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OCEANBUZZ ISSUE 485 – 28th February 2017

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1. OCEAN BUSINESS 2017 NEWS

1.a) VISITOR BADGES BEING POSTED THIS WEEK

With thousands of visitors already registered to attend Ocean Business from 4-6 April 2017, BADGES are currently being printed and will be posted later this week. Registering and receiving your badge in advance will save you time when you arrive onsite and will get you fast tracked into the show.

This is of particular interest for those wanting to get signed up and registered for the 180+ workshops. Registration for these workshops has to be done on site and traditionally the popular sessions start filling up quickly.

For more information on all aspects relating to the show visit www.Oceanbusiness.com

1.b) OCEAN CAREERS LAUNCHES ITS 2017 PROGRAMME

If you know of anyone that you would like to introduce to an exciting career working within the ocean technology, marine science and offshore industries then please let them know about the Ocean Careers event that is held alongside Ocean Business.

Aimed at students who are currently taking their university degrees or A levels – Ocean Careers provides the student with a clearer idea of the types of jobs available within the sector and provides them with an opportunity to meet face to face with future prospective employers.

It is clearly becoming harder for many graduates, newly qualified engineers and the unemployed to find work. Whether the students skills are in engineering, science or mathematics, Ocean Careers can help them realise how these skills can be utilised in this vast, exciting, forward thinking and diverse industry.

For more information visit www.oceanbusiness.com/ocean-careers

Keep in touch with the latest Ocean Business 2017 news by following us on Twitter @OceanBusiness #oceanbiz, on Facebook and Instagram OceanBusinessShow, or by joining our LinkedIn group OceanBusiness.

1.c) SWATHE SERVICES TO LAUNCH USS 'INCEPTION CLASS' UNMANNED SURVEY VESSEL (USV) AT OCEAN BUSINESS

Swathe Services, UK, are exhibiting the new Inception Class Mark II USV on their exhibition stand, alongside daily on water demonstrations of the USV at the dockside. Visitors can attend these demos by booking with personnel at the Swathe exhibition stand U5.

In addition, there will be demonstration equipment of the Merlin marine mobile laser scanner from Renishaw and single-beam sonar equipment from CEE HydroSystems. BeamWorX are also giving a demonstration of their Fully Automated Multi-Beam Echo Sounder patch test calculator 'AutoPatch' as well as their Cleaning and Validating software 'AutoClean' at noon on Wednesday 5 April. Please book early at the Swathe stand as places are limited.

Swathe Services have also announced that the Ports of Jersey survey department will be showcasing their new R2SONIC 2024 multi-beam sonar, SBG Apogee INS and Renishaw Merlin laser scanning capability from their pilot vessel 'Rival'. Numerous 'on water' demonstration sessions will be conducted each day and places can be booked at the R2SONIC stand J8, SBG stand E5c and Swathe stand.

Swathe Services are representatives for BeamworX, BioSonics, CEE HydroSystems, Hypack, Renishaw, R2Sonic, SBG Systems, Trittech Starfish, Unmanned Survey Solutions (USS) and Valeport. For more information or pre-booking of any demonstrations please contact James Williams on +44 (0)1872 275 642 or at james.williams@swathe-services.com

Swathe Services are exhibiting at Ocean Business on stand U5.

For more information visit www.swathe-services.com

Follow on Twitter @SwatheServices

1.d) NORCOM TO SHOWCASE NEW TIDAL PREDICTION WEBSITE AT OCEAN BUSINESS

Developers of electronic chart software, Norcom Technology, UK, have recently completed the development of a tidal prediction website for the Port of London Authority, which will be on display at the show.

Meridian has traditionally developed electronic charting software to run on a windows laptop or tablet. With the internet becoming more readily available and people wanting to access marine information from their tablet or mobile phone Meridian are developing web based solutions which provide up to date information to assist in passage planning etc. The first solution available will be a tidal website using tidal height and tidal stream information derived from data supplied by the UK Hydrographic Office. As well as being able to view the data it will be possible to print or download data directly from the website. For more information visit <http://tidepredictions.pla.co.uk/>.

Norcom will also showcase their electronic chart display system which has just been upgraded to overlay wind turbine co-ordinates and oil and gas infrastructure. In addition, various software products to assist in the installation of wind turbines and offshore structure will be available.

Norcom Technology are exhibiting at Ocean Business on stand F4.

For more information visit www.norcom-technology.co.uk

1.e) HIGHLY ANTICIPATED SONARWIZ7 TO BE DEMONSTRATED AT OCEAN BUSINESS

Chesapeake Technology, USA, are demonstrating their highly anticipated SonarWiz7 at their stand S5 as well as presenting training and demonstrations throughout the show.

See the best of SonarWiz in a quick one hour session on Tuesday 4 April 4 at 13.00, 14.30 and 16.00 at an on water demonstration with EdgeTech data acquisition. On Wednesday 5 April at 13.30 there is an on water demo with Kongsberg PulSAR Sidescan data acquisition, and on Thursday 6 April at 09.00 there is a SonarWiz 7 exclusive first-look classroom session.

If you can extend your trip, make the most of it by spending the day with them on Friday April 7 for a one-day workshop at NOC Southampton. The class will cover post-processing for sidescan, sub-bottom, bathymetry, and magnetometer data. You'll get all the inside tips on how SonarWiz can help your business achieve optimal efficiency. Sign up via email at sales@chesapeaketech.com.

Chesapeake are exhibiting at Ocean Business on stand S5

For more information visit www.chesapeaketech.com

1.f) EDGETECH CONDUCTING ON-WATER DEMONSTRATIONS THROUGHOUT OCEAN BUSINESS

EdgeTech, USA, have announced details of their participation at Ocean Business and welcomes everyone attending the event to come see them at one of their demonstrations or on their stand.

