargo Ship Safety Radiotelegraphy Certificate or a Cargo Ship Safety Radiotelephony Certificate issued in respect of cargo ships of 300 tons gross tonnage and upwards, but less than 500 tons gross tonnage, was originally issued, that certificate may be withdrawn, and a new certificate may be issued which shall expire 12 months after the end of the said period.
- (d) If the ship at the time when a certificate, other than that referred to in paragraph (b) of this Regulation, expires is not in a port of the country in which it is registered or is to be surveyed, the Administration may extend the certificate, but such extension shall be granted only for the purpose of allowing the ship to complete its voyage to the country in which it is registered or is to be surveyed, and then only in cases where it appears proper and reasonable to do so.
- (e) No certificate shall be extended under the provisions of paragraph (d) of this Regulation for a longer period than five months, and a ship to which an extension is granted shall not, on its arrival in the country in which it is registered or the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port or country without having obtained a new certificate.

- (f) A certificate, other than that referred to in paragraph (b) of this Regulation, which has not been extended under the foregoing provisions of this Regulation, may be extended by the Administration for a period of grace up to one month from the date of expiry stated on it.
- (g) A certificate shall cease to be valid:
  - (i) if the inspections and surveys are not carried out within the period specified under Regulations 7(a), 8, 9 and 10(a) of Chapter I of the Convention and the present Protocol or as they may have been extended in accordance with paragraphs (d), (e) or (f) of this Regulation, or
  - (ii) upon transfer of the ship to the flag of another Government. A new certificate shall only be issued when the Government issuing the new certificate is fully satisfied that the ship is in compliance with the requirements of Regulation 11(a) and (b) of this Chapter. In the case of a transfer between Parties, if requested within three months after the transfer has taken place, the Government of the Party whose flag the ship was formally entitled to fly shall, as soon as possible, transmit to the Administration copies of the certificates carried by the ship before the transfer and, if available, copies of the relevant survey reports.

## **Regulation 19**

### **Control**

The existing text of Regulation 19 is replaced by the following:

- (a) Every ship when in a port of another Party is subject to control by officers duly authorized by such Government in so far as this control is directed towards verifying that the certificates issued under Regulation 12 or Regulation 13 of Chapter I of the Convention are valid.
- (b) Such certificates, if valid, shall be accepted unless there are clear grounds for believing that the condition of the ship or of its equipment does not correspond substantially with the particulars of any of the certificates or that the ship and its equipment are not in compliance with the provisions of Regulation 11(a) and (b) of this Chapter.
- (c) In the circumstances given in paragraph (b) of this Regulation or where a certificate has expired or ceased to be valid, the officer carrying out the control shall take steps to ensure that the ship shall not sail until it can proceed to sea or leave the port for the purpose of proceeding to the appropriate repair yard without danger to the ship or persons on board.

- (d) In the event of this control giving rise to an intervention of any kind, the officer carrying out the control shall forthwith inform, in writing, the Consul or, in his absence, the nearest diplomatic representative of the State whose flag the ship is entitled to fly of all the circumstances in which intervention was deemed necessary. In addition, nominated surveyors or recognized organizations responsible for the issue of the certificates shall also be notified. The facts concerning the intervention shall be reported to the Organization.
- (e) The Port State authority concerned shall notify all relevant information about the ship to the authorities of the next port of call, in addition to parties mentioned in paragraph (d) of this Regulation, if it is unable to take action as specified in paragraphs (c) and (d) of this Regulation or if the ship has been allowed to proceed to the next port of call.
- (f) When exercising control under this Regulation all possible efforts shall be made to avoid a ship being unduly detained or delayed. If a ship is thereby unduly detained or delayed it shall be entitled to compensation for any loss or damage suffered.

