#### STATUTORY INSTRUMENTS

# 1999 No. 2721

The Merchant Shipping (Life-Saving Appliances For Ships Other Than Ships Of Classes III To VI(A)) Regulations 1999

## **PART IV**

# REQUIREMENTS FOR SHIPS CONSTRUCTED ON OR AFTER 1ST JULY 1998

# GENERAL REQUIREMENTS

## Operating instructions for survival craft and their launching controls

- **70.** Posters and signs provided on or in the vicinity of survival craft and their launching controls shall:
  - (a) illustrate the purpose of controls and the procedures for operating the appliance and give relevant instructions;
  - (b) be easily seen under emergency lighting conditions on ships of Classes I, II and II(A), and of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX; and
  - (c) where applicable, use symbols which are specified in Schedule 16.

#### Survival craft assembly and embarkation arrangements

- 71.—(1) Lifeboats and liferafts for which launching appliances are required shall be stowed as close to accommodation and service spaces as possible.
- (2) Assembly stations shall be provided close to the embarkation stations. Each assembly station shall have sufficient clear deck space of at least 0.35 square metres per person, to accommodate all persons assigned to assemble at that station. In ships of Classes I, II and II(A) passenger assembly stations shall have ample room for the marshalling and instruction of the passengers and there shall be ready access between assembly stations and the embarkation station.
- (3) Assembly and embarkation stations shall be readily accessible from accommodation and work areas.
- (4) In ships of Classes I, II and II(A) and in ships on Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX of 500 tons or over, assembly and embarkation stations shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 or the Merchant Shipping (Cargo Ship Construction) Regulations 1997, as appropriate.
- (5) Alleyways, internal and external stairways and exits giving access to the assembly and embarkation stations shall be lighted. In ships of the Classes referred to in paragraph (4) such lighting shall be capable of being supplied by the emergency source of electrical power required by the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A) Regulations 1998 or the Merchant Shipping (Cargo Ship Construction) Regulations 1997, as appropriate. In addition to, and as part of the markings required by the Merchant Shipping (Fire Protection: Large Ships)

Regulation 1998(1), routes to assembly stations shall be indicated with the assembly station symbol intended for that purpose; where applicable use symbols which are specified in Schedule 16.

- (6) Davit-launched and free-fall launched craft assembly and embarkation stations shall be so arranged as to enable stretcher cases to be placed in survival craft.
  - (a) (7) (a) In ships of Classes I, II, II(A), VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX, XI and XII an embarkation ladder shall be provide at each embarkation station or at every two adjacent embarkation stations, extending, in a single length, from the deck to the waterline in the lightest seagoing condition under unfavourable conditions of trim of up to 10 degrees and with the ship listed not less than 20 degrees either way and where such distance exceeds 1 metre.
  - (b) Such ladders may be replaced by approved devices to afford access to survival craft when waterborne: provided that there shall be at least one embarkation ladder on each side of the ship.
  - (c) Handholds shall be provided to assist in a safe passage from the deck to the ladder and vice-versa.
  - (d) Other means of embarkation may be permitted for the liferafts carried in compliance with regulations 65(5) and 66(8).
- (8) Where necessary, means shall be provided for bringing davit-launched survival craft against the ship's side and holding them alongside so that persons can be safely embarked.
- (9) On ships of Classes I, II and II(A) survival craft embarkation arrangements shall be so designed that:
  - (a) all lifeboats can be boarded and launched either directly from the stowed position or from an embarkation deck, but not both; and
  - (b) davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which, in compliance with the requirements of regulation 72(5), the liferaft is transferred prior to launching.

Notwithstanding the requirements of subparagraph (9)(a), if the rescue boat or fast rescue boat is also a lifeboat and the other lifeboats are boarded and launched from an embarkation deck, the arrangements shall be such that they can also be boarded and launched from the embarkation deck.

