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Kumeu, New Zealand-based Bladerunner Boats has recently completed the tailormade build of a trailer-able, hardtop cabin, inshore limits research vessel for newly-established Canadian operation, Maritime Survey Services.

Named 'Knave', the hydrofoil-supported "deep vee" concept catamaran was ordered by proprietor Kenneth Keeping to provide commercial diving surveys, terrestrial and underwater archaeological consultation and other services from the company's St Johns (Newfoundland) base.

It is understood that Mr Keeping had been particularly attracted to Bladerunner by the size-to-length ratio of one of its previous builds, 'Gambler', as he sought to maximise the craft that could be accommodated on a reasonable-sized trailer in Canada.

Other requirements included having a stable platform from which to deploy remote sensing equipment, durability and overnight sleeping capability.

Bladerunner proprietor Greg Shine explains that the design upon which 'Knave' was based was originally configured for Australian use as a coastal marine research vessel.

"The owner is an experienced diver and has a Masters Degree in Marine Archaeology from the University of Adelaide where he lived for five years," Mr Shine told Ausmarine.

"However, the owner's circumstances changed and he and his family returned to Newfoundland, so the vessel was increase fuel capacity through the addition of two 260 litre tanks and associated fuel systems.

"This resulted in a total fuel capacity of 1,720 litres – two 600 litre and two 260 litre tanks with transfer valves etc.

"On the basis of an expected fuel burn of around 35 litres per hour per motor at 30 knots, we have about 24 hours' range at 30 knots, which is 720 nautical miles less 15 per cent for reserve.

"That range could be up to 600 nautical miles at 30 knots which means that large parts of the coast are within her range even at higher speeds. This is quite special for a fully specified work boat."

Reportedly achieving a top speed of 42 knots while also demonstrating ease of steering at lower speeds during recent sea trials off Auckland's West Park Marina, the Knave's design was approved by South Australia's Department for Transport Energy and Infrastructure for coastal use (Class 2B) using Lloyd's Rules For Special Service Craft G3 (LR SSC G3).

"The safe operational envelope is rather incredible...and shows that this craft will still hold together in extreme seas. It follows that a similar vessel could be built for Australia using this approved design as a basis with minimal additional requirements."

Also originally designed for Australian requirements, the vessel's trailer was initially to have tandem heavy-duty axles with Australian-made suspension and air brakes to ensure Department of Transport

Having been removed from New Zealand waters on March 2, 'Knave' – which Mr Shine describes as an "extreme maxi road trailer boat suitable for transport throughout the American continent as a 3D bottom imaging maritime research and archaeology vessel with an offshore capability" – was duly packaged and despatched via the ports of Tauranga and Philadelphia prior to final road delivery to St Johns.

For further information contact: Bladerunner Boats, New Zealand. Email: bladerunner@xtra.co.nz Web: www.bladerunnerboats.co.nz

'Knave' SPECIFICATIONS

Type of vessel: Catamaran research vessel

In survey to: Designed to Class 2B DTEI

South Australia

Home port: Conception Bay,

Newfoundland, Canada

Owner: Maritime Survey Services
Designer: Greg Shine

CAD software: Maxsurf/Autocad

Builder: Bladerunner Boats,

New Zealand

Construction material: Aluminium

Length overall: 10.6 metres

Length waterline: 8.2 metres

Length b.p: 8.2 metres

Beam: 3.1 metres

Draught: 0.7 metres

Depth: 0.9 metres

Displacement: 5,500kg (full load)

Main engine: Yamaha F 250 V6 Offshore

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reconfigured during the build for the requirements of the United States and Canada regarding such items as electrical wiring, AC power supplies (120 VAC 60 cycle – 230 VAC 50 cycle in Australia and New Zealand)."

Mr Shine says another notable design change for 'Knave' was to significantly and Regional Services approvals.

It now utilises Kodiak stainless steel running gear, s/s disc brakes and tri-axles and has a New Zealand Transport Design Certificate for the structure. Furthermore, it is being towed by a new Ford F550 conventional truck, super duty-rated to 12,000kgs towing gross vehicle mass.

each 186kW

Generator: Fischer Panda 8 Mini

Steering: Seastar Pro Power Assist

Maximum speed: 42 knots

Cruising speed: 30 knots

Range: 600nm

Electronics supplied by: Electronic Navigation

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