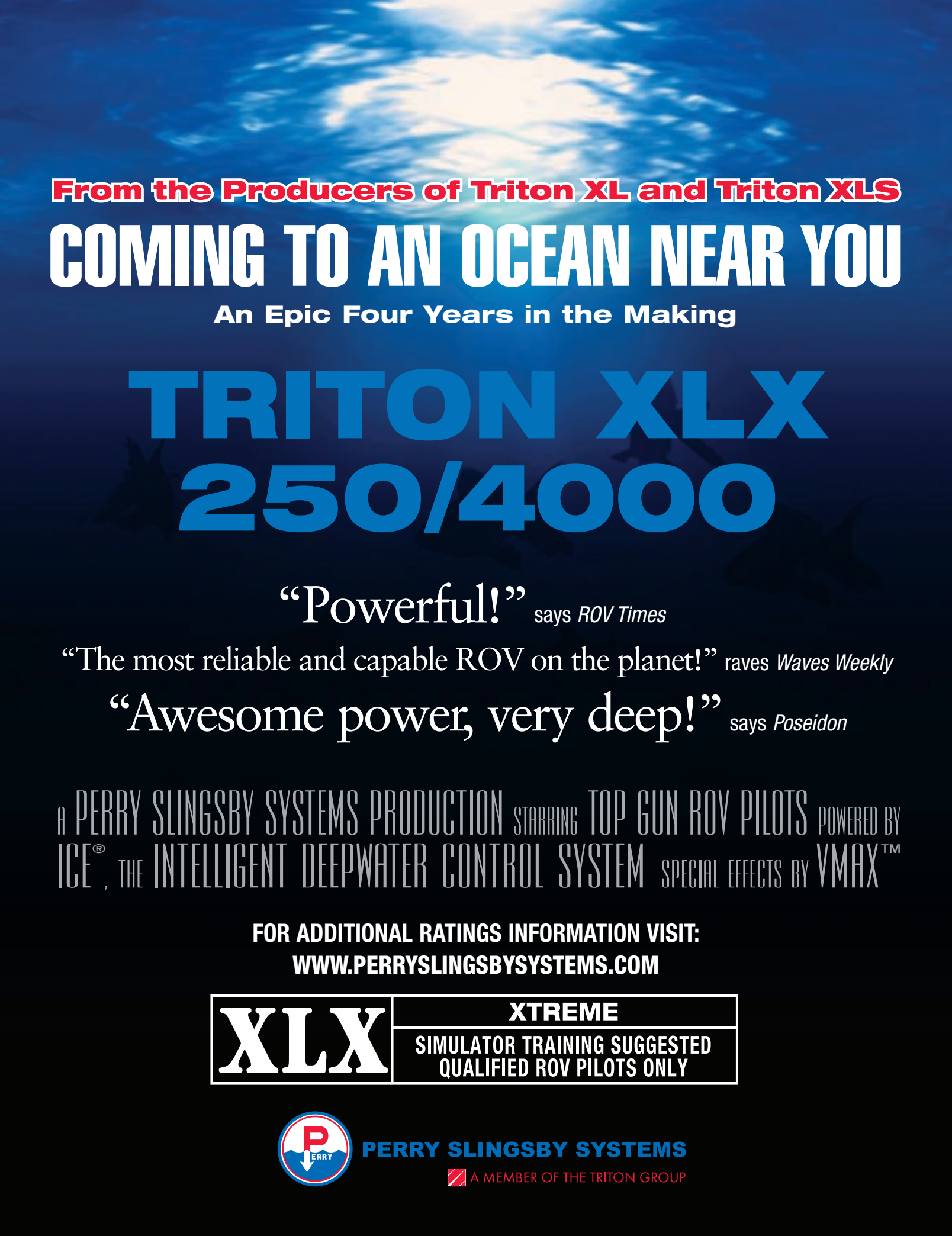
The Yearbook

MARINE TECHNOLOGY REPORTER

July 2008
www.seadiscovery.com

100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World-leading range of **cable location and tracking** equipment.

WORLD LEADERS IN MARINE NAVIGATION

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For further information on any TSS products please contact us: **T: +44 (0)1923 470800 E: tsssales@teledyne.com**

July 2008

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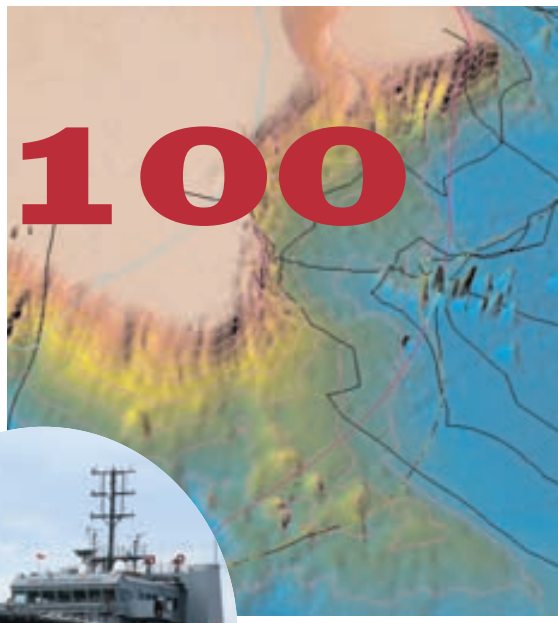
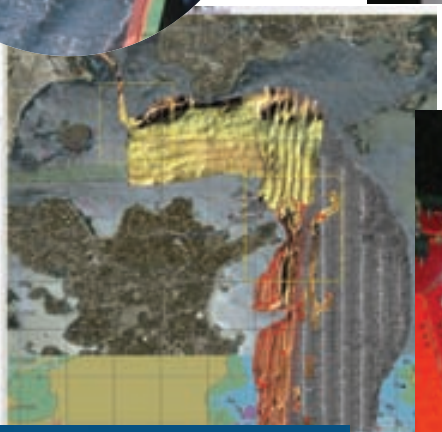
The MTR100





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An Electric Revolution

SEAEYE is renowned for its pioneering ROV technology which has made us worldwide leaders in electric ROVs, with names respected industry wide:

FALCON TIGER LYNX COUGAR PANTHER

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SAAB

www.seadiscovery.com

NEW YORK
118 E. 25th St., New York, NY 10010
Tel: (212) 477-6700; Fax: (212) 254-6271

FLORIDA
215 NW 3rd St., Boynton Beach, FL 33435
Tel: (561) 732-4368; Fax: (561) 732-6984

PUBLISHER
John C. O'Malley
jomalley@marinelink.com

Associate Publisher & Editor
Gregory R. Trauthwein
trauthwein@marinelink.com

Contributing Editors
Capt. Edward Lundquist, USN (Ret.) • Steve Withrow

Production Manager
Irina Tabakina
tabakina@marinelink.com

Sales Administration Manager
Tina Veselov
veselov@marinelink.com

Marketing Administration
Kami Accursio
accursio@marinelink.com

Manager, Accounting Services
Esther Rothenberger
rothenberger@marinelink.com

Manager, Public Relations
Mark O'Malley
momalley@marinelink.com

Manager, Information Technology Services
Vladimir Bibik
bibik@marinelink.com

CIRCULATION
Kathleen Hickey
mtrcirc@marinelink.com

ADVERTISING

Vice President, Sales and Marketing
Rob Howard
howard@marinelink.com
Tel: (561) 732-4368 • Fax: (561) 732-6984

Advertising Sales Manager
Lucia M. Annunziata
annunziata@marinelink.com
Tel: (212) 477-6700 • Fax: (212) 254-6271

Scandinavia
Roland Persson • roland@orn.nu
ÖRN MARKETING AB, Box 184, S-271 24 Ystad, Sweden
Tel: +46 411-184 00 • Fax: +46 411 105 31

Japan
Katsuhiro Ishii • amskatsu@dream.com
Ace Media Service Inc., 12-6, 4-chome, Nishiike, Adachi-ku, Tokyo 121, Japan,
Tel: +81 3 5691 3335 • Fax: + 81 3 5691 3336

The Third Annual **MTR100**, presented here in our Yearbook edition, has become a valuable exercise in assessing the overall direction and health of the subsea industry. The direction and health of this industry today can be summarized in a simple phrase: "Oil & Gas."

While academia and defense remain strong pillars, a near perfect storm has formed in regards to subsea technology and the hunt for offshore O&G. Record demand and prices for oil and gas globally; a strong orderbook for technologically advanced ships and boats to drill for and service this expanding industry; political pressure and renewed supprt in the U.S. to expand offshore O&G zones for drilling; and ever-improving technology which makes the discovery and recovery of subsea assets more cost-efficient: All have conspired to induce the most balance-minded executives to put all of their proverbial eggs into the mushrooming oil and gas basket.

The 2008 **MTR100** is filled with a diversity of subsea market players, but this year the flavor is decidedly O&G, with insights from not only the developers of subsea technology serving this market, but also some of the biggest names in the deployment of this technology to feed the world O&G need.

Gregory R. Trauthwein • trauthwein@marinelink.com • tel: 212-477-6700

MARINE TECHNOLOGY REPORTER
www.seadiscovery.com
Vol. 51 No. 6
ISSN 1559-7415
USPS# 023-276

118 East 25th Street, New York, NY 10010
tel: (212) 477-6700;
fax: (212) 254-6271

Marine Technology Reporter is published monthly except for February, August, and December by New Wave Media, 118 E. 25th St., New York, NY 10010-2915. Periodicals Postage at New York, NY and additional mailing offices.

POSTMASTER: Send address changes to MARINE TECHNOLOGY REPORTER, 118 E. 25th St., New York, NY 10010-2915. Postmaster send notification (Form 3579) regarding undeliverable magazines to Marine Technology Reporter, 118 East 25th Street, New York, NY 10010.

Publishers are not responsible for the safekeeping or return of editorial material.

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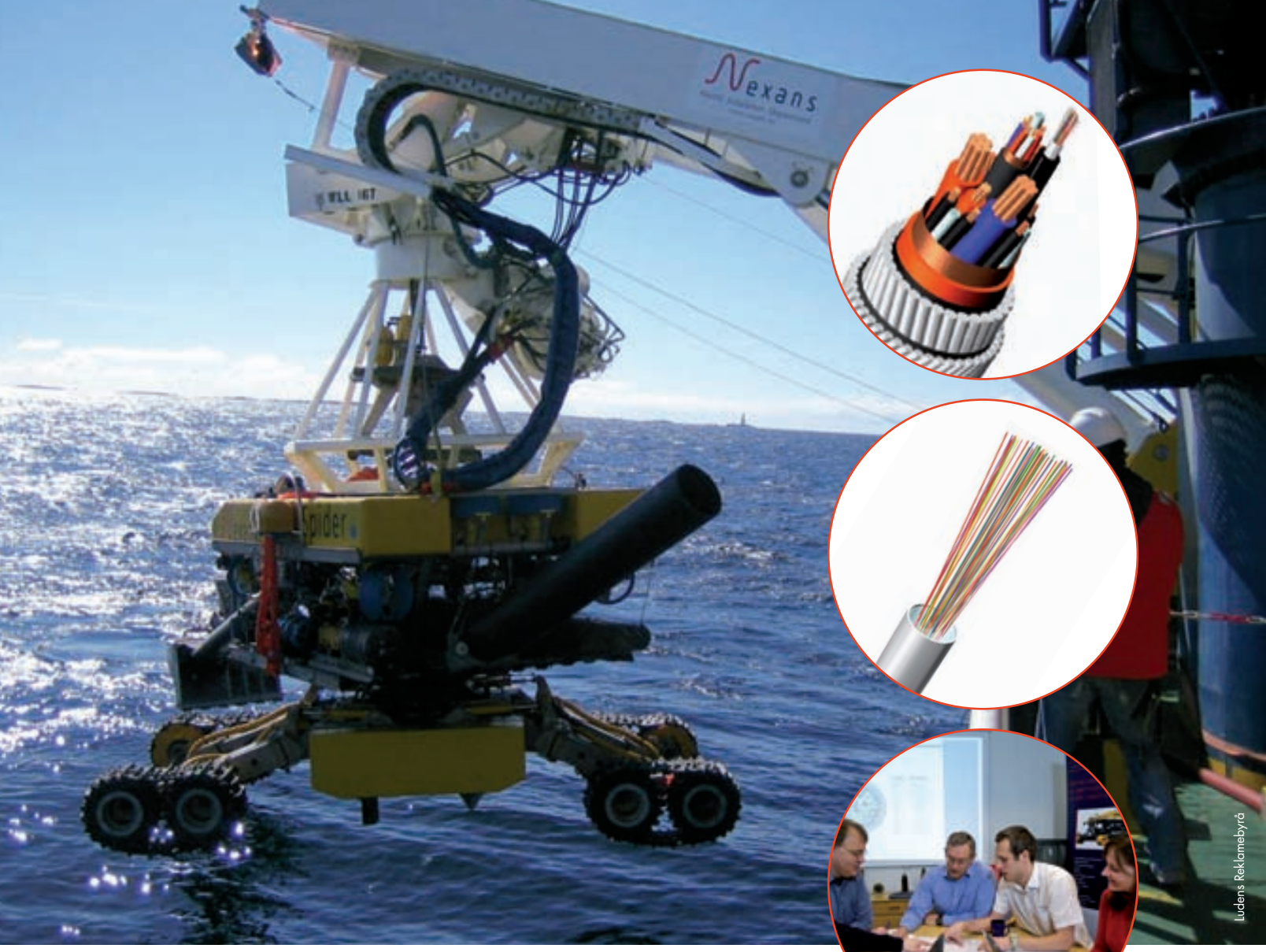

Ludens Reklamebyrå

ROV Umbilicals and Tethers Reliable at any depth

ROV Umbilicals and Tethers
Nexans is an established supplier of underwater cables to the international ROV market. Our cables are highly dynamic, torque balanced and compact and are known for their reliability and robustness.

