
STATUTORY INSTRUMENTS

1992 No. 135

**MERCHANT SHIPPING
SAFETY**

**The Merchant Shipping (Cargo Ship Construction and
Survey) Regulations 1984 (Amendment) Regulations 1992**

Made - - - - 28th January 1992
Laid before Parliament 4th February 1992
Coming into force - - 25th February 1992

The Secretary for State for Transport, after consulting with the persons referred to in section 22(2) of the Merchant Shipping Act 1979(1), in exercise of the powers conferred on him by sections 21(1) (a) and (b) and (3) and (4) and 22(1) of that Act and all other powers enabling him in that belief, hereby makes the following Regulations:—

1. These Regulations may be cited as the Merchant Shipping (Cargo Ship Construction and Survey) Regulations 1984 (Amendment) Regulations 1992 and shall come into force on the 25th February 1992.

2. The Merchant Shipping (Cargo Ship Construction and Survey) Regulations 1984(2) shall be amended by the insertion at the end of part IIA of a new Part II AA as follows:—

“PartIIAA—

STABILITY OF SHIPS OF 100M OR OVERCONSTRUCTED
ON OR AFTER 1ST FEBRUARY 1992

Interpretation

8A. In this Part:—

“attained subdivision index” means, in relation to a ship, the attained subdivision index of the ship calculated in accordance with regulation 8C.

“IMO” means the International Maritime Organisation;

(1) 1979 c. 39.

(2) S.I.1984/1217 to which there are amendments not relevant to these regulation

“subdivision length” means, in relation to a ship, the greatest projected moulded length of that part of the ship at or below deck or decks limiting the vertical extent of flooding with the ship at the deepest subdivision load line;

“subdivision load line” means a waterline used in determining the subdivision of the ship; and “deepest subdivision load line” means the subdivision load line which corresponds to the summer draught to be assigned to the ship.

Application

8B. This Part applies to every ship of 100m or over in sub-division length of which the keel was laid or which was at a similar stage of construction on or after 1st February 1992, except:—

- (a) any United Kingdom ship in respect of which there is in force—
 - (i) a certificate issued pursuant to regulation 7 of the Merchant Shipping (Prevention of Oil Pollution) Regulations 1983⁽³⁾, showing that the ship complies with regulation 29 of those Regulations, or
 - (ii) a certificate issued pursuant to regulation 5 of the Merchant Shipping (IBC Code) Regulations 1987⁽⁴⁾, or
 - (iii) a certificate issued pursuant to regulation 5 of the Merchant Shipping (Gas Carriers) Regulations 1986,⁽⁵⁾ or
 - (iv) a certificate issued pursuant to regulation 5 of the Merchant Shipping (BCH Code) Regulations 1987⁽⁶⁾ showing that the ship complies with Chapter II of that Code, or
 - (v) a document issued by the Secretary of State certifying that the ship complies with the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (Gas Carrier Code) (1983 edition) published by IMO, or
 - (vi) a document issued by the Secretary of State, certifying that the ship complies with Chapter 3 of the Guidelines for the Design and Construction of Offshore Supply Vessels annexed to IMO Resolution A.469(XII), or
 - (vii) a document issued by the Secretary of State certifying that the ship complies with the Code of Safety for Special Purpose Ships annexed to IMO Resolution A.534(13), and
- (b) any United Kingdom ship which complies with the damage stability requirement of paragraph 5 of the Part I of Schedule 5 to the Load Lines Rules 1968⁽⁷⁾; and
- (c) any ship (other than a United Kingdom ship) which complies with—
 - (i) regulation 25 of Annex 1 to the International Convention for the Prevention of Pollution from Ships 1973/78, or
 - (ii) the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) (1990 edition) published by IMO, or

(3) S.I. 1983/1398.

(4) S.I. 1987/549, amended by S.I. 1990/2602

(5) S.I. 1986/1073

(6) S.I. 1987/550, amended by S.I. 1990/2603

(7) S.I. 1968/1053

- (iii) the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) annexed to IMO Resolution MSC.5(48), or
- (iv) the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code) (1990 edition) published by IMO, or
- (v) the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (Gas Carrier Code) (1983 edition) published by IMO, or
- (vi) the Guidelines for the Safety and Construction of Offshore Supply Vessels mentioned in paragraph (a)(vi) above, or
- (vii) the Code for the Safety of Special Purpose Ships mentioned in paragraph (a)(vii) above, or
- (viii) both with the damage stability requirements of regulation 27 of the International Load Line Convention 1966 as modified by IMO Resolutions A.320(IX) and 514(13) and, in the case of ships to which paragraph (9) of that regulation applies, with paragraph (12)(f) of Resolution A.320(IX).

