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## INDEX

### 1. GENERAL OCEAN NEWS

- a) Sonardyne Helps Major Scientific Discovery on the Mid-Atlantic Ridge
- b) Seebyte Provides Seetrack Military Training to the Polish Navy
- c) Emu Limited Awarded Major MCA Contract
- d) ABPmer to Provide QHM Portsmouth with Marnis Port Assessment Toolkit Support
- e) Quinault River Automated Salmon Counter is First of its Kind

### 2. EVENT, TRAINING & DEMONSTRATION NEWS

- a) Impact of Gulf Offshore Oil & Gas Industry on Job Creation - MTS Houston Lunch August 25, 2011

### 3. WHO'S ON THE MOVE

- a) Principal Consultant Joins Partrac Consulting

### 4. JOB POSTINGS

- a) Survey Engineers Required
- b) Senior Ocean Application Engineer Needed
- c) Coastal Surveyor/Hydrographer/Process Scientist Required

## 1. GENERAL OCEAN NEWS

### 1.a) SONARDYNE HELPS MAJOR SCIENTIFIC DISCOVERY ON THE MID-ATLANTIC RIDGE

Sonardyne International's Ranger 2 USBL (Ultra-Short BaseLine) acoustic positioning technology has played a crucial role in a scientific mission to discover a new eco system on the floor of the Atlantic Ocean. The Irish led VENTuRE expedition used the Ranger 2 equipment to track the Remotely Operated Vehicle (ROV) Holland 1 over three kilometres below the sea surface as it searched for and filmed evidence of the newly named Moytirra Vent Field.

The mission to find and study the deep sea vent field on the mid Atlantic Ridge was undertaken from the Irish research vessel, RV Celtic Explorer. The deep rated ROV Holland 1 was required to operate in the challenging conditions created by hydrothermal vents. These vents occur where cracks in the Earth's crust allow sea water to penetrate downwards into areas of subterranean volcanic activity. The seawater is not only heated to boiling point, but also permeated with dissolved minerals and suspended solids from the molten rock. This heated seawater then gushes back upwards into the ocean giving rise to what looks like miniature erupting volcanoes.

"On the first dive, we found the edge of the vent field within two hours of arriving on the seafloor," said Dr Andy Wheeler, who led the expedition. "The ROV descended a seemingly bottomless underwater cliff into the abyss. We never reached the bottom, but rising up from below were these chimneys of metal sulphides belching black plumes of mineral-rich superheated water. Often the search for vents takes much longer, and our success is a testament to the excellent equipment on board and the hard work and skill of everyone involved."

Because of the extreme depth and the importance of monitoring the precise location of the ROV as it navigated the difficult conditions, the research team selected Sonardyne's Ranger 2 acoustic positioning technology. This system is specifically designed for deep water, long range tracking of underwater vehicles and is widely used throughout the offshore oil, ocean science and marine survey industries.

Sonardyne's engineers fitted Holland 1 with a high power acoustic transponder that communicates with a transceiver mounted onboard the RV Celtic Explorer. From this, the system is able to calculate the range and bearing of the underwater target with great precision. Ranger 2 incorporates the latest Wideband 2 signal technology which allows the vehicle's real time position to be accurately monitored despite the noise pollution generated by the hydrothermal vent plumes.

Dr Bramley Murton of the National Oceanography Centre in the UK, who first saw clues for possible vents on an expedition aboard the UK research vessel RRS James Cook in 2008 said: "The sense of awe at what we are seeing does not fade, and now we are working hard to understand what our discovery tells us about how our planet works."

For more information, contact Barry Cairns, VP Europe and Africa, [barry.cairns@sonardyne.com](mailto:barry.cairns@sonardyne.com). Tel +44 (0)1224 707875 or visit [www.sonardyne.com](http://www.sonardyne.com). Follow Sonardyne on Twitter: @sonardyne

### 1.b) SEEBYTE PROVIDES SEETRACK MILITARY TRAINING TO THE POLISH NAVY

SeeByte, a global leader in creating smart software technology for unmanned systems, has successfully provided the Gdansk University of Technology (GUT) and the Polish Navy full training to accompany their recent purchase of SeeByte's SeeTrack Military software.

