

1981 No. 1729

MERCHANT SHIPPING

SAFETY

The Merchant Shipping (Means of Access) Regulations 1981

Made - - - - 1st December 1981

Laid before Parliament 10th December 1981

Coming into Operation in accordance with regulation 1(2) below

The Secretary of State, after consulting with the persons referred to in section 22(2) of the Merchant Shipping Act 1979(a) (hereinafter called "the Act"), in exercise of powers conferred on him by section 21(1)(a) and (b), (3)(d) and (g), (4), (5) and 6(a) and (b) and section 22(3)(a) of the Act and of all other powers enabling him in that behalf, hereby makes the following Regulations:—

Citation and commencement

1.—(1) These Regulations may be cited as the Merchant Shipping (Means of Access) Regulations 1981.

(2) These Regulations shall come into force as follows:—

(a) all regulations except regulations 4(1) and (2), 5(1), 6(1), 7(1), 9(1) and 13 on 1st January 1982,

(b) regulations 4(1) and (2), 5(1), and 7(1) as follows:—

(i) in relation to every United Kingdom ship the keel of which is laid or which is at a similar stage of construction on or after 1st January 1982, on 1st April 1983;

(ii) in relation to every ship registered outside the United Kingdom before 1st January 1982 which becomes a United Kingdom ship on or after that date, on 1st April 1983;

(iii) in relation to every United Kingdom ship the keel of which was laid or which was at a similar stage of construction before 1st January 1982, on 1st January 1987;

(c) regulations 6(1), 9(1) and 13, on 1st April 1983.

Interpretation

2.—(1) In these Regulations:—

“the Act of 1894” means the Merchant Shipping Act 1894(b);

“employer” means the person for the time being employing the master;

“fishing vessel” means a vessel which is for the time being employed in sea fishing but does not include a vessel used otherwise than for profit;

(a) 1979 c. 39.

(b) 1894 c. 60.

“master” shall include any person in charge of a vessel during the absence of the master;

“Merchant Shipping Notice” means a notice described as such, issued by the Department of Trade and published by Her Majesty’s Stationery Office;

“offshore installation” means any offshore installation within the meaning of section 1(3) of the Mineral Workings (Offshore Installations) Act 1971(a) or any such other installation as is mentioned in section 44(1) of the Petroleum and Submarine Pipe-lines Act 1975(b);

“owner” in relation to a ship includes the employer;

“pleasure craft” means a vessel primarily used for sport or recreation;

“United Kingdom ship” has the same meaning as in section 21(2) of the Act;

the references in regulations 4(2), 5(1), 7(1) and 9, and in paragraph (f) of the Schedule hereto, to the standards there mentioned mean respectively:—

- (i) in regulation 4(2), the British Standards Institution Standard BSMA 78: 1978 published on 28th April 1978;
- (ii) in regulation 5(1), the British Standards Institution Standard BSMA 89 published on 31st October 1980;
- (iii) in regulation 7(1), the British Ship Research Association Ship-building Industry Standard No. SIS 7 (“Weatherdeck Ladders (Bulwark)”) published in July 1976;
- (iv) in regulation 9, the British Standards Institution Standard BS 3913:73 (“Industrial Safety Net”) published on 15th October 1973;
- (v) in paragraph (f) of the Schedule,
 - in relation to wrought materials:
 - in paragraphs (i) and (ii), the British Standards Institution Standard BS 1474:72 published on 30th March 1972;
 - in paragraph (iii), the British Standards Institution Standard BS 1470:72 published on 10th April 1972;
 - in paragraph (iv), the British Standards Institution Standard BS 1471:72 published on 15th March 1972;
 - in relation to forgings, the British Standards Institution Standard BS 1472 published on 15th March 1972;

(2) Any reference in these Regulations to a Standard or to a specification includes a reference to that standard or specification as amended at the date these Regulations are made and shall include references to any document amending the same which is considered by the Secretary of State to be relevant from time to time and is specified in a Merchant Shipping Notice.

Applications and exemptions

3.—(1) These Regulations, except regulations 13, 14(5) and 16 apply to United Kingdom ships, except—

- (a) fishing vessels;
- (b) pleasure craft; and
- (c) offshore installations whilst on their working stations.

(a) 1971 c. 61.

(b) 1975 c. 74.

(2) Regulations 4(3), 5(2), 6(2), 8, 9(2), 10, 11, 12(a), (b) and (c), 13, 14(5) and (6) and 16 apply to other ships when in a United Kingdom port except—

- (a) fishing vessels;
- (b) pleasure craft; and
- (c) offshore installations whilst on their working stations.

(3) The Secretary of State may grant exemptions from all or any of the provisions of regulations 4, 5, 7 or 9 below (as may be specified in the exemption) for classes of cases or individual cases on such terms (if any) as he may so specify and may, subject to giving reasonable notice, alter or cancel any such exemption.