We have designs for the majority of ROVs and we develop new designs for specific applications according to customer specifications. Our deep water umbilicals are designed for dynamic deep water applications rated down to 6000m.

Fibre in a Steel Tube
Nexans is the world leader in Fibre in Steel Tube and this technology is an important element in all our designs.

Combinations of multimode and single mode fibres are inserted in a laser welded tube and filled with petroleum filler for protection.

Nexans: Innovation through experience
Our cable production in Norway was first established in 1915. Today, we are a part of the world's largest cable producer, Nexans. Our underwater cable capabilities include offshore power and signal umbilicals, customised underwater communication cables, and fibre optic submarine cables.

Our ROV umbilcals and tethers are produced at our Rognan facility, the world's only cable factory above the Artic Circle.

Because so much of your performance runs through cables.

Nexans

Nexans Norway, Telecom Division, www.nexans.no.

Global expert in cables and cabling systems

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The World Floating Production Market Report 2008-2012

Floating production has proved a cost-effective method of developing both marginal and world-class offshore fields worldwide. In the past five years, 84 floating production units of varying types have been installed. In the next five years, the forecast is for the installation of over 123 floaters.

The World Floating Production Report by energy business consultants Douglas-Westwood is designed to deliver an overview of future prospects within the floating production sector. It analyses historic and future FPS installations over the period 2003-2012 by region, operator, water depth, and vessel type.

www.dw-1.com

$2.5B for Russia's First Sub-sea Infrastructure

Lukoil announced plans to spend some $2.5 billion to build Russia's first subsea pipeline network, which will be an integral part of its plan to develop two major fields in the Caspian Sea, according to a report on www.energytribune.com. By 2020, the company hopes to have over 2,000 km of underwater flow lines in place in the Caspian Sea's northern sector, and the first phase of the project could be onstream by 2012.

The part of the Caspian shelf that belongs to Russia contains over 88.25 Tcf of gas and 2.25 billion barrels of oil.

DSV Contract Signed

Singapore Technologies Engineering Ltd (ST Engineering) said that its marine arm, Singapore Technologies Marine Ltd (ST Marine), won a $94m contract to build and outfit a Diving Support Vessel (DSV) for a foreign customer registered in Singapore. Construction is scheduled to begin in January 2009 and delivery is planned for mid 2010.

Brazil Oil Reserve Gets Dedicated Spill Support

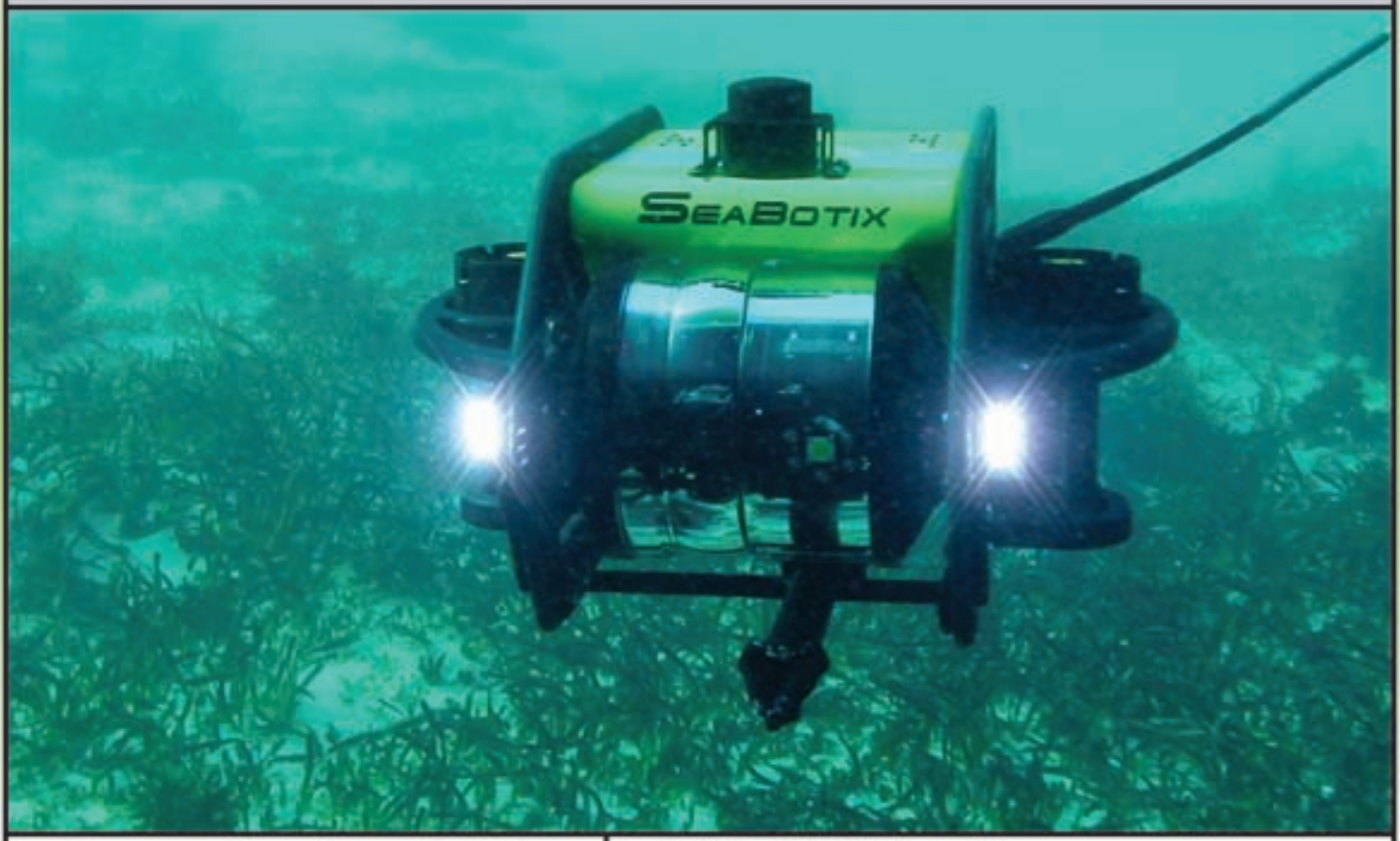
Following the world's largest oil discovery in eight years — the Tupi field — the South America office of Applied Science Associates, Inc. (ASA) announced a contract with Petrobras that represents a more dedicated model for emergency spill support. Petrobras expanded its relationship with ASA, to provide an enhanced support contract for emergency preparedness through dedicated oil spill modeling and response. Many of the world's energy producers purchase and use OILMAPM, ASA's oil spill modeling and simulation software. Traditionally, OILMAP licenses are purchased by energy companies with ASA providing support, training, and software updates. Petrobras has commissioned a dedicated staff of ASA's professional modelers to work on site and on-call 365 days a year.

MTS ROV Committee Announces Scholarships

Laura Fenton, Joshua Leighton, Brycen Nakashimi, and Brian Tiefenbach have been selected as recipients of the Marine Technology Society's 2008 ROV Committee Scholarships. In addition Dominique Evans, Milton Lywood, and Stacy Mauzey received special MATE Center MTS ROV Committee Scholarships. Drew Michel, Chairman of the ROV Committee of MTS initiated the scholarship program in 1994. Since then it has awarded over $120,000 to deserving students. Scholarship applications for 2009/10 must be received by April 15, 2009. Details on how to apply and additional information on the MTS ROV committee can be found at http://www.rov.org/

Size doesn't have to sacrifice stability!

SeaBotix



The most Versatile and Stable MiniROV on the Market.

The latest addition to the SeaBotix line of MiniROVs is the LBV150SE-5². Uniquely featured with dual vertical thrusters for added vertical thrust, stability and control. The LBV150SE-5² offers incredible performance both horizontally and vertically using the latest Brushless DC thrusters. In addition to the added power/control the LBV layout further increases stability by distributing the weight outboard. The system is easily configured with a wide variety of options to meet each operator's requirements.

LBV150SE-5²

Depth rating 150 meters **Umbilical** 175 meters on reel **Thrusters** 5 high output Brush-Less DC including lateral **Cameras** hi-res color and low light B/W **Optional equipment** scanning sonar, USBL tracking system, grabber, video enhancement, multi-beam sonar and additional lighting

ROV

As a stand alone ROV or simply ROV mode the LBV150SE-5² is a highly capable free swimming ROV. Equipped with all the standard features of the proven LBV line of MIniROVs.

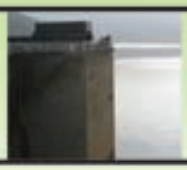
CRAWLER

Add the crawler skid enabling the LBV150SE-5² to adhere to hard surfaces such as a ship hull for unmatched precision and stability. Increased working capability to 5 knots current.

LBV150²
The benchmark MiniROV system
Depth: 150m
Umb: 100-175m

LBV200²
Powerful and portable
Depth: 200m
Umb: 250m

LBV300²
Long line or extreme power
Depth: 300m
Umb: 350-750m



LBV600²
Deep water rapid response
Depth: 600m
Umb: 750m

SeaBotix Inc. • 2877 Historic Decatur Road, Suite 100, San Diego, CA, 92106, USA • Tel: +1 619-450-4000 • www.SeaBotix.com

MTR 100

Aanderaa Data Instruments AS

Nesttunbrekken 97, P.O. Box 34 Slåtthaug,
5851Bergen, Norway
Tel: +47 55 60 48 00
Email: info@aadi.no • www.aadi.no

Aanderaa Instruments develops, manufactures and markets oceanographic and meteorological instruments and special systems for collecting environmental data. The products are designed to be rugged, reliable and particularly well suited for long-term applications in remote areas without electricity supply. Data can be stored internally in a highly protected memory or transferred in real-time via cable, VHF/UHF radio, satellite, modem or GSM.

AC-CESS Co. U.K. Ltd

Tyrebagger Works, Clinterty,
Kinellar, Aberdeen, AB21 0TT
Tel: + 44 (0)1224 790100
Email: info@ac-cess.co.uk • www.ac-cess.com

The AC-ROV is a portable small ROV. A complete system comes in one rugged waterproof hand carry case with an all up weight of 18kg. It defines the "Hand Carry" class in underwater inspection systems. CE Marked and certified for all "feet wet" applications, offshore, onshore or down pipes for underwater inspection. One person can deploy the system in less than 3 minutes.

Technology Profile: Standard System Components - AC-ROV, surface control unit, intuitive 3-D hand controller, depth sensor, monitor & stand options, tether configuration to client requirement, tether deployment system (TDS), flight assist functions, tool kit, storm case, instruction manual, training, operators online secure area.

Options - 2 function manipulator, slip ring, rear view camera and light, custom cable reel (additional tether to 120m), video grabber

Applied Acoustic Engineering Ltd.

Marine House, Marine Park, Gapton Hall Road
Great Yarmouth, NR31 0NB, UK
Tel: +44 1493 440355
Email: general@appliedacoustics.com
www.appliedacoustics.com
President: Adam Darling
Sales Manager: Gavin Willoughby
Square Footage: 20,000
Testing Capabilities: (ie. test tanks, boats): Multiple test tanks (internal+external), environmental chamber, pressure testing, calibration facilities
Number of Employees: 40

Applied Acoustics has been supplying innovative acoustic technologies for almost two decades. Initially manufacturing acoustic positioning beacons for the offshore oil and gas industry, the company now provides an extensive range of additional acoustic products, including a subsea tracking system and seabed profiling equipment to survey companies, oceanography and research institutes, defence and law enforcement agencies. Technology Profile: The products use acoustics, underwater sound waves, in location, positioning, navigation and data acquisition applications. The range of products includes a variety of positioning and release beacons, the innovative USBL Tracking System, Easytrak and seismic devices for offshore geotechnical

[SOUND PRINCIPLE NO. 12]

Test the waters with the team that's been there.

Joel Edelman
Applications and Instrumentation

Chris Ward
Global Applications Development

Experience

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Acoustic Doppler Velocimeter

If there's a body of water to be explored, Chris and Joel have probably been there... from the icy Antarctic to the tropical Pacific of the Polynesian Islands. Our customers have been there too, giving us a lot of common ground, like experience in applying acoustic Doppler technology to waves, tides and currents — anywhere in the world.

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Easytrak

and seabed analysis, known as sub-bottom profiling. The seismic energy sources and sound sources have been designed as a modular system so the various components can be mixed and matched to create a general purpose system or custom built.

