



This **FREE OF CHARGE** newsletter is brought to you by the organisers of the Ocean Business event www.oceanbusiness.com. It is **FREE** to subscribe to and **FREE** to include your articles. Simply send us your news and info on events so we can spread the word to the Ocean Technology industry. To add your colleagues to the Oceanbuzz circulation list simply email info@intelligentexhibitions.com or go to the Oceanbuzz website www.oceanbuzz.org where you can also download past issues as well.

Oceanbuzz Issue No. 109 – 28th July 2009

INDEX

1. General Ocean News

- a) SHOM Chooses Valeport for Major Upgrade
- b) Aanderaa's Seaguard WLR replaces iconic WLR-7
- c) Trelleborg Offshore produces world's largest bend stiffener
- d) EdgeTech Delivers Eight 4200 Side Scan Sonar Systems to the U.S. Naval Oceanographic Office
- e) SeeByte Very Shallow Water Mine Neutralisation Trial a Success
- f) IPOZ opts for LANDINS
- g) Chelsea's MINI^{pack} adapted for Antarctic deployments
- h) Bluefin-12 AUV chosen to facilitate UVic's Ocean Technology Test Bed
- i) Oceanscan goes against the tide and continues on a wave of success
- j) Water Studies Institute surveying GT Bay bottom

2. Who's on the Move?

- a) Stephen Cochrane appointed Business Development Manager
- b) Successful introduction of IXSEA's Offshore field engineers

3. Event, Training & Demonstration News

- a) Heriot-Watt University triumph at student AUV competition

4. Job Postings

- a) Teledyne TSS see 2 Sales Managers, Aberdeen and Singapore

1. GENERAL OCEAN NEWS

1.a) SHOM CHOOSES VALEPORT FOR MAJOR UPGRADE

The French Navy Hydrographic & Oceanographic Service, SHOM, has once again chosen Valeport to complete a major replacement programme which will ensure their fleet of vessels continue to use the very latest in robust, state-of-the-art technology.

With five 60m ships and eight 9m hydrographic boats equipped with multi-beam echosounder systems, the quality of data these vessels gather is essentially dependent on accurate measurements of the speed of sound in both the surface water and through the entire water column.

After conducting a comprehensive evaluation of over a dozen other units acquired in 2005, SHOM chose Valeport's miniSVT (Sound Velocity with Temperature) and miniSVS (sound velocity sensors). Both are equipped with inbuilt digital time-of-flight sound speed sensors with an unprecedented accuracy of $\pm 0.020\text{m/s}$.

SHOM purchased the Valeport MIDAS SVP in 2003 based on sensor specification, mechanical robustness, multiple functionality and competitive pricing. Five years on, the product has become its own best advert by standing the test of time. Each year, the pressure, temperature and SV sensors are checked in house at SHOM's own metrological laboratory and have remained high quality. Valeport's three year guarantee has also provided a level of maintenance that keeps the products in top operational condition with minimal cost.

SHOM purchased a total of 19 further products from Valeport in May 2009, including 5 miniSVT and 14 miniSVS through EurOceanique who are part of the MacArtny Group.

Other Information: Kevin Edwards, Valeport Ltd, St, Peter's Quay, Totnes, Devon, TQ9 5EW. Tel: +44 (0) 1803 869292, Fax: +44 (0) 1803 869293, Email: kedwards@valeport.co.uk
Internet: www.valeport.co.uk

1.b) AANDERAA'S SEAGUARD WLR REPLACES ICONIC WLR-7

For many, many years the Aanderaa (AADI) WLR-7 Water Level Recorder and its deep water counterpart, the WLR-8, were standard tools for oceanographic and hydrographic surveyors. Used to acquire precision sea level data sets to compensate for tidal variations as part of manifold surveying activities, a WLR was just about the first instrument to be pencilled in on manifests for survey projects. Time and technology move on and, recently, AADI announced the release of a specific variant of their multi-faceted Seaguard range to target the acquisition of water level data.

The resultant Seaguard WLR is offered in 0-30, 0-60 and 0-300m standard depth ranges and provides pressure measurement accuracy to $\pm 0.04\%$ FSO. In common with all Seaguard variants, a Windows CE based datalogger with LCD colour touch screen provides the user portal for instrument and sensor configuration. Likewise, the Seaguard WLR can also host extra AADI "Smart Sensors" for current, C/T/D, Dissolved Oxygen, etc data acquisition either through direct top plate fixings or via remote cable connections. Seaguard Studio software supports the product enabling fast and simple presentation of results.

