

(b) that it has entrances at both ends and on each side, provided with efficient adjustable closing arrangements which can be easily and quickly opened and closed from inside or outside so as to permit ventilation but exclude seawater, wind and cold. Means shall be provided for holding the entrances securely in the open and in the closed position.

(c) that with the canopy erected and all entrances closed, sufficient air is admitted for the occupants at all times;

(d) that it has means for collecting rainwater;

(e) that the exterior of the rigid covers and canopy and the interior of that part of the lifeboat covered by the canopy is of a highly visible colour. The interior of the shelters shall be of a colour which does not cause discomfort to the occupants; and

(f) that it is possible to row the lifeboat.

**15. Capsizing and Re-righting**—(1) A 4-point safety belt and head protection shall be fitted at each indicated seating position. The safety belt shall be so designed as to hold a person of a mass of 100kg securely in place when the lifeboat is in a capsized position.

(2) The stability of the lifeboat shall be such that it is inherently or automatically self-righting when loaded with its full or a partial complement of persons and equipment and the persons are secured with safety belts.

**16. Propulsion**—(1) The engine and transmission shall be controlled from the helmsman's position.

(2) The engine and engine installation shall be capable of running in any position during capsize and continue to run after the lifeboat returns to the upright or shall automatically stop on capsizing and be easily restarted after the lifeboat returns to the upright and the water has been drained from the lifeboat. The design of the fuel and lubricating systems shall prevent the loss of fuel and the loss of more than 250 millilitres of lubricating oil from the engine during capsize.

(3) Air-cooled engines shall have a duct system to take in cooling air from, and to exhaust it to, the outside of the lifeboat. Manually operated dampers shall be provided to enable cooling air to be taken in from, and exhausted to, the interior of the lifeboat.

**17. Construction and Fendering**—(1) Notwithstanding the requirements of clause 3(6) of Part I of this performance standard a self-righting partially enclosed lifeboat shall be so constructed and fendered as to ensure that the lifeboat renders protection against harmful accelerations resulting from the impact of the lifeboat, when loaded with its full complement of persons and equipment, against the ship's side at an impact velocity of not less than 3.5 metres per second.

(2) The lifeboat shall be automatically self-bailing

**18. Radiotelegraph Installations**—Any radiotelegraph installation required by the L.S.A. Regulations shall be installed in a cabin large enough to accommodate both the equipment and the person using it. No separate cabin is required if the construction of the lifeboat provides a sheltered space to the satisfaction of the Director.

## PART IV

### Totally Enclosed Lifeboats

**19.** All totally enclosed lifeboats shall comply with the requirements of Part I of this performance standard, and in addition shall comply with the requirements of this Part.

**20. Enclosure**—(1) Every totally enclosed lifeboat shall be provided with a rigid watertight enclosure which completely encloses the lifeboat.

(2) The enclosure shall be so arranged that:

(a) it protects the occupants against heat and cold;

(b) access to the lifeboat is provided by hatches which can be closed to make the lifeboat watertight;

(c) hatches are positioned so as to allow launching and

recovery operations to be performed without any occupant having to leave the enclosure;

(d) access hatches are capable of being opened and closed from both inside and outside and are equipped with means to hold them securely in open positions;

(e) it is possible to row the lifeboat;

(f) it is capable, when the lifeboat is in the capsized position with the hatches closed and without significant leakage, of supporting the entire mass of the lifeboat, including all equipment, machinery and its full complement of persons;

(g) it includes windows or translucent panels on both sides which admit sufficient daylight to the inside of the lifeboat with the hatches closed to make artificial light unnecessary;

(h) its exterior is of a highly visible colour and its interior of a colour which does not cause discomfort to the occupants;

(i) handrails provide a secure handhold for persons moving about the exterior of the lifeboat, and aid embarkation and disembarkation;

(j) persons have access to their seats from an entrance without having to climb over thwarts or other obstructions; and

(k) the occupants are protected from the effects of dangerous subatmospheric pressures which might be created by the lifeboat's engine.

**21. Capsizing and Re-righting**—(1) A 4-point safety belt and head protection shall be fitted at each indicated seating position. The safety belt shall be designed to hold a person of a mass of 100kg securely in place when the lifeboat is in a capsized position.

(2) The stability of the lifeboat shall be such that it is inherently or automatically self-righting when loaded with its full or a partial complement of persons and equipment and all entrances and openings are closed watertight and the persons are secured with safety belts.

(3) The lifeboat shall be capable of supporting its full complement of persons and equipment when the lifeboat is in the damaged condition prescribed in clause 3(1) of Part I of this performance standard and its stability shall be such that in the event of capsizing, it will automatically attain a position that will provide an above-water escape for its occupants.

(4) The design of all engine exhaust pipes, air ducts and other openings shall be such that water is excluded from the engine when the lifeboat capsizes and re-rights

**22. Propulsion**—(1) The engine and transmission shall be controlled from the helmsman's position.

(2) The engine installation shall be capable of running in any position during capsize and continue to run after the lifeboat returns to the upright or shall automatically stop on capsizing and be easily restarted after the lifeboat returns to the upright. The design of the fuel and lubricating systems shall prevent the loss of fuel and the loss of more than 250 millilitres of lubricating oil from the engine during capsize.

(3) Air-cooled engines shall have a duct system to take in cooling air from, and exhaust it to, the outside of the lifeboat. Manually operated dampers shall be provided to enable cooling air to be taken in from, and exhausted to, the interior of the lifeboat.

**23. Construction and Fendering**—Notwithstanding the requirements of clause 3(6) of Part I of this performance standard a totally enclosed lifeboat shall be so constructed and fendered as to ensure that the lifeboat renders protection against harmful accelerations resulting from an impact of the lifeboat, when loaded with its full complement of persons and equipment, against the ship's side at an impact velocity of not less than 3.5 metres per second.

**24. Free-fall Lifeboats**—A lifeboat arranged for free-fall launching shall be a totally enclosed lifeboat so constructed that it is capable of rendering protection against harmful