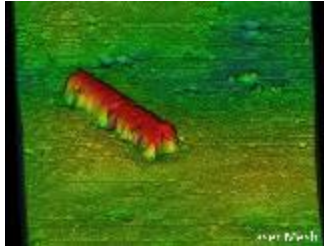


Autonomous Underwater Vehicles in Mine Counter Measures

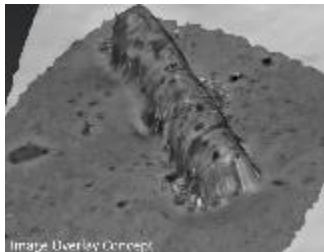
Reaching Full Potential with Identification Capability



Reliance upon the use of a diver or ROV for the identification phase significantly limits the benefit of AUV deployment. Operational efficiency is reduced with the need to manoeuvre a ship to deploy divers or ROVs limited by swimming or tether range. Covert operations are comprised by the presence of a ship, and the ship and personnel are endangered through their presence in the minefield.

Integration of laser and camera sensors into an AUV enables the AUV to contribute to the identification phase and achieve the full potential of unmanned technology for MCM operations.

Recent results from Hydroid REMUS 600 demonstrations at Exercise Autonomous Warrior 2018 conducted at Jervis Bay, NSW, Australia in November 2018 showed the capability for laser sensor integration into an AUV.



[Read More](#)

REMUS Sea Launcher

Autonomous Deployment and Recovery of UUVs from a USV

The REMUS Sea Launcher is a transformational capability that links Unmanned Surface Vehicle (USV) and Unmanned Underwater Vehicle (UUV) operations. Sea Launcher has been developed to meet the requirements for further increments of the Littoral Combat Ship (LCS) Mine Countermeasures (MCM) Mission Package.

The REMUS Sea Launcher is very lightweight, scalable and adaptable for a variety of UUVs. It is compact and mobile enough to be fitted into smaller surface ships (less than 2m of freeboard). With bolt-on/bolt-off flexibility it can be quickly adapted into many ships with standard interfaces for power and control.



[Read More](#)

Z-Boat Unmanned Vehicles as a Force Multiplier

Doubling and Tripling Coverage Rates with Low Cost USV



The Teledyne Oceanscience Z-Boat is a low-cost but powerful force multiplier, providing the capability of a small boat manned by one or two people in a much smaller platform and with endurance only limited by battery power.

Integration of a Multi Beam Echo Sounder such as the Teledyne Odom MB2 means that high resolution bathymetric data can be obtained quickly and efficiently using one Unmanned Surface Vehicle (USV). With two or more vehicles in action, coverage rates



can clearly be doubled or tripled. When time is money (for commercial operations) or time is advantage (for military operations) the use of low-cost USV must be considered by smart operators.

[Read More](#)

Events

Please join BlueZone Group at these upcoming events!

We are keen to talk to you about how innovative new technologies offered by BlueZone can solve issues for your challenges in Australia's oceans, coastal seas, and rivers.

We are happy to answer your questions and arrange on-site demonstrations and further discussion if required.

[Ocean Business - 9 to 11 April - Southampton UK](#)

BlueZone Group will be at Ocean Business in Southampton again in 2019 and we are looking forward to meeting with existing and new suppliers, colleagues and friends. Please contact us to set up a meeting if you would like to discuss any issues about sales and support of leading underwater technologies in Australia and New Zealand.

[SUT Perth - Evening Technical Meeting: Advancements in Riser Technology - 10 April 2019](#)

Hear from David Aubrey, CEO of EOM Offshore, on "Elastomeric Solutions for Marine Moorings and Risers".

EOM Offshore offers a versatile product portfolio for many ocean monitoring and mooring applications:

- Patented Electro-Mechanical Cables. Stretch Hose and Electromechanical Chain enable compliant or non-compliant connection with seafloor assets. They both provide direct electrical connection that enables the constant delivery of data and power for fixed, real-time measurements from seafloor-to-surface.
- Marine Recovery Systems. LinePak and Multifunction Node. Marine Recovery Systems enable recovery of a mooring and then haul back of the anchor.
- Universal Joints. Electromechanical universal joints provide a robust electrical and mechanical connection point for electromechanical riser elements.

[Read More – Product Portfolio](#)

[Read More – EOM Offshore](#)

[Protect and Preserve AE1](#)

Help by entering to win a 13-day small ship expedition cruise around PNG waters

About 12 months ago, one of Australia's most enduring naval mysteries was solved when the wreck of HMAS AE1 was finally discovered. A few months later, a detailed survey uncovered a host of secrets including a likely cause of the sinking.

The Australian E Class Submarine Foundation (AESMF) has now been established and one of its tasks is to understand the environment in which AE1 is laying. It plans to do that with an instrumentation package which will cost around \$120,000.

To help raise some of those funds, APT has donated a 13-day small ship expedition cruise around PNG waters, including the AE1 site, departing in October 2019. The cruise is valued at \$27,990 and a raffle has been established with only 1,000 tickets to be sold at \$50 each.

To buy tickets, please visit the [Submarine Institute of Australia](#) website where you will see the link on the home page.

The raffle will be drawn on 1 April 2019 and the winner advised as soon as possible thereafter.



[Read More](#)

New Products & Services



DeepWater Buoyancy *New Products for Offshore Oil & Gas*

DeepWater Buoyancy has announced a range of new products to service the Offshore Oil & gas market:

- Jumper Buoyancy modules are fabricated with either a rotationally-moulded polyethylene shell or with a GRP skin. In all cases, high-performance DeepTec® syntactic foam provides the buoyancy. An integral elastomeric clamp acts as the interface to the pipe and resists axial and torsional loads.
- Umbilical Buoyancy provides distributed buoyancy for platform-to-seafloor umbilical applications. Available with either an integral or secondary clamp, these modules can be custom to fit to any umbilical of any size or configuration. Umbilical Ballast modules are also available to assist in the creation of the proper umbilical arrangement.
- Pipeline Buckle Mitigation Buoyancy modules are clamped onto the pipeline to control the formation of the lateral buckles and to alleviate stress. These modules decrease the lateral friction from the buckle by both reducing weight of the buckling sections and by providing a protective shell.



[Read More – Flotation Technologies](#)

[Read More – Deepwater Buoyancy](#)

DL24 Acoustic Modem Configurator

Intuitive Programming of Benthos Acoustic Modems

The DL24 Acoustic Modem Configurator (AMC) simplifies the task of configuring Teledyne Benthos acoustic modems. The intuitive graphical user interface of the AMC is easy for any technical staff to learn and use and eliminates the need to learn a modem serial command set. Save time in setting up modems, reduce the risk of mistakes due to incorrect keystrokes and know the status of your batteries before you launch with the DL24 Acoustic Modem Configurator.



[Read More](#)

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