

oceanbuzz!

The weekly ocean technology e'Newsletter everyone's talking about

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, job postings, info on events and we will help 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 new Oceanbuzz website www.oceanbuzz.org where you can download past issues as well.

Oceanbuzz Issue No. 92 – 3rd February 2009

INDEX

1. Ocean Business News

- a) Ocean Business Social Events Set To Be Better Than Ever! 30th March - 1st April 2009
- b) Environmental Risk Management tools for water quality monitoring, Ocean Business 2009, National Oceanographic Centre Southampton (UK), 30th March 2009
- c) Callista looking for support on Jurassic journey
- d) FREE 2-hour demonstration of the Nu-Shuttle on board RV Callista

2. General Ocean News

- a) Another Spanish Galleon Found!
- b) Nasnet®'S Bespoke Solution Positions Bundle on Machar
- c) Nu-Shuttle System – New Tool for Marine Geology
- d) Swedish Coastguard Selects Easytrak
- e) Helix Well Ops Purchase Optima System
- f) Sonardyne Tsunami Warning System Chosen to Watch for India
- g) OceanTools Choose Bowtech Products for SEA CON® Connectors
- h) Sevencs Launches New Contouring Tool

3. Who's on the Move?

- a) New Offshore Business Director at SEA

4. Event, Training & Demonstration News

- a) The next SUT London Evening Meeting will take place on Thursday, 26 February
- b) Imarest's Inaugural Metocean Course Set for Success

1. OCEAN BUSINESS NEWS

1.a) OCEAN BUSINESS SOCIAL EVENTS SET TO BE BETTER THAN EVER! 30TH MARCH - 1ST APRIL 2009

Once again the Ocean Business team have outdone themselves with a social programme set to entertain every visitor to the show! The week kicks off with an ice breaker at the White Star Tavern, where the team welcome you to join us for an informal get-together on Southampton's very own Oxford Street. A perfect way to start the week and catch up with old friends before you get down to serious business over the next few days. Open to all - visitors and exhibitors. Please note that space is limited so arrive early if you want to get in!

The opening night sees the return of the infamous Ocean Business wine trail within the actual exhibition itself. All you have to do is sample the wines available at various exhibitor stands, identify or guess the wines, double check with your colleagues, debate the answer and re-try just to be sure. Fill in the answers and if you get them all right you join the elite club of Ocean Business wine tasters!

The next evening Ocean Business take over DockGate 4 for the ever popular Gala Dinner – so much so that it sold out before Christmas! Once a hotel and restaurant for passengers sailing to the United States – including those of the Titanic – Dockgate 4 now revels, not only in its historical and international influence but as one of Southampton's most exciting and prestigious restaurant and bar venues. With a combination of live entertainment, excellent cuisine and 200 business colleagues in a historical setting, we are sure that you will agree that we have the perfect setting for our Gala Dinner.

Offshore Delegates are also welcome to attend any of the above.

For more information go to <http://www.oceanbusiness.com/social/> or contact info@intelligentexhibitions.com

1.b) ENVIRONMENTAL RISK MANAGEMENT TOOLS FOR WATER QUALITY MONITORING, OCEAN BUSINESS 2009, NATIONAL OCEANOGRAPHIC CENTRE SOUTHAMPTON (UK), 30TH MARCH 2009

Organised by WARMER & INTERRISK EC 6th FP IST Projects, the workshop will be run in conjunction with Ocean Business 2009 offering an overview of the state of the art in environmental risk management tools, sensors aimed for water quality monitoring, and meeting the information need for implementation of the Water Framework Directive (WFD).

The workshop objectives include; identifying synergies between ongoing EU projects within environmental risk management; identification of users' requirements for applications of environmental information from in situ stations, buoys, aircraft and satellite sensors and modelling predictions for risk management; live demonstration of current systems and services; round table discussion with prospective users, focusing on contributions meeting the information needs of the Water Framework Directive.

For more information on the WARMER project visit www.projectwarmer.eu or email luca.sanfilippo@systea.it. For more info on the InterRisk project visit <http://interisk.nersc.no/> or email stein.sandren@nersc.no.

1. c) CALLISTA LOOKING FOR SUPPORT ON JURASSIC JOURNEY

The National Oceanography Centre, Southampton-based research vessel *Callista*, will be sailing back in time 200 million years to the Jurassic period as a star attraction at the May 2009 Lyme Regis Fossil Festival.

