

1988 No. 38

**MERCHANT SHIPPING**

**SAFETY**

**The Fishing Vessels (Life-Saving Appliances) Regulations  
1988**

*Made - - - - 18th January 1988*

*Laid before Parliament 25th January 1988*

*Coming into force in accordance with regulation 1*

The Secretary of State for Transport, after consulting with the persons referred to in section 22 of the Merchant Shipping Act 1979(a), in exercise of the powers conferred on him by section 21(1)(a) and (3) to (6) and section 22(1) and (3) of that 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 Fishing Vessels (Life-Saving Appliances) Regulations 1988.

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

(a) Regulations 1, 2, 4, 6, 7 and 8 on 15th February 1988;

(b) Regulations 3 and 5 as follows—

(i) On 15th April 1988 for—

- all vessels of 21 metres in length and over whenever constructed; and
- vessels of 12 metres in length and over but less than 21 metres in length if constructed on or after 15th April 1988;

(ii) on 15th July 1988 for vessels of 18 metres in length and over but less than 21 metres in length constructed before 15th April 1988;

(iii) on 15th October 1988 for vessels of 15 metres in length and over but less than 18 metres in length constructed before 15th April 1988;

(iv) on 15th January 1989 for vessels of 12 metres in length and over but less than 15 metres in length constructed before 15th April 1988.

**Interpretation, application**

2.—(1) In these Regulations—

“constructed” in respect of a vessel means a stage of construction where—

- (a) the keel is laid; or
- (b) construction identifiable with a specific vessel begins; or
- (c) assembly of that vessel has commenced comprising at least 50 tonnes or 1 per cent of the estimated mass of all structural material, whichever is less;

“EPIRB” means Emergency Position-Indicating Radio Beacon;

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(a) 1979 c.39; section 21(6) was amended by the Criminal Justice Act 1982 (c.48), section 49(3).

“expiry date” in relation to any source of energy means the expiry date marked on that source of energy;

“fishing vessel” means a vessel which is for the time being used for or in connection with sea fishing but does not include a vessel used for fishing other than for profit;

“float-free arrangement” means an arrangement for the launching of safety equipment whereby the equipment is automatically released from a sinking vessel;

“length” means the registered length shown on the vessel’s certificate of registry;

“person” means a person over the age of one year;

“survival craft” means a craft capable of sustaining the lives of persons in distress from the time of abandoning the ship; and

“United Kingdom fishing vessel” means a fishing vessel which is a United Kingdom ship.

(2) A reference in these Regulations to any British Standard or specification shall include a reference to any document amending that publication which is considered by the Secretary of State to be relevant from time to time and is specified in a Merchant Shipping Notice.

(3) In these Regulations a reference to a numbered schedule is a reference to the schedule of that number of these Regulations.

(4) These Regulations apply to United Kingdom fishing vessels.

#### **Emergency Position-Indicating Radio Beacon**

3.—(1) Every fishing vessel of 12 metres in length and over shall carry an EPIRB capable of operating on the frequency of 406MHz: provided that in place of this requirement until 15th April 1992 the Secretary of State may permit the carriage of an EPIRB not capable of operating on the frequency of 406 MHz, if the EPIRB was installed before 15th March 1988.

(2) Each EPIRB required to be carried by paragraph (1) above shall—

(a) be fitted to the vessel—

(i) mounted on a float-free arrangement whose operation will activate the EPIRB; and

(ii) in such a position that it is protected from possible damage and can easily be removed from its mounting and placed in any survival craft—

Provided that the Secretary of State may in place of the above requirement permit an EPIRB to be fitted in each of the inflatable liferafts required to be carried on vessels of 12 metres and over if he is satisfied that the arrangements for stowage and activation are at least as effective as being mounted on a float-free arrangement;

(b) have its source of energy replaced whenever necessary and at least before the expiry date shown on the source of energy;

(c) as far as practicable, be in a condition capable of operation at all times when the vessel is at sea or proceeding to sea;

(d) conform to relevant performance specifications issued by the Department of Trade and Industry, as specified in Department of Transport Merchant Shipping Notice No. M1291; and those specifications shall include a reference 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.

