REBORN RAWINIA RETURNS TO TARANAKI

BY LINDSAY WRIGHT

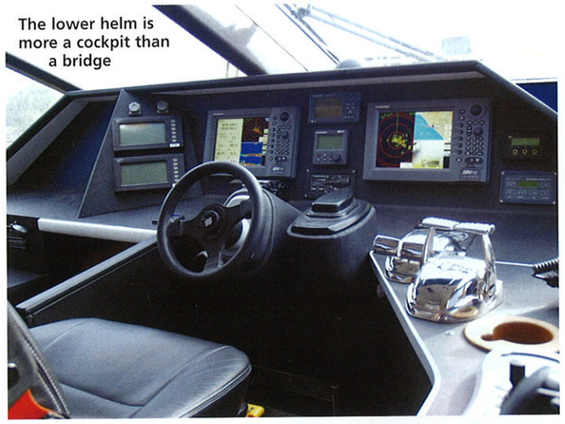
As a teenager I spent hours sitting on a bollard admiring the Port Taranaki pilot vessel *Rawinia*. To me, she was the most beautiful thing around; staunchly built in wood by Miller and Tunnage, with her slightly raked stem, canoe stern, teak wheelhouse amidships and a Gardner diesel rustling away below decks. I would have gladly sacrificed my index fingers to be invited aboard for a ride but was too shy to ask.

A few decades have flowed past and the *Rawinia* has long since left the port. Grey hairs way outnumber the blonde ones under my fishing cap and it takes a bit more to kick start the heartbeat these days. But a new *Rawinia* might just do the trick. She left the Wanganui riverside shed of Q-West Boatbuilders and was delivered to Port Taranaki in early August. The new 17.6m *Rawinia* is designed to deliver maintenance workers, technicians or emergency response personnel to the Pohokura gas field production platform, about 15 miles north of Port Taranaki. The boat may also back up Port Taranaki's pilot boat.

She has more tricks up her sleeve than a convention of magicians. The first trick is getting to the platform quickly and safely in all conditions. Two Series 60 MTU turbocharged straight-six power plants produce 740hp (552kW) each at 2300rpm. The engines are coupled to Hamilton 364 jet units and give the 20 tonne vessel a top speed of about 36 knots. Her cruising speed is 26 knots, which is achieved at a leisurely 2000rpm.

Q-West's general manager, Colin Mitchell, says that fuel consumption will be about 160 litres an hour for each engine at full speed. There is space for 3000 litres of fuel aboard in one central double-bottom tank. A key factor in the fuel economy figures is the International Intersleek 970 antifouling that coats the *Rawinia*'s hull. The non-toxic black silicon coating is hard and extremely slippery when wet, so marine growth can't get a toehold on the underwater sections, which stay ▶

Stern view shows man overboard recovery system



The lower helm is more a cockpit than a bridge

KAB seating provides for crew comfort and safety

smooth and increase efficiency.

"It's quite tricky to apply but the benefits to the operator are enormous," says Colin. Special spray equipment is required and Q-West is one of only two outfits in the country with the gear and the experience to apply it. "I saw one of the Kaikoura Whale Watch boats on the hard the other day. The Intersleek antifouling was nine years old and still in fair condition.

"We built two identical ferries for Pine Harbour – one has Intersleek 970 and the other has the old 900 version Intersleek – and the one with the 970 is three to four knots faster at the same engine revs. It is most efficient for boats that are always on the move, though."

Rawinia's shapely hull form is plated with 6mm marine grade alloy over bulkheads, frames and stringers, with 5mm on the topsides, deck and superstructure.

Much of the interior joinery is completed in the same Ayres composite panels used on the Auckland police vessel *Deodar III*. The panels use an aluminium honeycomb core for lightness and strength with a paint finish bonded to the outside for a fine finish. "It's great to use," says Colin. "It bends easily to make a nice, smooth radius and has a great finish." The deckhead finish is vinyl-covered marine ply panels, and Autex marine carpet completes the fitout underfoot.