Boeing - Maritime ISR Systems

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Anaheim, CA 92806-1911
Tel: (714) 762-5838
Email: jameson.a.garrett@boeing.com
www.boeing.com/defense-space/ic/sis/ais/marine.html
CEO: Jim McNerney
President, Integrated Defense Systems: Jim Albaugh
Director, Advanced Information Systems: Dan Jones
Marketing Director, Advanced Info Syst: Sean Rice
Director, AIS-Maritime ISR Systems: Tom Jones
Eng. Director, AIS-Maritime ISR Systems: Tom Drury
Number of Employees: 180
Annual Sales: $80m

Within Boeing's Intelligence and Security Systems, Advanced Information Systems (AIS) resides Maritime ISR Systems - Boeing's organization for core expertise in undersea systems. Formerly part of Rockwell International, Maritime ISR Systems has produced more than 36 undersea systems during its 40-year history. In parallel with the vehicle design, Boeing has invested in development of high-level, fault-tolerant autonomous software. Current field-tested and operational systems include the Navy's AN/BLQ-11 (mine survey AUV) and the Echo Ranger LDUUV (recently transitioned from commercial surveying to a DoD development testbed).

Technology Profile: The AN/BLQ-11 autonomous Unmanned Undersea Vehicle (UUV) provides the US Navy with a covert mine countermeasure capability that can be launched and recovered through the submarine's torpedo tube while underway. It is currently the US Navy's only submarine-qualified 21-in. heavyweight vehicle. The autonomous UUV carries multiple sonar and navigation systems and control software for the mine reconnaissance mission. The BLQ-11 system is a temporary alteration (TEMPALT) and the vehicles and shipboard deployed equipment is all handled and loaded like a torpedo.

Currently, Echo Ranger is transitioning from commercial survey missions to an operational LDUUV testbed for Maritime ISR Systems' government customers. Field testing of the AN/BLQ-11 has demonstrated the required level of autonomy, navigational accuracy and mine-like object detection. After successful end-to-end L&R tests this fall, BLQ-11 will validate the Navy's plan for a submarine-deployed UUV. As an LDUUV demonstrator, Echo Ranger will validate open hardware/software architectures and future USW technologies.

Rockland Scientific International

520 Dupplin Road, Victoria BC Canada V9A 4B6
Tel: +2503701688;
E-mail: Fabian@rocklandscientific.com

Rockland Scientific designs and manufactures high-accuracy instrumentation for oceanographic research and is a leading supplier of measurement systems for microstructure turbulence in natural waters. The company is headed by Rolf Lueck and Fabian Wolk, both physical oceanographers with academic background in ocean turbulence. Rockland produces an array of high-accuracy research instruments, specializing in the measurement of turbulence in oceans, lakes, and rivers. The Vertical Microstructure Profiler (VMP) can be configured for deployment in coastal areas, as well as for deep sea applications up to 5500 m depth.

SeaBotix Inc.

1425 Russ Blvd, T112D
San Diego, CA 92101
Tel: +1-619-239-5959
President: Donald Rodocker
www.seabotix.com

SeaBotix is a leading manufacturer of Mini-ROV systems since the introduction of the LBV in 2001. Over the years more than 430 systems have been sold around the world into a diverse group of operators/owners. Founder Donald Rodocker has been involved in the underwater industry for over 30 years. Donald's most famous endeavors being the first SAT dive to the Andrea Doria, gold recovery from the HMS Edinburgh and founding of multiple companies that now represent the leaders in their class. SeaBotix manufactures a full line of MiniROVs. LBV success is attributed to the capability, intuitiveness and affordability. Each SeaBotix system is designed with unique aspects in the MiniROV market. Such aspects include powerful thrusters including lateral, small diameter umbilical, umbilical lengths to 750 meters, 270º field of view, video overlay, highly intuitive control system, auto functions and a multitude of options.

Bluefin Robotics Corporation

237 Putnam Ave., Cambridge MA 02139
Tel: 617 715 7080
Email: dabraham@bluefinrobotics.com • www.bluefinrobotics.com
CEO/President: David P. Kelly
COO: Robert Grieve
Marketing Director: Deanna Abraham
Facilities: Bluefin occupies two facilities in the Boston area. The main facility is a 37,000 sq. ft. headquarters on Putnam Avenue in Cambridge, MA which houses three floors of engineering, manufacturing, and corporate administrative functions. Our marine operation location is based in East Boston, which provides Bluefin with year-round ocean access for testing and sea trials.
Testing Capabilities: Four test tanks, machine shop, 58 ft boat, RHIB, 35 ton crane
Number of Employees: 65

HAUV

Bluefin Robotics is a leader in the development and manufacture of Autonomous Underwater Vehicles (AUVs), derivative systems, and related technology. Since 1997, it has brought innovative and technologically advanced AUV solutions to military, commercial (oil and gas survey, sea floor mapping) and scientific markets worldwide. Bluefin became a wholly-owned subsidiary of Battelle Memorial Institute in 2005. Technology Profile: Bluefin's wide range of vehicles includes the cost-effective Spray glider, the non-tethered Hovering Autonomous Underwater Vehicle (HAUV) designed for ship hull inspection, and the BF Series of AUVs, available in a number of standard and customized configurations. In addition, its product family includes innovative propulsion, navigation, and battery systems that is has developed and refined based on years of experience in subsea component design. Bluefin Robotics' BF Series vehicles are the only commercially available AUVs that boast a completely modular, free-flooded architecture for optimum performance at even the greatest depths. All BF Series AUVs feature rapid, on-the-fly swapping of our specially designed pressure-tolerant batteries for safe, fast turnaround at sea - without ever opening a pressure housing. Bluefin has licenses with MIT, Scripps Institute of Oceanography, and Monterey Bay Aquarium Research Institute. These partnerships in combination with our in-house R&D programs, allow us to deliver innovative subsea solutions to our customers worldwide.

Sidus Solutions Inc.

P.O. Box 60767, San Diego, CA 92116
Tel: +1 619-275-5533
Email: info@sidus-solutions.com
www.sidus-solutions.com
President: Leonard Pool
Marketing Director: Partrice Alexander
Engineering Director: Jeff Gardiner
Testing Capabilities: (ie. test tanks, boats)
Electronics & Video test facilities
Number of Employees: 10
Annual Sales (US$): $3.5m

Sidus Solutions, Inc. is an integrated systems provider of robust security and video surveillance systems, services and equipment for numerous worldwide businesses in the heavy commercial, industrial and oil and gas markets. The company's solutions are fully capable of operating in any industry requiring remote surveillance systems, and the company is proud to offer its customers flexibility and a high level of commitment.

Technology Profile: Each system delivered by Sidus is custom built specifically for the individual needs of the customer.

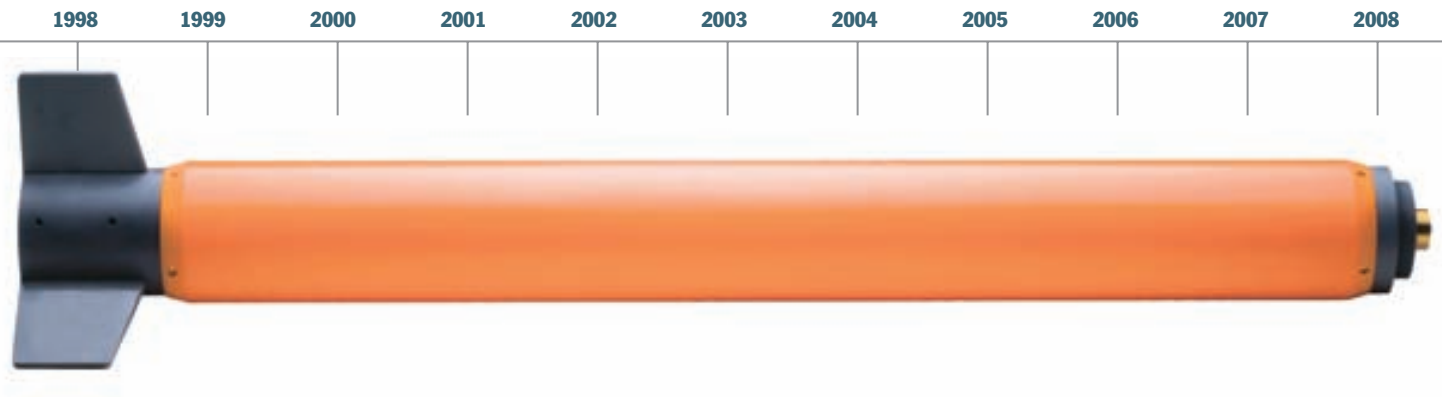
However, its engineering services cover a span beyond its product development and delivery. Its engineering staff provides seamless system integration design, installation and commissioning of all remote control, management, monitoring and video surveillance systems.

SeeByte Ltd

Orchard Brae House, 30 Queensferry Road
Edinburgh EH4 2HS, SCOTLAND, UK
Telephone: +44 (0) 131 447 4200
info@seebyte.com • www.seebyte.com

SeeByte was founded in 2001 in Edinburgh, Scotland with the aim of bringing to market technologies designed at the world-class Ocean Systems Laboratory of Heriot-Watt University. OSL is consulted by the world's leading operators in the offshore, military and transportation sectors.

We got it right the first time



When we designed SeaSPY we set out to build a magnetometer that would last. A magnetometer that would not only collect data, but would be the most accurate magnetometer in the world. A magnetometer that would be free of heading errors, sensor orientation restrictions and consumable parts. A magnetometer rugged and reliable enough that our customers would it use for decades.

It seems like only yesterday when we sold our first SeaSPY, but its already been one decade. And after 10 years and hundreds of SeaSPYs we are excited that our manifesto still holds true. We continue to look for ways to ensure that SeaSPY does the best job for our customers. And every time we do, we make the improvements backward compatible to the first SeaSPY ever sold. By the way, the first SeaSPY owner retired, but his magnetometer is working strong for a new company.

Collecting data is not the end of the story. It's the beginning.

Marine Magnetics

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Thomas & Jim Chance keep C&C on track as a global subsea leader.

C & C Technologies, Inc.

730 East Kaliste Saloom Road, Lafayette, La.
10615 Shadow Wood Drive Suite 100
Houston, Texas
Tel: (337) 210-0000, Tel: (713) 468-1536
Email: info@cctechnoll.com • www.cctechnol.com
CEO & President: Thomas Chance
Vice President: Jim Chance
Employees: 400+

C & C provides a range of survey and mapping services for the land and offhore oil & gas industry, the telecommunications industry and several government entities. The company consist of six divisions including: the Land and Transition Zone Survey Division, Marine Construction Survey Division, NOAA Survey Divisions, Geotechnical Division, and the Worldwide DGPS Services Division. Several in-house departments including a Database, System Development Information Technology, HSE, and QA as well as a mechanical fabrication department support all C & C operational divisions. C & C Technologies pioneered the world's first commercially operated AUV for oil and gas exploration. As a technological leader, C & C has made ground breaking advancements to the survey industry with innovations such as C-Nav, Globally-corrected GPS and C-Surveyor AUVs. C & C remains the worldwide leaser in the deepwater AUV survey services

CARIS

115 Waggoners Lane
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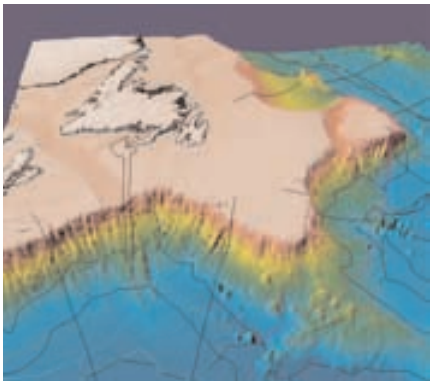


CARIS gives value to spatial data.

CARIS develops and supports rigorous, technologically advanced geomatics software. Its systems give value to spatial data and empower customers with information that is meaningful. Providing software solutions to hydrographic and marine organizations since 1979, CARIS pioneered the use of geomatics technology in this industry. In this time the company has gained a secure understanding of the daily operations, technological needs, and challenges faced by their maritime clientele.

(Continued on page 20)

Bourbon

33 rue du Louvre, 75002 Paris, France
Tel.: +33 1 40 13 80 16
www.bourbon-online.com
CEO: Jacques de Chateauvieux
COO: Christian Lefèvre
CFO: Laurent Renard
2007 Revenue: $1.2 billion

Bourbon offers to the most demanding oil and gas clients worldwide a full line of new generation, innovative, high performance vessels and an expanded offer of subsea services. By 2012, Bourbon intends to become the leader in modern offshore oil and gas marine services. Bourbon also protects the French coastline with its vessels chartered by the French Navy, and is developing its bulk transport business for industrial groups within long-term contract relations.

Classified by ICB (Industry Classification Benchmark) in the "Oil Services" sector, Bourbon is listed for trading on Euronext Paris, Compartment A, and is included in the Deferred Settlement Service SRD and in the SBF 120 and Dow Jones Stoxx 600 indices.

With 4,300 professionals and a fleet of 236 owned vessels, Bourbon is present in more than 25 countries.

Each of the Bourbon Divisions is developing real expertise that combines quality of service, technological advances, professionalism and long-term relations with its contractors.

