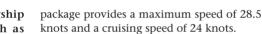
## HART MARINE GOES BACK EAST WITH PILOT BOAT FOR PORT KEMBLA

**BY MIKE BROWN** 

Following a series of orders to flagship Western Australian projects such as Gorgon and Wheatstone, Victorian pilot boat specialist Hart Marine has recently delivered the pilot boat 'Kestrel' to Port Kembla, New South Wales.

Constructed out of FRP, the 'Kestrel' measures 16.06 metres in length overall, with a waterline length of 15.5 metres, a beam of 5.43 metres and a draught of 1.5 metres. Displacing 22.5 tonnes, a pair of Caterpillar C18s powers the vessel, each rated for 533kW and turning Mikado screws via Twin Disc gearboxes. This power



The 'Kestrel' is a further refinement of Hart Marine's ORC 15.6 series, which the builder debuted for the Port Phillip Sea Pilots (PPSP) following the tragic loss of one of its pilot boats in Victoria's notorious Bass Strait.



The 'Kestrel's' beak bow lowers into the water in rough weather via the vessel's trim tab system. This lowering adjusts the longitudinal trim to increase speed and decrease drag



In the wake of the disaster, PPSP searched abroad for the best pilot boat design for operation in frequently treacherous conditions, settling on France-based Pantocarene's ORC concept and bringing it to Hart Marine. Sporting its now-distinctive beak bow, the resulting new-generation selfrighting vessel displays excellent sea-keeping capabilities in the worst weather conditions and sea states.

Following delivery of that first ORC vessel, PPSP saw the boat as a critical part of its operations and went on to order and receive a further two vessels. With Hart Marine currently building a fourth vessel for PPSP, one with a length of 18 metres, this brings the total to four pilot boats in five years, an impressive effort.

According to Hart Marine Managing Director Mal Hart, the close proximity between PPSP and Hart Marine has seen the formation of a prosperous working relationship, with Hart Marine able to grow and learn using PPSP and Bass Strait as the ultimate testing ground. Further tweaks and refinements to the ORC formula as a result of this collaboration then make their way into subsequent new builds such as the 'Kestrel'.

Owned and operated by Sydney Ports Corporation, the 'Kestrel' will provide pilotage services in and out of the seaport of Port Kembla, near Wollongong. In rough weather conditions, the 'Kestrel's' trim tab system drops the beak bow, adjusting the longitudinal trim of the vessel to decrease drag and increase speed. Down weather,





To reduce pilot fatigue, the vessel's resiliently mounted wheelhouse features vibration dampening aualities as well as noise levels below 70 decibels

with tabs lifted, the bow rises and copes with large following seas with ease; there is no broaching tendency.

On board the 'Kestrel', significant steps have been taken to reduce pilot fatigue and improve crew alertness. The vessel features a resiliently mounted wheelhouse to reduce vibrations and noise, with the noise level reduced to fewer than 70 decibels at cruise. Like all other Hart Marine pilot vessels, the 'Kestrel' is constructed from FRP using epoxy-infused laminated construction techniques, ensuring a working life of 35-plus years.

As well as delivering the 'Kestrel' to Port Kembla, three vessels to PPSP (with one on the way), and three vessels to Western Australia, Hart Marine is also constructing two ORC vessels for Flinders Port in South Australia, giving the builder a distinguished presence throughout many key Australian ports. This is the way Hart Marine wants it, notes Mal Hart, as he sees it is of utmost importance to support the local boat building industry, Australian suppliers and manufacturing in Australia as a whole

Rounding off a successful few years of orders to Australian ports, Hart Marine has achieved ISO 9001 to Lloyd's Register. A significant achievement in its own right, the accreditation will further boost the builder's already excellent processes, systems, quality control, and build quality.

For further information contact: Hart Marine, Victoria. Email: gt@hartmarine.com.au Web: www.hartmarine.com.au

## **'Kestrel'** SPECIFICATIONS

Type of vessel:	Pilot boat
In survey to:	NSCV 2C
Home port:	Port Kembla, New South Wales
Owner/operator:	Sydney Ports Corporation, New South Wales
Designer:	Pantocarene, France
Builder:	Hart Marine, Victoria
Construction material:	FRP
Displacement:	22.5 tonnes
Length overall:	16.1 metres
Length waterline:	15.1 metres
Beam:	5.4 metres
Draught:	1.5 metres
Main engines:	2 x Caterpillar C18; each 533kW @ 2,100rpm
Gearboxes:	2 x Twin Disc MGX 5135A
Propellers:	2 x Mikado twin screws
Steering:	Hydraulic
Exhaust system:	Waterlift muffler w/riser
Maximum speed:	28.5 knots
Cruising speed:	24 knots
Range:	330 nautical miles
Electronics supplied by:	Furuno
Thermal imaging:	FLIR camera
Winch supplied by:	Lonestar Marine
Anchor supplied by:	AMI Marine
Air conditioning:	Daikin/Hart
Lighting supplied by:	Hella marine
Flooring:	Vinyl
Safety equipment:	MOB platform
Lifeboats:	Zodiac/RFD
Fuel capacity:	2,500 litres
Freshwater capacity:	120 litres
Crew	2
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