Visit the RS Aqua website at www.rsaqua.co.uk where a Latest News item will enable the downloading of a copy of the Seaguard WLR brochure. Also, contact RS Aqua product specialist David Goldsmith at d.goldsmith@rsaqua.co.uk with any queries and price requests

1.c) TRELLEBORG OFFSHORE PRODUCES WORLD'S LARGEST BEND STIFFENER

Trelleborg Offshore has completed design, manufacturing and testing of the world's largest bend stiffener. To facilitate the fabrication, an additional polyurethane (PU) dispensing machine was specially commissioned at Trelleborg Offshore's plant in Skelmersdale, England.

The bend stiffener was specifically developed for use by StatoilHydro, who are responsible for the development and operation of the Vega field in the North Sea and produced for Aker Solutions. Typically a bend stiffener is around 1,000 kilograms/ 2,204 pounds in weight and up to five meters/ 16 feet in length. The record-breaking bend stiffener was over twice the length and around five times the weight in PU.

Trelleborg Offshore produces custom-designed integral bending stiffeners for rigid riser end fittings. These conically shaped polyurethane moldings are used in offshore oil & gas installations. They add local stiffness to the riser, flowline, cable or umbilical, limiting bending stresses and curvature to acceptable levels. The world's largest bend stiffener was designed for a 240mm/ 9.5 inches diameter umbilical and installed by Subsea7. It has an overall length of 11.3 meters/ 37 feet and a base diameter of 1,315 mm/ 4.3 feet. The weight in air of the component is 8,340 kilograms/ 18,386 pounds. It required a total PU volume of 5,360 liters/ 1,416 gallons.

For more information about Trelleborg Offshore bend stiffeners contact Ronnie Doctor, Marketing Manager, Trelleborg Offshore. Telephone: +44 (0)1695 714 361. Email: ronnie.doctor@trelleborg.com Web: www.trelleborg.com/offshore.

1.d) EDGETECH DELIVERS EIGHT 4200 SIDE SCAN SONAR SYSTEMS TO THE U.S. NAVAL OCEANOGRAPHIC OFFICE

EdgeTech has recently delivered eight 4200 Side Scan Sonar Systems to the U.S. Naval Oceanographic Office (NAVO). Four of the systems are single frequency 600 kHz Dynamically Focused and the remaining four are dual simultaneous frequency 300/900 kHz systems.

The EdgeTech 4200 was selected by NAVO due to its very high resolution imagery and long range capability. The systems will be used for shallow water surveys worldwide. For further information go to Web: www.edgetech.com

1.e) SEEBYTE VERY SHALLOW WATER MINE NEUTRALISATION TRIAL A SUCCESS

SeeByte, the global leader in creating smart software for unmanned underwater vehicles, successfully completed the final trial in Panama City Beach, Florida of its new control and sensor processing software for iRobot's Transphibian vehicle as part of the Office of Naval Research's VSW Mine Neutralisation programme of work.

This final trial demonstrated novel hover capabilities relative to a target, such as transit-to-target and target inspection, video and sonar automatic target recognition (ATR) and vehicle control over a wireless buoy. All control modules were run embedded and monitored by a graphical user interface (GUI) which ran top-side. A live demonstration allowed trial participants to control the vehicle through the SeeTrack interface while the vehicle transited in, inspected and neutralised a target.

SeeTrack Military has become the de facto standard smart technology for the worldwide defence market. Showcased in a multitude of military situations, this product is currently used by Navy teams to identify man-made underwater objects, search and recovery missions and to enhance the capabilities of their remote vehicles, marine mammals and divers. As a result, our customers are saving time, money and valuable man-hours while reducing unnecessary risk for the human operators who eventually have to interface with the underwater objects.

For more information, contact: Kristen Gucwa, +44 (0) 131 447 4200 kristen.gucwa@seebyte.com

1.f) IPOZ OPTS FOR LANDINS

IPOZ has ordered three LANDINS, the high-end INS positioning system specifically designed for areas where GPS quality is often poor and the need for geo-referenced information is most critical.

Houston based IPOZ provides its clients with inertial navigation based solutions to problems encountered on the earth's surface, in the marine environment and underground.