Gangways

4.—(1) The owner of every ship to which these Regulations apply of 30 metres or more registered length shall ensure that a gangway appropriate to the deck layout, size, shape and maximum freeboard of the ship is carried of not less than the following length:

- (a) in the case of a ship of less than 40 metres in registered length, 3 metres;
- (b) in the case of a ship of 40 metres or more, but of less than 80 metres, in registered length, 4.5 metres;
- (c) in the case of a ship of 80 metres or more, but of less than 120 metres, in registered length, 6 metres;
- (d) in the case of a ship of 120 metres in registered length or more, 9 metres.

(2) Each such gangway shall conform to the specifications set out in Standard BSMA 78:1978, excluding the maximum overall widths specified in Table 2, or shall be of an equivalent standard. Each such gangway shall be permanently and clearly marked with the manufacturer's name, the gangway model number, the maximum designed angle of use and the maximum safe loading both by number of persons and by total weight.

(3) The master and owner shall not permit a gangway to be used when its angle of inclination is more than 30 degrees above or below the horizontal except that a gangway may be used at a greater angle of inclination if it was designed and constructed to be used at that angle.

Accommodation ladders

5.—(1) The owner of every ship to which these Regulations apply of 120 metres in registered length or more shall ensure that an accommodation ladder appropriate to the deck layout, size and maximum freeboard of the ship is carried complying with the specifications set out in Standard BSMA 89, or of an equivalent standard. Each such ladder shall be permanently and clearly marked with the manufacturer's name, the ladder model number, the maximum designed angle of use and the maximum safe loading both by number of persons and by total weight.

(2) The master and owner shall not permit an accommodation ladder to be used when its angle of inclination is more than 55 degrees below the horizontal, except that an accommodation ladder may be used at a greater angle of inclination if it was designed and constructed to be used at that angle.

Portable ladders

6.—(1) If any portable ladder is carried in a ship to which these Regulations apply, the owner shall ensure that it complies with the specifications set out in the Schedule to these Regulations or is of an equivalent standard.

(2) The master and owner shall permit a portable ladder to be used for the purpose of access to the ship only:

- (a) at an angle of inclination above the horizontal of more than 60°; and
- (b) when it is unsafe or impossible for practicable reasons to use either a gangway or an accommodation ladder:

Provided that this requirement shall not apply to the use of pilot ladders by pilots.

Bulwark ladders

7.—(1) The owner of every ship to which these Regulations apply on which the in-board end of any equipment used as a means of access rests on, or lies flush with, the top of the bulwark, shall ensure that the ship carries a bulwark ladder complying with the specifications set out in the Shipbuilding Industry Standard No. SIS 7, or of an equivalent standard.

(2) The owner shall ensure that adequate fittings are provided in every such ship to enable the bulwark ladder to be properly and safely secured and fastened.

Hand-holds for bulwark gateways etc

8. Where access to a ship to which these Regulations apply is by way of a gateway in the rails or bulwark of the ship, the owner and master shall ensure that where a gap exists outboard of the rail or bulwark between the end of the access equipment in use and the rail or bulwark, adequate hand-holds, guard-rails and stanchions are provided and used to prevent any person falling through such a gap.

Safety nets

9.—(1) The owner of every ship to which these Regulations apply shall ensure that an adequate number of safety nets complying with British Standard 3913:73 or of an equivalent standard are carried.

(2) The master and owner shall ensure that whenever any of the access equipment specified in regulations 4 and 5 above or similar equipment provided from the shore is in use, a safety net shall be mounted so as to preclude, so far as is reasonably practicable, injury to any person who falls from that access equipment or from the quayside immediately adjacent to the access equipment.

Duties in relation to means of access

10. The owner and master shall maintain in a serviceable condition any access equipment, including safety nets, carried on a ship pursuant to these Regulations.

11. Any person boarding or leaving the ship shall use the access equipment provided for the purpose.

12. The master and owner of a ship to which these Regulations apply shall ensure that—

- (a) access equipment is deployed as soon as possible after the ship secures alongside a dock, pontoon or similar structure or another ship and that it remains deployed as continuously as possible for as long as possible whilst the ship is so secured;
- (b) any access equipment which is in use:
 - (i) is properly rigged, secured and deployed and, so far as reasonably practicable, is safe to use; and
 - (ii) is so adjusted from time to time as to maintain safety of access;
- (c) the means of access and the deck area in the immediate vicinity is lighted at least to a level of 50 lux at deck level with the minimum of stray light and direct glare;
- (d) a life-buoy with a self-activating light and also a separate safety line attached to a quoit or some similar device is provided ready for use at the point of access aboard the ship; and
- (e) in the case of a ship to which regulation 7(1) applies, a bulwark ladder is used as a means of access.