Having acquired SeeTrack Military earlier this year, SeeByte's team trained two engineers from GUT and two members of Poland's naval staff, including Lieutenant Adam Polak of the Polish Naval Academy, at SeeByte's headquarters in Edinburgh. The Polish Navy's 8th Coastal Defense Flotilla commands the Mine Countermeasures (MCM) vessels, whilst GUT work closely with the Navy to ensure it is equipped with state-of-the-art, new generation technology to carry out these duties.

Lieutenant Polak commented of the training: "I found the instruction in SeeTrack to be straightforward, efficient and insightful. As a new user of the software and its accompanying modules it is clear how easily SeeTrack Military could improve the efficiency of missions and naval operations. At this time, we intend to use the software to develop future capabilities within the Polish Navy, and I feel the SeeTrack training will prove vital in this development."

SeeTrack Military is a mission-planning, monitoring and post-processing tool that provides users with the ability to view their operating environment in a single, integrated picture while saving time, money and valuable man-hours. This latest purchase by GUT brings the current number of NATO friendly countries utilizing the mission-planning, monitoring and post-processing software tool to twelve.

For more information, contact Ioseba Tena, on Tel: +44 (0) 131 447 4200 or Email: [ioseba.tena@seebyte.com](mailto:ioseba.tena@seebyte.com). [www.seebyte.com](http://www.seebyte.com).

### **1.c) EMU LIMITED AWARDED MAJOR MCA CONTRACT**

The Maritime and Coastguard Agency (MCA) has awarded marine survey specialists EMU Limited (EMU) a multi-million pound hydrographic contract as part of its programme to systematically survey the waters around the UK.

The EMU contract will cover the Shallow Water Lot of the MCA's Civil Hydrography Programme, which aims to gather accurate hydrographic information for updating United Kingdom Hydrographic Office (UKHO) nautical charts and publications.

The work will focus on eight main coastal offshore regions around the UK. These areas cover from Barra Island in Scotland and Carmarthen Bay in Wales to Belfast Lough in Northern Ireland and Poole Bay in England.

Starting in August, and with a two-year timeframe, the scope of work undertaken by EMU will cover more than 1,900 km<sup>2</sup> of seabed utilising state-of-the-art multibeam echosounding equipment and other geophysical sensors. The survey will incorporate challenging areas in which EMU's choice of the right people, equipment and techniques will be vital in ensuring safe and reliable seabed data is gathered.

The award of the contract recognises EMU's expertise in collecting precise seabed depth and geophysical data to the exacting International Hydrographic Office (IHO) standards, which are rigorously specified and enforced by the MCA and UKHO. The safety-related nature of this type of survey means accuracy is of paramount importance.

For further information: Bruce Tomlinson, Managing Director, Emu Limited M: 07798 851508, E: [bruce.tomlinson@emulimited.com](mailto:bruce.tomlinson@emulimited.com) or W: [www.emulimited.com](http://www.emulimited.com).

### **1.d) ABPmer TO PROVIDE QHM PORTSMOUTH WITH MARNIS PORT ASSESSMENT TOOLKIT SUPPORT**

The Queen's Harbour Master (Portsmouth), who took delivery in 2010 of a personalised MarNIS 'Port Assessment Toolkit' for managing marine risk within its statutory harbour area, has confirmed that ABP Marine Environmental Research Ltd (ABPmer) are to provide support arrangements for the next 2 years.

The MarNIS 'Port Assessment Toolkit' has been adapted to help QHM Portsmouth meet the expectations of the Dockyard Ports Marine Safety Policy (Port Marine Safety Code), with tailored versions of report formats, customised risk controls, causes and hazard descriptions.

Commander Nigel Hare, QHM Portsmouth commented that "We are very pleased to have continued support from ABPmer for the MarNIS risk management system; this enables us to demonstrate and manage our system of risk assessment, marine incident recording and marine safety management of Portsmouth Harbour".

The Port Assessment Toolkit prototype can be downloaded from the following website link: <http://www.abpmer.net/MarNIS/>. A personalisation service is provided by ABPmer along with technical support, product upgrades and help desk facilities.

For further information please contact Tracey Hewett, Marketing Manager, ABPmer at [thewett@abpmer.co.uk](mailto:thewett@abpmer.co.uk) or Tel: +44 (0)23 80 711 844.

### **1.e) QUINAULT RIVER AUTOMATED SALMON COUNTER IS FIRST OF ITS KIND**

Fisheries managers at the Quinault Indian Nation (QIN) have a long history working with BioSonics on management of the salmon resources of the Quinault River. Since the early 1980's, BioSonics has

assisted tribal biologists in developing systems and procedures to enumerate adult salmon in Lake Quinault.