EdgeTech are conducting on-water demonstrations of the EdgeTech 6205 Multi Phase Echo Sounder (MPES) continuously throughout the show. The system provides 200 degree IHO quality bathymetric coverage and co-registered simultaneous dual-frequency side scan sonar data. EdgeTech's 6205 next generation technology increases efficiency and safety for traditional shallow water multibeam users. Demonstration will be conducted on board the New Life II.

A presentation Tuesday 4 April 4 at 12.30 will focus on the latest sonar technology including combined side scan and bathymetric systems on AUVs and USVs and enhancements to the sub-bottom profiler product line. On their stand B9, EdgeTech will display the new 2300 combined side scan sonar and sub-bottom profiling system (with optional bathymetry).

If you plan to join them for the boat demonstration of the classroom presentation, please sign-up to as soon as possible to secure your spot. Simply send an email to info@edgetech.com

EdgeTech are exhibiting at Ocean Business on stand B9
For more information visit www.edgetech.com

1.g) ESW500 WINCH AND SEASPYDER DROP CAMERA SYSTEM DEMOS AT OCEAN BUSINESS

Subsea Technology & Rentals (STR), specialists in the design, production and rental of advanced subsea technology have released details of their workshop and demonstration for Ocean Business.

From Tuesday 4 to Thursday 6 April, STR will demonstrate their ESW500 Winch and SeaSpyder Drop Camera System aboard the Solent Guardian, moored on the dockside. On Wednesday 5 April at 9.00, Andrew Seaton, Senior Sales Engineer will host a workshop on the STR SeaSpyder Drop Camera System. To reserve your space, please email training@str-subsea.com or visit their stand G7.

For more information visit www.str-subsea.com
Follow on Twitter @STR_Subsea

1.h) GEOSOFT CONTINUES TO ADVANCE ITS UXO DETECTION AND ANALYSIS WORKFLOWS

Geosoft are hosting a demonstration session, showcasing the latest UXO Marine tools and workflows with some case studies presenting the wider uses of Oasis montaj. This seminar takes place on Thursday 6 April at 10.30 in the Access Grid room 124/14 and will be of interest to anybody working in marine survey mapping and geophysics.

The Oasis montaj software is widely used for large volumes of magnetic data in the geophysical survey and investigation phase of marine construction projects. The software is used to detect and locate UXO as well as buried cables and pipelines, and helps to offer insight on archaeological sites and ocean contamination. Huge quantities of many marine data types can now be analysed and mapped.

One exciting capability is the detection and analysis of buried bombs and munitions in the seabed using Geosoft's UXO Marine extension. Cleanup of these and other marine hazards as well as mapping cables and pipelines, is crucial for the development of European waters and many other global projects. Oasis montaj provides powerful capabilities to the marine industries for geophysical mapping, data processing and analysis, along with easy visualisation of results and data in 1D, 2D and 3D.

Geosoft are exhibiting at Ocean Business on stand G8.
For more information visit www.geosoft.com

2. GENERAL OCEAN NEWS

2.a) BOATY MCBOATFACE SUBMARINE SET FOR FIRST VOYAGE

In a report by the BBC, the yellow submarine named Boaty McBoatface is set to leave for Antarctica this week on its first science expedition to map the movement of deep waters that play a critical role in regulating the earth's climate.

Boaty carries the name that a public poll had suggested be given to the UK's future £200m polar research vessel. The government felt this would be inappropriate and directed the humorous moniker go on a submersible instead, however, what many people may not realise is that there is actually more than one Boaty. The name covers a trio of vehicles in the new Autosub Long Range class of underwater robots developed at Southampton's National Oceanography Centre (NOC).

The submersible that will initiate the "adventures of Boaty" will head out of Punta Arenas, Chile, on Friday 17 March, aboard Britain's current polar ship, the RRS James Clark Ross. The JCR will drop the sub into a narrow, jagged, 3,500m-deep gap in an underwater ridge that extends northeast of the Antarctic Peninsula. Referred to as the Orkney Passage, this is the gateway into the Atlantic for much of the "bottom-water" that is created as sea-ice grows on the margins of the White Continent.

Read the full story at www.bbc.co.uk/news/science-environment-39232973

2.b) NORCOM TECHNOLOGY SIGNS SOFTWARE SUPPLY AGREEMENT WITH THURN GROUP

Thurn Group and Norcom Technology (both of Norwich, UK) have announced the signing of a software supply agreement covering Thurn Group's technology development projects.

Thurn Group provides sonar technology and applications expertise aimed at enhancing seabed survey capabilities, particularly in the shallow offshore and renewables sectors. Norcom is a specialist software development company for the offshore marine sector, specialising in real-world interfacing and data handling.

Tom Hiller, General Manager at Thurn, said: "Thurn and Norcom have collaborated on projects in the past and recognise the strength of combining our expertise in a formal arrangement. This agreement will support Thurn's future projects, enabling us to provide our customers with better and faster solutions to their survey challenges."

Thurn Group and Norcom are exhibiting at Ocean Business on stand F4, where Norcom will be showing its range of Electronic Chart Planning tools which include overlays of Wind Turbine Locations and its new tidal prediction.