Foreign ships

13. The master of any ship not registered in the United Kingdom shall, when that ship is in port in the United Kingdom, ensure that no access equipment is carried for use on board which, if used, would be clearly hazardous to safety.

Offences and penalties

14.—(1) The owner of a United Kingdom ship who contravenes any provision of regulations 4, 5, 6, 7, 8, 9, 10 or 12 shall be guilty of an offence and liable on summary conviction to a fine not exceeding £1,000.

(2) The master of a United Kingdom ship who contravenes any provision of regulations 4(3), 5(2), 6(2), 9(2), 10 or 12 shall be guilty of an offence and liable on summary conviction to a fine not exceeding £500.

(3) Any person who contravenes regulation 11 shall be guilty of an offence and liable on summary conviction to a fine not exceeding £50.

(4) Any person who:

- (i) misuses or intentionally or recklessly damages any access equipment carried on a ship pursuant to these Regulations; or
- (ii) without reasonable cause alters its deployment or rigging unless authorised to do so

shall be guilty of an offence and liable on summary conviction to a fine not exceeding £200.

(5) The master of a ship not registered in the United Kingdom who contravenes regulations 4(3), 5(2), 6(2), 8, 9(2), 10, 12(a), (b) or (c) or 13 shall be guilty of an offence and liable on summary conviction to a fine not exceeding £1,000.

(6) In any proceedings for an offence under paragraph (1) (2) or (5) above, it shall be a defence for the owner or master, as the case may be, to show:

- (a) that an item of equipment to which the offence relates was lost at sea or damaged and that there was not reasonable time to replace it; or
- (b) that all reasonable steps had been taken by him to ensure compliance with the Regulations.

Inspection and detention of a United Kingdom ship

15. Any person duly authorised by the Secretary of State may inspect any United Kingdom ship to which these Regulations apply and if he is satisfied that the ship does not carry the access equipment required by these Regulations, he may detain the ship until such access equipment is provided, but shall not in the exercise of these powers detain or delay the ship unreasonably.

Inspection, detention and other measures in respect of ships registered outside the United Kingdom

16.—(1) Any person duly authorised by the Secretary of State may inspect any ship registered outside the United Kingdom when the ship is in a United Kingdom port, and if he is satisfied that:

- (a) access equipment is being carried in contravention of regulation 13 of these Regulations, or
- (b) access equipment is not being maintained or deployed in accordance with these Regulations,

he may:

- (i) send a report to the government of the country in which the ship is registered, and a copy thereof to the Director General of the International Labour Office; and
- (ii) where conditions on board are clearly hazardous to safety or health:
 - (aa) take such measures as are necessary to rectify those conditions;
 - (bb) detain the ship:

Provided that the measures specified in sub-paragraphs (i) and (ii) may be taken only when the ship has called at a United Kingdom port in the normal course of business or for operational reasons.

(2) If he takes either of the measures specified in paragraph (1)(ii), the person duly authorised shall forthwith notify the nearest maritime, consular or diplomatic representative of the flag State.

(3) The person duly authorised shall not in the exercise of his powers under this regulation unreasonably detain or delay the ship.

17. Section 692 of the Act of 1894 (which relates to the detention of a ship) shall have effect in relation to any ship so detained under regulation 15 or 16 of these Regulations, subject to the modification that for the words "this Act" wherever they appear, there shall be substituted "the Merchant Shipping Acts 1894 to 1979 or any Regulations made thereunder".

1st December 1981.

Iain Sproat,
Parliamentary Under Secretary of State,
Department of Trade.

(Regulation 6)

SCHEDULE

SPECIFICATIONS FOR PORTABLE LADDERS

Portable ladders shall:

- (a) not exceed 10 metres in total length and may be of extending pattern of up to three units capable of separation for individual use;
- (b) be fitted with rungs which shall—
 - (i) have a non-slip surface;
 - (ii) have a width or diameter of not less than 20 mm;
 - (iii) be secured to the stringers of each unit of the ladder in such a way that they cannot work loose and, in particular, turn;
 - (iv) have a width between stringers of not less than 330 mm;
 - (v) be equally spaced apart at intervals not exceeding 305 mm;
- (c) if of extending pattern, be provided with—
 - (i) suitable guide brackets to allow extending sections to glide easily without excessive clearance and be guided throughout the full range of extension in such a manner that they cannot separate in use;
 - (ii) means to prevent over-extension of the ladder;
 - (iii) an effective locking device to hold the ladder at any position of extension at which the rungs on the main and extending sections coincide;
- (d) be fitted on the heels of each stringer of each unit of the ladder with non-skid shoes or other attachment to protect the stringer ends and to prevent the ladder slipping, and such non-skid shoes shall have a base of plastic or similar material sufficient to prevent smears on steel decks liable to cause explosions on ships carrying oil, gas or dangerous chemicals;
- (e) be fitted with adequate securing points at the head and heels of the ladder;
- (f) be constructed from aluminium alloys made to the following specifications:
 - in relation to wrought materials:
 - (i) extruded open sections, specification 6082 set out in BS 1474;
 - (ii) extruded hollow sections, specification 6082 set out in BS 1474;
 - (iii) sheet and strips, specification 6082 set out in BS 1470;
 - (iv) drawn tubes, specification HT 30 set out in BS 1471;
 - in relation to forgings, specification HF 30 set out in BS 1472.
- (g) have been sold with a statement by the manufacturer that they are of a design tested in accordance with the following procedures and meet the minimum requirements specified—