#### **Lifejackets and lifejacket lights**

4.—(1) A fishing vessel of less than 12 metres in length shall carry lifejackets suitable for each person weighing 32 kg or more on board, and lifejackets suitable for each person weighing less than 32 kg on board and there shall be carried in addition—

(a) if lifejackets of different sizes are required to be carried, at least one extra lifejacket of each size;

(b) otherwise, one extra lifejacket if there are 10 or fewer persons and two extra lifejackets if there are 11 or more.

(2) All lifejackets carried shall comply either with Part I or Part II of Schedule 1.

(3) Each lifejacket required by paragraph (1) above to be carried shall be fitted with a lifejacket light complying with Schedule 2.

#### **Liferaft float-free arrangements**

5.—(1) The liferafts required by the Fishing Vessels (Safety Provisions) Rules 1975(a) to be carried by a fishing vessel of 12 metres in length and over shall be secured in such a way that they are automatically released and be float-free if the vessel sinks.

(2) The arrangements required by paragraph (1) above shall be such that every liferaft carried is stowed—

(a) with its painter permanently attached to the vessel and with a float-free arrangement complying with the requirements of Schedule 3 so that the liferaft floats free and, if inflatable, inflates automatically when the vessel sinks, and

(b) to permit manual release from its securing arrangements.

#### **Equivalents and exemptions**

6.—(1) Where these Regulations require that a particular device, mechanism, material, appliance, standard, or type thereof, shall be fitted and carried in the vessel, or that any particular provision should be made, the Secretary of State may permit any other device, mechanism, material, appliance, standard, or type thereof, to be fitted or carried, or any other provision to be made in that ship if he is satisfied by trial thereof or otherwise that such other device, mechanism, material, appliance, standard or type thereof, or provision is at least as effective as that required by these Regulations.

(2) The Secretary of State may exempt any vessel or description of vessel from all or any of the provisions of these Regulations (as may be specified in the exemption) if he is satisfied that compliance with such provision is either impracticable or unreasonable in the case of that vessel or description of vessels on such terms (if any) as he may specify and may, subject to giving reasonable notice, alter or cancel any such exemption.

#### **Power to detain**

7. In any case where a vessel does not comply with the requirements of these Regulations, the vessel shall be liable to be detained and section 692(1)–(3) of the Merchant Shipping Act 1894(b) (which relates to the detention of a vessel) shall have effect in relation to the vessel, subject to the modification that for the words “this Act” wherever they appear, there were substituted “the Fishing Vessels (Life-Saving Appliances) Regulations 1988”.

#### **Penalties**

8.—(1) If a vessel to which these Regulations apply proceeds to sea without complying with the requirements of regulations 3 or 5, the owner and skipper of the vessel shall each be guilty of an offence and liable on summary conviction to a fine not exceeding £2000.

(2) If a vessel to which these Regulations apply proceeds to sea without complying with the requirements of regulation 4, the owner and skipper of the vessel shall each be guilty of an offence and liable on summary conviction to a fine not exceeding £500.

(3) It shall be a defence to a charge under this regulation to prove that the person charged took all reasonable steps to avoid the commission of the offence.

Signed by authority of the Secretary of State.

18th January 1988

*David B. Mitchell*  
Minister of State, Department of Transport

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(a) S.I. 1975/330, to which there are amendments not relevant to these Regulations.

(b) 1894 c.60.

## REQUIREMENTS FOR LIFEJACKETS AND ATTACHMENTS

## PART I

## INHERENTLY BUOYANT LIFEJACKETS

Inherently buoyant lifejackets for persons weighing 32kg or over shall comply with the following requirements—

**1. Construction**

1.1 An inherently buoyant lifejacket shall be constructed with proper workmanship and materials.

1.2 An inherently buoyant lifejacket shall be so constructed that—

- .1 after demonstration, a person can correctly don it within a period of 1 minute without assistance;
- .2 it is capable of being worn inside out or is clearly capable of being worn in only one way and, as far as is possible, cannot be donned incorrectly;
- .3 it is comfortable to wear;
- .4 it allows the wearer to jump from a height of at least 4.5 metres into the water without injury and without dislodging or damaging the lifejacket.