The LANDINS system will be used on the IPOZ Surveyor, which is comprised of a single enclosure containing an inertial measurement IMU, a CPU and a lithiumion battery pack. It was developed as a solution for seismic surveying in areas not suitable for GPS or in environmentally sensitive areas where line-of-sight instruments require damaging tree clearance. For further information, please contact anne.berg@ixsea.com

1.g) CHELSEA'S MINI^{PACK} ADAPTED FOR ANTARCTIC DEPLOYMENTS

Chelsea Technologies Group has upgraded its MINI^{PACK} CTD Fluorimeter for use in the Antarctic. The MINI^{PACK} is already a very compact sensor and it has now been complimented with a low profile guard specifically designed for deployments through ice holes. A standard ice auger hole is 250 mm diameter. With the new guard the MINI^{PACK} diameter only increases from 120mm to 140mm making it ideally suited for measurements through ice boreholes. An internal lithium battery and removable SmartMedia card means that the MINI^{PACK} has no external connectors – ideal for such a rugged environment.

MINI^{PACK} can also be used as the core of a larger multi-parameter system. As such, it may be used as a discrete profiling instrument, installed on a data buoy, moored in the ocean or to form the core of a towed undulating vehicle system. It has been designed specifically for easy installation into the Chelsea Technologies Group range of towed vehicles.

This compact instrument contains a fluorimeter, conductivity, temperature and depth sensor. These sensors are coupled to a high performance data logger. For real time applications, the MINI^{PACK} is provided with a transmission system with the capability of providing power to and acquiring data from up to 16 external sensors (14 differential channels & 2 single ended channels). These may typically include dissolved oxygen, pH, PAR, up & down welling sensors, fluorimeters & transmissometers. A titanium / acetal housing contains all on-board sensors, processing boards, data transmission or internal batteries.

Full details on the MINI^{PACK} can be found on: <http://www.chelsea.co.uk/Instruments%20MINIPACK.htm> or contact Ellen Keegan, Email: ekeegan@chelsea.co.uk

1.h) BLUEFIN-12 AUV CHOSEN TO FACILITATE UVIC'S OCEAN TECHNOLOGY TEST BED

Bluefin Robotics Corporation, a world leader in the design and manufacture of Autonomous Underwater Vehicles (AUVs), has been contracted to provide a Bluefin-12 AUV to the University of Victoria's Ocean Technology Lab (OTL). The vehicle will be integrated into the Ocean Technology Test Bed (OTTB) being constructed in Saanich Inlet near Vancouver Island, Canada. The OTTB will be a facet of the VENUS cabled ocean observatory already implemented in the same location which provides real-time ocean data to scientists and students. Because the Bluefin-12 AUV is a highly flexible platform capable of being fitted with a variety of commercial and prototype payloads, it will be a key instrument in facilitating research and development for the University and the oceanographic community

The modular Bluefin-12 AUV will be delivered with an empty payload section and a generic standard payload interface, so the OTL can integrate new payloads as their research goals evolve. The vehicle includes three of Bluefin's pressure-tolerant 1.5 kWh battery packs to provide UVic operators with a way to simply and rapidly swap depleted packs for fresh packs. The navigation package includes a proprietary Bluefin-designed software algorithm that combines information from the Inertial Measurement Unit and multiple sensors, including Global Positioning

Satellite, Doppler Velocity Log, and compass to provide very high positioning accuracy. The contract also calls for Bluefin's Operator Tool Suite a graphical user interface for mission planning, monitoring and post-mission analysis. Accompanied by a set of topside support equipment and operational spares, the UVic package represents the state-of-the-art in AUV technology.

For further information contact, Deanna Abraham, E-mail: dabraham@bluefinrobotics.com or go to www.bluefinrobotics.com

1.i) OCEANSCAN GOES AGAINST THE TIDE AND CONTINUES ON A WAVE OF SUCCESS

Oceanscan are bucking the trend of the current financial climate and are continuing to expand the product division with global sales of the T-Type Crude Oil Tank Inspection System and X-Typ Underwater Intruder Detection System. Business is thriving and orders are continuing to be received resulting in more work and jobs being created in a period of general depression in the offshore oil and gas industry.

