## **Trade Winds**

## Knave I multi-purpose platform

## Maritime Survey Services Limited

*Knave I* is Maritime Survey Services Limited's primary survey launch and general-use platform. It is a purpose-built, easily trailered, 9 metre aluminum hydrofoil supported catamaran. The vessel has a range of 600 nm, is capable of working 25 nm from shore, cruises at 28 knts and surveys from 4 to 9 knts.

The boat is powered by twin Yamaha 250 HP four-stroke outboard motors with an incorporated snorkel system for safety as well as salt spray protection for increased engine life. The cabin and climate is controlled with a Webasto reverse cycle air conditioner as well as a Webasto diesel heater to be used during the fall and winter months and is capable of providing windscreen defrost and hot water to the shower/toilet cubicle. The cubicle forms the basic amenities with the addition of an electric cooktop, fridge, sink and two forward bunks. The set up receives ample electricity via an 8 kw Fisher Panda diesel generator linked to a Victron Multiplus inverter/battery charger that manages the house battery bank.

The primary survey unit on board is an R2sonic 2024 multibeam echo sounder that is coupled with an Applanix Wavemaster Global Navigation Satellite System. This system also provides navigation information to the boat as well as the deployable inspection class ROV Ultra Short Baseline. In order for the boat to be capable of fulfilling several roles as a general-purpose platform and survey vessel, the R2sonic transducer is pole mounted. This is achieved by creating a pivot point on the outboard davit for the transducer pole, which lowers into the water and is secured in



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place with a locking mechanism just above the waterline. Due to the weight of the pole with the transducer head installed, it is raised and manoeuvred overboard with the assistance of a powered capstan located on the davit.

Although not pictured currently when the transducer is not in use it is stored on an A-frame located over the transom. This clears the deck space for other work that the boat may be required to perform such as sample collections, diver deployment or ROV handling. If more deck space is required, the pole and transducer can be removed entirely to allow for full access to the deck space. For other types of survey equipment, the central deck area in the cockpit has been reinforced to allow for the attachment of winches and reels effectively keeping the area free from entanglements.

## For more information:

www.maritime-ss.com