For more information visit www.thurngroup.com and www.norcom-technology.co.uk

2.c) RS AQUA SUPPLY A THIRD LIQUID ROBOTICS WAVE GLIDER TO THE NOC FOR RAPID PROGRAMME

RS Aqua, UK, have recently supplied the National Oceanography Centre, Southampton, with another Wave Glider SV3. This new SV3 "Sennen" (named after Sennen Cove, the popular surfing beach in Cornwall, UK) will be used to harvest sensor data from the RAPID array deep water moorings across the Atlantic at 26°N. The Wave Glider will use integrated acoustic modems to gather data from subsea modems on the mooring lines. In addition, CTD sensors on

the Wave Glider's float and submarine section, will capture additional valuable data points to complement the existing fixed moored sensors. RS Aqua's Application Scientists, consulted extensively with NOC Oceanographers and the NOC's engineering team to specify the most effective sensor suite to integrate onto the Wave Glider. Added to the integration support, mission and data services that RS Aqua are supplying, this is truly an end-to-end solution.

This new Wave Glider will now achieve the dual purposes of collecting valuable metocean sensor data from the surface and sub-surface waters, whilst also continuously extracting data from deep water moorings via the acoustic communications link. The Wave Glider is the only proven Unmanned Surface Vehicle (USV) for real-time oceanographic data gathering over long durations and in varying sea states. Until now, no CTD data was being collected for the surface waters above the RAPID moorings, and moored sensor data was only available to the RAPID programme scientists when the moorings were physically recovered during infrequent Research Vessel cruises, or from occasional pop-up data capsules from a small number of seabed landers. The Wave Glider now enables persistent, reliable data to be harvested from deep water moorings in all weathers, in near real-time.

Over 50 different sensors have been integrated onto Wave Gliders. The particular project is supported by RAPID, NOC, NERC, Liquid Robotics a Boeing Company, Teledyne, Sonardyne and RS Aqua.

For more information visit www.rsqua.co.uk
Follow on Twitter @RS_Aqua

2.d) CLINTON AND SINGLE SUPPLIER EIVA COLLABORATE TO CREATE BETTER TECHNOLOGY

When choosing a single supplier, Clinton, Sweden, found that the customisation possibilities that EIVA, Denmark, offered made for a great partnership and together they have developed the tools necessary to meet Clinton's unique challenges.

During the single-supplier selection process, Clinton reached out to EIVA for aid in solving a specific challenge with data reporting. Clinton was working on a project where they needed to provide specific information about uncertainty in the data, and while EIVA's existing tool at the time covered difference, variance, and standard deviation in each cell, it was not exactly what Clinton was looking for. However, with Clinton supplying the requirements and EIVA supplying the development, soon, new custom surfaces were added to EIVA NaviModel. Using the new custom surfaces, Clinton could design their own formulas and solve the task. Other projects undertaken together before and since include tools for squat tables, gap-finding, filtering, and more.

Clinton has used NaviSuite for all its projects since the collaboration started, including its recent project surveying the Bratten area in Skagerrack, a survey project over a much larger and deeper area than most in Scandinavian waters. The assignment involved charting a 1206km² area, and in the process, charting the deepest point in Swedish waters at 560m.

For more information visit www.clinton.se and www.eiva.com

2.e) A VITAL LINK: FUGRO SURVEYS VIKING LINK

The Viking Link, a joint venture between the UK's National Grid and Denmark's Energinet, is a proposed 1,400-megawatt high voltage direct current electricity link, which passes under the North Sea, from Revsing in Denmark, to Bicker Fenn in the UK. The interconnector will enable more effective use of renewable energy, access to sustainable electricity generation and improved security of electricity supplies.

Awarded in February 2016, the contract to survey the 630-kilometre marine section of the interconnector's route involved many of Fugro's specialist disciplines. The survey started in March 2016 in Danish waters, and crossed the southern North Sea through German and Dutch territorial waters, before ending in the UK.

Water depth and sediment data were collected using multibeam echosounder, side scan sonar, magnetometer, pinger and sparker over the full corridor length of the link. Offshore and nearshore geotechnical investigations included vibrocore and cone penetration testing.

A remotely operated vehicle (ROV) was deployed to identify and locate subsea assets, such as cables and pipelines that cross the proposed Viking Link route, and measure the burial depth of the assets. The ROV also recorded video and multibeam echosounder data. To identify the ecological environment, Fugro carried out benthic investigations including grab samples and photography.

The survey was successfully completed in six months and the data gathered by Fugro will inform further feasibility assessments of the route's viability. Construction on the Viking Link project is planned to start in 2018 and is planned to be operational by 2022.

For more information visit www.fugro.com/media-centre/fugro-world/article/a-vital-link

2.f) KATFISH COMPLETES SUCCESSFUL PHASE ONE SEA TRIALS

Kraken Sonar, Canada, has announced that it has successfully completed phase one sea trials of its KATFISH™ towed Synthetic Aperture Sonar system.

The goals of the initial sea trials were to validate KATFISH towing performance at various speeds and sea states; to operate and validate the system's hydrodynamic flight sensors; and to operate onboard sonars including the AquaPix® MINSAS 180 Synthetic Aperture Sonar. Other system sensors that were tested included a high accuracy Ultra Short Base Line positioning system utilising both topside and underwater inertial navigation; and platform sensors for velocity, current, temperature and depth measurements. The manually operated KATFISH Launch and Recovery System, designed by Kraken's Handling Systems Group based in Dartmouth, Nova Scotia, was also tested and evaluated.

To date, tow speeds up to eight knots have been successfully demonstrated in shallow water depths up to 50 metres and in sea state conditions up to Beaufort 5 scale. In all sea states and towing conditions, the hydrodynamic stability of the KATFISH exceeded expectations.