The 20-metre catamaran, which will feature strongly at Ocean Business 2009, will be moored at the famous Cobb, offering visitors the chance to find out more about the oceans, sea life and climate change.

Annually, RV *Callista* hosts thousands of students and members of the public for Discover Oceanography sessions around the South Coast. The *Callista* crew are seeking support for their participation in the May 2009 Lyme Regis Fossil Festival. Support will be matched 100% through the government's new matched giving scheme.

Exhibitors at Ocean Business 2009 have a unique opportunity to join other community partners to lend their support to this unique educational and outreach expedition and to maximise their donation.

Gary Fisher, who runs the Discover Oceanography programme, explained: "Events like the Lyme Regis Fossil Festival enhance our normal programme of activities and demand a high level of commitment from our crew. Sponsoring a Discover Oceanography event gives companies an opportunity to demonstrate their commitment to spreading knowledge about marine science and technology to a broad and predominantly young audience."

Recently, Princess Yachts of Plymouth supported a week of Discover Oceanography events for schools in the Plymouth area. Their support, along with other community partners, is helping to maintain and enhance this valuable programme.

Visitors to *Callista* will be able to take part in a range of hands-on and interactive activities. Exhibition material on board will also give visitors the chance to learn more about the work of the National Oceanography Centre, Southampton, including the amazing technology used to explore the deep ocean.

To learn more about Discover Oceanography, please visit: www.discoveroceanography.co.uk .

To find out more about Discover Oceanography giving opportunities, please contact Gary Fisher on Tel: +44 (0)23 8059 6172, email gjf@noc.soton.ac.uk.

1.d) FREE 2-HOUR DEMONSTRATION OF THE NU-SHUTTLE ON BOARD RV CALLISTA

Chelsea Technologies will be participating in the Ocean Business Technology Training event (31 March – 2 April 09) and will be holding a FREE 2-hour demonstration of the Nu-Shuttle towed vehicle on 31 March on board RV Callista. Sign up to see the Nu-Shuttle in action with a range of new sensors.

Register today for a FREE training session at Ocean Business 2009, the ocean technology training and procurement forum, Southampton, 2009, www.chelsea.co.uk/OceanBusiness2009

2. GENERAL OCEAN NEWS

2.a) ANOTHER SPANISH GALLEON FOUND!

Tom Gidus of Gold Coast Explorations, a division of Wreckovery Salvage, reports his team has discovered a shipwreck off the east coast of Florida that dates to the early 17th century. Gidus and his team conducted a non-intrusive remote sensing survey using JW Fishers magnetometer and metal detectors in an area 14 miles off Indian River County. In the spot where the largest magnetic anomaly occurred divers confirmed there were several iron cannon lying partially covered on the seafloor and a large ballast pile.

The team then followed a trail leading from the wreck site that extended over a half mile and produced another 300+ readings on the detectors. A total of 18 cannon were located between the main site and the end of the debris trail, confirming the ship had broken up slowly as it moved north with the current. A number of historic and valuable artifacts were located, and identified by the company archaeologist, including a large pewter bowl and several intact olive jars. Preliminary archival research by historian Robert Marx suggests the ship may be the Espiritu Santo el Mayor, a 400 ton galleon that sank in a storm in 1632. This galleon is not the first wreck the team has found. Last year they located two 19th century shipwrecks off Florida's gulf coast.

Wreckovery Salvage was established in 1992 for the purpose of locating historic shipwrecks and recovering the cargo before these aquatic time capsules are ravaged by the sea and lost forever. The corrosive effects of salt water, toredo worms, high energy coastal storms, dredging, beach replenishment projects, fishing trawlers, and modern day pirates all contribute to the destruction of these valuable pieces of history. The company employs archaeological methods approved by the State of Florida in their ocean recovery operations. In addition to following the state guidelines they also contract the services of a registered professional marine archaeologist on all their projects. Twenty percent of the finds are donated to the state and are on display in museums in Tallahassee and Sebastian. In addition to search and recovery operations, Wreckovery Salvage conducts historical research and maintains an extensive Florida shipwreck database. At their conservation laboratory in Orlando they conduct research, record wreck site

data, and restore artifacts from cannon balls to cob coins and K'ang Hsi china. Information gathered from these pieces of history, and the stories they tell, are made available to the public through a presentation program developed by Mr. Gidus.

The team knows their research is sound and they have some of the best tools for the job. They are convinced more wrecks will be recovered. "Our JW Fisher search equipment was instrumental in locating this new site.", reports Mr. Gidus. "With these detectors and our experience, it's only a matter of time before another historic shipwreck is discovered."