Subsea Services: The start of production of a number of deep offshore oil fields in the last decade has generated new and growing deepwater maintenance and repair needs. In this context, Bourbon has expanded its line of services by launching a new Offshore Activity named Subsea Services, offering IMR services (Inspection, Maintenance and Repair). Building on an initial successful experience in this segment in West Africa through its MPSV fleet and its Engineering and Management subsidiary Bourbon Offshore Gaia, BOURBON has decided to expand both its line of services and its resources, completing it with the expertise of DNT Offshore, a company that operates subsea robots for IMR, which was acquired in December 2007 and is recognized for the qualification of its team and the quality of its fleet of Remotely Operated Vehicles (ROVs).

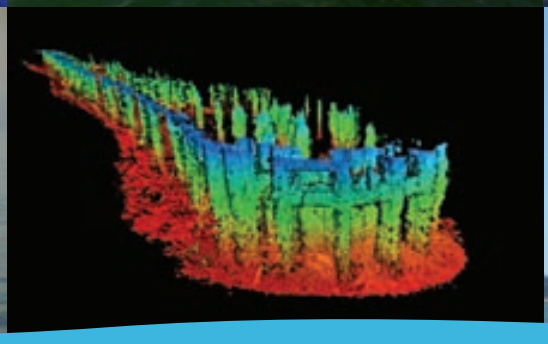
In order to keep pace with the strong growth in this new Activity and strengthen the existing fleet of 11 vessels, Bourbon has already placed orders for 19 vessels, including the latest order for a series of 10 GPA 696 IMR vessels for 450 million euros, whose design is specifically adapted to this type of operations. The Horizon 2012 plan also targets investment in its fleets of ROV's increasing the number from 7 to 21 units by 2012.

CEO Jacques de Chateauvieux has helped to orchestrate the meteoric rise of the $1.2B Bourbon.

(Photo Courtesy: Bourbon)





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team

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USA & Canada Tel: +1 888 340-2627 e-mail: salesamericas@codaoctopus.com
www.codaoctopus.com

CodaOctopus

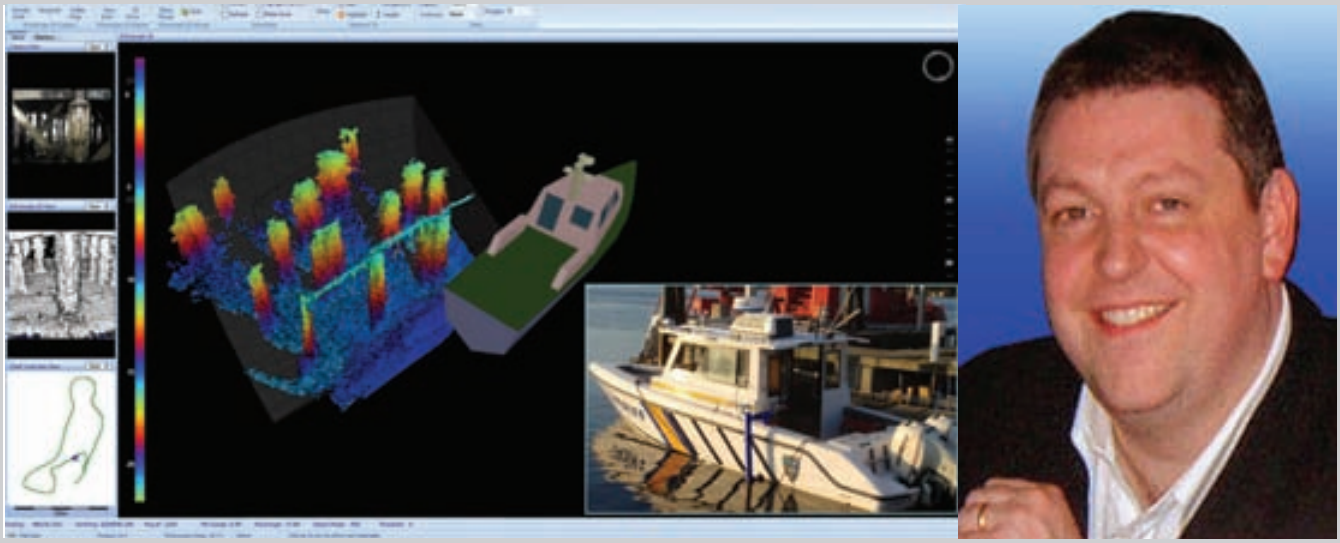
CodaOctopus Group, Inc

164 West 25th Street, 6th Floor, New York, NY 10001
Tel: +1 212 924 3442
Email: info@codaoctopusgroup.com • www.codaoctopus.com
CEO/President: Jason Reid
VP, Americas: Anthony Davis • VP, Europe: Geoff Turner
Number of Employees: 99
Annual Sales (US$): $13.9m

CodaOctopus Group, Inc. is engaged in 3D subsea technology and is the developer and patent holder of real time 3D sonar products, playing a critical role in the next generation of underwater port and harbor security and terrorism prevention. It produces hardware, software and fully integrated systems that are sold and supported on a worldwide basis. Operations are primarily in two distinct market segments: marine geophysical survey and underwater defense/security. With a focus on oil and gas, construction, oceanographic research and exploration, customers include survey specialists, research institutions and dredging, construction and salvage companies. The wide range of Coda and Octopus branded products encompasses geophysical data collection and analysis, thermal printing and precision attitude and positioning sensing. In the field of maritime security we work with ports and harbors, state and federal government agencies and defense contractors. With the Coda Echoscope, a unique, patented instrument that supplies accurate 3D visualization, measurement, data recording and mapping of underwater objects, continued development has led to the Coda Underwater Inspection System (UIS). Intensifying its focus on port security, recent subsidiary company, The Port Security Group is an authority on maritime security projects, defining and guiding system design and project management. Two engineering services subsidiaries, Martech Systems (Weymouth) Ltd, (UK) and Colmek Systems Engineering, (US), enable the company to provide engineering services to a wide variety of clients in the subsea, defense, nuclear and pharmaceutical industries. These engineering capabilities are increasingly being combined with our product offerings, bringing opportunities to provide complete systems, installation and support.

Technology Profile: The Coda Underwater Inspection System (UIS) is reportedly the world's first and only fully integrated high-resolution real time 3D inspection system. It is designed to deliver precise and intuitive 3D images in real time and is designed to inspect large areas with 100% coverage and 98% probability of detection. The UIS is built on the knowledge gained in the development and testing of a Mobile Inspection Package which was developed in collaboration with the Center for Ocean Technology, USF, with funding from ONR and USCG. At the heart of the UIS is the unique Echoscope real time 3D sonar incorporating its cutting edge phased array technology to simultaneously generate more than 16,000 beams. This results in an instant three-dimensional sonar image where the position of every data point is accurately known, producing detailed images from a single sonar ping. To ensure accurate positioning the Echoscope is integrated with the Octopus F180 in the UIS, giving precise attitude and positioning data at accuracies of up to 10cm, with heading better than 0.05°. This ensures that all data is correctly geo-referenced, enabling real-time mosaicing as well as quick relocation of areas of interest.

CodaOctopus Group is a developer and patent holder of real time 3D sonar products, led by CEO Jason Reid.



(Continued from page 14)

Technology Profile: The CARIS product line provides a complete 'Ping-to-Chart' solution from post-processing of bathymetric data to chart production, to spatial database management and production, through to Internet distribution. HIPS and SIPS offer a comprehensive bathymetric data cleaning and validation tool integrated with powerful vector product creation. Take the raw sounding data from survey to chart. Supporting over 40 industry standard sonar data formats, HIPS and SIPS can easily integrate into any workflow. Bathy DataBASE allows the user to centrally manage large bathymetric data sets coming from different data sources. The software allows users to validate and combine bathymetric data sets as input for further.

CaviDyne, LLC

P.O. Box 358628
Gainesville, Fla. 32635
Tel: (352) 275-5319
Email: aforneris@cavidyne.com
www.cavidyne.com
CEO: John R. Fulkerson
President: Dr. Ilia Kondratiev
Vice President: Antone L. Forneris
Engineering Director: Vladimir Paramygin
Number of Employees: 6
Annual Sales (US$): <$1,000,000

CaviDyne, LLC was conceived in 2002, when a team of Russian scientists and engineers that had been studying the physics of cavitation joined efforts with a group of American entrepreneurs. Together, this team began to study high-energy or ultra-cavitation and to search for potential commercial applications of that technology. The first promising application developed by the group is for cleaning underwater surfaces at relatively low pressures. In 2003, CaviDyne was formed and research and development began on the company's first high-energy cavitation underwater cleaning system, the CaviBlaster. Throughout the R&D process, attention was focused on maximizing the efficiency of the cavitation-generating nozzle. By 2005, CaviDyne researchers had developed a nozzle that generated cavitation bubbles in a jet of water passing through it. This was an important stage in the development of the technology because it eliminated the danger of injury to the diver through contact with high-pressure

CEO Fulkerson

water or rotating machinery. The CaviBlaster system consists of an engine or motor driving a pump that propels water through a proprietary nozzle. As the water exits the nozzle, the pressure drops and the water begins to vaporize. As the jet velocity drops or when it hits an obstacle the voids (bubbles) implode due to increased pressure. The collapsing bubbles release energy and produce ultrasound, creating a distinctive noise. The force generated by the energy released during implosion of the cavitation bubbles creates small-scale shock waves that tear foreign material off of the surface to be cleaned.

Deep Ocean Engineering

1431 Doolittle Drive, San Leandro CA 94577
Tel: 510-562-9300
Email: customersolutions@deepocean.com
www.deepocean.com

Deep Ocean designs, builds and tests its ROV's from its plant in California. Deep Ocean has been in continuous operation for 25 years and has sold more than 530 ROV systems in over thirty countries worldwide. Deep Ocean's ROV systems have been utilized in a broad range of industry applications - military, security, salvage, long tunnel and pipeline inspection, customs, nuclear and hydroelectric power plants, dams and lakes, offshore oil and gas servicing, scientific research and education, fisheries and broadcast filming. Customers include the military organizations of eighteen (18) countries (including the U.S. Navy, Naval Surface Warfare Center, Explosive Ordinance Disposal, Naval Facilities Engineering and Service Center and Army Corps of Engineers), the FBI, Canadian Defense, UK Customs, various utility power companies, science, law enforcement and security groups.

DeepSea Power & Light

3855 Ruffin Rd., San Diego, CA 92123-1813
Tel: 858-576-1261
E-mail: sales@deepsea.com
www.deepsea.com

DeepSea Power & Light's growth means it is moving into a 36,000 sq. ft. state-of-the-art facility just up the road from its current location. The company's new address, as of September 1, 2007, will be: 4033 Ruffin Road San Diego, CA 92123-1817.

DeepSea Power & Light has designed and manufactured oceanographic equipment for more than 20 years, including underwater lights, underwater video cameras and batteries.

EdgeTech/ORE Offshore

4 Little Brook Road,
West Wareham, MA 02576
T: (508) 291-0057 x 713
www.edgetech.com
www.ore.com
VP: Greg MacEachern ,ORE
Testing Capabilities: Acoustic test tank, pressure test facility, company boat for sea trials
Number of Employees: 60


EdgeTech 4200 Towfish

EdgeTech Marine and ORE Offshore are sister companies that are based out of the same facility in West Wareham, Mass. The two companies employ 60. EdgeTech traces its history back to 1965 when it operated as a division of EG&G. In 1995 the division established itself as a private company and selected the name EdgeTech, in part to honor the late Dr. Edgerton, an MIT professor and marine instrumentation pioneer. EdgeTech develops and produces a variety of standard and engineered to order marine products and systems including side scan sonar, sub-bottom profilers and combined, integrat-

ed and modular imaging systems. These systems come available in towed configurations as well as for deep towed, AUV, ROV and custom platforms. ORE Offshore was founded in 1961 with the original focus of the company being subsurface flotation and acoustically released anchors for oceanographic moorings. ORE has expanded and is now a leading manufacturer in high accuracy acoustic positioning, communication and control systems. ORE has two main product lines; Underwater Navigation & Positioning and Acoustic Communication & Control. The Navigation & Positioning systems are used to track underwater vehicles and the Communication & Control products are used to locate, communicate and activate or control devices underwater. Technology Profile: EdgeTech develops a variety of high end marine products by utilizing and enhancing a set of core technologies, which includes, but is not limited to, Full Spectrum CHIRP Processing, Multi-Pulse Technology, Dynamically Focused Arrays, Synthetic Aperture Sonar (SAS), Bathymetry, Telemetry, Modular Design, and Compact & Low Power Electronics. The company offers a wide range of standard sonar systems but also prides itself on developing and delivering engineered to order systems for customers with unique requirements. ORE Offshore designs and manufactures acoustic products for many underwater applications.

The company's core technology is acoustic tracking and underwater communications.

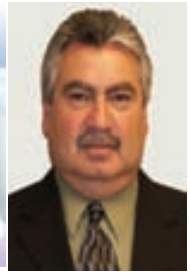
FarSounder, Inc.