Salmon are a main staple of income and subsistence for the Quinaults. While the river supports several viable runs, the blueback sockeye, a highly prized delicacy, represent the most culturally significant salmon run in the river. Accurate and timely measure of salmon escapement is foundational to a successful sockeye harvest management strategy. Historically, sockeye escapement has been estimated by counting adult salmon in Lake Quinault using a BioSonics mobile scientific echosounder. Tribal harvest managers have expressed concerns about using estimates from lake surveys because of an apparent relationship between distribution (depth) of the fish and precision of the estimates, the potential for overestimation due to resident fish, and due to lag between the time fish enter the river and the time they enter the sampled population in Lake Quinault. QIN harvest managers therefore sought a more timely and precise index of salmon counts to properly manage their fisheries resources. It was widely believed that such an index would most likely be obtained from sampling in the lower river.

In May 2011, the automated salmon counting system utilizing BioSonics scientific sonar was deployed in a remote stretch of the Quinault River in Grays Harbor County, Washington. The system consists of 120 kHz split beam transducer and ROS PT 25 rotator mounted to an adjustable track trolley system custom fabricated from anodized aluminum. The track was gravity mounted with cement pier blocks for minimal bank disturbance and easy demobilization. A DT-X echosounder and control computer were housed in a mobile office trailer with a satellite modem for communication. The system operated for several months during which time, data was collected and processed for algorithm refinement and tuning for site-specific conditions. By the end of the deployment phase, the system was automatically transmitting daily salmon count reports to project managers. BioSonics President Tim Acker expressed the significance of the project; "This pilot stage deployment was monumental. To our knowledge, there is nothing else like this in the world. Completely autonomous, completely automatic fish counting represents a shift in the way fisheries managers work. Imagine sitting at your desk and receiving a fish count report from an unmanned monitoring station twenty miles away."

For more information please contact Eric Munday, General Sales Manager, BioSonics, Inc. at [emunday@biosonicsinc.com](mailto:emunday@biosonicsinc.com) or Tel: +1 206 782 2211.

Or contact Tyler Jurasin, Quinault Indian Nation, Dept of Fisheries at [tjurasin@quinault.org](mailto:tjurasin@quinault.org).

## **2. EVENT, TRAINING & DEMONSTRATION NEWS**

### **2.a) IMPACT OF GULF OFFSHORE OIL & GAS INDUSTRY ON JOB CREATION - MTS HOUSTON LUNCH AUGUST 25, 2011**

The next MTS Houston Section luncheon will be held on August, 25 2011 and will feature a presentation by Paul Hillegeist, Quest Offshore. Paul will provide an overview of a new study released in July by the National Ocean Industries Association (NOIA) and the American Petroleum Institute (API). The study reveals the nationwide jobs and economic impact of the Gulf of Mexico offshore oil and gas industry and the effect of permitting on the job figures.

According to the study conducted by Quest Offshore Inc., the Gulf offshore oil and gas industry supported more than 240,000 jobs across the country in 2010, while contributing more than \$26 billion to the nation's GDP.

The Gulf offshore oil and gas industry supports tens of thousands of jobs outside the Gulf of Mexico. These jobs are found across the United States – at places like 3M in Minnesota, Webco in Oklahoma, and Parker Hannifin in Ohio, just to name a few.

The study shows that more than 60,000 offshore industry-related jobs have been lost in the Gulf States since 2008, in part to the poor economy, the deepwater moratorium, and the continuing slow pace of new drilling permits in the Gulf.

On a positive note, the Gulf offshore industry could add nearly \$45 billion dollars to the nation's GDP by 2013, but only if exploration and development permitting return to historic levels and backlogged projects are allowed to progress forward. Moreover, the Gulf offshore industry could help create an additional 190,000 jobs by 2013 for a total of more than 400,000 industry supported jobs across the USA.

Quest will also provide medium and long-term forecast activity levels for the Gulf of Mexico in the wake of the drilling moratorium buoyed by projections for a 71% increase in Gulf development spending to \$41 billion in 2013 and predictions for growth in crude oil production totaling more than 1.8 million barrels per day.

For a copy of the Quest study, a fact sheet, video, and radio piece related to the study, go to <http://www.noia.org>.

