



ELITE: dedicated fireboat for Hong Kong

Builder.....Wang Tak Engineering & Shipbuilding Co Ltd
 Vessel name.....*Elite*
 Owner.....Government of the HKSAR
 Operator.....Fire Services Department, HKSAR
 Designer.....Wang Tak Engineering & Shipbuilding Co Ltd
 Flag.....HKSAR
 Total number of sister ships already completed.....Nil
 Total number of sister ships on order.....Nil
 Contract date.....2000
 Delivery date.....April 2002

The fireboat *Elite* was delivered in April and now acts as a replacement for the aged *Alexander Grantham*, for the Fire Services Department, HKSAR. She has been in service since May.

This vessel was designed and built to enhance the functional roles of fire fighting for vessels including ocean going merchantmen; fire fighting of coastal regions; search and rescue in case of marine disasters; diving support; and command centre for directing major operations.

Elite, a monohull designed to LRS 100A1 Tug designation, is propelled with two sets of CAT3516B diesel engines, which also serve as fire pumps, and deliver a 15knot cruising speed. A highly automated Unitor external fire fighting system with firewater pumping capacity totalling 7200tonnes/hr, make *Elite*, it is claimed, the world's most dedicated fireboat. Onboard firefighting equipment meets Fi-Fi 11 requirements, with 2 x 40,000litres/min water monitors at maximum throwing distance of 90m, a deluge water screen, and foam making facilities.

A Southern Oceanics diving cage, with a three-diver capacity and a maximum working depth of 60m, was fitted to carry out diving operations. This diving cage is said to be unique, and the first of its kind within HKMD's marine fleet. A Boston Whaler rescue boat is carried on deck, launched, and recovered by a Palfinger deck crane. A helicopter winching area is provided for rapid transport of survivors back to shore.

A specially designed wheelhouse has 360deg windows for all round vision. In addition, a skylight is fitted on the top of the wheelhouse, so that firefighting can be easily monitored from this area. Consoles and control stands are purposely profiled to meet operational requirements,

separated into coxswain station, navigator station, and commander station. A dedicated fire fighting and engineering station is provided as the central commander centre. Internal spaces and roomy and functional for attending crew members.

Fully air-conditioned accommodation is provided for 15 crew, with two single cabins, and one six-man crew cabin. Additionally, *Elite* is outfitted with a 16-seater conference room, a 20-seater mess room, a 25-seater briefing room, and a survivor cabin, with space for 100 people.

TECHNICAL PARTICULARS

Length, oa.....42.50m
 Length, bp.....39.60m
 Breadth, moulded.....9.60m
 Depth, moulded.....4.20m
 Gross tonnage.....653gt
 Displacement.....650tonnes
 Max speed (100% MCR engine output).....over 15knots @ 100% MCR
 Service speed.....15knots @ ~85% MCR
 Range.....50nm
 Fuel consumption.....750litres/hr
 Classification Society & Notation.....Designed to LRS 100A1 Tug (not classed)
 Other regulations.....HKMD Survey, IMO, IEE, Fi-Fi 11
 Main Engine
 Model.....CAT3516B
 Manufacturer.....Caterpillar
 Number.....2
 Output.....1772kW @ 1600rev/min
 Alternators
 Number.....CAT3406
 Make.....Caterpillar
 Number.....2
 Output.....245kW
 Gearboxes
 Make.....NICO
 Model.....MGN1424V
 Number.....2
 Reduction ratio.....3.06:1
 Propellers
 Material.....Bronze
 Manufacturer.....Stone
 Number.....2

Pitch.....5-bladed FP
 Diameter.....1700mm
 Open/nozzle.....Open
 Bow Thrusters
 Make.....Schottel
 Number.....STT330T-LK
 Output of each kW and rev/min.....500kW @ 1470rev/min

Deck machinery
 Deck crane
 Make.....Palfinger
 Model.....PK48000MA
 Number.....1
 Capacity.....SWL 3tonnes @ maximum outreach 5m

Anchor Windlass
 Make.....Plimssoll
 Model.....PR-HAW/GG-24
 Number.....2
 Gypsy size.....24mm diameter U2 chain

Speedboat
 Make.....Boston Whaler
 Model.....21' Impact
 Number.....1

Bridge Electronics
 Radar.....Furuno FR1525 Mk3
 GPS.....Furuno GP3300
 GPS Receive.....Furuno GR80
 Echo sounder.....Furuno FE-700
 VHF.....Vingtor
 PA and Intercom.....Vingtor
 Speedlog.....Walker 7070

Complement
 Crew.....15
 Passengers.....100
 Number of cabins.....3

Other Equipment
 Diving Cage System
 Make.....Southern Oceanics
 Model.....LG-360
 Capacity.....3 divers
 Max working depth.....60m

External Fire Fighting System
 Make.....Unitor Fi-Fi Systems
 Firepump.....3 x 2400m³/hr
 Monitor.....2 x 40,000litres/min (water monitors); 6 x 10,000litres/min (water/foam monitors)