Schedule

Performance Standard For Inflated Boats

1. General—(1) An inflated boat is a composite craft combining a flexible lower hull and an inflated tube fitted at the edge of the lower hull together forming a watertight boundary and which relies solely on the buoyancy of the inflated tube as the inherent buoyancy of the craft.

(2) All inflated boats prescribed in this performance standard shall:

(a) be constructed with proper workmanship and materials;

(b) not be damaged in stowage through the air temperature range -30° C to $+65^{\circ}$ C;

(c) be capable of operating throughout a seawater temperature range of -1° C to $+30^{\circ}$ 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) be of a highly visible colour on all parts where this will assist detection;

(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) be capable of satisfactory operation in a sea environment.

2. Construction—(1) All boats shall be properly constructed and shall be of such form and proportion that they have ample stability in a seaway and sufficient freeboard when loaded with their full complement of persons and equipment. All boats shall be capable of maintaining positive stability in an upright position in calm water when loaded with their full complement of persons and equipment and fully swamped.

(2) All boats shall be of sufficient strength to enable them to be safely lowered into the water when loaded with all their equipment and a crew of 2 persons.

(3) At least 1 portable thwart shall be fitted to enable the boat to be rowed satisfactorily.

(4) Each boat shall be of sufficient strength to withstand, when loaded with its full complement of persons and equipment and with, where applicable, skates or fenders in position, a lateral impact against the ship's side at an impact velocity of at least 3.5 metres/second and also a drop into the water from a height of at least 3 metres.

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

(a) the number of persons having an average mass of 75kg, all wearing lifejackets, that can be seated in a normal position plus 1 person lying down; all persons must be seated inboard of the buoyancy tubes and shall not interfere with the means of propulsion or the operation of any of the boat's equipment; or

(b) the number of spaces that can be provided on the seating arrangements in accordance with the Figure in clause 2 (5) (b) of Part I of the Performance Standard for Rescue Boats plus 1 person lying down.

(6) Each seating position shall be clearly indicated in the boat.

(7) All boats shall have a boarding ladder that can be used on either side of the boat to enable persons in the water to board the boat. The lowest step of the ladder shall be weighted and float at a level not less than 0.4m below the boat's light waterline.

(8) The boat shall be so arranged that disabled persons can be brought on board either from the sea or on stretchers.

(9) All surfaces on which persons might walk shall have a non-skid finish.

(10) All inflated boats, when loaded with 50 percent of the number of persons the boat is permitted to accommodate seated in their normal positions to one side of the centreline,

shall have a freeboard, measured from the waterline to the lowest opening through which the boat may become flooded, of at least 1.5 per cent of the boat's length or 100mm, whichever is the greater.

(11) An inflated boat shall:

(a) be not less than $3.8 \mathrm{m}$ and not more than $8.5 \mathrm{m}$ in length; and

(b) be capable of carrying at least 3 persons plus 1 person lying down.

(12) Unless the boat has adequate sheer, it shall be provided with a bow cover of highly visible colour extending for not less than 15 percent of its length, and shall be angled upwards to deflect water and spray.

(13) Boats shall be capable of manoeuvring at speeds of at least 6 knots in calm water with 2 persons on board, and maintaining a speed of 6 knots for a period of at least 2 hours.

(14) Boats shall have sufficient mobility and manoeuvrability in a seaway to enable persons to be retrieved from the water, marshal liferafts, and tow the largest liferaft carried on the ship when loaded with its full complement of persons and equipment, or its equivalent, at a speed of at least 2 knots.

(15) The boat shall be fitted with an outboard engine having a maximum power of 7.5kW complying with the requirements of clause 3 of this performance standard.

(16) Arrangements for towing shall be permanently fitted in boats and shall be sufficiently strong to marshal or tow liferafts as required by subclause (14) of this clause.

(17) Boats shall be fitted with weathertight stowage for small items of equipment.

(18) A boat shall be constructed in such a way that, when suspended by its bridle or lifting hook;

(a) it is of sufficient strength and rigidity to enable it to be lowered and recovered with all its equipment and a crew of 2 persons;

(b) it is of sufficient strength to withstand a load of 1.1 times the mass of its equipment and a crew of 2 persons at an ambient temperature of -30° C with all relief valves operative;

(c) it is of sufficient strength to withstand a load of 4 times the mass of its equipment and a crew of 2 persons at an ambient temperature of $20^{\circ}C \pm 3^{\circ}C$ with all relief values inoperative.

(19) Inflated boats shall be constructed as to be capable of withstanding exposure:

(a) when stowed on an open deck on a ship at sea;

(b) for 30 days afloat in all sea conditions.

(20) The buoyancy of an inflated boat shall be provided by either a single tube subdivided into at least 5 separate compartments of approximately equal volume or 2 separate tubes neither exceeding 60 percent of the total volume. The buoyancy tubes shall be so arranged that, in the event of any 1 of the compartments being damaged, the intact compartments shall be able to support, with positive freeboard over the boat's entire periphery, the number of persons which the inflated boat is permitted to accommodate, each having a mass of 75kg, and seated in their normal positions.

(21) The buoyancy tubes forming the boundary of the inflated boat shall on inflation provide a volume of not less than $0.17m^3$ for each person the boat is permitted to accommodate, and the diameter of the main buoyancy chamber must be at least 0.43 metres.

(22) Each buoyancy compartment shall be fitted with a nonreturn valve for manual inflation and means for deflation. A safety relief valve designed to operate at a pressure not exceeding 125 per cent of the designed working pressure of the buoyancy chamber shall also be fitted to each buoyancy compartment.