## **CHAPTER II-1**

### **CONSTRUCTION - SUBDIVISION AND STABILITY, MACHINERY AND ELECTRICAL INSTALLATIONS**

#### **PART A - GENERAL**

##### **Regulation 1**

##### **Application**

The following sub-paragraphs are added to the existing text of paragraph (b):

- (iii) Notwithstanding the provisions of sub-paragraph (ii) of this paragraph and sub-paragraph (a)(iii) of this Regulation, for the purposes of paragraph (d) of Regulation 29 of this Chapter, a new tanker means a tanker:
  - (1) for which the building contract is placed after 1 June 1979; or
  - (2) in the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction after 1 January 1980; or
  - (3) the delivery of which is after 1 June 1982; or
  - (4) which has undergone an alteration or modification of a major character:
    - (a) for which the contract is placed after 1 June 1979; or

- (b) in the absence of a contract, the construction work of which is begun after 1 January 1980; or
  - (c) which is completed after 1 June 1982.
- (iv) For the purposes of paragraph (d) of Regulation 29 of this Chapter, an existing tanker is a tanker which is not a new tanker as defined in sub-paragraph (iii) of this paragraph.
- (v) For the purposes of sub-paragraph (iii) of this paragraph, conversion of an existing tanker of 20,000 metric tons deadweight and upwards to meet the requirements of the present Protocol or the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973, shall not be deemed to constitute an alteration or modification of a major character.

## **Regulation 2**

### **Definitions**

The following paragraphs are added to the existing text:

- (k) The remote steering gear control system is the means by which required rudder movements are transmitted from the navigating bridge to the steering gear power unit controls.
- (l) The main steering gear is the machinery, the steering gear power units, if any, and ancillary equipment and the means of applying torque to the rudder stock (e.g. tiller or quadrant) necessary for effecting movement of the rudder for the purpose of steering the ship under normal service conditions.
- (m) The steering gear power unit is:
  - (i) In the case of electric steering gear, an electric motor and its associated electrical equipment;
  - (ii) in the case of electro-hydraulic steering gear, an electric motor and its associated electrical equipment and connected pump;
  - (iii) in the case of other hydraulic steering gear, a driving engine and connected pump.
- (n) The auxiliary steering gear is that equipment which is provided for effecting movement of the rudder for the purpose of steering the ship in the event of failure of the main steering gear.

## **PART C - MACHINERY AND ELECTRICAL INSTALLATIONS**

## **Regulation 29**

### **Steering gear**

The following paragraph is added to the existing text:

- (d) Tankers only
  - (i) The following shall apply to every new tanker of 10,000 tons gross tonnage and upwards and, not later than two years from the date of entry into force of the present Protocol, to every existing tanker of 10,000 tons gross tonnage and upwards:
    - (1) two remote steering gear control systems shall be provided, each of which shall be operable separately from the navigating bridge. This does not require duplication of the steering wheel or steering lever. In the event of failure of the remote steering gear control system in operation, the other system shall be capable of being brought into immediate operation from a position on the navigating bridge. Each remote steering gear control system, if electric, shall be served by its own separate circuit supplied from the steering gear power circuit from a point within the steering gear compartment. In the event of failure of electrical power supply to a remote steering gear control system an alarm shall be given on the navigating bridge. The alarms required in this sub-paragraph shall be both audible and visual and situated in a position on the navigating bridge where they can be readily observed;
    - (2) control of the main steering gear shall also be provided in the steering gear compartment;
    - (3) means shall be provided in the steering gear compartment to disconnect the remote steering gear control system from the power circuit;
    - (4) a means of communication shall be provided between the navigating bridge and the steering gear compartment;
    - (5) the exact angular position of the rudder shall be indicated on the navigating bridge. The rudder angle indication shall be independent of the remote steering gear control system; and
    - (6) the angular position of the rudder shall be recognizable in the steering gear compartment.