43 Jefferson Boulevard, Warwick, RI 02888-1078
Tel: 401-784-6700
Email: joann.aldsworth@farsounder.com
www.farsounder.com
CEO/President: Cheryl M. Zimmerman
VP Sales & Marketing: Captain Ian Bowles
VP Engineering: Matthew J. Zimmerman
Facilities: One facility for Worldwide Corporate

FarSounder is a developer and manufacturer of advanced 3D sonar systems for marine navigation, obstacle avoidance and security applications. The privately held company has patented technology with four patents issued and has been in business for 7 years. The first commercial product line was launched in 2004.

Channel Industries, Inc.

839 Ward Dr., Santa Barbara, CA 9311
Tel: 805-967-0171
Email: ciisales@channeltech.com • www.channelindstries.com
CEO: Robert F. Carlson • President: Elias Medina • Engineering Director: Michael Wittman
Square Footage: 27,000 sq. ft. • Employees: 80
Annual Sales ($): $10m



Medina

Channel Industries, Inc. (CII) was founded and incorporated by R.F. Carlson and R.M. Callahan in 1959. In 1983, a parent company called Channel Technologies was formed and Channel Industries evolved into a subsidiary company. Today, Channel Industries is known for its expertise in manufacturing piezoelectric ceramics. Channel Industries is a provider for a variety of applications and market segments; transducers, hydrophones, and ultrasonic devices Channel's piezoelectric plant in Santa Barbara, California is equipped to produce large orders quickly and with uniform electrical properties. Channel prides itself on maintaining the flexibility to handle small custom orders; some of which can be delivered in approximately three weeks.

Technology Profile: Since 1959, Channel Industries, Inc. (CII) provides piezoelectric ceramic discs, plates, cylinders, hollow cylinders, tubes, hemispheres, spheres, discs with holes, rings, as well as custom shapes and dimensions. These elements are the heart of the system for hundreds of marine applications. When it comes to piezoelectric ceramic materials, Channel Industries manufactures lead zirconate titanate and barium titanate compositions. CII's extensive knowledge of piezoelectric physics, and years of experience has earned CII the reputation for producing the highest quality ceramics in the world. Many engineers involved with the development of new and novel applications depend on CII's ceramics and technical support. To further enhance its customer support Channel Industries has increased its plant capacity. By years end they will also have outfitted and installed a fast track department designed to meet or exceed customer demands for rapid development of R & D projects as well as small production runs.

Markets sold to include passenger vessels, large yachts and commercial and government organizations. The FarSounder technology transcends the commercial, military and recreational markets, and is intended to enable marine vessel operators to avoid collisions and groundings. Technology Profile: FarSounder has developed an advanced 3D sonar technology. Current products include a 440m (>1/4 mile) navigation and collision avoidance sonar. It offers patented Target Model technology. The company has recently been issued four U.S. patents on various aspects of the core technology., with several patents pending. Current R&D projects include adapting this advanced sonar technology to security and defense applications. The company is working with the US Department of Homeland Security on a Phase II HSARPA SBIR project. This work will result in a Low Cost Under Water Threat Detection prototype which will then be commercialized into a variety of port, ship protection and shoreline infrastructure security products. The company is also working on an ONR project, UPSIDE Phase I, for Undersea Perimeter System Integrated Defense Environment, in partnership with the Rhode Island Economic Development Council and other regional companies.

PCCI, Inc.

300 North Lee Street, Suite 201
Alexandria,VA 22314-2640
Tel: 1-703-684-2060
Email: use web form • www.pccii.com
President: Bob Urban
Vice President: Alan Becker
Engineering Director: Tony Kupersmith
Number of Employees: 41
Annual Sales (US$): $19m

PCCI, Inc. is a privately owned marine and environmental engineering firm established in 1977. The company has specialized experience in: marine emergency operations involving oil and hazardous substance issues, salvage and safety engineering, Incident Command System (ICS) management, emergency response planning and training, ocean engineering, and naval architecture. PCCI specialty services include: Engineering and Installation of Ocean and Waterfront Structures; Ship Salvage Engineering; Marine Environmental Regulatory Compliance.

PCCI's key technologies include: Moorings analysis, design and installation of both temporary and permanent moorings for ocean platforms, from simple buoys to large floating bases. PCCI uses the OPTIMOOR and ORCAFLEX programs to analyze platform motions and mooring leg loads. Underwater Cofferdams: PCCI engineers conduct finite element model analyses of Underwater Ship Husbandry (UWSH) cofferdams, analyzing weight handling systems, provide operational procedures development services, and develop logistics support requirements for UWSH operations and activities.

Deep Marine Technology Inc.

9000 Jameel Rd., Ste. 190
Houston, TX 77040
Tel: 713-896-8555
Email: tross@deepmarinetech.com
www.deepmarinetech.com
CEO: Paul McKim
COO: Wade Abadie
Sales Mgr.: John Whites
VP, Dive: Mike Luinstra
VP, ROV: Mike Gilliam
Employees: 247
Annual Sales: $83m

Since 2002, Deep Marine Technology, Inc. (DMT) has been providing subsea services to the Offshore O&G Industry. Far surpassing its modest beginnings as a Direct Operated Vehicle (DOV) contractor, DMT has quickly grown to become a significant player in the Gulf of Mexico and now includes the following groups: Deepwater Construction, Commercial Diving, Direct Operated Vehicle, and Intervention Systems. Starting with just seven employees and 1 DOV, DMT currently employs over 247 office and offshore personnel and owns and operates eight Remotely Operated Vehicles (ROV), four Vessels, and three DeepWorker 2000 DOVs. Named two years in a row (2006 & 2007) by Entrepreneur Magazine as one of its top 10 fastest growing businesses in America, DMT continues to strengthen its presence in the Gulf of Mexico and as well as branching out internationally. The Executive Officers of Deep Marine Technology have over one hundred years of combined experience in the subsea oil and gas industry. They have held key positions with some of the major players in our business and have also worked on some of the largest offshore developments in the US Gulf of Mexico. The combined knowledge and experience of these individuals allowed DMT to launch the first 240ft multi-service vessel (DMT Diamond) in the Gulf of Mexico with a knuckle boom crane, as well as the introduction of the 292ft DMT Emerald, which is the first of her kind in the world with a 100T Heave Compensated Multi-purpose Lifting Tower. Technology Profile: DMT owns and operates the DMT Emerald, the DMT Diamond, and the DMT Sapphire Multi-service vessels. The versatility of these vessels provides the company with the ability to perform demanding subsea construction, field development, and maintenance tasks. Assisting with these vessels are DMT's line of heavy work class Triton ROVs with which the company is one of the industry leaders in logged time below 8,000 ft. The Commercial Diving group offers services from 0-1,000fsw including air, mixed gas, and saturation diving. The company owned and operated DMT Topaz saturation vessel spread contains a 3 man bell and a brand new, state-of-the-art 1,000fsw, 12-man saturation system. This system is the largest available on the market and its inclusion on the DMT vessel spread allows us to provide divers on the bottom 20 out of 24 hours. DMT is the only company in the Gulf of Mexico to have a Direct Operated Vehicles (DOVs) group. Consisting of three DeepWorker 2000 DOVs, these one-man submersibles perform many tasks from surveys and inspections to habitat studies.

DMT has soared with the offshore O&G market, with leading technology such as the DMT Emerald and leading executives, such as CEO Paul McKim.

Optech Incorporated

300 Interchange Way, Vaughan,
Ontario L4K 5Z8 Canada
Tel: 905-660-0808
Email:shoals2@optech.ca • www.optech.ca

Optech's line includes SHOALS (Scanning Hydrographic Operational Airborne Lidar Survey), the ALTM (Airborne Laser Terrain Mapper), the CMS (Cavity Monitoring System) and ILRIS ground-based scanning/imaging. Applications include: airborne marine and terrestrial surveying, ground-based industrial and 3D imaging, and space systems and advanced technologies. Optech began as an R&D firm specializing in laser applications. It has grown from small business to a leader, with more than 200 employees and a wholly-owned U.S.-based subsidiary.

Rapp Hydema

4433 27th Avenue W., Seattle, WA 98199
Tel: 206-286-8162
Email: kirkn@rappus.com • www.rappmarine.com

Rapp Hydema AS manufacturers and suppliers of Hydraulic deck machinery to the Marine and fishing Industries for 100 years. Founded in 1907, it offers a range of winch systems for anchor handling, vessel mooring, towing, trawling and lifting operations along with the associated control-monitoring systems. Rapp recently launched its "Offshore Solutions" division offering a new range of Hi-Performance winch-handling systems, specifically designed for deep-water ROV systems used in subsea drilling and offshore construction support industries. These custom build winches are available in Hydraulic or Electric formats with optional Computerized Active Heave Motion Compensation (AHC) systems and Traction control modules.

SouthWest Electronic Energy Corp.

12701 Royal Drive, Stafford, TX 77477
Tel: 800.231.3612 • http://www.swe.com

SouthWest Electronic Energy Corporation (SWE) designs and builds custom battery packs, battery chargers, cable/wire harnesses and electro-mechanical assemblies.

SWE's customers include oilfield services, seismic, pipeline inspection, medical, military, remote monitoring and process control, marine, aerospace, telecommunications and homeland security.

DOF Subsea

Nedre Åstveit 12, NO-5106 Øvre Ervik, Bergen, Norway
Tel +47 55 25 22 00
Email: info@dofsubsea.com • www.dofsubsea.com
CEO: Steve Brown • CFO: Geir Johansen
Director of Sales: Olav Arne Drønen

DOF Subsea is a construction support, survey and IRM contractor. Headquartered in Bergen, Norway, with offices in the world's major subsea markets, the company employs more than 1,200 and owns state of the art equipment including 23 offshore vessels, 25 ROVs, 1 AUV and 11 diving spreads. Its services include: Survey; Seabed Mapping and Geophysical Data; Data Processing and Interpretation; Deep Water Acoustic Wellhead Position; Subsea Positioning and Metrology; & C3D and C4D Visualisation

DOF Subsea is a major pipeline/structure inspection supplier in the oil industry. With its workclass ROVs, it conducts inspections and provide support down to 4,000 m water depth.

DOF Subsea provides a wide range of offshore construction services to oil and gas field developments on a worldwide basis. With a modern asset base of vessels, ROVs and diving systems, we undertake complex and innovative construction activities in both shallow and deep water. Also, DOF Subsea provides innovative subsea engineering services, offering clients cost effective solutions underpinned by an accredited ISO 9001:2000 quality system.

Remote Ocean Systems

5618 Copley Dr., San Deigo, CA
Tel: 858-565-8500
E-mail: Sales@rosys.com
www.RemoteOceanSystems.com
CEO & President: Bob Acks
Sales Director: Edward Petit De Mange
General Manager: Rick Longabaugh
Square Footage: 28,000
Testing Capabilities: (ie. test tanks, boats, pressure chambers): Pressure Chamber
Number of Employees:45
Annual Sales (US$): $8m

Remote Ocean Systems (ROS) is a leader in the design and manufacturing of high-tech equipment and systems for the most severe oceanographic, industrial, commercial, and military environments. ROS customers require products which must be infinitely reliable, and its standard product line includes underwater video cameras, underwater lights, rugged pan and tilts, controllers and video inspection systems which are manufactured primarily for the oceanographic, nuclear, and defense industries.

Technology Profile: Introducing the world's first compact zero-maintenance AC-powered underwater LED floodlight. The compact Q-LED operates on 120 or 240 volt AC power, yet fits in the same compact footprint as Remote Ocean Systems' trusted QL-3000 floodlight, which has been a mainstay of the ROV industry for more than three decades.

Hydroid, Inc

(A Kongsberg Company)
6 Benjamin Nye Circle, Pocasset, MA 02559
Phone: +1 508-563-6565
Email: sales@hydroid.com • www.hydroid.com
Hydroid Europe: Unit 3, Basepoint Enterprise Centre, Anderson's Road
Southampton SO14 5FE, United Kingdom
Phone: +44 (0) 2380-682-388
President/CEO: Christopher von Alt
Vice President of Marketing: Kevin McCarthy
Director, Hydroid Europe: Graham Lester
Number of Employees: 55


REMUS 6000

Hydroid, Inc. was founded in November 2001, following the execution of a technology transfer license with the Woods Hole Oceanographic Institution (WHOI). The intent of the license was to transfer the REMUS Autonomous Underwater Vehicle (AUV) technology out of the academic development environment and into the commercial marketplace, making the technology available to a wide array of users. Over the past several years, Hydroid has taken the REMUS product and technology to a new level, providing world-class sales, service and support to an ever-increasing customer base. Hydroid has realized rapid growth and in support of this growth has opened a European office to service an ever increasing international market. This team is enhanced by the organization's growing representative network, which provides local sales and support at a global level. There are over 160 REMUS 100 vehicles in operation around the globe, serving customers within the military, scientific, and commercial market segments. Hydroid maintains a full service production and test facility, staffed by a highly skilled and experienced group of individuals committed to our customers' ultimate success. All products are designed and built to meet a rigorous quality standard, and all products are fully documented and designed for large production runs, thus ensuring a repeatable, high quality product. Hydroid also offers customers a comprehensive, easy to follow training seminar, which ensures that users gain a full understanding of their REMUS vehicle's capabilities, data collection and analysis, and service requirements. Hydroid's customer service department is well-versed and readily available to assist customers in all aspects of operation throughout the life of the vehicle. In June 2008, Hydroid was acquired by Kongsberg Maritime.