Details of recent sales include, LERCO – (Libyan Emirates Oil Refining Company), who have placed an order for Oceanscan's T-TYPE Crude Oil Tank Inspection System. The system currently being built and delivery is scheduled for September 2009. TECHCORR Inc. has also placed an order for Oceanscan's T-TYPE System, which is scheduled for delivery and mobilisation in early August 2009. Hemasi Limitada in Brazil have placed an order for a T-TYPE System (high temperature version), for delivery in early October for work with

PETROBRAS. VAOS – have requested a technical upgrade to their existing tool, delivered in 2007. VAOS have use the system to detect sludge contents in 500.000bbl crude oil tanks. The upgrade includes enabling the system to work in temperatures above 60°C. For further information go to www.oceanscan.co.uk

1.j) WATER STUDIES INSTITUTE SURVEYING GT BAY BOTTOM

Northwestern Michigan College's Water Studies Institute is spearheading the first effort to map the bottom of Grand Traverse Bay in 80 years, an endeavor which already is expected to lead to the first public pictures of a 1980 shipwreck near Suttons Bay.

Assisted by Michigan Sea Grant, NMC is conducting advanced hydrographic surveys of both east and west arms of Grand Traverse Bay and northern Lake Michigan this summer and again in 2010. The first phase of underwater research, conducted with side-scan sonar equipment aboard the NMC research vessel *Northwestern*, is now underway and will continue through Aug. 10.

Since existing data dates to the 1920s, the survey project will provide important updated and expanded information with multiple applications, including environmental impact assessments, commercial navigation charts and supporting fisheries.

To see pictures, visit www.nmc.edu/water

2. WHO'S ON THE MOVE?

2.a) STEPHEN COCHRANE APPOINTED BUSINESS DEVELOPMENT MANAGER

World-leading mass-flow excavation (MFE) company Rotech Subsea, a member of the Rotech Group, has promoted Stephen Cochrane to Business Development Manager for the UK, Europe, Middle East and West Africa.

Stephen, 30, has worked at the Aberdeen base of the company for almost a year as Business Development Executive. His promotion marks an important development at Rotech Subsea as it focuses marketing its unique and patented range of "T" excavation tools in three distinct regions. Sarah Hargrave will control the *Americas* and June Othman will control *Asia-Pacific*.

Stephen, of Elgin, joined the company after working as a project manager in the Oil & Gas industry for Cape. He previously worked in marketing and design at Aberdeen agency Mearns & Gill. He graduated with a 2.1 BSc (Hons) in Digital Media from The Robert Gordon University, Aberdeen in 2005.
ENDS

Please contact Stephen Cochrane Stephen.cochrane@rotech.co.uk or +44 (0) 7525128594

2.b) SUCCESSFUL INTRODUCTION OF IXSEA'S OFFSHORE FIELD ENGINEERS

IXSEA is pleased to announce the introduction of its offshore field support team; Carl Potts, based in the UK; Charlie Friend, based in Thailand; Stuart McCall, based in the UK.

Their mission is to support customers in integration of IXSEA equipment, to support clients during operations, to assist in demonstrating products and to provide on site training to customers own field staff. The aim of this growing dedicated team is to provide a more complete service to customers by getting the best from IXSEA equipment and to maximize the return on investment.

Available for work worldwide, they are augmented by an ever growing pool of specially trained freelance staff who are available for operational support duties.

For further information contact anne.colliou@ixsea.com

3. EVENT, TRAINING & DEMONSTRATION NEWS

3.a) HERIOT-WATT UNIVERSITY TRIUMPH AT STUDENT AUV COMPETITION

Heriot-Watt University triumphed over international competitors at the fourth Student Autonomous Underwater Competition – Europe (SAUC-E 2009), held at the Qinetiq Ocean Basin, in Gosport, UK. This is the second year in a row that the team has achieved first place.

The Heriot-Watt team designed and built a hover capable Autonomous Underwater Vehicle (AUV) able to carry out a complex in-water mission with no direct human control. The team of students worked hard to ensure that the AUV completed the mission successfully. The work paid off as the “Nessie IV” AUV took first place, demonstrating high autonomy and capabilities beyond any of the seven competitors, coming from different European Universities. The tasks successfully completed by Nessie include tracking of a moving mid-water target, hovering closely above an identified ground target, wall following with sonar, and a very tough underwater docking task.

To read BBC coverage of the event, click on <http://news.bbc.co.uk/1/hi/sci/tech/8143541.stm>

4. JOB POSTINGS

4.a) TELEDYNE TSS SEE 2 SALES MANAGERS, ABERDEEN AND SINGAPORE

Teledyne TSS seeks 2 experienced Technical Sales Managers to develop and support TSS product sales. Experience in the marine market and knowledge of systems and operations will be a definite advantage. These positions will be based in Aberdeen and Singapore respectively. For further information please contact Carolyn Jones – cmjones@teledyne.com.