

- (c) automatically release the liferaft at a depth of not more than 4 metres;
- (d) not release prematurely when seas wash over the unit;
- (e) be capable of releasing a liferaft when the stowage is:
 - (i) horizontal;
 - (ii) tilted 45° and 100° with the hydrostatic release unit at the upper side;
 - (iii) tilted 45° and 100° with the hydrostatic release unit at the lower side;
 - (iv) vertical.

(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:

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

(5) Instructions and Information

Instructions and information required for inclusion in the training manual specified in Part I of the Performance Standard for Training Manual and Maintenance Instructions and in the instructions for on-board maintenance specified in Part II of the Performance Standard for Training Manual and Maintenance Instructions shall be in a form suitable for inclusion in such training manual and instructions for on-board maintenance. Instructions and information shall be in English in a clear and concise form and shall include the following:

- (a) general description of the unit;
- (b) installation instructions;
- (c) any on board maintenance requirements;
- (d) servicing requirements;

27. Weak Link—(1) Construction and Materials

A weak link used in the float-free arrangements shall:

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

(2) Performance

A weak link shall be of sufficient strength to:

- (a) pull the painter out of the liferaft container;
- (b) operate the liferaft inflation system;
- (c) break under a tensile force of between 1.8 and 2.6 kN.

PART VII

Liferaft Lights

28. General—(1) Internal and External Lights

(a) The lights shall be arranged with manual control and shall operate automatically when the liferaft inflates in the case of an inflatable liferaft and when the canopy is set in place in the case of a rigid liferaft.

(b) Each light shall be connected independently to its own power source.

(c) The external light may be of a flashing type.

29. Construction of Internal and External Lights—

(a) The complete light unit shall be constructed with proper workmanship and materials.

(b) It shall be capable of withstanding the drop-test on a liferaft without damage to the light or the liferaft.

(c) It shall be capable of withstanding a drop of 2 metres on to a rigidly mounted steel plate or concrete surface.

(d) It shall be rot-proof, corrosion-resistant, and not be unduly affected by seawater, oil or fungal growth.

(e) It shall not deteriorate due to damp or humidity when stowed with a liferaft in its container.

(f) The power source shall be a sea activated or dry chemical cell battery.

(g) The power source shall be proofed against leakage of any chemicals which could damage or cause deterioration of any fabrics used in the construction of the liferaft.

(h) The connection between light and power source shall be suitably protected.

(i) The power source in the inactive condition with the terminals covered shall be capable of being immersed for 30 days in salt water without deterioration or loss of power.

(j) The lamp holder, and lens shall be so constructed to prevent the ingress of water.

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

30. Performance of Internal and External Lights—(1)

(a) The lights shall have an operational endurance of not less than 12 hours.

(b) They shall not be damaged in storage and shall operate in a satisfactory manner throughout the air temperature range -30°C to $+65^{\circ}\text{C}$.

(c) They shall operate in a satisfactory manner throughout a seawater temperature of -1°C to $+30^{\circ}\text{C}$.

(d) They shall have a shelf life of not less than 3 years.

(2) The internal light shall be of sufficient luminous intensity to enable survival and equipment instructions to be read.

(3) The external light shall:

(a) be visible on a dark night with a clear atmosphere at a distance of at least 2 miles.

(b) be visible through 360 degrees in a horizontal direction and over as great a segment of the upper hemisphere as is practical, when attached to a liferaft.

(c) in the case of a flashing light, flash at a rate of not less than 50 flashes per minute for the first 2 hours of operation.

31. Markings of Internal and External Lights—(1) The power source shall be marked externally with:

(a) the manufacturer's name or trade mark;

(b) the type and batch number;

(c) date of manufacture and expiry;

(d) the words "M.O.T. APPROVED" (or mark of another approving authority).

(2) If the power source is a chemical pressurised cell it shall be clearly marked with a suitable warning notice.

PART VIII

Gas Inflation System

32. General—(1) The component parts of the gas inflation system shall be constructed with proper workmanship and materials.

(2) The capacity of the gas charge shall be sufficient to achieve full working pressure in a liferaft within 1 minute at an ambient temperature of $18-20^{\circ}\text{C}$, and within 3 minutes at a temperature of -30°C .

(3) The inflation system shall be fitted with a pressure relief arrangement capable at a temperature of $+65^{\circ}\text{C}$ of exhausting sufficient capacity of gas to prevent damage to a liferaft through overpressure.

(4) The inflation system shall provide sufficient pressure to