For more information visit www.krakensonar.com

Follow on Twitter @KrakenSonar

2.g) EVOQUA SECURES SEACURE® SYSTEM CONTRACT FOR SOUTH KOREAN TANKER NEWBUILDS

Evoqua Water Technologies has secured an order from a South Korean shipyard for the supply and installation of SeaCURE® ballast water management systems (BWMS) to two 115,000dwt crude oil tankers under construction for a Singapore-based ship owner.

Each vessel will feature a 3000m³/h capacity SeaCURE BWMS, which Evoqua will deliver for installation this summer during the vessels' early construction phase. The vessels are scheduled for delivery in 2018.

Available as a compact skid or as modular components, the system is suitable as a newbuild or retrofit installation since biocide generation takes place in small side streams from the main ballast water thus reducing system footprint and optimizing available space.

The Evoqua SeaCURE system can also be configured to provide marine growth protection for critical onboard seawater cooling systems.

For more information visit www.evoqua.com

2.h) ALERON BROADENS HORIZONS WITH NORTH AFRICA CONTRACTS ANNOUNCEMENT

Aberdeenshire-based ROV solutions provider, Aleron has boosted its international credentials, with the announcement of two contract wins in the North Africa region for its group companies, Aleron Subsea and ROVQUIP.

Supplying turnkey ROV solutions via Aleron Subsea (specialising in service, repair and upgrade of Work Class ROV systems) and ROVQUIP (producing specialist subsea tools), the group has recently completed the first of two projects for client, Oceana Subsea.

Utilising an Aleron Subsea Triton XL, supplied together with ROVQUIP's new decommissioning multi-mode Cutting Tool, the Aleron Subsea ROV system is continuing to operate with Oceana on a subsea intervention project and will remain available for additional work in the Mediterranean. The ROVQUIP 30" TCT saw was re-designed to allow the option of a Diamond Wire to be installed, thus ensuring the successful cut of a composite of steel and concrete. Built and tested in just three weeks, the tool demonstrates the depth of engineering capability within ROVQUIP.

With ten overhauled Work Class ROV Systems currently available for sale or rental, Aleron Limited is successfully gaining global traction, with recent contract wins in South East Asia, Norway, France and North Africa.

For more information visit www.aleronsubsea.com

2.i) CYANOFLUORTM HANDHELD HAB INDICATOR: EARLY WARNING OF HAB CONDITIONS

Early identification of Harmful Algal Blooms (HABs) is key to mitigating their effects and protecting public health. Turner Designs' CyanoFluor is a new handheld fluorometer equipped with optics for detecting chlorophyll (CHL) and phycocyanin (PC) responses from natural water samples. CyanoFluor uses these responses to calculate and report a PC to CHL ratio for estimating the relative abundance of cyanobacteria within a phytoplankton population. By monitoring PC to CHL ratios over time, users can tell whether environmental conditions are changing, favoring cyanobacterial production which typically leads to the formation of HABs. CyanoFluor also provides raw fluorescence readings, which can be used to estimate chlorophyll concentrations.

CyanoFluor is factory-calibrated; no calibration standards or tools are required. Solid state optoelectronics ensure long term instrument stability. Results are displayed in less than 30 seconds and logged for future downloading. CyanoFluor is a perfect field instrument for HAB monitoring efforts – small, lightweight, battery-powered, waterproof and easy to use.

For more information visit www.turnerdesigns.com
Follow on Twitter @Turner_Designs

2.j) WATERWAYS MAPPING SOLUTION BY MACARTNEY

Effective transport systems are indispensable to the economic development, employment, and prosperity of a region. Freight transport via the waterways is environmentally friendly, safe, energy-saving, and cost-effective. At the same time, the waterways allow extensive leisure and

recreational use, offer habitat for rare plants and animals, and ensure flood water removal and energy production.

The catamaran built by the German shipyard “Schiffswerft Barthel” and being the property of WSA Berlin, German waterway authority, serves as a survey vessel on the lakes, adjacent canals, and rivers of Berlin, Brandenburg, Eberswalde, and Lauenburg carrying out complete surveys at speeds of up to 6 knots and water depths down to 20 metres.

The leading-edge equipment applied consists of the onboard MacArtney control systems and software working to ensure optimal data acquisition from the survey sensor suite and is capable of handling the enormous data stream of up to 25,000 soundings per second.

The scope of supply for “Spreegrund” features the first Teledyne RESON T20-P TripleHead multibeam echo sounder providing an excellent swath even in the often very shallow water environments in rivers and canals. This feature enables the customer to survey large areas in a short time. Other sensors include a Teledyne ODOM CV 100 single beam echo sounder, Teledyne RDI Navigator DVL and a Valeport SWiFT as well as a Valeport Ultra SV sound velocity sensor. Besides this a SBG Apogee-E inertial navigation system has been supplied together with two ObeLx-R GNSS heading receivers (Septentrio boards inside) which allows for obtaining good position data even under poor GNSS environments, e.g. under bridges. The ObeLx-R receivers, manufactured by MBT, MacArtney Germany, and the DVL are connected to the inertial navigation system to get stable position data. The data acquisition software QINSy stores and visualise all information.

For more information visit www.macartney.com

2.k) UNIQUE APPLICATION OF POP-UP TAGS IN FRESHWATER!

The Michigan Department of Natural Resources is applying the Desert Star SeaTag-MOD pop-ups in its tagging of lake trout in Lake Superior, MI, USA. This is an ongoing tagging programme with a large sample size.

One reason for the selection of SeaTag pop-up tags is its kinetic release mechanism, which works in fresh and seawater alike. The group chose the largest tag, SeaTag-MOD. While it may seem unusual to use such a large tag on a relatively small fish, the SeaTag-MOD also provides the greatest variety of sensing data, including 3-axis magnetometer, 3-axis accelerometer, depth, temperature and light sensing. This provides the greatest insights into fish behaviour.

