



## HydroSurvey Australia - the Seabed Mapping Specialists

**H**ydroSurvey Australia, Flinders Ports' specialist seabed mapping division, has been using three customised vessels to carry out detailed hydrographic surveys, not only for Flinders Ports, but for other ports and organisations too.

Over the last 12 months the HydroSurvey Australia team has conducted a number of hydrographic surveys for Flinders Ports including the annual surveys of the navigation channels and berths for the ports of Port Adelaide, Wallaroo, Port Lincoln, Port Pirie, Port Giles and Klein Point in South Australia, a clearance survey for the new Oil Berth at Outer Harbor, Port Adelaide and surveys of TschPart and ASC Berths at Osborne, Port Adelaide - under both ship lifts.

As well as working for Flinders Ports, HydroSurvey Australia has recently completed other survey work in South Australia. This has involved a bi-annual survey of the Port Bonython navigation channel and berth in Upper Spencer Gulf, an annual survey of the Yerraville Shoal Choke Point in Upper Spencer Gulf, a bathymetric survey of the Cape Jervis harbour and boat ramp, pre and post dredge surveys of the O'Sullivan Beach boat haven and a pre-dredge survey of the entrance to Gulf Point Marina for the South Australian Department of Planning and Infrastructure.

HydroSurvey Australia regularly undertakes hydrographic survey work in Tasmania. Working in close consultation with Tasports, HydroSurvey Australia recently carried out the annual survey of the Devonport harbour and entrance, a survey of two proposed spoil grounds in the Bass Strait adjacent to Devonport, and a survey at Hells Gates near Strahan.

By using Geoswath Plus interferometric wide swath survey systems in combination with Position Orienting System for Marine Vessels (POS MV) - Global Positioning System (GPS) aided inertial navigation systems, HydroSurvey Australia is able to achieve 'total bottom coverage', in compliance with the IHO specifications for Special Order Surveys. The company's in-house experts then process the raw data, prepare plans, undertake 3D modelling, calculate volumes and provide a variety of textual or graphic based outputs for clients.



Above: 11m NoosaCat Pathfinder using an interferometric wide swath survey system mounted in a moon pool between the hulls

### Customised Survey Vessels

HydroSurvey Australia's fleet of vessels are the 11 metre NoosaCat Pathfinder, the 5 metre NoosaCat Felix and a fully customised SeaDoo Jet Ski. The company has committed to an ongoing program of technology upgrades for each survey vessel. Both catamarans, the Pathfinder and the Felix, have been installed with their own dedicated wide swath survey systems. The 11 metre Pathfinders gives

HydroSurvey Australia strong capability for off-shore surveys, whereas the 5 metre long, trailerable Felix, is highly suited to inshore work. The Jet Ski, with a dual frequency single beam echo sounder built into its hull enables HydroSurvey Australia to deliver high quality survey services for near shore or river surveys.

This diversity of high-quality survey platforms lies behind HydroSurvey Australia's success in winning survey work for ports, marinas, rivers, dams, lakes and coastal sands projects.

Below: 5m trailerable NoosaCat Felix using an interferometric wide swath survey system located in a centre aft position between the engines



Below: Fully customised SeaDoo JetSki using a single beam echo sounder