Subdivision indices

8C.—(1) The attained subdivision index of every ship to which this Part applies shall not be less than the required subdivision index of that ship.

(2) The attained subdivision index of a ship is the value “A” calculated in respect of that ship in accordance with the formula specified in paragraph 3 of Annex I of Merchant Shipping Notice No. M1476 and the required subdivision index for a ship, is the value “R” calculated in respect of that ship in accordance with the formula specified in paragraph 2 of Annex I to that notice.

(3) In calculating “A” and “R” regard shall be had to the explanatory notes set out in Annex II to that M Notice.

Stability information

8D.—(1) The master of every ship to which this Part applies shall be supplied with such reliable information as is necessary to enable him by rapid and simple means to determine the stability of the ship under varying conditions of service.

(2) That information shall include:—

(a) One of the following:—

(i) a curve of minimum operational metacentric height (GM)

versus draught which assures compliance with the applicable intact stability requirements of Schedule 4 Part I to the Merchant Shipping (Load Lines) Rules 1968 or with the attained subdivision index of the ship, whichever is the more onerous condition or, where curves representing the requirements cross the part of each curve which represents the more onerous requirement; or

(ii) a (corresponding)

curve of the maximum allowable vertical centre of gravity (KG) versus draught; or

(iii) a tabular or equivalent presentation of either of these curves; and

(b) instructions concerning the operation of cross-flooding arrangements; and

(c) all other data and means of presentation necessary to assist the crew to maintain stability after damage.

(3) Where the curve provided or presented in compliance with regulation 8D(2)(a) is based wholly or in part on the attained subdivision index of the ship the operational GM(KG) values shall be applied in the manner and to the extent specified in paragraph 7 of Annex I to Merchant Shipping Notice No. M1476;

(a) (4) The information required to be supplied by this regulation shall, before it is supplied to the master, be submitted for approval to that Assigning Authority to which the information supplied in respect of the ship pursuant to rule 30 of the Merchant Shipping (Load Line) Rules 1968(8) is required to be submitted in accordance with paragraph (5) of that rule. The information shall incorporate such additions and amendments as the Assigning Authority may specify for the purpose of ensuring that it complies with the provisions of this regulation.

(b) In this paragraph, "Assigning Authority" has the same meaning as in the Merchant Shipping (Load Line) Rules 1968.

(5) There shall be permanently exhibited or readily available on the navigating bridge for the guidance of the officer in charge of the ship, plans showing clearly for each deck and hold the boundaries of the watertight compartments, the openings therein, the means of closure and position of any controls thereof, and the arrangements for the correction of any list due to flooding. In addition, booklets containing the aforementioned information shall be made available by the owners for the use of the officers of the ship.

Openings in watertight bulkheads and internal decks

8E.—(1) The number of openings in the boundaries of watertight compartments shall be the minimum compatible with the design and proper working of the ship. Where penetration of watertight bulkheads and internal decks is necessary for access, piping, ventilation, electrical cables, or for any other purpose, arrangements shall be made to maintain watertight integrity at each such point of penetration. The Certifying Authority may permit openings in compartment boundaries above the free board deck to be weathertight rather than watertight where it is demonstrated that any progressive flooding resulting therefrom could be easily controlled and that safety of the ship would not be thereby impaired.

(2) Doors provided to ensure the watertight integrity of internal openings which are used while the ship is at sea shall be of the sliding watertight type and capable of being remotely closed from the bridge and capable also of being operated locally from each side of the door without automatic closure of the door. Indicators shall be provided at the bridge position showing whether the doors are open or closed, and an audible alarm shall be provided at the door closure. The power for operating and controlling the doors, indicators and alarms shall be supplied from the emergency switchboard required by regulation 45. The control system shall be so designed that if the system fails closure by hand will not be prevented or impeded. Each power-operated sliding watertight door shall be provided with an individual hand-operated opening and closing mechanism. Means shall be provided at the door itself to open and close the door safely by hand from both sides and from an accessible position above the bulkhead deck.