1.3 It shall be so constructed that the buoyancy is not reduced by more than 5% after 24 hours submersion in fresh water.

1.4 It shall be fitted with a whistle firmly secured by a cord of suitable length. The whistle shall be non-metallic and not be adversely affected by water or humidity.

1.5 It shall be fitted with an approved light.

1.6 It shall be fitted with retro-reflective material where it will assist in detection, and the dimensions and location of the material shall be to the satisfaction of the Secretary of State.

1.7 It shall be fitted with a ring or loop or similar device of adequate strength to facilitate rescue.

**2. Materials**

2.1 As applicable, the materials of a lifejacket shall be rot-proof, corrosion resistant, not be unduly affected by sea-water, oil or fungal attack, and shall be resistant to deterioration due to exposure to sunlight.

2.2 Buoyancy material shall be of good quality synthetic material, or kapok.

2.3 Cover material where used shall be of good quality synthetic material, or pre-shrunk cotton material free of admixture of sizing or other foreign matter.

2.4 Cover material shall be of a highly visible colour such as traffic yellow (BS 381, Ref 368) international orange (BS 381, Ref 592) or a colour of equivalent conspicuity.

2.5 Where a synthetic cover material is used and the seams are stitched, the thread shall be of a synthetic material. Where a cotton cover material is used the thread shall be of natural fibre or a combination of synthetic and natural fibre.

2.6 Fastening tapes shall be not less than 32mm wide and have a breaking strength of not less than 1.4 kilonewtons. Tapes of a synthetic material shall be capable of providing an equivalent degree of security when tied as that provided by cotton tapes.

**3. Performance**

3.1 An inherently buoyant lifejacket shall not be damaged in stowage throughout an air temperature range of  $-30^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$ .

3.2 It shall operate throughout a sea-water temperature range of  $-1^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$ .

3.3 It shall be capable of satisfactory operation in a sea-way.

3.4 It shall have sufficient buoyancy and stability in calm fresh water to—

- .1 lift the mouth of an exhausted or unconscious person not less than 120mm clear of the water with the body inclined backwards at an angle of not less than  $20^{\circ}$  and not more than  $50^{\circ}$  from the vertical position;
- .2 turn the body of an unconscious person in the water from any position to one where the mouth is clear of the water in not more than 5 seconds;

3.5 An inherently buoyant lifejacket shall allow the person wearing it to swim a short distance and to board a survival craft.

3.6 It shall not sustain burning or continue melting after being totally enveloped in a fire for a period of 2 seconds.

#### 4. Marking

4.1 An inherently buoyant lifejacket shall be marked indelibly with-

- .1 the manufacturer's name or trade mark and name of lifejacket, if any;
- .2 the words "PERSON OF 32KG OR MORE" on both sides of the lifejacket in letters not less than 12mm in size in the case of lifejackets which can be worn inside out. In the case of lifejackets which can only be worn one way the marking shall be on the outside of the lifejacket;
- .3 the words "DOT (UK) APPROVED" or "DTp (UK) APPROVED" in letters not less than 12mm in size;
- .4 the year of manufacture; and
- .5 the word "FRONT" on both sides of the front part of the lifejacket in letters not less than 12mm in size in the case of lifejackets which can be worn inside out. In the case of lifejackets which can only be worn one way the marking shall be on the outside of the front part of the lifejacket.

5. Inherently buoyant lifejackets for persons weighing less than 32kg, shall comply with the requirements of paras 1.1 to 6 except that in para 4.1.2 they shall be marked with the word "CHILD". Such lifejackets shall provide a minimum buoyancy of 66.7 newtons in fresh water.

#### 6. Instructions and Information

Instructions and information shall be provided in English in a clear and concise form and shall include the donning and securing of the lifejacket and the operation of the light.