For more information on Wreckovery Salvage go to www.wreckoverysalvage.com. For more on any of Fishers underwater search systems go to www.jwfishers.com or contact Chris Combs at info@jwfishers.com

2.b) NASNET®'S BESPOKE SOLUTION POSITIONS BUNDLE ON MACHAR

NAUTRONIX has completed a project with Subsea 7, for a NASNet® solution to support positioning operations during a pipeline bundle tow out.

The project on BP's Machar field follows on from the successful use of NASNet® by Subsea 7 on a similar bundle tow out operation on TOTAL's Jura field in 2008.

The high quality positioning and monitoring of the pipeline bundle during tow out is a key factor in achieving the offshore delivery schedule and NASNet® is a vital component in meeting the demanding schedule.

Sales Director John MacLeod said: "Using NASNet® technology in reverse was developed for Subsea 7 for TOTAL's Jura field and at that time our aim was to give them a solution along with bespoke NASNet® bundle tow software module to meet future project requirements. We are delighted NASNet® proved itself on Jura and Subsea 7 has again used it on this project".

Nautronix NASNet® system usually allows subsea positioning by deploying stations on the seabed in a network and using these to give position reference signals to position equipment within the water column. The company reversed this principle for the bundle tow out operation and instead track the position of the beacons on the bundle using the position of the vessel and numerous constraints, as a result there is one reference point providing full positioning rather than a network.

Managing Director Mark Patterson said; "We have always anticipated that NASNet® would offer a variety of applications to the industry. We have invested over £12 million into the research and development of NASNet® over the last 7 years and the success of solutions like the bundle prove the value in our continued commitment and investment into the system. Once again we are delighted by the proactive approach taken by Subsea 7 to use game changing technology in their projects".

For more information visit <http://www.nautronix.com> or email laura.cruickshank@nautronix.co.uk

2.c) NU-SHUTTLE SYSTEM – NEW TOOL FOR MARINE GEOLOGY

The Chelsea Technologies Group has recently delivered a Nu-Shuttle system specifically configured for marine geology applications. Working with Sequoia Scientific (Bellvue, WA) a redesigned compact version of the LISST 100x instrument has been installed in the Nu-Shuttle undulating towed vehicle. This is complimented with a Sontek MiniADP, OBS3+ optical backscatter sensor and MINI^{pack} CTD-fluorimeter package. The system will be towed behind a survey vessel enabling real time profile of suspended sediments throughout the water column.

The standard LISST 100x, redesigned into two smaller pressure housings resulting in a more compact unit with better flow orientation, provides real time data on particle size distribution and volume concentration. The Sontek ADP 1.5 MHz was selected due to its small, compact size and ability to provide water current data during the survey.

Nu-Shuttles are used in a wide range of environmental, oceanographic and biological surveys and with many different payloads. This geological configuration proved challenging; to accommodate large complex sensors within the vehicle whilst providing an unobstructed view of the water column and hydrodynamic control of the vehicle.

This Nu-Shuttle configuration enables large areas of suspended sediment to be mapped on a regular basis and overcomes the coverage limitations of buoy mounted and profiled systems. It is ideally suited to provide real time data in support to dredging, land reclamation and river discharge monitoring.

Chelsea Technologies Group is participating in the Ocean Business Technology Training event (31 March – 2 April 09) and will be holding a FREE 2-hour demonstration of the Nu-Shuttle towed vehicle on 31 March on board RV Callista. During this time visitors will see the Nu-Shuttle in action and learn more about Chelsea's new range of sensors. To reserve a place please visit <http://www.chelsea.co.uk/OceanBusiness2009.htm>.

2. d) SWEDISH COASTGUARD SELECTS EASYTRAK

The Swedish Coastguard has recently awarded Applied Acoustic Engineering a contract for two Easytrak Portable subsea tracking systems through its partner CA Clase AB of Göteborg. Easytrak is a comprehensive USBL tracking system that can provide vital location information on moving targets such as divers and ROVs operating out of sight underwater, and will be primarily used in the authority's search and rescue operations, both along Sweden's coastline and in its many lakes.

As well as the numerous vessels, boats and vehicles the Coastguard requires to patrol, rescue and assist in maritime operations, the authority also recognises the need for specialist technical equipment to add to its effectiveness and efficiency. During dynamic sea trials, Easytrak proved that it could precisely match this requirement by accurately plotting target locations, planning routes and monitoring the paths of divers and subsea vehicles in real-time, saving time and providing safety benefits in the challenging underwater environment.

