CATEGORY 1

PURPOSE AND PLANNING INFORMATION

GENERAL DESCRIPTION

1 The RN variant of the 6.5 m Pacific Rigid Inflatable Fast Rescue Boat (Pacific 22, Mk 2) is constructed in accordance with, but not certified to, SOLAS requirements. The RFA variant is constructed in accordance with SOLAS requirements for Life Saving Appliances (LSA) for a Fast Rescue Craft and is approved for 8 persons. Both variants of the boat are built in compliance with MoD(N) Specification DGSS/SS514/922/04/03 June 1998. (Refer also to the Classification and Approval data in Table 1.)

2 The RiB comprises a deep V hard chine planing hull, constructed from Glass Reinforced Plastic (GRP), surmounted by a mechanically attached inflatable buoyancy tube (flotation collar). One diesel engine is mounted inboard within an enclosure located behind the Coxswain's position. Drive is transmitted from the engine via a drive shaft through a waterjet mounted on a reinforced transom.

3 The Coxswain is provided with a straddle type seat and backrest, aft of the console. Bench type seats for passengers are provided either side of the engine cowling. Toe straps and grab rails, situated above the engine cowling, provide added support.

4 The RIB incorporates a tubular frame, with integral lifting hook, situated between the Coxswain's seating position and the engine box, for specific use with a single point lifting system.

5 At the stern a manually operated, gas inflated, self-righting bag is fitted on a dedicated framework. This equipment is optional, fitted dependent on the role of the boat. Also fitted at the stern is a set of rollers to assist in the recovery of casualties on stretcher, and, secured to the transom, is a tubular waterjet guard with ladder to further assist in the recovery of personnel from the water.

6 Refer to Figs 1 and 2 for general arrangement views of the RIB.

PURPOSE

7 The primary purpose of the RIB is to operate in coastal waters and the open sea at all times of the year. The RIB will be used for: Military operations boarding/force protection, search and rescue or for transport of freight from ship to ship.

DESIGN AND PERFORMANCE DATA

Identity, Weight and Principal Dimensions

8 The identity, weight and principal dimensions of the RIB are given in Table 1.

TABLE 1 IDENTITY, WEIGHT AND PRINCIPAL DIMENSIONS

ldentity	Builder	VT Halmatic Ltd Portchester Shipyard Hamilton Road Portsmouth PO6 4QB
	Designation	6.5 m Pacific Rigid Inflatable (Pacific 22, Mk 2) RN Variant Fast Rescue Boat
		6.5 m Pacific Rigid Inflatable (Pacific 22, Mk 2) RFA Variant Fast Rescue Boat (SOLAS) for 8 Persons
		(continued)

BR 7919

Weight and Principal Dimensions	Weight Full Load (with fuel, sling and 8 Persons, typical)	2.5 tonnes (approximate)
	Length - Overall	7.10 m (23 ft 3.5 in)
	Length - Rigid Hull	6.12 m (20 ft 9.5 in)
	Beam - Overall	2.44 m (8 ft 0 in)
	Beam - Rigid Hull	2.03 m (6 ft 8 in)
	Draught (Operational)	0.50 m (1 ft 7.5 in)
Capacity	Fuel	150 litres (33 gallons)
	Passengers	8 (including 2 crew)
Approval	Lloyds	The rigid hull is moulded in accordance with Lloyds Rules and carries a Lloyds Report 10.
Classification	SOLAS 74	SOLAS 74 as amended to date, Revised Chapter III as published by IMO as resolution MSC.47(66) of 4 June 1996, Regulations 4 34, 35 and 36 (RFA Variant)
	LSA	The International Life-Saving Appliance (LSA) Code referenced by Regulation III/34 above and as published by IMO as resolution MSC.48(66) dated 4 June 1996 (RFA Variant)
	łМО	IMO Resolution MSC.81(70) Part 1 (this being further revised version of A.689(17) consolidated with all amendments including those of MSC/Circs 596, 615 and 809 plus IMO Resolution MSC.54(66)) (RFA Variant)

TABLE 1 IDENTITY, WEIGHT AND PRINCIPAL DIMENSIONS (continued)

NOTE

The weight of one person is to be taken as 75 kg, ie. the average weight of one woman and one child.

Speed

9 The RIB is capable of achieving a maximum of 28 knots under optimum sea and wind conditions and with a full load.

Endurance

10 At 20 knots (the minimum SOLAS speed requirement for a fast rescue boat) with 8 persons and full fuel load, the fuel tank capacity of 142 litres will give an endurance of 4.5 hours approximately.

Stability, Handling and Seakeeping

11 The RIB is an intrinsically stable craft as a result of the lift generated as the buoyancy tube is immersed. In calm sea conditions the RIB can be safely turned under full wheel and power. In adverse sea conditions, alterations of course across a wave train require extreme care so as to avoid exposing too great an area to gusts with consequent risk of capsize. The limiting operational factor is likely to be crew and passenger fatigue from high accelerations and in consideration of any casualties on board.

12 A detailed description covering all aspects of handling RIBs in a seaway is given in BR 68.