### PART II INFLATABLE LIFEJACKETS

Inflatable lifejackets for persons weighing 32kg or over shall comply with the following requirements-

#### 1. Construction

1.1 An inflatable lifejacket shall be constructed with proper workmanship and materials.

1.2 An inflatable lifejacket shall be so constructed that-

- .1 after demonstration, a person can correctly don it within a period of 1 minute without assistance;
- .2 it is capable of being worn inside out or is clearly capable of being worn in only one way and, as far as is possible, cannot be donned incorrectly;
- .3 it is comfortable to wear;
- .4 it allows the wearer to jump from a height of at least 4.5 metres into the water without injury and without dislodging or damaging the lifejacket.

1.3 It shall be so constructed that the buoyancy is not reduced by more than 5% after 24 hours submersion in fresh water.

1.4 It shall be fitted with a whistle firmly secured by a cord of suitable length. The whistle shall be non-metallic and not be adversely affected by water or humidity.

1.5 It shall be fitted with an approved light.

1.6 It shall be fitted with retro-reflective material where it will assist in detection and the dimensions and location of the material shall be to the satisfaction of the Secretary of State.

1.7 An inflatable lifejacket shall be constructed with not less than two separate compartments, and not less than two compartments shall inflate automatically on immersion and be provided with a device to permit inflation by a single manual motion. All compartments shall be capable of being inflated by mouth. The automatic inflation system shall be so designed and protected that the risk of inadvertent inflation is reduced to a minimum.

1.8 In the event of loss of buoyancy in any one compartment the lifejacket shall be capable of complying with the requirements of paragraphs 1.2, 3.4 and 3.5.

1.9 The inflatable compartments shall be so located that when inflated they do not channel water into the wearer's face when in a seaway.

1.10 An inflatable lifejacket shall comply with the requirements of paragraph 1.3 after inflation by means of the automatic mechanism.

1.11 It shall be fitted with a ring or loop or similar device of adequate strength to facilitate rescue.

## **2. Materials and Components**

2.1 Materials and components shall as applicable be rot-proof, corrosion resistant, and not be unduly affected by sea-water, oil or fungal attack, shall be resistant to deterioration due to exposure to sunlight, and shall comply with the requirements of Clause 5 of BS 3595.

2.2 Materials used on the exterior of the buoyancy chambers shall be of a highly visible colour such as traffic yellow (BS 381, Ref 368), international orange (BS 381, Ref 592) or a colour of equivalent conspicuity.

## **3. Performance**

3.1 An inflatable lifejacket shall not be damaged in stowage throughout an air temperature range of  $-30^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$ .

3.2 It shall operate throughout a sea-water temperature range of  $-1^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$ .

3.3 It shall be capable of satisfactory operation in a sea-way.

3.4 It shall have sufficient buoyancy and stability in calm fresh water to—

.1 lift the mouth of an exhausted or unconscious person not less than 120mm clear of the water with the body inclined backwards at an angle of not less than  $20^{\circ}$  and not more than  $50^{\circ}$  from the vertical position;

.2 turn the body of an unconscious person in the water from any position to one where the mouth is clear of the water in not more than 5 seconds;

3.5 An inflatable lifejacket shall allow the person wearing it to swim a short distance and to board a survival craft.

3.6 It shall not sustain burning or continue melting after being totally enveloped in a fire for a period of 2 seconds.

## **4. Marking**

4.1 An inflatable lifejacket shall be marked indelibly with—

.1 the manufacturer's name or trade mark and name of lifejacket, if any;

.2 means of identification of the date of manufacture;

.3 the words "PERSON OF 32KG OR MORE" on the front in letters not less than 12mm in size;

.4 the words "DOT (UK) APPROVED" or "DTp (UK) APPROVED" in letters not less than 12mm in size; and

.5 the word "FRONT" on both sides of the front part of the lifejacket in letters not less than 12mm in size in the case of lifejackets which can be worn inside-out. In the case of lifejackets which can only be worn one way the marking shall be on the outside of the front part of the lifejacket.