"The Coastguard in Sweden is a very well respected and professional organisation with extremely high standards of expertise, personnel and equipment, so we are particularly pleased that our Easytrak tracking system was selected to add to its overall capability," commented Gavin Willoughby, Sales Manager.

The Swedish Coastguard is the first such authority to use Easytrak in its search and rescue missions, but several European Navies already use Easytrak for mine counter measure operations and harbour surveillance while other national organisations, including police authorities, are successfully utilising Easytrak systems for a range of underwater positioning tasks.

For further information visit www.appliedacoustics.com

2.e) HELIX WELL OPS PURCHASE OPTIMA SYSTEM

Helix Well Ops, a global leader in light well intervention, has purchased the MCS:Fugro system, Optima (R), for their new light well intervention (LWI) vessel, MSV Well Enhancer.

"Optima (R) is a suite of on-board riser management tools for monitoring and planning operations with drilling, completion/workover, and LWI risers," explains Alan Dougan, head of the Structural Monitoring division of Fugro GEOS, which supplies the system in partnership with MCS, the foremost experts in riser analysis software. "The Optima® range provides both the operator and drilling contractor with significant benefits that can translate into substantial cost savings as well as enhancing safety and integrity. We are confident that these benefits will prove of great value to Helix Well Ops on their new vessel."

Since its launch in late May 2008 MSV Well Enhancer has been undergoing equipment outfitting in Rotterdam, Holland, and is due to begin working for Helix Well Ops clients in Q2 of 2009 when all outfitting, sea trials and crew training are expected to be completed.

Optima (R) is available as an off-the-shelf package or a customised solution to reflect the requirements of a particular project. Further information on all aspects of the Optima® suite is available at www.optima-rm.com

For further project information contact Alan Dougan at a.dougan@geos.com

2.f) SONARDYNE TSUNAMI WARNING SYSTEM CHOSEN TO WATCH FOR INDIA

Sonardyne International Ltd of Yateley, UK, has delivered the latest batch of acoustic monitoring sensors that will oversee the Indian coastline by providing the early detection and warning of tsunami waves. The

network of new sensors will be deployed alongside the existing Sonardyne sensors in the Bay of Bengal and off the west coast of India where they will continuously monitor the ocean for the characteristic water pressure changes that indicate a developing tsunami.

The Sonardyne monitors are based upon sophisticated subsea transponders equipped with highly accurate pressure sensors that are positioned on the seabed hundreds of miles off the Indian coast. If one of the transponders detects a small, but continuous, change in water pressure it transmits an acoustic emergency warning signal to a radio buoy moored on the surface above it. The buoys are operated by NIOT (National Institute of Ocean Technology) of India and they relay the warnings via a satellite link to the organisation's headquarters in Chennai. From there, alerts can be forwarded to the appropriate authorities in time for precautions to be taken.

The contract for a tsunami detection system for India was awarded to Sonardyne following an initial trial early in 2007 when systems from Sonardyne and three other manufacturers were evaluated. Only the Sonardyne sensors performed satisfactorily so the company was asked to supply a further eight monitoring transponders which were installed to provide immediate coverage for the areas at most risk. The latest delivery of sensors completes the Indian early warning network and now provides monitoring for India's entire coastline.

The success of the Sonardyne system is attributed to its use of proven acoustic technology that is in everyday use in the offshore oil and gas industry. Sonardyne is a leading supplier of subsea navigation, positioning and communications systems for this industry and the company's Compatt 5 acoustic transponder proved to be the ideal hardware platform on which to base the tsunami detection sensor.

The reliability of the Sonardyne detection system was convincingly demonstrated to NIOT when the first sensors had only just been laid. The NIOT ship *Sagar Manjusha* was returning to Chennai after the deployment of six tsunami buoys. When the ship was an hour from port, one of the Sonardyne sensors it had just laid registered a tsunami warning, triggering an alert to NIOT. The vessel was prevented from entering the harbour for berthing and all vessels in Chennai port were evacuated as a precaution. Although a dangerous tsunami did not develop, it was felt that the Sonardyne system had proved its reliability and effectiveness.

The National Early Warning System for Tsunami and Storm Surges in the Indian Ocean is a collective project initiated by the Ministry of Earth Sciences of India. It was launched following the devastating tsunami of December 2004 and has become a significant demonstration of Indian expertise.