Hydroid offers a family of AUVs, including:

• REMUS 100: The REMUS 100 is a powerful, lightweight, compact AUV designed for operation in coastal environments up to 100 meters in depth.

• REMUS 600: The REMUS 600 is a highly versatile, modular AUV used for the collection of oceanographic data in water depths up to 600 meters, and can also be configured for 1500 or 3000 meter operations.

• REMUS 6000: The REMUS 6000 is capable of highly intricate deep-water operations in water depths up to 6000 meters, allowing for a wide spectrum of autonomous operations.

Subsea 7

Peregrine Road, Westhill Business Park
Westhill, Aberdeenshire AB32 6JL, United Kingdom
Phone: +44-1224-344-300
Fax: +44-1224-344-600
http://www.subsea7.com
info@subsea7.com

Subsea 7 operates a fleet of dynamically positioned (DP) vessels and remotely operated vehicles (ROVs) fitted to perform deepwater construction, pipelaying, and surveying functions. The company also provides drill rig support services, subsea inspection, repair, and maintenance services, and subsea equipment and expertise.

Technip

92973 Paris -La Défense Cedex - France
Tel: 33 (0) 1.47.78.21.21
info@technip.com • http://www.technip.com

Technip offers a range of products and technologies in the subsea area (subsea pipelines, umbilicals, and riser systems). Technip touts multidisciplinary teams in a global project approach:pipeline systems/platforms, topsides/structures, fabrication/offshore installation. Complemented by manufacturing and fabrication capabilities, these project design and management capabilities have control on the procurement of critical products.

SMD Hydrovision

B21 0GP, Aberdeen, Scotland
Phone: (+4412) 24 77 21 50
rovs@hydrovision.co.uk • www.hydrovision.co.uk

SMD Hydrovision was founded in 1971 as Soil Machine Dynamics and developed a reputation for supplying innovative equipment for the burial of pipelines and cables. Since then we have applied our engineering skills in subsea markets ranging from oil and gas, telecommunications, military, scientific and mining. With the acquisition of Hydrovision in 2003 the company entered the Workclass ROV market.

Nexans Norway AS

16, rue Monceau, 75008 Paris, France
Email: nexans.web@nexans.com • www.nexans.com

With energy as the basis of its development, Nexans is a player in the infrastructure, industry, building and Local Area Network (LAN) markets. As a leader in the cable industry, Nexans Norway offers a range of cables and cabling systems to raise industrial productivity, improve business performance, enhance security, enrich the quality of life, and assure long-term network reliability. With an industrial presence in more than 30 countries and commercial activities worldwide, Nexans employs 22,000 people and had sales in 2007 of $11.7 billion.

Noise Control Engineering, Inc.

799 Middlesex Turnpike, Billerica, MA 10821
Tel: 978-670-5339
E-mail: mikeb@noise-control.com
President: Raymond W. Fisher
Vice President: Michael Bahtiarian

Noise Control Engineering (NCE) was founded in 1991 by Raymond Fischer. NCE is an engineering consulting firm that specializes in shipboard noise and vibration measurement and control with clients worldwide. In June 2008, NCE became the first and only company in the United States certified by ABS as specialists for "Ambient Environmental Testing". This allows NCE to confirm that the ABS established requirements for vessels notated with HAB, HAB+, COMF, COMF+ and Naval Vessel Rules (sections 6-1-1/4.2.3).

ODIM Brooke Ocean Ltd.

461 Windmill Road, Dartmouth, Nova Scotia, Canada B3A 1J9
Tel: (902) 468-2928
Email: sales@brooke-ocean.com • www.odim.com

ODIM Brooke Ocean Ltd.provides hardware, systems engineering and R&D services to the marine science, naval and oil & gas sectors. Its specialty is the development of equipment and systems to operate in harsh marine environments. ODIM Brooke Ocean Ltd. is a subsidiary of ODIM ASA (www.odim.com) a fast-expanding Norwegian technology company which develops and sells advanced automated handling solutions, primarily cable handling systems and winches for use on offshore, oceanographic, and naval vessels.

IXSEA

Tel. +33 (0)1 30 08 98 88
Email: info@ixsea.com • www.ixsea.com/en

IXSEA aims to deliver high-technology systems and solutions to its customers in the scientific, oil and gas, defense and aerospace industries, focussing on on four key areas: Navigation and positioning; Imagery; Moorings; and Survey.

Today, IXSEA has 3 industrial sites in France as well as a global sales network in Europe, America and Asia. It employs more than 200 people, with more than 50 PHD graduates and engineers concentrating solely on research and development. IXSEA strives to invent solutions that are cost-effective, time-efficient, reliable and user-friendly. IXSEA offers a broad and unique range of complementary systems and solutions built on key technologies:

1 **FOG (Fiber Optic Gyroscope) technology**
2 **Underwater acoustics**
3 **Seismic, sonar and magnetometer imagery solutions**

Technology profile: IXSEA works in 4 main market segments: Navigation and positioning; Imagery; Moorings; and Survey. Its Fiber Optic Gyroscope (FOG) technology is at the heart of our easy to use and versatile Gyrocompasses and Inertial Navigation Systems. IXSEA positions itself at the center of the data fusion revolution: by merging our Inertial Navigation Systems (INS) and Global Acoustic Positioning Systems (GAPS, IXSEA's USBL), we provide accurate and robust subsea positioning where all data is fused into optimal solutions. Its seismic, sonar and magnetometer imagery solutions integrate hardware with interpretation tools. SHADOWS is a quick and efficient high-performance sonar system with synthetic aperture processing, which offers unparalleled image quality in real-time with no gap at nadir boosting productivity. SHADOWS doubles the resolution while reducing survey costs by one-third. It is the perfect solution for all sidescan survey applications: cable route, offshore mining, pre-dredging survey, small objects search on the seabed and shipwreck search and salvage. Moreover SHADOWS is compatible with GAPS and POSIDONIA, IXSEA's USBL positioning systems. From mooring line recovery to mooring heavy equipment, our rugged acoustic releases have long battery life and low power consumption. The OCEANO moorings range is world renowned and synonymous with durability and longevity.

OceanTech Expo'08

October 1-3, 2008
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Explore the Business of Ocean Technology

Register your company today and join North America's premier marine technology and ocean science Expo this October for what will be the most informative and important event of the fall.

EXHIBIT

NETWORK

DEMO

Key Topics will include:

-The increasing application of augmented reality, modeling and simulation in dealing with operational challenges in the undersea environment.

-Societal, scientific and economic drivers behind ocean observation initiatives.

-The growing challenges of keeping international ports and harbors secure.

-An insider's look at the mission planning and technology selection process for the new NOAA Oscar Dyson class multi- disciplinary fisheries survey vessel.

-Emerging opportunities and requirements for future deployment of offshore renewable energy systems.

-New opportunities and pathways to bringing new marine technology into the market.

-The growing market and applications for underwater vehicles.

-Technology gaps in the subsea production and processing of oil & gas.

Log on to www.oceantechexpo.com to register your booth now!

Contact-
Rob Howard Tel: 561-732-4368
howard@marinelink.com

Produced By
MARINE TECHNOLOGY REPORTER

Allseas

Route de Pra de Plan 18, Case Postale 411
1618 Châtel-Saint-Denis, Switzerland
tel: +41 21 948 3500
Email: sales&marketing@allseas.com
www.allseas.com

Allseas Group S.A. is an offshore pipelay and subsea construction company, operating six specialized vessels which were designed in-house. Founded in 1985, we have gained worldwide experience in all types of offshore and subsea construction projects. Allseas' approach is to support clients already in the conceptual design stage and offer its services for project management, engineering and procurement up to and including installation and commissioning.

Delta Wave Communication

8001 Hwy 182 E., Morgan City, LA 70380
Tel: 985-384-4100
Email: sales@deltawavecomm.com
www. deltawavecomm.com

Delta Wave Communications, Inc. (Delta Wave) is a mobile satellite service provider based out of Morgan City, LA. Products and services include Inmarsat, Iridium, asset tracking, and system integration. Founded in 1997, Delta Wave Communications, Inc. offers communications solutions for customers based in remote areas, with roots in the offshore Oil and Gas market.

ECA Group

ZI Toulon Est, 262 Rue des Frères Lumière
83130 LA GARDE - France
Tel: +33 (0)494 08 90 00
Email: info@ecagroup.com
www.eca.fr

The ECA Group, with its head office in Toulon, France, has staff of 600 in six countries. The organization has four business entities; Robotics, Naval, Aerospace and Land. The Robotic group of ECA designs and manufactures mine countermeasure systems for inspection and intervention with over 450 vehicles sold to 20 navies, as well as designs towed systems, torpedo qualification systems, and equipment for acoustic positioning and hull inspection robots.

RW Fernstrum

P.O. Box 97, 1716 11th Ave.
Menominee, MI 49858
Phone: 906-863-5553
Email: sales@fernstrum.com
www.fernstrum.com

R.W. Fernstrum & Company is a leader in the engineering, development and manufacturing of cooling technologies for the marine industry.

Fugro GEOS

6100 Hillcroft (77081), Houston, Texas 77274
Tel: 713 -346-3600
Email: usa@geos.com • www.geos.com
President (USA): Jan van Smirren
VP Sales & Marketing (USA) : Rob Smith
Managing Director: Jeff Coutts
Number of Employees: 200 worldwide

Fugro GEOS is a leader in providing oceanographic and meteorological (metocean) services to the offshore and coastal construction industry, institutions and governmental organizations. The broad spectrum of metocean services offered is designed to provide solutions through cost-effective, high quality and technically advanced services and systems. With over 30 years experience in a diversity of metocean projects worldwide, Fugro GEOS has an active policy of technical and business development that is closely linked to both its clients' needs and a desire to maintain the lead in metocean expertise on a global basis from offices in Wallingford (UK), Glasgow (UK), Houston (USA), Abu Dhabi (UAE), Trondheim & Sandes (Norway), Kuala Lumpur (Malaysia), Singapore and Perth (Australia). In addition to the unique capabilities of their staff, they have the largest commercially available inventory of metocean measurement equipment and a policy of continual investment in new technology.

Sensor Technology Limited

20 Stewart Road, Collingwood,
Ontario L9Y3Z4 Canada
Tel: 705+444-1440
Email: hthompson@sensortech.ca
www.sensortech.ca
CEO: Dr. Eswar Prasad
Engineering Director: Sylvain Terzolo
Number of Employees: 42

Sensor Tech is a producer of piezo electric ceramic material and a fully integrated manufacturer of Hydrophones, Transducers and specialty products for underwater acoustic applications. It supplies to world leaders in geophysical exploration, Naval marine, aerospace and under water research. Sensor Technology's products have been employed 6000m below sea level, on the space shuttle and at both poles.

General Acoustics GmbH

Am Kiel-Kanal 1, 24106 Kiel, Germany
Tel: +49(0)431-580 8180
Email: info@generalacoustics.com
www.generalacoustics.com

General Acoustics GmbH is a producer of special echo-sounders, water level and wave sensors, as well as flow measuring systems. The company, an off-shoot of a university specialist acoustic and sensor technology research team, was founded in 1996 by physicists and engineers and is now located in Kiel, Germany.

The Mobile LOG_aLevel.

Kongsberg Maritime/Kongsberg Mesotech

1598 Kebet Way
Port Coquitlam, B.C.
Vancouver, Canada V3C 5M5
Tel: (604) 464-8144
Email: km.sales.vancouver@kongsberg.com
www.kongsberg.com • www.kongsberg-mesotech.com
CEO: Nader Riahi (Kongsberg Mesotech)
President: Torfinn Kildal (Kongsberg Maritime)
Sales Manager: Gavin Cullimore (Kongsberg Mesotech - offshore)
Engineering Director: Max Muntner (Engineering Manager - Kongsberg Mesotech)
Facility: Kongsberg Mesotech - Vancouver: Kongsberg Maritime - Horten and Kongsberg, Norway, Aberdeen, Scotland: Kongsberg Seatex - Trondheim, Norway
Square Footage: 20000 (Kongsberg Mesotech - Vancouver)
Testing Capabilities: (ie test banks, boats, pressure chambers):
Simrad Echo test boat and large pool in Horten Norway; Test tank in Port Coquitlam and a test barge in Port Moody.
Number of employees: Kongsberg Maritime - 2510 in 25 countries (31. Dec. 2007)
Annual Sales (US$): Kongsberg Maritime - 2007 Operating revenues in Offshore & merchant marine sector are $943.7m

Kongsberg Maritime is a global company providing innovative and reliable solutions for shipping, offshore, oil & gas, subsea, navy, coastal marine and fisheries, maritime training, port and harbor surveillance and more. The company delivers systems for positioning, surveying, navigation and automation, and is a market leader in dynamic positioning systems, automation and surveillance systems, process automation, satellite navigation and hydroacoustics. With integration of various systems a key driver, Kongsberg Maritime prides itself on its ability to deliver the Full Picture to all of its markets.