- (10) On every ship provided with a rescue boat or fast rescue boat, arrangements shall be such that they can be boarded and launched directly from the stowed position with the number of persons assigned to crew the boats on board.
- (11) On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T), IX and XI survival craft embarkation arrangements shall be so designed that lifeboats can be boarded and launched directly from the stowed position and davit-launched liferafts can be boarded and launched from a position immediately adjacent to the stowed position or from a position to which the liferaft is transferred prior to launching in compliance with the requirements of regulation 74(5).

# Stowage of survival craft, fast rescue boats, marine evacuation systems, means of rescue, rescue boats and inflated boats

- **72.**—(1) Each survival craft shall be stowed:
  - (a) so that neither the survival craft nor its stowage arrangements will interfere with the operation of any other survival craft or rescue boat at any other launching station;
  - (b) as near the water surface as is safe and practicable and, in the case of a survival craft other than a liferaft intended for throw-overboard launching, in such a position that the survival

- craft in the embarkation position is not less than 2 metres above the waterline with the ship in the fully loaded condition under unfavourable conditions of trim of up to 10 degrees and listed up to 20 degrees either way, or to the angle at which the ship's weatherdeck edge becomes submerged, whichever is less;
- (c) in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in less than 5 minutes;
- (d) fully equipped as prescribed in Schedule 2, or Part 2 or Schedule 4, of Part 6; and
- (e) as far as practicable, in a secure and sheltered position and protected from damage by fire and explosion. In particular, survival craft on tankers, other than the liferafts required by regulations 65(5) and 66(8) shall not be stowed on or above a cargo tank, slop tank, or other tank containing explosive or hazardous cargoes.
- (2) Lifeboats for lowering down the ship's side shall be stowed as far forward of the propeller as practicable. On ships of Classes VII, VII(T), VIII, VIII(T), VIII(A), VIII(A)(T) and IX of 80 metres in length and upwards but less than 120 metres in length, each lifeboat shall be so stowed that the after end of the lifeboat is not less than the length of the lifeboat forward of the propeller. On such ships of 120 metres in length and upwards and on ships of Classes I, II and II(A) of 80 metres in length and upwards, each lifeboat shall be so stowed that the after end of the lifeboat is not less than 1.5 times the length of the lifeboat forward of the propeller. Where appropriate, the ship shall be so arranged that lifeboats, in their stowed positions, are protected from damage by heavy seas.
  - (3) Lifeboats shall be stowed attached to launching appliances.
    - (a) (4) (a) Marine evacuation and means of rescue systems shall be stowed in a state of continuous readiness for launching in the shortest possible time:
      - (i) so that the ship's side shall not have any openings between the embarkation station of the marine evacuation and means of rescue systems and the waterline in the lightest seagoing condition and means shall be provided to protect the systems from any projections;
      - (ii) in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull and so that, as far as practicable, the system can be launched down the straight side of the ship;
      - (iii) so that neither the passage nor platform nor its stowage or operational arrangements will interfere with the operation of any other life-saving appliance at any other launching station.
    - (b) Where appropriate, the ship shall be so arranged that the marine evacuation and means of rescue systems in their stowed positions are protected from damage by heavy seas.
- (5) Davit-launched liferafts shall be stowed within reach of the lifting hooks unless some means of transfer is provided which is not rendered inoperable within the limits of trim and list prescribed in paragraph (1)(b) or by ship motion or power failure: provided that the liferafts required to be carried by regulations 63(2)(c) and 64(4) need not be so stowed.
- (6) Canopied reversible liferafts and automatic self-righting liferafts carried on ro-ro passenger ships in accordance with regulation 63(17)(b)(iv) and 64(21)(b)(iv) do not need to be arranged for easy side-to-side transfer and are therefore not subject to the 185 kilogramme mass limitation of Schedule 4, or Part 1 of paragraph 2.7.
- (7) Liferafts intended for throw-overboard launching shall be stowed in a position providing for easy side-to-side transfer at a single open deck level so as to be readily transferable for launching on either side of the ship unless liferafts, of the aggregate capacity required by regulations 65(4)(a), 66(4), 67(3)(c)(i), 68(2)(a) and 69(2)(a) to be capable of being launched on either side, are stowed on each side of the ship.

