

'Sousa'

A Kirby "Air Rider" for environmental patrol

By MIKE BROWN



The cathedral-hulled "Air Riders" are expensive on a per-metre basis when compared with the "ordinary" monohull of equivalent size and generally are ordered because they are either unquestionably the best or the only craft that will do the job.

The Western Australian Department of Environment and Conservation (DEC) chose a ten-metre Air Rider from Kirby Marine only after a great deal of research and thought. The Air Rider, a trademark design from Global Marine Design, was supplied to Kirby Marine as a detailed router cut kitset.

The vessel's task was to handle the on-site environmental management oversight of the northwest's oil and gas fields, with particular emphasis on the Barrow Island environs and the Gorgon field. The environmental safeguards for the Gorgon development are exceptionally rigorous, and their monitoring has the highest priority. The vessel needed to be small enough for skipping by the holder of a coxswain certificate in inshore waters – and there was already a preference for modest size – and yet it had to provide a safe environment offshore.

The ability to carry substantial loads without degrading performance was also important, which meant a planing catamaran was a doubtful proposition. Several Air Riders are already operating in the Dampier area as workboats and their success in that role influenced DEC's decision. Fulfilling the safe offshore requirement was never in question: trailable versions of the Air Rider are the vessel of choice for abalone divers in all weathers on the south coast.

'Sousa' is an exact ten metres in length, with a 3.45m beam and a near rectangular plan form; the stability is phenomenal. A

single Volvo D6, rated at 246kW and driving through a Duo-prop sterndrive leg, powers her. Top speed is 30 knots, for a probable cruising speed in the 18-20 knot range. The unusually high 1,000-litre fuel capacity gives a range of up to 700nm, illustrating the efficiency of the Air Rider hull. Where past generations of cathedrals were characterised by increased drag, the Air Rider adds slipperiness to its renowned soft riding.

Although 'Sousa' has accommodation, it is provided very much for contingency use; camps ashore will normally cater for overnight stays. There is a basic galley, a toilet forward, and it is possible to sleep in the accommodation, though on those rare sleeping occasions the cockpit is far more likely to be used – it just does not get cold in the Pilbara.

The wheelhouse is roomy enough for two suspension seats and a pair of auxiliary seats, and for comprehensive electronics. Communications are particularly well catered for, with UHF, VHF and HF radios, satphones, 3G phones and Internet. The forward-raking windscreens increase the compartment's volume as well as reducing heat gain and glare.

The transom ends at the main deck, the opening closed by chain whenever the tender is not aboard. The tender is a 3.7-metre Naiad RIB, also built by Kirby Marine.

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'Sousa'	
SPECIFICATIONS	
Type of vessel:	Patrol boat
In survey to:	2C USL
Home port:	Dampier, Western Australia
Owner/operator:	Western Australian Department of Environment and Conservation
Designer:	Global Marine, Western Australia
Builder:	Kirby Marine Fabrication, Western Australia
Construction material:	Aluminium
Length overall:	11 metres
Length waterline:	8.9 metres
Beam:	3.35 metres
Draught:	705mm
Displacement:	6.2 tonnes
Propulsion:	1 x Volvo D6, rated at 246kW
Maximum speed:	30 knots
Cruising speed:	18-22 knots
Range:	700nm
Electronics supplied by:	Taylor Marine
Radars:	Furuno
Depth sounder:	Furuno
Radios:	Icom
Autopilot:	Coursemaster
Compass:	Plastimo
GPS:	GP32
Plotter:	Furuno
Winches:	Muir
Capstan:	Muir
Paints/coatings:	International Paint
Windows:	Beta Marine
Rescue boat:	1 x Naiad 3.7
Fuel capacity:	1,000 litres
Fuel consumption:	32 litres / hour
Freshwater capacity:	200 litres
Crew:	2 + 8 special personnel