Headquartered in Kongsberg, Norway, the company is present in 25 countries to ensure its ability to provide reliable service at local level but as a global technology leader. With manufacturing facilities in Aberdeen, Scotland; Horten, Norway; Kongsberg, Norway; Trondheim, Norway and Vancouver, Canada, the company exceeds market requirements for a wide range of products and services, and is well known for its commitment to R&D.

Kongsberg Maritime's subsea department develops and markets single and multi beam echo sounders, Sonar, Underwater Cameras and the HUGIN AUV. Its solutions are used by the world's best survey vessels, operated by the top survey companies. Subsea product development and manufacturing takes place in Aberdeen, Horten and Vancouver. The company gives particular focus to this business segment in North America with its Kongsberg Mesotech Ltd facility in Vancouver and the Kongsberg Maritime Inc., office in Houston, Texas, which is positioned to service survey and energy companies operating in and around the Gulf of Mexico. Technology Profile: Kongsberg Maritime is committed to developing new and innovative products that use the latest technology and techniques to the operational and economic benefit of its customers. The company's multibeam echo sounder systems for seabed mapping include models for all water depths, and virtually any application and the subsea department offers hydroacoustic systems for all eventualities. In addition to the Horten facility, Kongsberg Mesotech's Vancouver facility is responsible for the design and manufacture of underwater acoustic products, including: Imaging and Profiling Mechanically Scanned Sonars; Multibeam Imaging Sonars; and Altimeters. Kongsberg Maritime offers complete mapping systems, providing turn-key survey solutions including multibeam echo sounders connected to positioning equipment, heading and motion sensing instruments, as well as sound velocity sensors in order to position the soundings correctly. The entire package, including software is designed, manufacturer and often installed by Kongsberg Maritime. The company is also a leader in the field of underwater cameras and AUV development, counting several navies and the world's leading survey companies as customers of its HUGIN AUV. This cutting-edge AUV has been a key technology development area since 1990 and is used for a variety of civilian and military applications.

Operating revenues in 2007 exceeded $943 million.

The company has established a global network of distributors for its products in more than 50 countries. Numerous GA systems and applications are installed and operating throughout all continents.

Technology Profile: GA is producer of unique ultrasonic level gauge and wave measurement systems for laboratory and outdoor applications. The capability to measure dynamic water surfaces with high resolution enables different applications for Ship Model Basins, Simulation Facilities - Hydraulic Laboratories, Water Resources Management, Harbour-, River- and Coastal Management, Coastal Defense, Hydrography, Oil- and Gas Industry. GA developed a proprietary technology to measure, evaluate and visualize complex flows (up to 3D). This generates high quality results on the basis of few measuring data. An application of this technology is the GA software product LOG_aFlow to generate high quality flow charts for harbors, coastal zones and inland waters. International patents for key technology and related software have been applied for by GA. Well known products are the Tide and Wave Gauge LOG_aLevel (Test Winner RIZA 05) and the UltraLab systems for Wave measurement in Hydraulic Laboratories.

General Robotics Limited (GRL)

7 Walker Avenue, Wolverton Mill East
Milton Keynes, Buckinghamshire
United Kingdom MK12 5TW
Tel: +44 1908 224670
Email: Jason-tisdall@generalrobotics.co.uk
www.generalrobotics.co.uk
CEO: Dr Jason Tisdall

General Robotics Ltd (GRL) is the home of professional simulation software for the offshore oil and gas industry. It is a leader in physics-based 3D and 4D solutions. These

allow clients to quickly and accurately plan, rehearse and monitor complex installation and maintenance operations. GRL solutions provide: Engineering data at your fingertips; True visualisation of operational outcomes to get it right first time; Consistent, realistic and repeatable operational training at low cost; Easy to generate 3D media to communicate complex concepts; Enterprise tools to reuse graphical and data resources within and between organizations.

Products cover the whole development cycle including:

- **FEED**: DeepSim allows advanced engineering solutions to be modeled on the desktop.
- **Operations**: DeepTouch allows integrated virtual pilot training.
- **Live Monitoring**: DeepLive brings in live data to allow an interactive 3D view of the operations under way.

Geometrics, Inc.

2190 Fortune Dr.
San Jose, Ca. 95131
Tel: 408-954-0522
www.geometrics.com

Geometrics has been in the design and manufacture of geophysical instrumentation since 1968. Using the latest technologies, Geometrics designs and manufactures highly portable instruments to provide the user with a subsurface 'picture' of the earth. The instruments we design, sell and service are well suited for harsh land, sea and airborne environments.

Global Marine Systems

New Saxon House
1 Winsford Way
Boreham Interchange
Chelmsford
Essex CM2 5PD
England
Tel: +44 (0)1245 702000
Fax: +44 (0)1245 702210
www.globalmarinesystems.com
john.neal@globalmarinesystems.com

Global Marine is a marine technology and engineering company that specializes in the maintenance of submarine telecom cables. The company has the capability to leverage its resources for telecom and power cable installation. Global Marine works in four distinct markets: telecoms; renewable energy; the oil and gas industry; and defense.

Gregg Drilling & Testing, Inc.

2726 Walnut Avenue, Signal Hill, CA 90755
Tel: 562-427-6899
Email: info@greggdrilling.com
www.greggdrilling.com

Gregg Drilling & Testing, Inc. offers a wide range of environmental drilling, geotechnical drilling and cone penetration testing (CPT) services for site investigation and remediation. On or offshore, experienced personnel and extensive resources allow it to solve the most complex technical problems and save time and money, without sacrificing quality.

Services Include: Offshore drilling using jack-up boats, barges or Gregg's drill boat (the Quin Delta)/ Sediment/soil sampling and continuous coring/ Cone penetration testing (CPT) services/ Offshore foundation and liquefaction services/Vibracore

Gregg Marine Services offers offshore drilling, sediment sampling, and cone penetration testing (CPT) services. The drill ship Quin Delta is a self-propelled ocean going vessel with a draft of only three ft.

MAR Incorporated - Ohmsett Facility

PO Box 473, Atlantic Highlands, NJ 07716
Tel: 732-866-7183
bschmidt@ohmsettnj.com • jdelgado@marinc.com • www.ohmsett.com
Chaiman & CEO: Mike Norcio

Ohmsett, The National Oil Spill Response Test Facility is located in Leonardo, NJ. It is the only facility in the world where full-scale oil spill response testing, research and training can be conducted with oil in a realistic simulated marine environment under controlled conditions. The facility consists of a large outdoor above-ground concrete test tank measuring 667 feet long by 65 feet wide by 8 feet deep filled with 2.6 million gallons of crystal clear salt water, conference rooms, maintenance/machine shop, chemistry laboratory, and offices. Ohmsett's mission is to increase oil spill response capabilities through independent and objective performance testing of equipment, providing realistic training to response personnel, and improving response technologies through research and development. MMS has operated the Ohmsett facility for 15 years as part of its mandated requirements to ensure that the best and safest technologies are used in offshore oil and gas operations. The Ohmsett facility is maintained and operated by MAR, Inc., through a contract with MMS. Technology Profile: Ohmsett plays a critical role in developing effective response technologies and represents a necessary intermediate step between small scale bench testing and open water testing of equipment. Many commercially available oil spill cleanup products and services have been tested at Ohmsett either as off-the-shelf commercially available equipment, or as equipment or technology still under development. In addition to developing and testing response technologies, Ohmsett provides first responders, from state and federal government agencies, private industry and foreign countries, with the most realistic training available enabling a rapid and efficient response to an actual spill event. Ohmsett has added two new courses to their offering this year: Spanish Language Oil Spill Response and Strategies Training and Dispersant Training for the Oil Spill Responder. The Spanish language course is a five-day course taught either in Spanish or with expert interpreters. This year, Ohmsett has explored the ability to test marine renewable energy systems, in particular wave energy mechanical devices.

Ohmsett's is exploring the ability to test marine renewable energey systems.

Shark Marine Technologies Inc.

Unit 4, 23 Nihan Dr., St. Catharines, ON L2N 1L2 • Tel: 905-687-6672
Email: jhoney@sharkmarine.com • www.sharkmarine.com
President: Jim Garrington • Controller: Wendy Garrington • Sales Manager: Jim Honey

While Shark Marine Technologies has been recognized for the quality of its underwater video products, two newly developed items have recently caught both the attention and imagination of all those involved in undersea applications. The Stealth2 ROV is an adaptable, underwater remote operated vehicle. Configurations have been sold worldwide as inspection vehicles, scientific sampling stations, pipeline tracking units as well as search and recovery vehicles. The Stealth2 is small in size and easily operated by a crew of 2, yet maintains enough bulk to create a sturdy platform for filming or sonar investigative purposes. The Stealth2 Control Console is designed to be small and versaitile. Completely contained in a small rugged case are the 240V power and communication modules for the ROV, a daylight readable Windows based computer with touch screen controls and an HDV video recording deck. The computer is used for processing the automatic command functions of the ROV, data feedback and collection, as well as control software for the attached sonars and other optional equipment. The Shark Marine NaviGator is a versatile diver-held sonar and guidance system. The NaviGator puts the power of Windows computing directly into the hands of the diver, allowing the portable adaption of any PC based, sonar, sensor or imaging product that is designed to work in an underwater environment. Applications range from EOD detection and hull scanning to target locating or archeological work in zero visibilty water. Some peripherals readily available include underwater GPS, scanning, multibeam and SBP sonars, doppler unit for dive tracking, underwater heads-up display, camera modules and mounts for DPV's.

Hallin Marine Subsea International

35 Loyang Crescent
#03-00 Admiralty International Building
Loyang Offshore Supply Base
Singapore 509012
Tel: +65 6214 8055
Email: enquiries@hallin.com.sg
www.hallinmarine.com
CEO: John Giddens
Chairman: Tony Ebel
COO: Paul Bundy
Facilities: Yards in Singapore and Aberdeen; Manufacturing in Singapore
No. of Employees 120
Annual Sales: $65M

Hallin started 10 years ago supplying saturation and air divers. It now manufactures saturation diving systems, air diving spreads and ROVs for itself and third parties. It provides subsea engineering services using the above along with the vessels and experienced operational personnel to offer

CEO John Giddens

packet solutions from its offices in Singapore, Aberdeen, Perth, Australia, Jakarta and Houston. Hallin focuses on developing its full range of products and services, its self-designed subsea offshore vessels are starting to come into service, while the number of its self-designed and manufactured ROVs and saturation diving vessels continues to grow, while the ROVs range and scope has grown.

Hawboldt Industries

220 Windsor Road, P.O. Box 20
Chester, Nova Scotia, Canada B0J 1J0
Tel: (902) 275-3591 • www.hawboldt.ca
Email: john.huxtable@hawboldt.ca

Hawboldt manufactures marine equipment for the defense, shipbuilding, fishing, oceanographic and offshore industries. Hawboldt's facilities include, state-of-the-art Machine shop, welding and fabrication shop, paint shop, hydraulic shop, and non ferrous foundry.

IHC Engineering Business

Broomhaugh House, Riding Mill
Northumberland NE44 6EG
Tel: +44 1434 682800
Email: Ben.Webster@engb.com • www.engb.com
No of Employees: 160
Managing Director: Tony Trapp
Technical Director: Tim Grinstead
Engineering Director: Steve Agar & Mike Watchorn

BlueView Technologies

2151 N. Northlake Way, Suite, 101 Seattle, WA 98103
Tel: 206-545-7260
Email: sales@blueview.com
www.blueview.com
CEO: Lee Thompson
President: Scott Bachelor
Vice President: Jason Seawall
Marketing Director: George Grant
Engineering Director: Jerry Brewer

CEO Lee Thompson

BlueView Technologies, Inc., is a provider of miniature multibeam imaging sonar. BlueView delivers acoustic underwater vision solutions using a technology breakthrough that provides high performance imaging sonar capabilities for the first time in compact, low power systems. Since delivering the first products in mid 2005, BlueView has been tripling annual commercial products sales and doubling overall annual revenues, which include revenues from 11 awarded US Navy contracts.

BlueView has developed a broad line of 2D and 3D sonar systems that operate from 225 kHz to 2.25 MHz and can therefore meet a wide range of underwater vision needs. The P450E-15 (450 kHz) sonar was introduced in mid 2005, followed by the P900-20 (900 kHz) in 2007 and the new dual frequency DF900-2250 (900/2250 kHz) in 2008. Over 140 BlueView commercial systems have been successfully integrated onto ROV platforms from micro to work class categories, numerous small to medium sized UUV, diver hand-held units, boat mount systems and fixed surveillance platforms to fast become the new standard in multibeam imaging sonar. These systems have been delivered to 25 major US port security groups, US and international navies, NOAA, global defense contractors, universities, as well as offshore oil and gas groups. In addition, over a dozen custom UUV systems have been delivered to provide integrated obstacle avoidance, automated homing, and 3D imaging capabilities on a variety of UUV platforms. BlueView was certified in 2008 as a Top 20 percent performer by Open Ratings, Inc based on the Past Performance Evaluation survey responses of its customers. According to Open Ratings, BlueView Technologies' PPE score of 95/100 demonstrates outstanding overall customer satisfaction in many areas such as reliability, product quality, cost and reliability as well as customer support.

