

# Evening Technical Meeting: Surveying Subsea with the Latest Technologies

Wednesday, 13<sup>th</sup> February 2019

Venue: Parmelia Hilton Hotel (Stirling Room), Mill St. Perth

Onsite Registration 5.30 pm; Presentations 6.00 pm – 7.30 pm; Networking over drinks and finger food 7.30 pm – 8.30 pm

To register for the event visit [www.sutetm13february2019.eventbrite.com.au](http://www.sutetm13february2019.eventbrite.com.au)

Chaired by: Paul Farquharson, Regional SPS/Services Engineering Leader - AsiaPac, Baker Hughes, a GE company

## Maritime Robotics for Defence

**Darren Burrowes, CTO, BlueZone Group**

The ADF seeks to maintain a “technology-edge” in capability and maritime robotics is a new and fast-growing area where Defence can find an edge by performing “dull, dangerous and dirty” tasks using maritime robots and autonomous systems. Defence is looking towards “man-on-the-loop” applications where increasingly automated systems will contribute to analysis and decision-making with the power of veto remaining with the human controller. This talk will explore the BlueZone journey in maritime robotics, beginning with the introduction of the first ROV to Offshore Oil & Gas in the Bass Strait through to current work with Navy and Army in unmanned systems.

## Spatially Co-registered Laser and Image data: Precision, Efficiency and Data Outputs for Robust Automation and Machine Vision

**Adrian Boyle, CEO, Cathx Group**

This presentation will cover the latest developments in precision laser and image based point cloud data capabilities for inspection of pipelines, structures and for resident or remote vehicle automation. The emphasis of the presentation is on rapid and robust data collection methods and considerations for today's processing and for compliance with automation. Case studies on work performed in Australia and the North Sea will be presented along with particular attention to the roadmap for robust automation of geometric anomaly detection such as freespan and non-circularity in pipeline inspection as well as structural assessments and precision data sets for 3D structures.

## Using a Subsea LiDAR Generated As-Built Digital Twin To Assess Differential Movement

**Neil Manning, Chief Operating Officer, 3D at Depth**

The new SL3 optical design now enables the accuracies and repeatability at up to 4000m water depth, previously only found with industrial grade terrestrial LiDAR laser scanners which can achieve accuracies of 2-3mm. The ability to manage, improve and extend subsea integrity due to subsidence, thermal expansion and vibration is now possible using Subsea LiDAR technology. Subsea LiDAR Laser Scanning creates three dimensional 1:1 copies or “digital twins” of existing subsea drill centres, jackets and interconnecting infrastructure. The true value of this capability is realised over time as differential movements in structures and stresses on jumpers or spools can be accurately quantified and appropriate, timely remedial action planned without the need to shut in and remove the jumper to fit tooling from legacy methods.

*ETM programme is subject to change*

### REGISTRATION FEES:

Student/Individual/Corp Members: Early bird: \$30\* or \$40 from 7<sup>th</sup> February

Non-Members: \$50 or \$60 from 7<sup>th</sup> February

5 Ticket Member Pass: \$125, 5 Ticket Non-Member Pass: \$225 (must book before 7<sup>th</sup> February)

Please note an additional \$5 fee applies if registering after 2pm on the day of event & paying on night

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\*New Individual Members can attend this Evening Meeting **Free\***

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*(correct at time of creating flyer)*

**CPD = 1.5 hrs**

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