- (ii) In every new tanker of 10,000 tons gross tonnage and upwards, in addition to the requirements of paragraph (a) and sub-paragraph (d)(i) of this Regulation, the following shall apply:
- (1) the main steering gear shall comprise two or more identical power units and it shall be capable of operating the rudder as required by sub-paragraph (d)(ii)(2) of this Regulation while operating with one or more power units. As far as reasonable and practicable, the main steering gear shall be so arranged that a single failure in its piping or in one of the power units will not impair the integrity of the remaining part of the steering gear. All mechanical couplings which are part of the steering gear and the mechanical connexion with any remote steering gear control system, if any, shall be of sound and reliable construction to the satisfaction of the Administration;
  - (2) the main steering gear shall, with the ship at its deepest sea-going draught, be capable of putting the rudder over from 35 degrees on one side to 35 degrees on the other side with the ship running ahead at maximum service speed. The rudder shall be capable of being put over from 35 degrees on either side to 30 degrees on the other side in not more than 28 seconds, under the same conditions;
  - (3) the main steering gear shall be operated by power where necessary to fulfill the requirements of sub-paragraph (d)(ii)(2) of this Regulation;
  - (4) the main steering gear power units shall be arranged to start automatically when power is restored after a power failure;
  - (5) in the event of failure of any of the steering gear power units an alarm shall be given on the navigating bridge. Every steering gear power unit shall be capable of being brought into operation either automatically or manually from a position on the navigating bridge; and
  - (6) an alternative power supply, at least sufficient to supply a steering gear power unit so as to enable it to move the rudder as specified below, and also to supply its associated remote steering gear control system and the rudder angle indicator, shall be provided, automatically, within 45 seconds, either from the emergency source of electrical power, or from another independent source of power located in the steering gear compartment. This independent source of power shall be used only for this purpose and shall have a capacity sufficient for half an hour of continuous operation. The steering gear power unit, when being supplied by the alternative

power supply, shall at least be capable of putting the rudder over from 15 degrees on one side to 15 degrees on the other side in not more than 60 seconds with the ship at its deepest sea-going draught while running at one half of its maximum service speed ahead or 7 knots, whichever is the greater.

## **CHAPTER II - 2**

### **CONSTRUCTION - FIRE PROTECTION, FIRE DETECTION AND FIRE EXTINCTION**

#### **PART A - GENERAL**

##### **Regulation 1**

##### **Application**

The following sub-paragraphs are added to the existing text of paragraph (a):

- (iv) Notwithstanding the provisions of sub-paragraphs (ii) and (iii) of this paragraph, for the purposes of paragraph (a)(ii) of Regulation 55 and of Regulation 60 of this Chapter, a new tanker means a tanker:
  - (1) for which the building contract is placed after 1 June 1979; or
  - (2) in the absence of a building contract, the keel of which is laid, or which is at a similar stage of construction after 1 January 1980; or
  - (3) the delivery of which is after 1 June 1982; or
  - (4) which has undergone an alteration or modification of a major character:
    - (a) for which the contract is placed after 1 June 1979; or
    - (b) in the absence of a contract, the construction work of which is begun after 1 January 1980; or
    - (c) which is completed after 1 June 1982.
- (v) For the purposes of paragraph (a)(ii) of Regulation 55 and of Regulation 60 of this Chapter, an existing tanker is a tanker which is not a new tanker as defined in sub-paragraph (iv) of this paragraph.
- (vi) For the purposes of sub-paragraph (iv) of this paragraph, conversion of an existing tanker of 20,000 metric tons deadweight and upwards to meet the requirements of the present Protocol or the Protocol of 1978 Relating to the

International Convention for the Prevention of Pollution from Ships, 1973 shall not be deemed to constitute an alteration or modification of a major character.

### **Regulation 3**

#### **Definitions**

The existing text of paragraph (v) is replaced by the following:

- (v) "Lightweight" means the displacement of a ship in metric tons without cargo, fuel, lubricating oil, ballast water, fresh water and feed water in tanks, consumable stores, and passengers and crew and their effects.

The following paragraph is added to the existing text:

- (x) "Crude oil" mean oil occurring naturally in the earth whether or not treated to render it suitable for transportation and includes:
  - (i) crude oil from which certain distillate fractions may have been removed; and
  - (ii) crude oil to which certain distillate fractions may have been added.