Inside the workboat's 5.4m beam is seating for nine passengers, plus a skipper and deckhand, all belted into leather KAB514C seats that are hydraulically dampened and can be adjusted for the weight of whoever is sitting in them. The KAB514C is a high-back mechanical suspension seat designed primarily for the construction industry, but it has other applications.

Fitted with its integral four-point full harness seat belt, the seat is manufactured to ISO standards. Vibration is a leading contributor to fatigue and the KAB seats are engineered in

The *Rawinia* has a fair turn of speed

Northampton, England to ergonomic designs that provide comfort, support and protection from harmful vibrations.

Cruisair reverse-cycle airconditioning maintains an optimal comfortable temperature inside the wheelhouse, no matter what's going on outside.

The big windows of 12mm thick tinted and toughened glass give an all-round view of proceedings and are supplemented by two wide-angle colour video cameras mounted on top of the wheelhouse. The cameras are integrated with Furuno Navnet displays so the skipper has instant visibility at his or her fingertips, along with a radar, GPS/plotter and depth sounder screen.

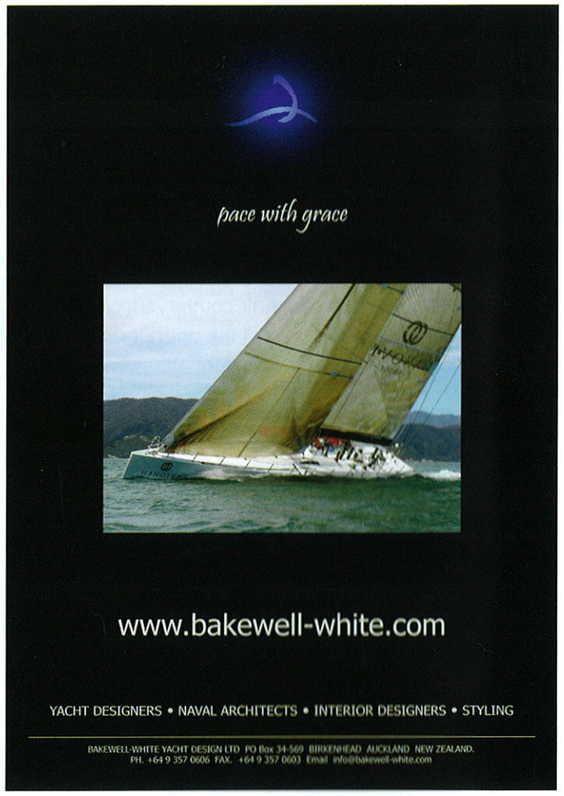
Communications will play a major part in the *Rawinia*'s gas field support role, and there are two maritime VHF radios, one aeronautical VHF and two UHF transceivers for person-to-person communication.

The *Rawinia* was designed by the Auckland company Bakewell-White Yacht Design, who are better known for race-winning offshore powerboats and racing yachts. She is self-righting and the windows are designed to withstand ▶

The freshwater wash down is a unique feature to keep the glass clean

the pressure of a rollover.

When she is berthed at the Pohokura production platform, about five miles off Motunui in the North Taranaki Bight, the *Rawinia*'s nose will fit into a specially designed docking bay so that workers can disembark over the bow and up a ladder. Modifications for this arrangement were being completed while she underwent sea trials, hence the orange patch on either side of the bow in the photographs. A black Hypalon-covered foam pad will replace these. Lancer Industries in Auckland made the Hypalon pontoons and they are attached



The liferafts are stowed ready for release in alcoves

with an integral flange and tube, sandwiched and through-bolted to the hull structure.

To help out with close-up manoeuvring the *Rawinia* is equipped with a Blue Arrow electronic control system operated using an arrow-shaped horizontal lever at the helm. In simple terms the skipper points the arrow where he or she wants the boat to go and the *Rawinia* follows suit by automatically altering engine revs, the jet unit buckets and angles to suit.