In addition, the tag has a large 2GB memory, so that a lot of data can be stored. While only some of that can be transmitted via Argos, the essentially 'unlimited' reporting time of the tag (absent fouling) due to solar power means that physical retrieval of tags by recovery boats and radio homing is well supported. The team sends a recovery boat every now and then, knowing that the tags will keep transmitting and reveal their position (no battery depletion). The recovery rate is very high, described at over 80% last year at the AFS conference in Kansas City. An important side benefit of physical recovery is of course economic.

For more information visit www.desertstar.com

3. EVENTS, TRAINING & DEMONSTRATIONS

3.a) SEABAT + TELEDYNE PDS TRAINING IN ABERDEEN, UK, 24-28 APRIL 2017

Mark your calendars for the next combined SeaBat and Teledyne PDS training scheduled to take place 24-28 April in Aberdeen, UK.

The combined week long training will cover the essentials for SeaBat operations and Teledyne PDS acquisition and processing software. This training is ideally suited for existing users to hone their skills and get more in depth with equipment and software. The SeaBat and PDS training can be taken separately, but is most beneficial as a combined training event.

Day one covers all the things you need to know about your SeaBat. You will get hands-on with the equipment and learn about operational settings, interfacing and advanced SeaBat features. Day 2-5 will continue with Teledyne PDS and guide you through PDS project setup, equipment interfacing, acquisition settings, patch test and typical processing features.

For booking or further information please see: <http://www.teledyne-pds.com/training-2/> or contact training@teledyne-reson.com

3.b) 4TH ANNUAL STUDENT PRESENTATIONS EVENING, HYDROGRAPHIC SOCIETY, UNIVERSITY OF PLYMOUTH, TUESDAY 25 APRIL 2017

The Student Presentations Evening is a fantastic opportunity for companies looking to recruit undergraduate and post-graduate students, currently nearing the end of their studies, to witness potential candidates' presentation skills, technical proficiency, confidence and professional capability. Taking place on Tuesday 25 April at the Devonport Lecture Theatre, Portland Square, University of Plymouth PL4 8AA from 18.00 to 21.00.

It also showcases the projects and dissertation studies undertaken at University of Plymouth and provides an ideal forum to offer the students advice or even practical assistance. Investing in the right people is a key component of business success. Identifying the best graduates from amongst those about to enter our industry can often be very challenging – never more so than in the current climate. In common with our three previous Student Presentations Evenings, this event will be the perfect setting in which to observe this year's BSc and MSc students 'in action' in an environment which can't be replicated in a traditional interview.

Don't miss out on this chance to find the perfect person for your company, meet the students and academic staff, offer advice to help tailor future course content to the ever-changing industry needs, or simply discover more about the inspiring work being undertaken at the University of Plymouth.

This year's keynote introduction will be given by a representative from the Jan De Nul Group. The programme will then feature a series of short presentations in which the students will outline their own dissertation studies, specialising in a range of topics across hydrography, environmental and ocean science. There will also be ample time for Q&A and for the students to benefit from guidance or offers of support from the audience.

Light refreshments will be provided at around 7.30pm and the student adjudged to have given the best presentation will be announced and awarded their cash prize at the end of the evening. Those wishing to continue their discussions in greater depth – or simply to relax – will then be able to adjourn to the nearby Roundabout Pub which is open until about midnight.

Please register your interest in attending by email southwest@ths.org.uk before Tuesday 18 April. For more information visit www.ths.org.uk

3.c) MARINE MEASUREMENT FORUM ANNOUNCES HOSTS FOR NEXT FIVE EVENTS

The Steering Group for the non-profit making Marine Measurement Forum (MMF) series of twice yearly, one day networking seminars has announced that host organisers have been secured through to Spring 2019.

The next forum will be MMF59, to be hosted by The Hydrographic Society UK (THS UK). The event will be held at the BP Upstream Learning Centre, Sunbury-on-Thames on Friday 7 July 2017. It will be preceded, on the Thursday, by a separate but associated afternoon networking event “HydSoc@The Magpie - Then and Now”, exploring how contemporary cutting edge hydrography has been influenced by the pioneers and innovators of the last 50 years. It was at The Magpie Inn, also in Sunbury, back in 1978 that a certain Mike Wright and colleagues initiated the first gathering of what started out as the Home Counties West branch of the Hydrographic Society and which subsequently morphed into the present THS UK. Keep an eye open for further news of both events at www.ths.org.uk

The hosts for MMF60 will be iXblue who have managed to secure the rather fascinating venue of Land Rover BAR (Ben Ainslie Racing) in Portsmouth for Tuesday 31 October. Moving on to 2018, the National Physical Laboratory will host MMF61 at their Teddington HQ in the Spring with Fugro, Wallingford following in the Autumn with MMF62. In Spring 2019, the hosts for MMF63 will be ecoSUB Robotics.

Each MMF event comprises a number of presentations by organisations and individuals involved in the many diverse aspects of the marine measuring sector. The management of the event is handled by each host but will fall within guidelines provided by the resident Steering Group. The audience generally comprises a cosmopolitan mix of researchers, surveyors, engineers and manufacturers all of whom have a common interest in the art/science of maritime data gathering. The MMF series has continually proven to be very popular, with attendee numbers generally around the 50-60 mark and offers a simple, cost-effective opportunity to highlight specific skills, capabilities, projects and developments.

For more information visit www.mmf-uk.org
Join the MMF Group on LinkedIn

4. WHO'S ON THE MOVE?

4.a) ASHTEAD STRENGTHENS SENIOR MANAGEMENT TEAM

Ashtead Technology has strengthened its senior management team with the appointment of a business development director.