### **PART E - FIRE SAFETY MEASURES FOR TANKERS**

#### **Regulation 55**

##### **Application**

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

- (a) Unless expressly provided otherwise:
  - (i) this part shall apply to all new tankers carrying crude oil and petroleum products having a flashpoint not exceeding 60deg.C (140deg.F) (closed cup test) as determined by an approved flashpoint apparatus and a Reid vapour pressure which is below atmospheric pressure and other liquid products having similar fire hazard; and
  - (ii) in addition, all ships covered by this Part shall comply with the requirements of Regulations 52, 53 and 54 of Chapter II-2 of the Convention except that fixed gas fire-extinguishing systems for cargo spaces shall not be used for new tankers and for those existing tankers complying with Regulation 60 of this Chapter. For existing tankers not required to comply with Regulation 60, the Administration, in applying the requirements of paragraph (f) of Regulation 52, may accept a froth



system capable of discharging froth internally or externally to the tanks. The details of the installation shall be to the satisfaction of the Administration.

- (b) Where cargoes other than those referred to in sub-paragraph (a)(i) of this Regulation which introduce additional fire hazards are intended to be carried, additional safety measures shall be required to the satisfaction of the Administration.
- (c) Combination carriers shall not carry solid cargoes unless all cargo tanks are empty of oil and gas freed or unless, in each case, the Administration is satisfied with the arrangements provided.

## **Regulation 60**

### **Cargo tank protection**

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

- (a) For new tankers of 20,000 metric tons deadweight and upwards, the protection of the cargo tanks deck area and cargo tanks shall be achieved by a fixed deck froth system and a fixed inert gas system in accordance with the requirements of Regulations 61 and 62 of Chapter II-2 of the Convention except that in lieu of the above installations the Administration, after having given consideration to the ship's arrangement and equipment, may accept other combinations of fixed installations if they afford protection equivalent to the above, in accordance with Regulation 5 of Chapter I of the Convention.
- (b) To be considered equivalent, the system proposed in lieu of the deck froth system shall:
  - (i) be capable of extinguishing spill fires and also preclude ignition of spilled oil not yet ignited; and
  - (ii) be capable of combating fires in ruptured tanks.
- (c) To be considered equivalent, the system proposed in lieu of the fixed inert gas system shall:
  - (i) be capable of preventing dangerous accumulations of explosive mixtures in intact cargo tanks during normal service throughout the ballast voyage and necessary in-tank operations; and
  - (ii) be so designed as to minimize the risk of ignition from the generation of static electricity by the system itself.

- (d) Any existing tanker of 20,000 metric tons deadweight and upwards engaged in the trade of carrying crude oil shall be fitted with an inert gas system, complying with the requirements of paragraph (a) of this Regulation, not later than a date:
  - (i) for a tanker of 70,000 metric tons deadweight and upwards, two years after the date of entry into force of the present Protocol; and
  - (ii) for a tanker of less than 70,000 metric tons deadweight, four years after the date of entry into force of the present Protocol, except that for tankers less than 40,000 tons deadweight not fitted with tank washing machines having an individual throughput of greater than 60 cubic metres per hour, the Administration may exempt existing tankers from the requirements of this paragraph, if it would be unreasonable and impracticable to apply these requirements, taking into account the ship's design characteristics.
- (e) Any existing tanker of 40,000 metric tons deadweight and upwards engaged in the trade of carrying oil other than crude oil and any such tanker of 20,000 metric tons deadweight and upwards engaged in the trade of carrying oil other than crude oil fitted with tank washing machines having an individual throughput of greater than 60 cubic metres per hour shall be fitted with an inert gas system, complying with the requirements of paragraph (a) of this Regulation, not later than a date:
  - (i) for a tanker of 70,000 metric tons deadweight and upwards, two years after the date of entry into force of the present Protocol; and
  - (ii) for a tanker of less than 70,000 metric tons deadweight, four years after the date of entry into force of the present Protocol.
- (f) Any tanker operating with a cargo tank cleaning procedure using crude oil washing shall be fitted with an inert gas system complying with the requirements of Regulation 62 of Chapter II-2 of the Convention and with fixed tank washing machines.
- (g) All tankers fitted with a fixed inert gas system shall be provided with a closed ullage system.
- (h) Any new tanker of 2,000 tons gross tonnage and upwards not covered by paragraph (a) of this Regulation shall be provided with a froth system, capable of discharging froth internally or externally, to the tanks. The details of such installation shall be to the satisfaction of the Administration.