Another trick in the *Rawinia's* repertoire is a full-width framework with net webbing, which is lowered and raised using a block and tackle system hinged to her stern for recovering personnel from the water.

The skipper can either handle the boat from the outside helmstation under the wheelhouse overhang to starboard, or from inside using the colour video camera mounted on the wheelhouse roof. Two eight-man liferafts are neatly stowed in recesses on either side of the superstructure and life rings are mounted at handy places round the vessel.

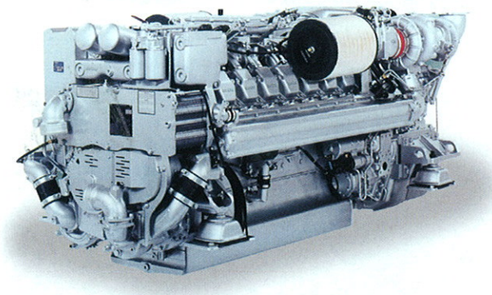
Much of the *Rawinia*'s work will be in standby mode while people are at work on the platform. An overhead DVD player, full galley with microwave, stovetop and refrigerator and toilet help her two crew pass the time. An 18kW Lombardini generator keeps the amperage up to the onboard systems. *Rawinia* carries 250 litres of fresh water and has a 68 litre black water holding tank.

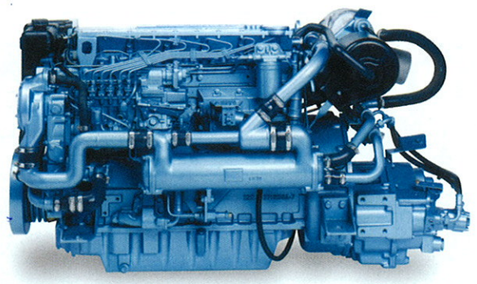
As part of the *Rawinia*'s emergency response role the stylish workboat is equipped with internal and external infra-red ▶

RAWINIA WAS A tall, elegant woman. Her father, Eruera Te Puke ki Mahurangi, was a leading chief from Ngati Te Whiti, the tangata whenua of the Moturoa land in what's now known as New Plymouth. Her mother was Kura Mai Te Ra, the daughter of Te Atiawa's paramount chief, Tautara.

She towered over her husband, Dicky Barrett, a British trader and whaler who arrived on the ship Adventure in 1828 as part of a flax-trading venture. The couple had many children, all of whom had two names, Maori and English, were bilingual and educated in the ways of both cultures.

Rawinia was a partner in many of Barrett's trading and whaling exploits. Today she lies buried beside him on a hill overlooking Port Taranaki.





The twin MTU power plants are coupled to twin Hamilton jets below

gas detectors that sound an alarm when gas levels begin to rise beyond set parameters. She also has a self-contained air system to supply the occupants with 10 minutes of breathable air in the event of a large-scale gas leak.

A pump can power a fully integrated deluge system at 650 litres per minute to envelop the boat in a shield of heat-dampening water spray or power her own firefighting hoses. An FM200 Halon flooding system handles fire suppression on board.

It took Q-West's 20 workshop staff 10 months to build the *Rawinia*, and the signs of quality construction are evident throughout the $1.6 million vessel. The swept-up styling and purposeful look will carry on a long tradition at the port. The *Rawinia* is back, 21st century style.

SPECIFICATIONS

Length	17.6m
Beam	5.4m
Displacement	20 tonnes
Engines	2 x Series 60 MTU diesels
Power	2 x 740hp @ 2300rpm
Propulsion	2 x Hamilton 364
Top speed	36 knots
Cruising speed	26 knots @ 2000rpm
Fuel	3000 litres
Fuel consumption	160 litres per hour per engine @ 36 knots
Genset	18kW Lombardini
Fresh water	250 litres
Black water	68 litres
Antifouling	International Intersleek 970
Designer	Bakewell-White Design
Builder	Q-West