(i) *Deflection Test*

The fully extended ladder shall be placed across trestles positioned 500 mm from each end. A 305 mm wide board shall be placed across the stringers at the centre of the span and a load of 38 kilogram force applied to relieve the ladder of any "joint-stiffness". This load shall be allowed to remain for a period of not less than a minute and then be removed. A load of 76 kilogram force shall then be gradually applied, and the deflection recorded due to this load shall not exceed 152 mm at any point measured from the original unloaded position. The load shall then be gradually increased to 114 kilogram force and the additional deflection shall not exceed 50% of the original deflection obtained with the applied load of 76 kilogram force. There shall be no sign of incipient failure in any part of the ladder. With the load removed, the ladder shall return to a position not lower than that taken up after removal of the 38 kilogram force load—i.e. no signs of a permanent set.

(ii) *Side Test*

On completion of the deflection test, the ladder, still resting on the two

trestles, shall be turned through 90 degrees on to one side. In this position, the deflection of the ladder under its own weight shall be measured from the centre of the rung at the point of maximum deflection to a line drawn between the centres of the top and bottom rungs of the ladder. The deflection must not exceed 305 mm. The ladder shall then be turned over and tested in the same way on its other side.

(iii) *Rung Test*

The ladder shall be fully extended and its head rested against a wall at an angle such that the test load can be properly applied in accordance with this test. A load of 317 kilogram force shall be gradually applied to the middle of at least one rung in each section by means of a metal hook having a bearing surface 51 mm wide and suitably lined to prevent damage to the rung. No sign of failure must be apparent either in the rung or at its junction with the stringers.

EXPLANATORY NOTE

(This Note is not part of the Regulations.)

These Regulations give effect in part to the Merchant Shipping (Minimum Standards) Convention 1976 (International Labour Organisation Convention 147) (Cmnd. 7163), laid before Parliament on 24th April 1978 and ratified by the United Kingdom on 28th November 1980, which is in force internationally and requires provisions to be made substantially equivalent to those of (amongst other Conventions) the Prevention of Accidents (Seafarers) Convention 1970 (International Labour Organisation Convention 134, Article 4) (Cmnd. 4800) which is in force but has not been ratified by the United Kingdom.

The Regulations require United Kingdom ships (other than fishing vessels, pleasure craft and offshore installations on site) to carry a gangway (regulation 4), an accommodation ladder (regulation 5), and if a portable ladder is carried, one of a specified type and description (regulation 6), and safety nets (regulation 9). Bulwark ladders (regulation 7) and handholds and guardrails (regulation 8) are required in specified circumstances. The Regulations also include provisions about the maintenance, deployment, safe rigging and use of access equipment (whether or not the ship's own equipment). A ship may be detained if she does not carry the necessary access equipment (regulation 15).

In the case of ships not registered in the United Kingdom, the Regulations require the maintenance, deployment, safe rigging and use of access equipment while in United Kingdom ports. Access equipment clearly hazardous to safety must not be carried (regulation 13) and ships which carry hazardous access equipment may be detained (regulation 16).

The Regulations concerning the maintenance, deployment, safe rigging and use of access equipment come into force on 1st January 1982 for all ships, including foreign ships in United Kingdom ports. The requirements for United Kingdom ships to carry specified types of gangways, accommodation ladders and, where applicable, bulwark ladders, come into force on 1st April 1983 in respect of new United Kingdom ships and on 1st January 1987 in respect of existing United Kingdom ships. The requirements to carry a specified type of portable ladder come into force on 1st April 1983 in respect of all United Kingdom ships. The requirement that a foreign ship when in a United Kingdom port shall not carry access equipment which if used would clearly be hazardous to safety, comes into force on 1st April 1983.

The British Standards Institution Standards mentioned in regulation 2(1) are obtainable from the British Standards Institution, 2 Park Road, London W1; the British Ship Research Association Shipbuilding Industry Standard is obtainable from the British Ship Research Association, Wallsend, Tyne and Wear; and the Merchant Shipping Notices are published by Her Majesty's Stationery Office.

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