With a career spanning more than 20 years in the oil and gas industry, David Mair joins Ashtead from Hoover Ferguson Group where he held the position of global business development director. Prior to this, Mr Mair worked at Subsea 7 where he held a number of senior management roles, including group vice president of business development.

Based in Aberdeen, Mr Mair will be responsible for Ashtead's global business development activities as the firm looks to further broaden its range of services and increase its geographical reach to provide its customers with the most efficient, cost-effective technological solutions. Mr Mair's appointment is the latest move in Ashtead's growth strategy and follows the company's recent expansion in the Middle East following the acquisition of Abu Dhabi based TES Survey Equipment Services LLC.

For more information visit www.ashtead-technology.com
Follow on Twitter @ashteadtech

4.b) RIPTIDE AUTONOMOUS SOLUTIONS WELCOMES NEW COO/CFO

Riptide Autonomous Solutions, a leader in low cost micro unmanned undersea vehicles (UUVs), has announced a significant new executive hire. John Vestri has joined Riptide with a joint appointment as Chief Operating Officer and Chief Financial Officer.

Mr Vestri brings significant experience supporting high growth technology companies, with a focus in manufacturing and operations. Most recently at VideoRay, he created significant growth in sales and profitability by introducing beneficial changes in mission, culture, operations and financial performance. He holds an engineering degree from Worcester Polytechnic Institute (WPI) and an MBA in Finance from Chapman University.

For more information visit RiptideAS.com

4.c) BIBBY OFFSHORE APPOINTS DIRECTOR OF DIVING

Bibby Offshore, a leading subsea services provider to the oil and gas industry, has announced the promotion of Allan Nairn to Director of Diving.

Allan joined Bibby Diving Services in 2010 as Offshore Project Manager with over 30 years' experience in the subsea sector. In his new role, Allan will be responsible for leading all diving related activity within the business. He will ensure day to day diving operations are executed safely, efficiently and continue to meet the high standards Bibby Offshore is known for.

For more information visit www.bibbyoffshore.com

5. JOB POSTINGS

5.a) FIVE JOB OPPORTUNITIES AT EGS, BORDON, HAMPSHIRE, UK

EGS (International) Ltd is part of the EGS Group that operates worldwide undertaking professional and tailored survey solutions for a wide range of projects including: Hydrographic, Geophysical, Geotechnical, Oceanographic and Environmental surveys. EGSi acquire high quality data for a variety of clients within the Nautical Charting, Renewables, Oil & Gas, Offshore Construction, Telecommunications and Cable Route sectors. They are currently recruiting for the following:

5.b) EXPERIENCED HYDROGRAPHIC SURVEYORS AT EGS, BORDON, HAMPSHIRE, UK

EGS (International) Ltd are searching for experienced hydrographic surveyors to join the team. The successful candidate will be involved with both site and office work working on projects globally in both the inshore and offshore environment. As an experienced surveyor, you will be involved with all aspects of a project to include; tendering, survey planning, vessel mobilisation, equipment calibration/verification, survey acquisition, data QC, data processing, processing QC and final reporting.

Working in small survey teams on complex projects, surveyors will be acquiring high quality bathymetric data and at times be involved in acquisition of other geophysical equipment (side scan sonar, sub-bottom profiler, magnetometer, multi-channel seismics, CPT, Vibrocore and grab sampling) and be working closely with the engineering department to assist in troubleshooting of any equipment related issues. Experience in online QC to ensure that the data is meeting client specifications is essential. Party Chief duties will be required on occasions.

Requirements: University degree in Hydrography or a closely related marine discipline; Equipment knowledge: Kongsberg MBES systems, Applanix POS MV positioning, Sonardyne USBL; Acquisition experience: QINSy, Kongsberg SIS, Sonardyne Ranger; Processing experience an advantage: Caris HIPS & SIPS, QINSy Qloud, Qimera; Experience of working in the shallow inshore environment; Party Chief experience an advantage; Willing to relocate to commutable distant of EGS office in Bordon, Hampshire; Site work rotations can be as short as a few days but also up to 6 weeks, therefore the ability to work away from home for long periods is essential; Self-motivated, with the ability to work well under pressure in a team environment; Current medical,

BOSIET/FOET certificates are an advantage; Eligible to work in the UK and possess a full UK driving licence.

To apply for this position, please send your CV and covering letter to: The HR Manager, EGS International Ltd, Unit 27 Woolmer Way, Bordon, Hants GU35 9QE or email: humanresources@egssurvey.co.uk

5.c) HYDROGRAPHIC DATA PROCESSING COORDINATOR AT EGS, BORDON, HAMPSHIRE, UK

EGS (International) Ltd are searching for a suitably experienced hydrographic data processor to join the team. The successful candidate will be shore based, primarily in the EGSi office in Bordon, Hampshire. On occasions, there will be the requirement to process on location close to the operational port of the survey vessels.

The successful candidate will have significant multibeam processing experience using Caris HIPS & SIPS. Knowledge of other processing packages including QINSy and Qimera are also of huge advantage. EGS regularly work on IHO Special Order nautical charting projects in the UK and further afield. The ideal candidate will have recent processing experience of UK nautical charting projects. Working alongside surveyors who spend time offshore, the data processing coordinator will ensure continuity and consistency of data and deliverables produced within the Hydrography Department.

