blue zone GROUP

UnderCurrents

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Conducting a Factory Acceptance Test over the Internet

Innovative Response to COVID-19 Travel Restrictions

Through our work for Defence, BlueZone Group has been designated as an essential business and we are working hard to keep servicing our defence and other customers through challenging and rapidly changing times.

When the BlueZone engineering team was faced with customer travel restrictions for a planned Factory Acceptance Test they found an innovative way to keep going with the test using video and voice over IP to support witness of the test over the internet. Four video cameras were deployed to capture the test of a large robotic system for pipeline inspection in the BlueZone facility in Newcastle NSW. Meanwhile, the customer observed the test in detail from their offices in Melbourne.

BlueZone was very thankful for the support for this approach received from our customer and looks forward to continuing this major project with commissioning trials.

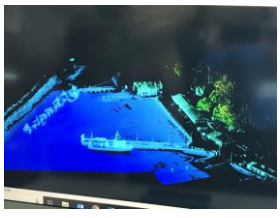
Coping with COVID-19

Sensor Fusion on Unmanned Surface Vehicles

Getting the Full Picture – Above and Below Water

Advances in sensor performance driven by the continual miniaturisation and rapid development of consumer electronics means more capability can be packed into a smaller Unmanned Surface Vehicle (USV) hull format.

This is well illustrated by the results obtained from deploying a Teledyne Oceanscience Z-Boat at trials at Jervis Bay. Equipped with a laser scanner and sonar the Z-Boat performed a surveillance function, providing valuable information of the above and below water environment in one inspection. Video cameras provided for real time feedback of conditions on shore.

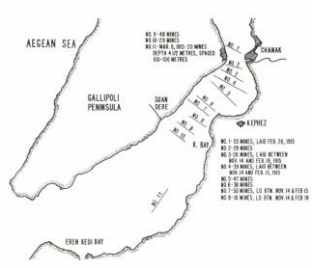


In a new application for the Z-Boat, Teledyne Marine has announced the Teledyne Z-Boat 1800T. Designed for marine surveying, the USV is equipped with a Trimble high-precision GNSS heading receiver, and is also compatible with Trimble Marine Construction (TMC) software, providing increased efficiency for marine construction/dredging projects as well as real-time monitoring from anywhere in the world.

Sensor Fusion on Unmanned Surface Vehicles

Sea Mine Defences that Instigated the Gallipoli Landings

Remembering the naval battles around ANZAC Day



April 25, ANZAC Day, is the Australian day national day of commemoration. At ANZAC Cove on the Dardanelles Peninsula, Australian and New Zealand troops landed on 25 April 1915 where they, along with other Commonwealth Forces, held ground against almost impossible odds for the next eight months, against a Turkish force determined to defend to the death their homeland.

There is an interesting, if tragic, link between the Minewarfare and the landing of ANZACs on the Gallipoli Peninsula.

The basic concept of the Dardanelles expedition was for the Royal Navy to force the Dardanelles, attack Constantinople and eliminate Turkey from World War One. The force consisted of 8 Dreadnoughts (heavy battleships), 3 cruisers, 15 destroyers, 4 submarines and a large number of auxiliary vessels including several minesweepers. However, the fleet was unable to force the Dardanelles, with a meeting concluding: "... the battleships could not force the straits until the minefield had been cleared ... the minefield could not be cleared until the concealed guns which defended them could be destroyed, and they could not be destroyed until the [Gallipoli] Peninsula was in our hands, hence we should have to seize it with the Army."

The result was the ANZAC force landing at Gallipoli. Minefields can seldom be used as complete substitutes for the activities of mobile forces, yet they can supplement these forces and act as a powerful force multiplier to enhance the effectiveness of a nation's air, sea and land forces.

Lest We Forget

ANZAC Day

New Products & Services

Certified Casings for Mobile Phones and Tablets for Hazardous Environments

BlueZone is pleased to introduce Xciel products to the Australian market to provide solutions for Zone 1 (Explosion Proof) and Zone 2 (Non-Sparking) deployment of off-the-shelf iOS, Android and Microsoft products. Xciel's ingenuity and engineering design capabilities have resulted in the following world-first patented solutions:

- C1D2/ Zone2 intrinsically safe iPhone
- C1D2/ Zone2 intrinsically safe iPad
- ATEX Zone1/ IECEx explosion proof iPad Mini
- ATEX Zone1/IECEX Explosion proof iPhone

Xciel's solutions provide simplicity and efficiency to enable your devices to be used at the office and also in a hazardous environment. IT departments can mandate preferred corporate operating systems, ERP systems, applications and carrier

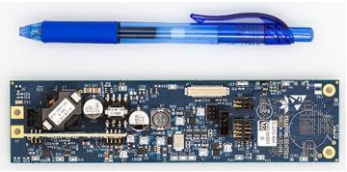
operator for standard commercial devices that are used in Zone 1 and Zone 2 applications.

Benthos Compact Modem

The Teledyne Benthos Compact Modem is based on decades of acoustic communications applications and experience. The Compact Modem delivers proven technology in a compact, light-weight, value priced option to address shallow to mid-water applications.

Key Features:

- Proven technology platform ensures solid product performance
- Compact, light-weight and affordable design make it ideally suited for a wide array of applications and budgets
- Self-contained and OEM configuration to fit your unique application
- Low power draw
- Depth rated to 2000M
- Communication ranges up to 4000M (at Low Frequency)
- Customizable to accommodate Band C, Mid-Frequency, or Low-Frequency depending on size and range requirements
- Self-contained configuration runs on 9V alkaline or lithium batteries
- Fully compatible with JANUS interoperability standard



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