

Maritime RobotX Challenge 2022 in Sydney

Innovative applications of WAM-V Technology in a Competition Environment



RoboNation, in collaboration with the United States Office of Naval Research (ONR) and the Australian Defence Science and Technology Group (DST) has announced that the 2022 Maritime RobotX Challenge will take place at the Sydney International Regatta Centre from 11 to 17 November 2022. All teams will use the Wave Adaptive Modular Vessel (WAM-V) surface craft manufactured by Marine Advanced Research (MAR) as their primary competition boat.



The Wave Adaptive Modular Vessel (WAM-V) is an innovative class of watercraft using unique suspension technology to radically improve seagoing capabilities. BlueZone support the WAM-V in Australia and has been pleased to assist university teams in competitions in several events. It will be great to welcome teams from all over the world for the competition in Sydney and to see the innovative applications of WAM-V technology in a fierce competitive environment!

[Maritime RobotX Challenge 2022 in Sydney](#)

SUEX Diver Propulsion Vehicles

Proven design and performance for 20+ years

SUEX tow-behind Diver Propulsion Vehicles (DPVs - also called single person DPD) have many advantages compared to the traditional DPDs and ride-on-top underwater scooters:

With proven design and performance for 20+ years including Military, Public Safety and Civilian Technical Diving SUEX DPV are the choice for professional users. High-performance operation is enabled using modern technologies to match that of larger, more expensive vehicles. Features include silent motors, high power/energy battery options, redundant controls and durable marine construction.

The SUEX DPV is a proven, powerful, reliable, portable, simple, user-friendly diver propulsion system for short-medium-long range applications.



[SUEX Diver Propulsion Vehicles for professional applications](#)

Gigabit Ethernet Subsea Dome Port Camera for Towed Camera System

Complete Housing and Optical System Design by BlueZone Engineering



BlueZone has completed design and manufacture of a Dome Port Camera System for the Australian Institute of Marine Science (AIMS). The camera system will form the payload for a towed system mounted from the stern of small vessels to collect high quality still images with a forward vessel speed of 2 to 3 knots.



The design utilised 3D components manufactured using the printing capability located in the BlueZone Perth office. The 3D printing capability ensured high quality for the finished camera components and enabled BlueZone to meet a tight delivery timeframe for the entire design and manufacture process.

[Gigabit Ethernet Subsea Dome Port Camera](#)

KraitArray™ Arrives in Australia

Low profile miniaturised acoustic array for directional sensing

BlueZone has taken delivery of the low profile KraitArray™ which will be included in a development program for acoustic sensing using the SV3 Wave Glider Uncrewed Surface Vehicle (USV). The BlueZone engineering team completed initial inspection of KraitArray™ before despatching it for further test by partners Sonartech Atlas.



The KraitArray™ will be returned for further testing in the BlueZone Test Tank. Located in Newcastle, this test tank provides the capability for comprehensive in-water testing of ROVs and underwater equipment of all types. The tank includes viewing portholes to enable clear observation of underwater behaviour. A 1-tonne capacity crane provides the capability to lift test items into the tank.

[KraitArray™ low profile miniaturised acoustic array](#)

SPCC Newcastle 2020 SUBS in Schools Technology Challenge Champions

[Exploring New Depths In STEM](#)



BlueZone Group would like to extend a huge congratulations to the students of St Philip's Christian College (SPCC) – Newcastle for their extraordinary success in the 2020 SUBS in Schools Technology Challenge. The team competed in the state and national finals at the end of last year and took out the top spot overall. In addition to the overall win, they won 6 trophies and 8 out of 10 major category awards. The team have done a phenomenal job!

BlueZone was proud to mentor and work with the students again this year to share their knowledge of design, engineering, and manufacturing. The SPCC Newcastle students designed and built a Remotely Operated Underwater Vehicle (ROV) that they operated themselves. BlueZone is please to help the future generation of engineers because STEM skills are predicted to be in high demand for years to come.

The SUBS in Schools competition began in response to the Australian Government's announcement of the Future Submarine Program and is the world's first in-class submarine design competition. It is the result of a collaboration with Re-Engineering Australia, the Department of Defence and industry stakeholders including the ASC and Saab Australia.

SPCC Newcastle was supported by Regional Development Australia (RDA) through their ME Program. The program is funded by Australia's Department of Defence and aims to connect students with the defence industry to prepare them for a future in STEM jobs. BlueZone would like to thank Regional Development Australia (RDA) for their continued support of our students in the Hunter.

[Exploring New Depths In STEM](#)

New Products & Services

Teledyne Marine Introduces New Ultra Compact Acoustic Modem



A-Comms at Your Fingertips

Introducing the New Ultra Compact Modem!



Teledyne Marine has announced the launch of its new Ultra Compact Modem (UCM). Sized at just 60mm x 50 mm, and weighing in at just 55 grams, the OEM version of the UCM is the smallest acoustic modem ever designed by Teledyne Benthos.

The UCM is based on Teledyne Benthos' proven signal processing technology to address the need for reliable wireless underwater acoustic communications onboard the growing number of autonomous micro vehicles and other subsea instruments. As the size of these micro vehicles continues to decrease, Teledyne Marine has responded with lightweight, low power, proven sensors and systems to expand the usefulness of these platforms, increasing the number of tasks they can perform.



The self-contained UCM is rated to 700m; Original Equipment Manufacturer (OEM) versions are available with multiple remote transducer options for greater depths. The UCM boasts increased transmit power resulting in increased range and improved data reliability, as well as a decreased power draw, both of which are critical for autonomous vehicles and extended subsea instrumentation deployments.

As with Teledyne's ATM series modems, the Ultra Compact Modem is compatible with the feature-rich UTS-9400 Universal Top Side (UTS), and the soon to be launched CE marked UTS-9500 and is fully compatible with the NATO Janus underwater communication interoperability standard.

[Teledyne Benthos Ultra Compact Modem \(UCM\)](#) [Top Five Reasons Why You Need a Teledyne Benthos Ultra Compact Modem](#)

Teledyne Benthos UTS-9500 Universal Topside

Highly Intuitive and Flexible Graphical User Interface ideal for RHIBs or smaller vessels

The Teledyne Benthos UTS-9500 Universal Topside UTS-9500 offers CE marked, enhanced replacement to the previous UTS-9400 unit. The updated portable topside delivers a highly intuitive and flexible Graphical User Interface (GUI) that removes the need for an additional laptop, something particularly useful for deployments from RHIBs or smaller vessels.



The redesigned UTS-9500 is also lighter than its predecessor, adding to the system portability, and features new rechargeable lithium ion battery technology that will lessen required maintenance cycles. Other new features include enhanced corrosion resistance, improved system safety, and an upgraded communication port.

[Effective immediately, the 9500 will replace the UTS-9400](#) [UTS-9500 Universal Topside](#)

Newcastle

+61 2 4964 3500
21 Huntingdale Drive
Thornton, NSW 2322, Australia

Perth

+61 8 6595 1500
Unit 1, 41 Discovery Drive
Bibra Lake, WA 6163, Australia

www.bluezonegroup.com.au

[Unsubscribe](#)