Requirements: University degree in Hydrography or a closely related marine discipline; Equipment knowledge: Kongsberg MBES systems, Applanix POS MV positioning, Sonardyne USBL; Processing experience of Caris HIPS & SIPS essential; Processing experience of QINSy and Qimera an advantage; Willing to relocate to commutable distant of EGS office in Bordon, Hampshire; Self-motivated, with the ability to work well under pressure in a team environment; Leadership skills to manage the processing schedule; Eligible to work in the UK and possess a full UK driving licence.

To apply for this position, please send your CV and covering letter to: The HR Manager, EGS International Ltd, Unit 27 Woolmer Way, Bordon, Hants GU35 9QE or email: humanresources@egssurvey.co.uk

5.d) EXPERIENCED GEOPHYSICISTS AT EGS, BORDON, HAMPSHIRE, UK

EGS (International) Ltd are searching for experienced geophysicists to join the team. The successful applicant will not only be expected to acquire and process geophysical data on-board vessels but also interpret and report upon the data on return to the office.

As an experienced geophysicist, you will be involved with all aspects of a project to include; tendering, survey planning, vessel mobilisation, equipment calibration/verification, survey acquisition, data QC, data processing, processing QC and final reporting. Working in small survey teams on complex projects, geophysicists will be acquiring high quality geophysical data (side scan sonar, sub-bottom profiler, magnetometer, single and multi-channel seismic arrays, CPT, Vibrocore and grab sampling) and be working closely with the engineering department to assist in troubleshooting of any equipment related issues. Experience in online QC to ensure that the data is meeting client specifications is essential. Party Chief duties will be required on occasions.

Requirements: University degree in Geosciences/Geophysics; Geophysical experience, with a thorough understanding of geophysical survey techniques and demonstrable experience with acquiring, processing and interpreting geophysical survey data; Advantageous software experience: IHS Kingdom, CTI SonarWiz and Geosoft Oasis Montaj, Radex Pro (or equivalent) and GIS packages; Experience of working in the shallow inshore environment; Party Chief experience an advantage; Willing to relocate to commutable distant of EGS office in Bordon,

Hampshire; Site work rotations can be as short as a few days but also up to 6 weeks, therefore the ability to work away from home for long periods is essential; Self-motivated, with the ability to work well under pressure in a team environment; Current medical, BOSIET/FOET certificates are an advantage; Eligible to work in the UK and possess a full UK driving licence.

To apply for this position, please send your CV and covering letter to: The HR Manager, EGS International Ltd, Unit 27 Woolmer Way, Bordon, Hants GU35 9QE or email: humanresources@egssurvey.co.uk

5.e) EXPERIENCED UHRS MULTI-CHANNEL SEISMIC GEOPHYSICISTS AT EGS, BORDON, HAMPSHIRE, UK

EGS (International) Ltd are searching for experienced UHRS multi-channel seismic (MCS) geophysicists to join the team. This is a new dedicated role where the successful applicant will not only be expected to acquire and quality assure the UHRS MCS data on-board vessels and process the data back in the office, but also drive the development of our UHRS MCS capability throughout the company.

The role will also include wider geophysical surveying aspects, so additional geophysical experience is advantageous. EGS are regularly involved with geophysical contracts that include UHRS MCS, mainly within pre-proposed offshore windfarm sites. However, the UHRS MCS element is currently subcontracted so the idea of this new role is to enable us to become more independent.

Requirements: University degree in Geosciences/Geophysics; UHRS MCS multi-channel seismic experience, with a thorough understanding of UHRS MCS survey techniques and demonstrable experience with processing and interpreting data; Advantageous software experience: CTI SonarWiz, Geosoft Oasis Montaj, IHS Kingdom and Radex Pro (or equivalent); Willing to relocate to commutable distant of EGS office in Bordon, Hampshire; Site work rotations can be as short as a few days but also up to 6 weeks, therefore the ability to work away from home for long periods is essential; Self-motivated, with the ability to work well under pressure in a team environment; Current medical, BOSIET/FOET certificates are an advantage; Eligible to work in the UK and possess a full UK driving licence.

To apply for this position, please send your CV and covering letter to: The HR Manager, EGS International Ltd, Unit 27 Woolmer Way, Bordon, Hants GU35 9QE or email: humanresources@egssurvey.co.uk

5.f) EXPERIENCED GEOSCIENCE DATA COORDINATOR REQUIRED AT EGS, BORDON, HAMPSHIRE, UK

In-order to expand its capacity EGSi has an exciting new opportunity for an experienced Geoscience Data Coordinator to join the team. This role would ideally suit a geophysicist who has experience of acquiring and processing geophysical data, but wants to make the transition to an office based role.

The successful applicant will not only be expected to process, interpret and report upon geophysical data but also be the link between onsite acquisition and office based processing teams. Assigned to the reporting team you will be the link between onsite acquisition and office based processing teams, working on an interesting variety of work within the renewables, oil & gas, offshore construction, telecommunications and cable route sectors. Ensuring continuity and consistency of data and deliverables produced within the Geoscience department will be the primary responsibility, with opportunities to process and interpret data as workload dictates.

Minimum Requirements: University degree in Geosciences/Geophysics; Geoscience reporting experience, with a thorough understanding of geophysical survey techniques and demonstrable

experience with interpreting and correlating geophysical survey data; Experience in report writing; Advantageous software experience: CTI SonarWiz, Geosoft Oasis Montaj, IHS Kingdom and Radex Pro (or equivalent); Eligible to work in the UK and possess a full UK driving licence.