For more information please contact Liz Stansfeld, MTS Publicity, 9300 Sandstone, Austin, TX 78737, USA. Telephone: +1 512 301 2744 or email: [lizstansfeld@earthlink.net](mailto:lizstansfeld@earthlink.net). Web: <http://www.mtshouston.org>.

### **3. WHO'S ON THE MOVE**

#### **3.a) PRINCIPAL CONSULTANT JOINS PARTRAC CONSULTING**

Partrac Consulting is pleased to welcome Dr Matthew Wright, a Principal Consultant, to the company. Matthew's previous position was with Jacobs Engineering, where he was employed as Principal Coastal Geomorphologist. Matthew has sixteen years experience of research and consultancy, which includes flood and erosion risk management; environmental impact assessment; habitat protection, creation and restoration; capital infrastructure development and maintenance projects in coastal, estuarine and shallow marine environments throughout the UK and worldwide.

Prior to joining Jacobs, Matthew held the prestigious position of Mendenhall Postdoctoral Research Fellow at the United States Geological Survey (USGS) National Center in Reston, Virginia. His qualifications include a PhD gained at Durham University (Coastal and Marine Geology and Geomorphology) and Masters and Bachelors degrees from the University of Liverpool.

This appointment reaffirms Partrac Consulting's ethos of providing high quality coastal and marine geosciences services through the employment of high calibre individuals.

For more information on Partrac Consulting please visit [www.partrac-consulting.com](http://www.partrac-consulting.com) or email Dr Kevin Black (Managing Director): [kblack@partrac-consulting.com](mailto:kblack@partrac-consulting.com).

### **4. JOB POSTINGS**

#### **4.a) SURVEY ENGINEERS REQUIRED**

EGS (International) Ltd is looking to expand its Technical Department by recruiting 2 Survey Engineers to work in the UK and overseas on a variety of Geophysical, Hydrographic and Metocean projects.

Responsibilities of the Survey Engineer include;

- Maintenance, testing and preparation of their broad based range of equipment.
- Installation, calibration, operation of equipment on inshore and offshore Survey vessels.
- Technical input for project and mobilisation planning.
- To provide up to date information on latest survey equipment and how it could be integrated into their current systems.
- Supporting the company's QHSE system and development of procedures and best practise for the department and survey operations.
- Maintaining the Equipment Inventory and ensuring records are kept up to date.
- Carrying out all survey activities safely and efficiently and within the parameters of the project

Qualifications & Experience;

- A recognised qualification in Electronics / Electrical Engineering or similar discipline is required
- Previous experience of working within the Marine Survey Industry would be advantageous
- Candidates must be willing to spend extended periods of time working on site and be prepared to travel worldwide

EGS (International) Ltd offers a challenging and rewarding career with a competitive remuneration package.

To apply please forward covering letter and CV along with salary expectations to [humanresources@egssurvey.co.uk](mailto:humanresources@egssurvey.co.uk)

#### **4.b) SENIOR OCEAN APPLICATION ENGINEER NEEDED**

Teledyne Benthos is seeking a Senior Ocean Application Engineer who will provide both internal & external customer support. The Application Engineer will provide customer support both in the field and the office, provide sales support, as well as on site technical support which may include time at sea.

Requirements:

- BS or MS in Engineering or Physics
- Excellent communicator, both verbal and written, with strong interpersonal skills
- Ability to learn and understand complex technical requirements, understand and write technical documents
- Computer skills and knowledge of Microsoft office products is essential Excel, Word and Power Point
- Must be able to travel 30%-35% of the time, international and domestic

Preferred:

- Knowledge of the Oceanographic industry
- 8 or more years Technical sales and customer service experience

Send Resume outlining education, experience and salary history to:

Human Resources, Teledyne Benthos, Inc., 49 Edgerton Drive, N. Falmouth, MA 02556, USA or e-mail: [benthosrecruiting@teledyne.com](mailto:benthosrecruiting@teledyne.com).

#### **4.c) COASTAL SURVEYOR/HYDROGRAPHER/PROCESS SCIENTIST REQUIRED**

There are up to 3 vacancies for coastal process scientists, coastal hydrographers or surveyors at the Channel Coastal Observatory based at the National Oceanography Centre in Southampton.

The posts are fixed-length contracts, until March 2017. Full details are given at:

[www.channelcoast.org/vacancies/](http://www.channelcoast.org/vacancies/)<<http://www.channelcoast.org/vacancies/>>