blue zone GROUP

UnderCurrents

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U.S. Navy orders REMUS 300 UUVs from Huntington Ingalls

Open architecture and modularity lead the way forward for unmanned systems

Huntington Ingalls Industries has announced a U.S. Navy order of two REMUS 300 unmanned underwater vehicles (UUVs).

"REMUS UUVs have been used by the U.S. Navy for their defence operations for more than 20 years," said Duane Fotheringham, president of the Unmanned Systems business group in HII's Technical Solutions division. "We are pleased to provide them with the new REMUS 300 to support their critical national security missions."

The two-man portable, small-class UUV offers swappable energy modules with up to 10, 20 or 30 hours of endurance. The open architecture and modularity allow the system to be tailored to specific mission requirements and enable spiral development and upgrades as technology evolves.

Delivery of the commercial REMUS 300 UUVs is scheduled for mid-2022 joining the REMUS 300 UUVs in service with the Royal New Zealand Navy.

REMUS 300 a Game-changer for the small UUV class

Offshore Wind Farms Choose Cougar

Saab Seaeye Cougar XT compact robotic vehicle for challenging environmental conditions

Especially suited for the offshore wind energy market, the Saab Seaeye Cougar XT Compact robotic vehicle has been chosen for Taiwan's huge offshore wind farm developments.

Created for challenging environmental conditions inherent in shallow water operations the Seaeye low-profile 300m rated Cougar XT Compact is specially designed to minimise the effect of current, with a reduced frame size, buoyancy, and weight — and a thinner 17mm tether cable that reduces the effect of drag.

Its six powerful thrusters hold the Cougar steady in strong cross currents and allow it to operate with precise manoeuvrability around structures whilst handling a wide array of equipment that can include cameras, sonar, tracking systems and manipulators.

The Cougar XT Compact will be equipped with a Kongsberg colour zoom camera, BlueView multibeam sonar, Tritec SeaKing side scan sonar, Cygnus ultrasonic thickness gauge, CP contact probe and a four-function manipulator. It also comes as a free-swimming option and has its own 16 ft control cabin.

Saab Seaeye Cougar XT Compact robotic vehicle

SUEX Calypso App

Stay Connected with your Suex Diving Equipment

The last version of the Calypso App is the result of significant development by Suex to perfect the application for diver support. The App offers a real support for the Suex device data collection and registration. This is a real “must have” for proper battery maintenance:

- Stay connected with your Suex diving equipment
- Have instant access to your essential data before and after the dive
- Monitor the performance status of your Suex equipment
- Configure the basic parameters before any dive
- Ensure dive mission success

SUEX Calypso App for dive mission success

BlueZone and the RDA Hunter Defence Industry Workforce Campaign

BlueZone Group has been partnering with RDA Hunter as part of the ME Program since 2019. Our engineers have been working with students to promote STEM skills and introduce them to the Defence Industry. In July 2021, Curtis Schur sat down with ME Program team to discuss his career as an engineer and particularly what it is like working as an engineer in Defence.

Curtis has previously mentored students as part of ME Program and has said of the experience, “It has been rewarding to work with the students and share with them my experiences with working in the defence industry… In today’s industry, having a mentor or role model is very beneficial, to learn from someone else’s experiences is invaluable.”

BlueZone and the RDA Hunter Defence Industry Workforce Campaign

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EVENTS

Please join BlueZone Group at these upcoming events as travel restrictions ease around Australia!

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.

SUT ETM - 11 August – Perth

Defence and Autonomous Systems

Join BlueZone WA staff in person or online for non-WA residents with presentations including:

- Anti-Submarine Warfare operations utilising autonomous Wave Gliders for detection, classification and localisation (Norman Ballard, BlueZone Group)
- Underwater Technologies Assisting Robotic Autonomous System (Scott Elson, L3 Harris MSA)
- Hull External Pressure Test Project (Hamid Yeganeh, JFD Global & Bernie Phelps, DSTG)

New Products & Services

Top 5 Reasons Why You Need an RDI RiverPro ADCP

Check out the top 5 reasons why Teledyne Marine's technology rocks!

Teledyne's Mikolaj Wydrych is a field expert in ADCP technology. Join him as he shares the top 5 reasons why Teledyne RDI's RiverPro ADCP is the ideal tool for your inland flow and discharge measurements.

Intelligent River Discharge Measurement System

The 1200 kHz RiverPro has been purpose-built to fill two specific needs:

- To provide an ADCP designed specifically for shallow river applications (20cm to 25m range)
- To provide an upgrade path for our current industry gold-standard Rio Grande ADCP users

Like our next-generation RiverRay ADCP, the RiverPro offers users a 5-beam solution, auto-adaptive sampling, user-friendly interface, and Teledyne RDI's unsurpassed quality, service, and support.

Top 5 Reasons Why You Need an RDI RiverPro ADCP

RiverPro for Australian river applications

UltraLab Advanced - Now with 16 Channels

For the first time the General Acoustics UltraLab Advanced has been equipped with 16 independent channels, ready for connecting 3 ultrasonic sensors to every of the 16 channels. In addition, 16 analogue outputs are available. The system is set up for a sample rate of 50Hz or 100Hz, providing excellent time resolution. To accomplish this functionality in one system, a new high-performance processor was necessary, and the motherboard was adapted to the 16-channel feature.

The UltraLab Advanced systems are developed to fulfil the highest demands with analysing highly dynamic wave situation at superb time and spatial resolution. Furthermore, the newest UltraLab Advanced systems benefit from our proven UltraLab technology, which demonstrated its durability and reliability in countless field and research applications around the globe for decades.

The first 16-channel UltraLab Advanced will be employed for top-notch research in the wave basins of the Leichtweiß-Institute for Hydraulic Engineering and Water Resources in Brunswick.

UltraLab Advanced Lab Wave Gauge is a high speed, calibration-free, remote sensing measurement

Xeos Rover Beacon Update

Energizer have made an alteration to their industrial AA battery manufacturing that changed the battery diameter from approximately 14.0 mm to 14.2 mm. Although minor, this size increase is causing some of the batteries to get stuck in Xeos Rover battery cores, therefore making them very difficult to get out. If your current batteries are getting stuck, we recommend using Panasonic AA alkaline batteries, 1.5V/2730 mAh, product #: LR6XWAC.

In the meantime, Xeos have redesigned the battery core to ensure the new Energizer batteries will not get stuck in future Rovers.

The Rover is an independently powered, self-contained satellite transceiver designed to track buoys or autonomous vehicles on the surface. Things don't always follow plan, so the Rover features independent dual GPS and Iridium patch antennas, so that in the event the surface expression is flipped over, the unit will continue to record its position and transmit it back to you. Packaged in a ruggedized, UV protected, marine grade housing,

the Rover makes use of the low power, real-time Iridium satellite constellation and GPS to reliably transmit the buoy's position automatically or on demand at any time.

Features

- Surface buoy tracking
- 1055g in air, 378g in water
- Waterproof to 100m
- Iridium Communications
- Bluetooth Low Energy (BTLE)
- 18 AA-cell Alkaline batteries
- Deployment time: 1096 days at the surface (once a day SOH message, checking its position every 3 hours within the watch circle)
- Two antennas at the top and bottom allow the unit to collect and transmit data even if it is capsized
- Command & Control App

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