## **5. Instructions and Information**

Instructions and information shall be provided in English in a clear and concise form and shall include the following—

.1 description of lifejacket and attachments;

.2 donning;

.3 operation;

.4 packing;

.5 any maintenance requirements;

.6 servicing requirements;

.7 type and charged weight of gas bottles; and

.8 replacement of gas bottles.

## LIFEJACKET LIGHTS

A lifejacket light shall comply with the following requirements—

**1. Construction**

1.1 The complete light unit shall be constructed with proper workmanship and materials. The materials shall be compatible with materials used in the construction of a lifejacket.

1.2 The unit shall be provided with a fixed or flashing light.

1.3 The unit shall be rot-proof, corrosion resistant and not be unduly affected by sea-water, oil or fungal attack.

1.4 The unit shall not have any adverse effect on the performance of the lifejacket to which it is attached.

1.5 Each component of the unit shall be designed to remain serviceable for at least as long as the storage life of the power source.

1.6 The unit shall be so designed that it will not leak any substance which would be harmful to the lifejacket, immersion suit or wearer.

1.7 A flashing light shall be provided with a manually operated switch.

1.8 A flashing light shall not be fitted with a lens or curved reflector to concentrate the beam.

1.9 Components of electronic circuits of the unit shall comply with the quality control requirements of BS 9000 or the Ministry of Defence Standard 05-21. Where components cannot be obtained under one of the above standards these components shall be covered by a Certificate of Conformance from the manufacturer of the components.

**2. Attachment**

2.1 The method of attachment shall not require penetration of a lifejacket's buoyancy material.

2.2 The method of attachment shall be such that the light cannot become accidentally detached.

2.3 The light and power source shall be capable of being removed and replaced without causing damage to the lifejacket.

**3. Activation**

The light shall be easy to activate with wet, cold or gloved hands in adverse conditions and with the minimum of preparation.

**4. Performance**

4.1 A lifejacket light shall not be damaged in stowage throughout an air temperature range of  $-30^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$ .

4.2 It shall operate as prescribed in paragraphs 4.7 and 4.8 throughout a sea water temperature range of  $-1^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$ . It shall also be capable of operating in fresh water.

4.3 It shall be capable of operation in a sea-way when attached to a lifejacket .

4.4 It shall be visible over as great a segment of the upper hemisphere as is practicable when attached to a lifejacket.

4.5 A flashing light shall flash at a rate of not less than 50 flashes per minute and shall attain this rate within 5 minutes of activation.

4.6 A water activated light shall commence functioning within 2 minutes of immersion and have reached a luminous intensity of 0.75 candela within 5 minutes in salt water at temperatures of  $-1^{\circ}\text{C}$  and  $+30^{\circ}\text{C}$ , and within 10 minutes in fresh water at ambient temperature.

4.7 A fixed light and a flashing light with a flash duration of not less than 0.15 seconds shall have a luminous intensity of not less than 0.75 candela. A flashing light with a flash duration of less than 0.15 seconds shall have an effective luminous intensity of not less than 0.75 candela.

4.8 A light shall have a source of energy capable of providing the luminous intensity, or the effective luminous intensity, as appropriate, for a period of at least 8 hours.

4.9 The unit and the lifejacket attachment arrangements shall be capable of withstanding a jump into the water from a height of 4.5 metres without the unit being damaged or dislodged or causing injury to the wearer of the lifejacket.

4.10 The unit shall be capable of withstanding a drop of 2 metres onto a rigidly mounted steel plate or concrete surface.

## 5. Marking

5.1 The unit shall be marked indelibly with—

- .1 the manufacturer's name or trade mark;
- .2 the batch number or other means of identifying the unit;
- .3 the words "DOT (UK) APPROVED" or "DTp (UK) APPROVED"; and
- .4 clear and concise directions in English for activating the light supported by illustrations.

5.2 The unit or power source as appropriate, shall be marked indelibly with the date of manufacture and expiry of the power source.