Responsibility for development and deployment of the tsunami buoy system and the algorithm for the seabed pressure reference systems was given to NIOT. The tsunami prediction modelling and the final prediction was assigned to the Indian National Centre for Ocean Information Services (INCOIS) in Hyderabad. The use of specialized acoustic technology from Sonardyne has enabled the creation of a system that now provides reassurance to vulnerable communities living around the coast of India.

Visit www.sonardyne.com for more information.

2.f) OCEANTOOLS CHOOSE BOWTECH PRODUCTS FOR SEA CON[®] CONNECTORS

A specialist hybrid subsea connector to carry AC and DC power and fibre-optic communications from the surface to a unique ROV system that The University of Limerick are developing in-house required a custom designed solution.

OceanTools Ltd, based in Aberdeen, Scotland were awarded the contract.

Having worked closely with the University before to design and build custom pressure housings, OceanTools subsequently chose SEACON (Europe) Ltd distributor Bowtech Products, as the company of choice for their specialist subsea connectivity and design.

This resulted in an optical hybrid mateable connector which has been fitted to the main ROV umbilical and junction pod. This connects using a range of other SEA CON[®] connectors to the three other subsea pods on this specialist ROV.

For further information on Bowtech's range of innovative SEA CON[®] products, please download the SEA CON[®] Newsletter or visit www.Bowtech.co.uk

2.g) SEVENCs LAUNCHES NEW CONTOURING TOOL

SevenCs is pleased to announce "Contour Generator" the latest development in its comprehensive suite of digital chart production and distribution software tools.

Contour Generator, which is a software plug-in for SevenCs existing ENC Designer application, automatically creates contours to "hydrographic rules" from source bathymetry.

Other source data tools from SevenCs include the very successful S-57 Writer plug-in for FME from Safe Software Inc.

For an evaluation copy of Contour Generator or to send us some sample data you would like to have converted or to find out about any of our other chart production and distribution tools please contact them at sales@sevencs.com

3. WHO'S ON THE MOVE?

3.a) NEW OFFSHORE BUSINESS DIRECTOR AT SEA

Hardy Sidhu has been appointed Offshore Business Director at SEA Group Ltd (a subsidiary of Cohort plc).

With an academic background in various marine sciences and technology and innovation management, Hardy joins SEA from a long and successful career in consultancy and the Fugro Group.

He has extensive experience in diverse offshore sectors, particularly within oil and gas exploration and production, submarine telecommunication networks, dredging/reclamation and mining.

Commenting on his appointment, Hardy said: "My primary aim is to realise the full potential of the company's Offshore division by leveraging the vast knowledge and capabilities within systems design, integration and production within SEA."

More details about SEA's capabilities are available on the Company's web-site at: www.sea.co.uk

4. EVENT, TRAINING & DEMONSTRATION NEWS

4.a) THE NEXT SUT LONDON EVENING MEETING WILL TAKE PLACE ON THURSDAY, 26 FEBRUARY 2009

The next SUT London evening meeting will take place on Thursday, 26 February 2009 and will be on the subject of "global energy prospects".

For further information, or to register for this event, please contact Michele Ross. Email:

michele.ross@sut.org or visit www.sut.org

4.b) IMAREST'S INAUGURAL METOCEAN COURSE SET FOR SUCCESS

Confirmed attendance by participants from several European countries at the three-day inaugural Metocean Awareness Course, being run by the Institute of Marine Engineering, Science and Technology (IMarEST), will ensure greater awareness of the metocean (meteorology and oceanography) conditions worldwide amongst project managers and engineers working in the offshore oil and gas industry. The course takes place in central London on 10-12 February 2009. Participants are coming from Denmark, The Netherlands, Norway and the UK.

"This new exciting learning event will give offshore industry participants a greater understanding of how metocean conditions impact the effectiveness of their work. Such understanding is essential for ensuring safe and economic designs and operations, and for meeting the challenges of both frontier and mature regions around the world," says Dr Chris Graham, course facilitator and one of the expert speakers actively involved in developing the new course.

The three-day course being held at IMarEST headquarters at 80 Coleman Street, London EC2R 5BJ. Dr Chris Graham explains: "Such a publicly available comprehensive metocean awareness course is not only a 'first' for IMarEST but also for the industry."

Further information on the course is available from technical@imarest.org and at www.imarest.org/events/metocean where the full programme for the three days appears; and from +44 (0)20 7382 2605.