

# A Kirby Naiad 8.5m patrol boat for Ningaloo Reef

By MIKE BROWN

# 'DECV 07'



The 8.5-metre Naiad hull is becoming one of Kirby Marine's most popular models, as users of smaller Naiads experience the capabilities of the design, wish to extend their roles, and look for more size to achieve that.

Kirby's latest 8.5 is for the Marine Parks division of the Western Australian Department of Environment and Conservation, primarily to operate in and near the Ningaloo Reef on the upper west coast. The RIB style is ideal for the many encounters the vessel will have with leisure craft, and its open sea abilities are needed for travel outside the reef. Ningaloo is a fringing reef, and covering distance quickly is better done outside where conditions are often blustery.

The vessel's layout is tropical style; with a fabric canopy covering the entire cockpit, and no impedance to air flow over the windscreen. This choice of structure also usefully reduced the boat's trailing weight. There is a small cabin ahead of the driving position whose use is entirely storage. Carpeted shelves with fiddle rails are capable of housing the likes of a portable fridge and diving equipment.

Unlike the current preference in Police and Sea Rescue 8.5s, the vessel has a small well ahead of the cabin reached via a watertight door, boarding other vessels over the bow being the simplest method. Although it is unlikely to operate in the extreme conditions Police and Rescue regard as routine, Kirby took precautions against the accidental flooding of the well. They doubled the freeing ports, and enlarged the thumbnails over the ports to encourage water flow.

Flooding of the well in earlier Police and Rescue Naiads had never endangered stability, but it did temporarily reduce manoeuvrability – a property usually in

high demand in the conditions causing flooding: typically in breakers.

Like all Kirby Marine vessels, the hull is constructed in aluminium. And also like all other Kirbys, to specifications well in excess of the USL Code, with all voids foam-filled. The bottom has the usual steep deadrise of 27 degrees, but does not have the two steps of some 8.5s. The buoyant tubes have seven independent air chambers, and are heavily reinforced at the wear points along the sides, and on top where they are walked on.

Motors are a pair of 149kW Yamaha four-stroke outboards – a shade smaller than the typical 8.5, reflecting the generally lower urgency of its role. Everything is comparative, of course, and top speed is still 45 knots. Cruising at 30 knots, range is over 200nm.

Like all government vessels, the 8.5 is almost extravagantly provided with radios; there are no less than six aerials, servicing private frequencies as well as 27MHz, UHF, VHF and HF. The electronics package is by Raymarine using a wide C120 screen. Driving control layout has received a lot of attention in recent Kirbys, with the intent of reducing fatigue on long working days. The coxswain has the minimum of electronics in front of him, and the relative positions of seat, footrest, throttles and wheel are tuned to within millimetres.

A pair of suspension seats faces the console, and a folding bench at the transom provides casual seating for another four. The entire cockpit is carpeted, over Kirby's trademark shock-absorbing membrane.

Diving operations figure largely in the vessel's future, checking moorings among other tasks. The standard transom boarding ladder, which the vessel has, puts a boarding diver out of the coxswain's direct sight as well as adjacent to the propellers. To mitigate this, a second ladder is

mounted to port, folding up against the canopy support.

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## 'DECV 07'

### SPECIFICATIONS

Type of vessel:	RIB patrol boat
In survey to:	2C USL
Home port:	Exmouth, Western Australia
Owner:	Department of Environment and Conservation, Western Australia
Operator:	DEC Exmouth, Marine Parks
Designer:	Naiad Design, New Zealand
CAD software:	MAXSURF
Builder:	Kirby Marine Fabrication, Western Australia
Construction material:	Aluminium
Length overall:	8.5 metres
Length waterline:	6.8 metres
Beam:	3 metres
Draught:	0.45 metres
Displacement:	2.7 tonnes
Propulsion:	2 x Yamaha outboards, each 150kW
Steering:	SeaStar hydraulic
Maximum speed:	45 knots
Cruising speed:	28 knots
Range:	200nm
Radar:	Raymarine
Depth sounder:	Raymarine
Radios:	ICOM
GPS:	Raymarine
Other electronics:	GME
Paints/coatings:	International Paint
Windows:	Beta Marine Windows
Fuel capacity:	580 litres