## **CHAPTER V**

### **SAFETY OF NAVIGATION**

#### **Regulation 12**

## **Shipborne navigational equipment**

The existing text of paragraph (a) is replaced by the following:

- (a) All ships of 1,600 tons gross tonnage and upwards but less than 10,000 tons gross tonnage shall be fitted with at least one radar. All ships of 10,000 tons gross tonnage and upwards shall be fitted with at least two radars, each capable of operating independently of the other. All radars fitted in compliance with this Regulation shall be of a type approved by the Administration and shall conform to operational standards not inferior to those adopted by the Organization. Facilities for plotting radar readings shall be provided on the bridge in those ships.

### **Regulation 19**

#### **Use of the automatic pilot**

The following paragraph is added to the existing text:

- (d) The manual steering shall be tested after prolonged use of the automatic pilot, and before entering areas where navigation demands special caution.

The following new Regulations are added to this Chapter:

#### **Regulation 19-1**

##### **Operation of steering gear**

In areas where navigation demands special caution, ships shall have more than one steering gear power unit in operation when such units are capable of simultaneous operation.

#### **Regulation 19-2**

##### **Steering gear - testing and drills**

- (a) Within 12 hours before departure, the ship's steering gear shall be checked and tested by the ship's crew. The test procedure shall include, where applicable, the operation of the following:
  - (i) the main steering gear;
  - (ii) the auxiliary steering gear;
  - (iii) the remote steering gear control systems;
  - (iv) the steering positions located on the navigating bridge;

- (v) the emergency power supply;
  - (vi) the rudder angle indicators in relation to the actual position of the rudder;
  - (vii) the remote steering gear control system power failure alarms; and
  - (viii) the steering gear power unit failure alarms.
- (b) The checks and test shall include:
- (i) the full movement of the rudder according to the required capabilities of the steering gear;
  - (ii) a visual inspection of the steering gear and its connecting linkage; and
  - (iii) the operation of the means of communication between the navigating bridge and steering gear compartment.
- (c)
- (i) Simple operating instructions with a block diagram showing the change-over procedures for remote steering gear control systems and steering gear power units shall be permanently displayed on the navigating bridge and in the steering gear compartment.
  - (ii) All officers concerned with the operation and/or maintenance of steering gear shall be familiar with the operation of the steering systems fitted on the ship and with the procedures for changing from one system to another.
- (d) In addition to the routine checks and tests prescribed in paragraphs (a) and (b) of this Regulation, emergency steering drills shall take place at least once every three months in order to practise emergency steering procedures. These drills shall include direct control from within the steering gear compartment, the communications procedure with the navigating bridge and, where applicable, the operation of alternative power supplies.
- (e) The Administration may waive the requirement to carry out the checks and tests prescribed in paragraphs (a) and (b) of this Regulation for ships which regularly ply on voyages of short duration. Such ships shall carry out these checks and tests at least once every week.
- (f) The date upon which the checks and test prescribed in paragraphs (a) and (b) of this Regulation are carried out and the date and details of emergency steering drills carried out under paragraph (d) of this Regulation, shall be recorded in the log book as may be prescribed by the Administration.

