



CUSTOMS 8/CUSTOMS 9: Hong Kong patrol vessels offered for general sale

Builder:.....Wang Tak Engineering & Shipbuilding Co Ltd
 Vessel name:.....Customs 8/Customs 9
 Owner/Operator:.....Customs & Excise Department of HKSAR
 Designer:.....Wang Tak Engineering & Shipbuilding
 Flag:.....HKSAR
 Total number of sister ships already completed (including this ship):.....2
 Total number of sister ships on order:.....nil
 Contract date:.....April 1999

Note: the vessel pictured is Customs 9

TWO vessels have recently been delivered by Wang Tak Engineering & Shipbuilding to the Hong Kong Marine Department for customs patrol duties. The yard says that the design has proved very successful in the first months of operation, and the vessels, known as the *Challenger* class, are being offered to other paramilitary and civilian operators for patrol launch requirements.

For operation in Hong Kong territorial waters, good seakeeping and a stable operational platform were prime considerations, and Wang Tak developed a 32m round bilge hull form, with narrow stem, full mid body and flat stern, incorporating a raised bow, bulge keels and centreline skeg. The hull was built from steel, with a two-deck superstructure in aluminium alloy, in order to keep weight down, all construction being under Lloyd's Register class survey.

Special attention was paid to the interior design and fitting out, with an ergonomically-designed wheelhouse laid out with the help of a full-scale mock-up to simulate actual operating conditions. The coxswain position is mounted in the centre, with a raised steering position for all-round vision, with navigator station to starboard and machinery controls and monitoring equipment to port. The chart table and surveillance equipment is sited behind the navigation station, with another work station

to port for specialised equipment, such as chemical analysis. Colour-matched decorative honeycomb panelling was used throughout the interior, for light-weight, easy maintenance and a feeling of space. The accommodation is fully air-conditioned, using Cruisair equipment, and includes a fully-outfitted galley.

An Avon SR6M RIB is carried on deck, launched and recovered using a specially-designed Caley davit system designed for use with the mother ship travelling at up to 10knots.

Normal service speed is 25knots, with a maximum of 29knots. During sea trials the vessels exhibited, according to the builders, good motion responses, dry decks, tight turning circles and stable heeling angle during fast turns. Noise and vibration levels are claimed to be particularly low.

MAIN PARTICULARS

Length, oa:.....32m
 Length, bp:.....29m
 Breadth moulded:.....6.8m
 Depth moulded:.....3.65m
 Displacement:.....165tonne
 Light weight:.....140tonne
 Design draught:.....1.95m
 Max speed:.....29knots @ 90% MCR
 Service speed:.....25 knots
 Range:.....600nm
 Class notation:.....LR +100A SSC Patrol mono HSC G3 + LMC Built to HKSAR class I and class II, IMO, IEE and IACS regulations

Main Engines
 Manufacturer:.....MTU
 Model:.....16V 4000 M70
 Number:.....2
 Output:.....2320kW @ 2000rev/min
 Generators
 Number:.....2

Make/type:.....Cummins - Onan 100MXDEGA-6652A
 Output:.....100kW @ 2000rev/min per set
 Gearboxes
 Make:.....ZF
 Model:.....BW755-1
 Number:.....2
 Reduction ratio:.....2.76:1
 Propellers
 Manufacturer:.....Teignbridge
 Number:.....2
 Material:.....AB2 Cu-4
 Pitch:.....Fixed
 Diameter:.....1420mm, 5-bladed open
 Deck Machinery
 Deck crane:.....Palfinger PK5000MA
 Boat Davit:.....Caley
 Windlass:.....Muir SCG1
 Rescue boats:.....Avon SR6M offshore
 Liferaft:.....2 x Viking DK20
 Bridge Electronics
 Radar:.....Decca Bridgemaster E (main & slave)
 Communications:.....Sperry RT-2048 VHF; Seiki PCV-150 radio transceiver base station; Vingtor VSP batteryless automatic telephone system; VMP 16/2 intercom, E3G-24 external broadcasting system
 GPS:.....Liton DGPS LMX-412
 Gyro:.....Liton SR-180 Mk 1
 Chart plotter:.....Liton ChartMaster
 Depth sounder:.....Sperry ES-5000
 Electromagnetic speed log:.....Navikator III/EM-200 Maritime surveillance imaging system
 Engine monitoring:.....Elop COMPASS MTU RCS-5 FPP
 Fire detection system:.....Thorn
 Complement
 Crew:.....15
 Passengers:.....12 (standing)
 Cabins:.....4
 Other
 Steering system:.....Wills Ridley 2PKS650