- (8) On ships of Classes I, II and II(A) every liferaft shall be stowed with its painter permanently attached to the ship and with a float-free arrangement complying with the requirements of Schedule 4, Part 8 so that, as far as practicable, the liferaft floats free and, if inflatable, inflates automatically when the ship sinks.
- (9) On ships of Classes VII, VII(T), VIII(T), VIII(A), VIII(A)(T), IX, XI and XII every liferaft, other than the liferafts required by regulations 65(5) and 66(8) shall be stowed with its painter permanently attached to the ship and with a float-free arrangement complying with the requirements of Schedule 4, Part 8 so that the liferaft floats free and if inflatable, inflates automatically when the ship sinks. The liferafts required by regulations 65(5) and 66(8) if securely fastened shall have provision for manual release.
- (10) On all ships operating on fixed routes in shallow water, the requirement that liferafts be arranged as to ensure that the liferafts are not dragged under by the sinking ship can be achieved by using a liferaft painter with a length of at least the maximum depth of the water plus an additional 10 metres.
- (11) In addition to meeting the requirements of paragraph (8) or (9) liferafts shall be stowed as to permit manual release of one raft or container at a time from their securing arrangements.
  - (12) Rescue boats and fast rescue boats shall be stowed:
    - (a) in a state of continuous readiness for launching in not more than 5 minutes;
    - (b) in a position suitable for launching and recovery;
    - (c) so that neither the boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station; and
    - (d) if it is also a lifeboat, in compliance with the requirements of this regulation for the stowage of lifeboats.
  - (13) Inflated boats shall be stowed:
    - (a) in a state of continuous readiness for launching in the shortest possible time;
    - (b) in a position suitable for launching and recovery; and
    - (c) so that neither the inflated boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station.
- (14) The stowage height of a survival craft on a passenger ship shall take into account the requirements of this regulation, the assembly, means of escape and evacuation procedures for the ship in accordance with the Merchant Shipping (Fire Protection: Large Ships) Regulations 1998, the size of the ship and the weather conditions likely to be encountered in its area of operation. For a davit launched survival craft, the height of the davit head with the survival craft in the embarkation position, shall, as far as practicable, not exceed 15 metres to the waterline when the ship is in its lightest sea going condition.

### Launching stations

**73.** Launching stations shall be in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull with the object of ensuring that so far as practicable survival craft, except survival craft specially designed for free-fall launching, can be launched down the straight side of the ship. If positioned forward survival craft shall be stowed abaft the collision bulkhead in a sheltered position.

#### Survival craft launching arrangements

**74.**—(1) Launching appliances complying with the requirements of Schedule 6, Parts 1 and 3, shall be provided for all liferafts except:

- (a) liferafts which are boarded from a position which is less than 4.5 metres above the waterline in the lightest seagoing condition and which either:
  - (i) have a mass of not more than 185 kilogrammes; or
  - (ii) are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10 degrees and with the ship listed not less than 20 degrees either way;
- (b) liferafts having a mass of not more than 185 kilogrammes and which are carried in excess of the survival craft for 200 per cent of the total number of persons on board the ship;
- (c) liferafts carried in excess of the survival craft for 200 per cent of the total number of persons on board the ship, are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10 degrees and list of up to 20 degrees either way;
- (d) liferafts provided for use in conjunction with a marine evacuation system, complying with Schedule 5, Part 1 and stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10 degrees and list of up to 20 degrees either way.
- (2) Each lifeboat shall be provided with an appliance complying with the requirement of Schedule 6, which is capable of launching and recovering the lifeboat. In addition there shall be provision for hanging-off the lifeboat to free the release gear for maintenance.
- (3) Only one type of release mechanism shall be used for similar survival craft carried on board the ship.
- (4) On ships of Classes I, II and II(A) all survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 30 minutes from the time the abandon ship signal is given.
- (5) On ships of Classes VII, VIII(T), VIII, VIII(T), VIII(A), VIII(A), VIII(A), IX and XI, with the exception of the survival craft referred to in subparagraph (1)(a), all survival craft required to provide for abandonment by the total number of persons on board shall be capable of being launched with their full complement of persons and equipment within a period of 10 minutes from the time the abandon ship signal is given.
- (6) On ships of Classes VII, VIII(T), VIII, VIII(T), VIII(A), VIII(A)(T), and IX of 20,000 tones and upwards, lifeboats shall be capable of being launched where necessary utilising painters, with the ship making headway at speeds up to 5 knots in calm water.
- (7) Preparation and handling of survival craft at any one launching station shall not interfere with the prompt preparation and handling of any other survival craft or rescue boat at any other station.
- (8) During preparation and launching, each survival craft, its launching appliance, and the area of water into which it is to be launched shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by the Merchant Shipping (Passenger Ship Construction: Ships of Classes I, II and II(A)) Regulations 1998 or the Merchant Shipping (Cargo Ship Construction) Regulations 1997, as appropriate.
- (9) Means shall be available to prevent any overboard discharge of water on to survival craft during abandonment or man overboard operations.
- (10) If there is a danger of a survival craft being damaged by the ship's stabiliser fins, means shall be available, powered by an emergency source of energy, to bring the stabiliser fins inboard. Indicators operated by an emergency source of energy shall be available on the navigating bridge to show the position of the stabiliser fins.

#### Marine evacuation systems

75.—(1) A marine evacuation system or systems complying with the requirements of Schedule 5 may be substituted on ships of Classes I, II and II(A) for some or all of the liferafts and launching

appliances required by regulations 63(2)(b) and 64(2)(b) or 3(b). The liferafts included in such system or systems, together with any other liferafts served by launching appliances other than the liferafts referred to in regulation 63(2)(c) and 64(4) shall provide the same aggregate capacity as that required by regulation 63(2)(b) and 64(2)(b) or (3)(b), as appropriate.

- (2) Where marine evacuation systems are provided on a ship, at least all the systems on one side shall be subjected to a trial deployment after installation; the remainder of the systems are to be satisfactorily deployed within 12 months of the installation date.
- (3) Where a marine evacuation system is provided, provision for training the crew in its use shall be made which shall include the arrangements specified in Schedule 5.

#### Fast rescue boat and rescue boat embarkation, launching and recovery arrangements

- **76.**—(1) The rescue boat embarkation and launching arrangements shall be such that the rescue boat can be boarded and launched in the shortest possible time and in any case in not more than 5 minutes.
- (2) If the rescue boat is one of the ship's survival craft, the embarkation arrangements and launching station shall comply with the requirements of regulations 71 and 73.
- (3) Launching arrangements shall comply with the requirements of regulation 74 and rescue boat launching appliances shall comply with the requirements of Schedule 6, Parts 1 and 2. All rescue boats shall be capable of being launched, where necessary utilising painters, with the ship making headway at speeds up to 5 knots in calm water.
- (4) Recovery time of the rescue boat shall be not more than five minutes in moderate sea conditions when loaded with its full complement of persons and equipment. If the rescue boat is also a lifeboat, this recovery time shall be possible when loaded with its lifeboat equipment, and the approved rescue boat complement or 6 persons, whichever is the greater.
- (5) Rescue boat embarkation and recovery arrangements shall allow for safe and efficient handling of a stretcher case. Foul weather recovery strops shall be provided for safety if heavy blocks constitute a danger.
- (6) Fast rescue boat launching and recovery arrangements shall comply with the requirements of paragraphs (2) and (5) inclusive of this paragraph; in addition the launching and recovery arrangements shall comply with the requirements of Schedule 6, Parts 1 and 2.