## 6. Instructions and Information

6.1 Instructions and information shall be provided in English in a clear and concise form and shall include the following—

- .1 method or methods of attachment to lifejackets;
- .2 type of power source for the particular type of light;
- .3 if the power source is replaceable, method of replacement;
- .4 type of light source and whether replaceable;
- .5 any maintenance requirements including the method and recommended frequency of checks of power source; and
- .6 operation of light.

# SCHEDULE 3

Regulation 5

## LIFERAFT FLOAT FREE ARRANGEMENTS

### 1. General

Float free arrangements shall provide for a liferaft to be released automatically in the event of a vessel's sinking.

### 2. Painter System

The liferaft painter system shall provide a connection between the ship and the liferaft and shall be so arranged as to ensure that the liferaft when released and in the case of an inflatable liferaft, inflated, it is not dragged under by the sinking vessel.

### 3. Hydrostatic Release Unit

#### 3.1 Construction

A hydrostatic release unit used in float-free arrangements shall be so constructed that—

- .1 the materials used are compatible so as to prevent malfunction of the unit; galvanising or other forms of metallic coating on parts of the release unit will not be accepted;
- .2 it has drains to prevent the accumulation of water in the hydrostatic chamber when the unit is in its normal position;
- .3 each part connected to the painter system has a strength not less than that required by the painter;
- .4 it can readily be removed for replacement or annual servicing.

#### 3.2 Materials and Components

Materials and components shall be corrosion-resistant and not affected by seawater, oil or detergents.

#### 3.3 Performance

A hydrostatic release unit shall—

- .1 function properly throughout an air temperature range of  $-30^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$ ;
- .2 function properly throughout a seawater temperature range of  $-1^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$ ;
- .3 automatically release the liferaft at a depth of not more than 4 metres;
- .4 not release prematurely when seas wash over the unit;
- .5 be capable of releasing a liferaft when the stowage is—



- .1 horizontal;
- .2 tilted 45° and 100° with the hydrostatic release unit at the upper side;
- .3 tilted 45° and 100° with the hydrostatic release unit at the lower side;
- .4 vertical.

### 3.4 Marking

A hydrostatic release unit shall be marked permanently on its exterior with a means of identifying its type, serial number, depth at which it will release, and in addition if of a type which—

- .1 requires annual servicing with its date of manufacture and a small plate permanently attached to the unit for recording the date of servicing,
- .2 is disposable, with the date at which it must be replaced.

### 3.5 Instructions and Information

Instructions and information shall be provided in English in a clear and concise form and shall include the following—

- .1 general description of the unit;
- .2 installation instructions;
- .3 any on board maintenance requirements;
- .4 servicing requirements.

## 4. Weak Link

### 4.1 Construction and Materials

A weak link used in the float free arrangements shall—

- .1 be made from a material which is corrosion resistant and not affected by seawater, oil or detergent;
- .2 when made of cordage have the ends either whipped or heat treated;
- .3 when made from a flexible wire have each end looped around a thimble and secured with a locking ferrule.

### 4.2 Performance

A weak link shall be of sufficient strength to—

- .1 pull the painter out of the liferaft container;
- .2 operate the liferaft inflation system;
- .3 break under a tensile force of between 1.8 and 2.6 kN.

## EXPLANATORY NOTE

*(This note is not part of the Regulations)*

These Regulations make requirements for life-saving appliances additional to those contained in Part IIIA of the Fishing Vessels (Safety Provisions) Rules 1975 and provide for—

- (a) the carriage of emergency position-indicating radio beacons by fishing vessels of 12 metres and over in length (reg. 3);
- (b) the carriage of lifejackets with lifejacket lights by fishing vessels of less than 12 metres in length for each person carried and at least one extra lifejacket (reg. 4 and Schedules 1 and 2);
- (c) float free arrangements for liferafts carried by fishing vessels of 12 metres and over in length (reg. 5 and Schedule 3).

Differing dates of entry into force of these requirements are given in the Regulations.

The requirements of the Regulations (which are made under sections 21 and 22 of the Merchant Shipping Act 1979) originated with sections 1 to 6 of the Safety at Sea Act 1986 (c.23).

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