To apply for this position, please send your CV and covering letter to: The HR Manager, EGS International Ltd, Unit 27 Woolmer Way, Bordon, Hants GU35 9QE or email:

humanresources@egssurvey.co.uk

5.g) GEOPHYSICAL ENGINEER REQUIRED AT FUGRO GB MARINE, PORTCHESTER, HAMPSHIRE, UK

Fugro is one of the world's leading hydrographic and geophysical survey companies employing approximately 13,500 people in over seventy countries. An exciting opportunity has arisen for an experienced Geophysical Engineer to join their team. The role will be based offshore on their fleet of nearshore vessels and will include a mixture operational duties for a range of clients operating in the coastal and offshore marine markets worldwide.

Roles and Responsibilities but not limited to change to including: To collect and QC geophysical data from sites throughout UK waters and overseas; Collection of seismic data using boomer, pinger, chirp and sparker and seismic multichannel systems Maintenance of the geophysics workshop and storage facilities; Collection of seabed data using sidescan sonar and magnetometer; Repair and maintain geophysical equipment on-board to minimise downtime; Provide fault reports and inventories to the engineering manager.

You will work with a strong and talented team in a challenging environment and your attributes will include: Proven experience in an offshore online geophysical or geophysical engineering role; A degree or equivalent in Engineering (Electrical/Mechanical) or Geophysics; Benefits for this role include a competitive salary accompanied by contributory pension scheme and investment in training.

Please apply by submitting a CV and covering letter explaining how you can fulfil all aspects of this role at <https://www.fugro.com/careers/search-for-vacancies/apply/view?vacancyId=2407>

Fugro GB Marine Limited is an Equal Opportunities employer. All applications are judged on the relevant skills and experience of the candidate, and not by gender, sexual orientation, marital status, religion, belief, age, nationality (other than where work permits may be required), or ethnicity. No agencies please. This is a permanent, full-time contract. Closing date is 24 March 2017.

For more information visit www.fugro.com/careers

5.h) REGIONAL SONAR SALES MANAGER REQUIRED AT KLEIN MARINE SYSTEMS

Since its founding in 1968, Klein Marine Systems has been a pioneer in the development of side scan sonar, sub-bottom profilers and related instruments and accessories for undersea search and survey. They design, manufacture and support equipment which has a worldwide reputation as the standard of excellence in the industry.

At Klein, their regional sales managers work "one on one" with customers and distributors to promote their products and capture business by providing effective system solutions. The regional sales manager works in concert with the company's marketing, engineering and manufacturing departments to ensure that the products offered meet the needs of the customers. This position requires a strong technical understanding of their product's performance, key features and applications and the ability to couple this understanding with customer needs to define optimal system solutions.

Candidates who do not show evidence of listed requirements will not be considered.

Duties and Responsibilities: Manage and interpret customer requirements – work with customers to understand, anticipate and meet their needs; Work with independent domestic and international sales representatives in pursuit of sales; Independently prepare quotes, proposals, and position papers based on customer specifications; Close and grow sales through professional communication with existing and potential customers; Provide support in advertising, exhibitions, conferences and other promotional activities; Participate in creating, implementing and executing strategic and tactical sales strategies across a broad spectrum of markets; Ability to travel within the United States and internationally (approximately 25% of time).

Requirements: Knowledge or familiarity with SONAR systems, acoustics, signal processing, etc; Five + years experience in a technical sales role; Strong technical skills: able to present technical concepts and provide customers with hands-on demonstration of our products (marine technology experience a plus); Bachelor's degree, preferably in a science or related field; Self-starter, motivated, team focused and results driven; Strong presentation and time management skills with outstanding communication proficiency; Demonstrated track record of consistently exceeding company's goals as well as strong negotiation and closing ability; Previous operational experience in the Navy will be favourably considered.

For more information visit www.KleinMarineSystems.com

5.i) TCARTA MARINE SEEK GEOSPATIAL MARINE DATA ANALYST, OXFORDSHIRE, UK

TCarta Marine has established itself by successfully delivering cutting edge marine mapping products, geospatial services and consultancy. As a result of several recent project awards, they are expanding the current team located at Harwell Campus, Oxfordshire.

They are looking for an additional geospatial Marine Data Analyst to join their experienced and motivated team. This role is critical to ensuring delivery of data to very high quality standards. The successful candidate will be a meticulous, organised, ambitious team player, with the ability to work under their own initiative. The geospatial Marine Data Analyst ensures that data production outputs are of sufficient quality for delivery to customers.

As a geospatial Marine Data Analyst you will support the Project Manager in ensuring Quality Control and Quality Assurance procedures are strictly managed and adhered to at all times. We are looking for a candidate with a proven eye for detail and the necessary technical skills and experience to fulfil an integral team role.

The ideal candidate will have: a degree in Hydrography, Oceanography, Marine Engineering or similar; a minimum of two years working with bathymetry, hydrography and marine charting data sets. Direct experience in production of Electronic Navigation Charts (ENCs) is advantageous; understanding and experience of quality control of geospatial marine data, with specific focus on marine charts being advantageous; experience in a hydrographic processing software package, as well as a GIS software package (with knowledge of ESRI software being advantageous); proficiency in Microsoft office programs, with software coding an advantage; good verbal, written and technical communication skills with a meticulous attention to detail; ability to work within high pressure situations and to tight delivery deadlines; ability to work independently, proactively and be flexible in responding to change.

Role and Responsibilities: Responsible for creating ENCs from point cloud bathymetric data; Responsible for performing marine geospatial data quality control with a specific focus on ENCs; Supporting the Project Manager in instigating Quality Control and Quality Assurance data work flows; Supporting the Project Coordinator in providing feedback to production teams and sub-contractors.

This is a full time position that offers a competitive salary, dependent on experience
Please submit your CV and cover letter complete with current salary expectation to Kim Wall
kw@tcartamarine.com by the Wednesday 12 April.