## APPENDIX

Form of Safety Construction Certificate for Cargo Ships

The following form of Supplement is added to the existing form:

SUPPLEMENT TO THE CARGO SHIP SAFETY CONSTRUCTION CERTIFICATE

(Official Seal) (Country)

Issued under the provisions of the

PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974

Name of ship	Distinctive letters	number	or Port registry	of Deadweight tons)	of ship	(metric Year build	of
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Type of ship:

Tanker engaged in the trade of carrying crude oil\*

Tanker engaged in the trade of carrying oil other than crude oil\*

Tanker engaged in the trade of carrying crude/other oil\*

Cargo ship other than a tanker engaged in the trade of carrying oil\*

Date of contract for building or alteration or modification of a major character

Date on which keel was laid or ship was at a similar stage of construction or on which an alteration or modification of a major character was commenced

Date of delivery or completion of an alteration or modification of a major character

This Supplement shall be permanently attached to the Cargo Ship Safety Construction Certificate.

\* Delete as appropriate. [Footnote appearing in original text.]

THIS IS TO CERTIFY:

That the ship has been surveyed in accordance with Regulation 10 of Chapter I of the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974; and

that the survey showed that the condition of the hull, machinery and equipment as defined in the above Regulation was in all respects satisfactory and that the ship complied with the requirements of that Protocol.

This certificate is valid until ..... subject to intermediate survey(s) at intervals of

Issued at .....

(Place of issue of certificate)

.....19.. .....

(Signature of duly authorized official issuing the certificate)

(Seal or stamp of the issuing Authority, as appropriate)

#### Intermediate Survey

This is to certify that at an intermediate survey required by Regulation 10 of Chapter I of the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974, this ship was found to comply with the relevant provisions of that Protocol.

Signed .....

(Signature of duly authorized official)

Place .....

Date .....

Next intermediate survey due .....

(Seal or stamp of the Authority, as appropriate)

Signed .....

(Signature of duly authorized official)

Place .....

Date .....

Next intermediate survey due .....

(Seal or stamp of the Authority, as appropriate)

Signed .....

(Signature of duly authorized official)

Place .....

Date .....

Next intermediate survey due .....

(Seal or stamp of the Authority, as appropriate)

Signed .....

(Signature of duly authorized official)

Place .....

Date .....

Next intermediate survey due .....

(Seal or stamp of the Authority, as appropriate)

Form of Safety Equipment Certificate for Cargo Ships

The following form of Supplement is added to the existing form:

**SUPPLEMENT TO THE CARGO SHIP SAFETY EQUIPMENT CERTIFICATE**

(Official Seal) (Country)

Issued under the provisions of the

**PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974**

Name	of Distinctive	number	or Port	of Deadweight	of ship	(metric	Year	of
ship	letters		registry	tons)		Year	build	

Type of ship:

Tanker engaged in the trade of carrying crude oil\*

Tanker engaged in the trade of carrying oil other than crude oil\*

Tanker engaged in the trade of carrying crude/other oil\*

Cargo ship other than a tanker engaged in the trade of carrying oil\*

Date of contract for building or alteration or modification of a major character

Date on which keel was laid or ship was at a similar stage of construction or on which an alteration or modification of a major character was commenced

Date of delivery or completion of an alteration or modification of a major character

This Supplement shall be permanently attached to the Cargo Ship Safety Equipment Certificate.

\* Delete as appropriate. [Footnote appearing in original text.]

THIS IS TO CERTIFY:

That the ship has been surveyed in accordance with Regulation 8 of Chapter I of the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974; and

that the survey showed that the condition of the safety equipment as defined in the above Regulation was in all respects satisfactory and that the ship complied with requirements of that Protocol.

This certificate is valid until .....subject to intermediate survey(s) at intervals of

Issued at .....

(Place of issue of certificate)

..... 19.. .....

(Signature of duly authorized official issuing the certificate)

(Seal or stamp of the issuing Authority, as appropriate)



Intermediate Survey

This is to certify that at an intermediate survey required by Regulation 8 of Chapter I of the Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974, the ship was found to comply with the relevant provisions of that Protocol.

Signed .....

(Signature of duly authorized official)

Place .....

Date .....

Next intermediate survey due .....

(Seal or stamp of the Authority, as appropriate)

Signed .....

(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the Authority, as appropriate)

Under the provisions of Regulation 14 of Chapter I of the Protocol the validity of this Certificate is extended until.....

Signed .....

(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the Authority, as appropriate)