

mark of other approving authority in lieu of the marking required by clause 4(3)(d) of Part I.

PART III

Rigid Liferrafts

9. General—(1) All rigid liferafts prescribed in this Part shall:

- (a) be constructed with proper workmanship and materials;
- (b) not be damaged in stowage throughout the air temperature range of -30°C to $+65^{\circ}\text{C}$;
- (c) be capable of operating throughout an air temperature range of -30°C to $+65^{\circ}\text{C}$, and a sea water temperature range of -1°C to $+30^{\circ}\text{C}$;
- (d) be rot-proof, corrosion-resistant, and not be unduly affected by seawater, oil or fungal attack;
- (e) be resistant to deterioration from exposure to sunlight;
- (f) have a canopy of a highly visible colour;
- (g) be fitted with retro-reflective material where this will assist in detection and the dimensions and location of the material shall be to the satisfaction of a Surveyor;
- (h) when floating with the canopy uppermost be stable in a seaway.

10. Construction—(1) Every liferaft shall be so constructed as to be capable of withstanding exposure for 30 days afloat in all sea conditions without such deterioration as would involve any loss of seaworthiness.

(2) The liferaft shall be so constructed that when it is dropped into the water from a height of at least 18 metres, the liferaft and its equipment will operate satisfactorily. If the liferaft is to be stowed at a height of more than 18 metres above the waterline in the lightest seagoing condition, it shall be of a type which has been satisfactorily drop-tested from at least that height.

(3) The floating liferaft shall be capable of withstanding repeated jumps on to it from a height of at least 4.5 metres above its floor both with and without the canopy erected.

(4) The liferaft and its fittings shall be so constructed as to enable it to be towed at a speed of 3 knots in calm water when loaded with its full complement of persons and equipment and with one of its sea-anchors streamed.

(5) The liferaft shall have a canopy to protect the occupants from exposure which is automatically set in place when the liferaft is launched and waterborne. The canopy shall comply with the following:

(a) it shall provide insulation against heat and cold by means of either 2 layers of material separated by an air gap or other equally efficient means; means shall be provided to prevent accumulation of water in the air gap;

(b) its interior shall be of a colour that does not cause discomfort to the occupants;

(c) each entrance shall be clearly indicated and be provided with efficient adjustable closing arrangements which can be easily and quickly opened from inside and outside the liferaft so as to permit ventilation but exclude seawater, wind and cold; liferafts accommodating more than 8 persons shall have at least 2 diametrically opposite entrances;

(d) it shall admit sufficient air for the occupants at all times, even with the entrances closed;

(e) it shall be provided with at least 1 viewing port;

(f) it shall be provided with means for collecting rain water;

(g) it shall have sufficient head room for seated occupants under all parts of the canopy.

(6) The buoyancy of the liferaft shall be provided by approved inherently buoyant material placed as near as possible to the periphery of the liferaft. The buoyant material shall be fire-retardant or be protected by a fire-retardant covering.

(7) The floor of the liferaft shall prevent the ingress of water and shall effectively support the occupants out of the water and insulate them from cold.

(8) The number of persons which a liferaft shall be permitted to accommodate shall be equal to the lesser of:

(a) the greatest whole number obtained by dividing by 0.096 the volume, measured in cubic metres of the buoyancy material multiplied by a factor of 1 minus the specific gravity of that material; or

(b) the greatest whole number obtained by dividing by 0.372 the horizontal cross-sectional area of the floor of the liferaft measured in square metres; or

(c) the number of persons having an average mass of 75kg, all wearing lifejackets, that can be seated with sufficient comfort and head room without interfering with the operation of any of the liferaft's equipment.

(9) No liferaft shall be approved which has a carrying capacity of less than 6 persons calculated in accordance with the requirements of subclause (8) of this clause.

(10) Unless the liferaft is to be launched by an approved launching appliance complying with the requirements of Part III of the Performance Standard for Launching Appliances and is not required to be portable, the total mass of the liferaft, its container, and equipment shall not be more than 185kg.

11. Liferaft Fittings—(1) Lifelines shall be securely becketed around the inside and outside of the liferaft.

(2) The liferaft shall be provided with arrangements for adequately siting and securing in the operating position the antenna provided with portable radio equipment required by the LSA Regulations.

(3) The liferaft shall be fitted with an efficient painter of length equal to not less than twice the distance from the stowed position to the waterline in the lightest seagoing condition or 15 metres whichever is the greater.

(4) The breaking strength of the painter system including its means of attachment to the liferaft except the weak link required by Part V of this performance standard shall be:

(a) 7.5 kilonewtons for liferafts accommodating up to 8 persons;

(b) 10.0 kilonewtons for liferafts accommodating 9 to 25 persons;

(c) 15.0 kilonewtons for liferafts accommodating more than 25 persons or have a factor of safety of 3 in association with the requirement of clause 10 (4) of this performance standard above whichever is the greater.

(5) At least 1 entrance shall be fitted with a rigid boarding ramp to enable persons to board the liferaft from the sea. In the case of a davit-launched liferaft having more than 1 entrance, the boarding ramp shall not be fitted at the entrance where bowing lines and embarkation facilities are fitted.

(6) Entrances not provided with a boarding ramp shall have a boarding ladder, the lowest step of which shall be weighted and float at a level not less than 0.4 metres below the liferaft's light waterline.

(7) There shall be means inside the liferaft to assist persons to pull themselves into the liferaft from the ladder.

(8) Unless the liferaft is capable of operating safely whichever way up it is floating, its strength and stability shall be such that it is either self-righting or can be readily righted in a seaway and in calm water by 1 person.

(9) The stability of a liferaft when loaded with its full complement of persons and equipment shall be such that it can be towed at speeds of up to 3 knots in calm water.

(10) At least 1 manually controlled lamp complying with the requirements of Part VII of this performance standard shall be fitted to the top outside of the liferaft canopy.

(11) A manually controlled lamp complying with the