(3) Access doors and access hatch covers normally closed at sea and intended to ensure the watertight integrity of internal openings, shall be provided with means of indication locally and on the bridge showing whether these doors or hatch covers are open or closed. A notice shall be affixed to each such door or hatch cover stating that it is not to be left open

(8) Rule 30(5) was replaced by S.I. [1990/2128](#).

at sea. Such doors and hatch covers shall not be used except where access is necessary and is authorised by the officer of the watch.

(4) Watertight doors or ramps of satisfactory construction may be fitted to subdivide large cargo spaces internally where the Certifying Authority is satisfied that such doors or ramps are essential. Such doors or ramps may be of the hinged, rolling or sliding type, but shall not be remotely controlled. Such doors or ramps shall be closed before the voyage commences and shall be kept closed throughout the voyage. The time of opening such doors or ramps when the voyage has ended and of closing them before the voyage commences shall be entered in the log book. Any doors or ramps which may be accessible during the voyage shall be fitted with a device which prevents unauthorised opening.

(5) Every closing appliance which is required to be kept permanently closed at sea to ensure the watertight integrity of a compartment shall be provided with a notice affixed to it stating that it is to be kept closed; provided that manholes secured by closely bolted covers need not be so marked.

External openings

8F.—(1) All external openings which lead to compartments assumed intact for the purposes of calculating the subdivision index “A”, and which are below the final damage waterlines, shall be watertight.

(2) External openings required to be watertight in accordance with paragraph (1) shall be of sufficient strength and, except in the case of cargo hatch covers, shall be fitted with indicators on the bridge.

(3) Openings in the shell plating below the deck limiting the vertical extent of damage shall be kept permanently closed while at sea. Any of these openings which may be accessible during the voyage, shall be fitted with a device which prevents unauthorised opening.

(4) Notwithstanding the requirements of paragraph (3), the Certifying Authority may authorise the opening of specific doors, at the discretion of the master, if it is satisfied that such opening is necessary for the operation of the ship and provided that the safety of the ship would not be thereby impaired.

(5) Every watertight closing appliance which is required to be permanently closed at sea to ensure the integrity of an external opening shall be provided with a notice affixed to it stating that it is to be kept closed at sea: provided that manholes secured by closely bolted covers need not be so marked.”

Signed by authority of the Secretary of State for Transport

28th January 1992

Patrick McLoughlin
Parliamentary Under Secretary of State,
Department of Transport

Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations, which amend the Merchant Shipping (Cargo Ship Construction and Survey) Regulations 1984, give effect to the amendments to Chapter II-I of the International Convention for the Safety of Life at Sea, 1974 (SOLAS) which were adopted by the Maritime Safety Committee of the International Maritime Organisation on 25th May 1990 by Resolution MSC 19(58).

The Regulations require ships of 100 metres in length or more, which are constructed after 1st February 1992, to comply with subdivision and stability requirements based on the probabilistic concept of survival. The Regulations do not apply to ships which comply with the subdivision and stability requirements of the Merchant Shipping (Load Lines) Rules 1968 relating to Type 'A' and certain Type 'B' ships or with the subdivision and stability requirements of any one of five codes for special types of ship adopted by the International Maritime Organisation. They also require stability information based on those requirements to be provided on board the ship.

The Regulations also include requirements relating to the number and type of openings in internal and external boundaries of watertight compartments and the means of closing them.

The method of calculating the Subdivision Indices and "EXPLANATORY NOTES" are contained in Merchant Shipping Notice No. M 1476. These "EXPLANATORY NOTES" have been developed by the International Maritime Organisation in order to ensure the uniform application of the amendments.

M Notices may be obtained from the Department of Transport's Marine Library, at Sunley House, 90 High Holborn, London WC1V 6LP, or from the Department's Marine Offices. Copies of the text of the Amendments to Chapter II-I of SOLAS, and of the Codes referred to in new regulation 8B of the 1984 Regulation, may be obtained from the International Maritime Organisation, 4 Albert Embankment, London SE1 7SR.