Perry Slingsby Systems

821 Jupiter Park Drive, Jupiter, FL 33458
Tel: 561-743-7000;
Fax: 561-743-1313
E-mail: Laura.Rhodes@perrymail.com
www.perryslingsbysystems.com
CEO: Martin Anderson
COO: Bruce Lokay

Perry Slingsby Systems traces its beginnings to the early days of the aviation and ocean engineering industries. As men of vision, John Perry and Fred Slingsby each began innovative cutting edge businesses that ultimately joined to form the Perry Slingsby Systems of today. As a leading expert in the design and manufacturing of remote intervention technologies and equipment systems, the company is known worldwide for its dedication to quality and professional excellence. The experience that has been gained over the past 50 years through design and production of hundreds of ROVs, Trenchers, Tether Management Systems, Submarine Rescue Systems, Submarine Cable Plows, Tooling Systems and Remote Intervention Technologies is unmatched throughout the world. From offices and agents around the world, Perry Slingsby Systems offers a worldwide support network that is available to customers 24 hours a day, 365 days a year.

Production is carried out at two facilities. One in Kirkbymoorside, near York, England, in a 48,000 sq. ft. plant and the other in Jupiter, near Palm Beach, Florida USA in a 45,000 sq. ft. plant. The company has a state of art training facility located in the heart of Houston. Through employing specialist capabilities and technologies, PSS has developed market leading positions in Telecommunications, Defense, Oil & Gas, and related markets. While these markets all differ in their product and service application, they all share the need for remote solutions to problems in hostile environments.

PSS remote intervention technologies and equipment systems have now been grouped into Six Business Lines with assigned Business Line leaders bringing you unparalleled knowledge and experience, Vehicle Systems, Tooling & Robotic Systems, Support Services, Defense, Control Products and Geotechnical & Trenching Products.

Extensive market driven research and development underlies all of our current and future offerings. Closely linked to the Sales and Business Development functions, the R&D program receives regular input from customer feedback continually linking all product improvements and new product developments to the market. Annual R&D programs are sanctioned to offer customers innovative and cost effective solutions to all of their remote intervention needs. Current projects include the development of the next state of the art control system and the development of subsidiary subsea products and applications

Sub-Atlantic Limited is the newest addition to the Triton Group. Sub-Atlantic is a market leader in the design and manufacture of small to medium sized electric ROV systems and ROV components and has recently opened in office in Houston, Texas.

IHC Engineering Business (EB), as part of the IHC Merwede group, is a leading designer, manufacturer and developer of offshore and seabed equipment for the offshore oil and gas, defense, submarine telecom and renewable offshore power generating industries. IHC Merwede is a leader in the construction of specialist dredging equipment and complex custom-built offshore vessels. IHC Merwede's business units are grouped together into three divisions: Dredging & Mining, Offshore & Marine, and the group of sector-related products and services - Technology & Services. As part of the Technology & Services division, EB supports the provision of turnkey vessels with fully integrated equipment packages.

International Submarine Engineering Ltd.

1734 Broadway Street
Port Coquitlam, BC V3C 2M8
Tel: 604-942-5223
Email: info@ise.bc.ca
www.ise.bc.ca
President: James McFarlane
Vice President: Mike Macdonald
Vice President: James Ferguson
Facilities: 45,000 sq. ft., consisting of ISE and ISER engineering, manufacturing and administration facilities
Testing Capabilities: In-ground, on-site test tank (45'x15'x15') and 25 meter trials/testing vessel
Number of Employees: 65
Annual Sales (US$): $10 M

International Submarine Engineering Ltd designs and develops autonomous and remotely operated underwater vehicles as well as a systems integrator of robotic platforms. Since 1974, ISE has developed and sold Remotely Operated Vehicles (ROVs), Autonomous Underwater Vehicles (AUVs), Unmanned Surface Vehicles (USVs) and manned submersibles. While the primary focus is on marine platforms, ISE also builds and supplies manipulators, hydraulic components and tools for use with ROVs and other robotics systems.

Notable product achievements include the HYSUB series of ROVs, the Theseus AUV, which holds the endurance record for AUVs, the Explorer Class of AUVs, Shell SmartPump refuelling robot and the

Hammerhead ROV

STM Crew training robot for the Canadian Space Agency. ISE's equipment is found in all sectors of the underwater activity including offshore, cable maintenance, marine science and oceanography and naval mine countermeasures.

Technology Profile: ISE's specialty lies in the design and integration of complex systems for the sub-sea industry with a focus on working to provide clients with solutions that address their specific needs. This experience is represented by the 210 underwater vehicles ISE has built and delivered to clients in 20 countries.

Imagenex

209 - 1875 Broadway Street
Port Coquitlam, BC V3C 4Z1 CANADA
Phone: (604) 944-8248
imagenex@npsnet.com
www.imagenex.com

Imagenex Technology Corp. was founded in 1988 by pioneers in the development of high resolution sonar. On an international level, Imagenex is an innovative company that designs and manufactures sonar systems and continues to move forward through ground-breaking advances, with continual support for the customer's needs and demands.

Innomar Technologie GmbH

Schutower Ringstraße 4. D-18069
Rostock, Germany
Tel.: +49 (0)3 81 44 079 0
info@innomar.com
www.innomar.com

Innomar works in the field of development, production and application of efficient underwater acoustic systems. Innovative technologies, e.g. parametric acoustics, are transferred into new products. The company was founded in 1997 by some engineers after many years of research work at the University of Rostock. The company started with the development of the product line SES-96. This line consists of different system variants of very efficient parametric sediment echo sounders. The systems have been introduced to the international market very well and are being improved with new features continuously. The actual models of SES-2000 are including shallow water systems to deep water systems and ROV mounted systems.

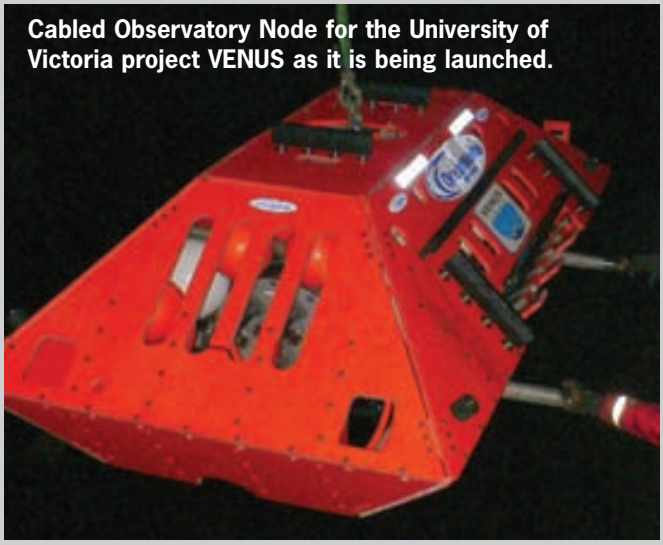
IVS 3D

325 Corporate Dr. Suite 175
Portsmouth, NH 03801
Tel: 603- 431-1773
www.ivs3d.com • Email: info@ivs3d.com

Interactive Visualization Systems' (IVS3D) Fledermaus software suite provides users with a set of interactive 3D visualization tools for data preparation, analysis and presentation. Fledermaus allows users near real-

OceanWorks International

11611 Tanner Road, Suite A, Houston, TX 77041
Tel: 281-598-3940
Email: knorth@oceanworks.com • www.oceanworks.com
CEO: Rod Stanley
VP Finance: Laurie Bristow • VP Special Projects: Jim English
GM Vancouver: Glen Viau • GM Houston: Ernst Fihn
Business Development Manager: Karen North
Houston Office/Shop Facility:
Square Footage: 42,500 sq. ft.
Test facilities: Oxygen cleaning, hydrostatic test chamber, outdoor test tank
No. of Employees: 150
Annual Sales: $30m



Cabled Observatory Node for the University of Victoria project VENUS as it is being launched.

OceanWorks specializes in the design and manufacture of manned/unmanned subsea systems and specialized equipment. Offering a full range of subsea system engineering, design and analysis, fabrication, testing, and project management services, OceanWorks has been at the cutting edge of deep submergence and diving technology, operations, and support for more than 20 years. The company provides solutions to unique subsea problems. The company has two major facilities located in Houston, Texas and Vancouver, BC. Vancouver operations are focused on the development of innovative subsea solutions for offshore military and scientific markets; areas of specialization include development of turnkey systems for submarine rescue, atmospheric diving, cabled observatory, and alternative energy applications. Houston operations are focused on the provision of selected subsea products and services for the offshore oil & gas industry. Areas of specialization include the design and fabrication of remote intervention tooling and field development hardware, as well as the provision of subsea engineering services, build-to-print fabrication, offsite welding services, and atmospheric diving services.

Technology Profile: Originally formed in 1986 to develop atmospheric diving technology, OceanWorks has continued to expand its technology base; today the company offers a unique range of subsea technologies, products and services to the international offshore marketplace. The company has continued to break new ground in atmospheric diving system (ADS) technology, and now supplies its Hardsuit 2000 and Hardsuit Quantum to a range of military clients. It recently expanded into commercial ADS operations in the South China Sea, and offers its ADS diving services on a worldwide basis. The company developed a range of state-of-the-art subsea tooling.

Sound Ocean Systems, Inc.

17455 N.E. 67th Court, Suite 120, Redmond, WA 98052 • Tel: 425 869-1834
www.soundocean.com
CEO/President: Ted Brockett • Vice President: James McFarlane
Marketing Director: Brian Reid • Engineering Director: Paul Hauser
Number of Employees: 21 • **Annual Sales (US$): $4m**

Sound Ocean Systems, Inc. (SOSI) is a small, women-owned business incorporated in the state of Washington with administrative, engineering and manufacturing facilities in the city of Redmond. SOSI was established in 1978 with the goal of providing quality marine and undersea systems at realistic costs through innovative engineering. This has included: ocean observation systems such as oceanographic data buoys and ocean data platforms, underwater time-lapse video recorder systems, moorings and instrumented moored systems, high-speed / low-speed tow-bodies, self-propelled seafloor vehicles, large ROV umbilical winches, cable handling systems, launch and recovery systems, and other specialized deck equipment. Recent history shows continued product evolution for commercial, scientific, and government customers worldwide. Consumable products in it's repertoire include leak detection modules, deep submersible GPS receivers, and support for the large numbers of customer's systems needing spares and repair services. The seismic generator-buoys SOSI produces are entering the third generation and promise to be an ongoing requirement in the oil industry.

time, interactive 3D display of very large complex scenes at their full resolution. Users gain insight and extract more information from their combined data (data sets such as multi-beam, LIDAR, magnetic and gravity, in fact any surface data that has an x, y, z, variables format). Fledermaus can be used as a tool to assess environmental and geological hazards, plan drilling locations, rig placements, or pipeline and cable routes. Data such as backscatter, side scan, geo-referenced aerial photographs or images.

L-3 Klein Associates, Inc.

11 Klein Drive, Salem, NH 03079
Tel: 603-893-6131
Email: Klein.Mail@L-3com.com
www.L-3Klein.com
CEO : John Cotumaccio
Vice President: Michael Mitchell
Marketing Director: Deborah Durgin
Engineering Director: Marc Parent
Testing Capabilities: We have a 30,000 sq. ft. facility which includes two large acoustic test tanks and a pressure vessel for simulating deep ocean pressure.
Number of Employees: 79
Annual Sales (US$): 25m

Founded in 1968 and headquartered in Salem, NH, with a regional support facility in Newport News, Va. L-3 Klein is a leading supplier of side scan sonar equipment, integrated bridge systems, navigation products and waterside security and surveillance systems. Klein's business is structured into four segments:

• **Sonar:** The high resolution Klein sonar systems, designed and manufactured in a 60,000 square foot plant in New Hampshire, provide high speed, full bottom coverage with imagery unmatched in the industry.

• **Navigation:** L-3 Klein has an extensive worldwide network of sales and factory trained support staff to distribute integrated bridge systems, radars, gyrocompasses, steering controls, autopilots, ship security alert

systems, automatic identification systems, echo sounders, and communication systems. Klein is the exclusive supplier of Raytheon Anschütz GmbH High Seas Products.

• **Waterside Security and Surveillance:** L-3 Klein has the HarborGuard Integrated Waterside Security and Surveillance System which combines radar, infrared and day time video surveillance technology to provide all weather, day/night security coverage over water areas.

• **Service:** L-3 Klein maintains a factory trained and certified staff for worldwide service.

LinkQuest Inc.

6749 Top Gun Street, San Diego, CA 92121
Tel: (858) 623-9900, 623-9916, 623-9919
Fax: (858) 623-9918
Email: sales@link-quest.com • www.link-quest.com

LinkQuest Inc., San Diego, California, is a leading manufacturer of precision acoustic instruments for offshore oil exploration, construction, drilling, survey, environmental study and other oceanographic applications. Its Broadband Acoustic Spread Spectrum (BASS) Technology sets new standard for acoustic communication and positioning. LinkQuest is the dominant supplier of Underwater Acoustic Modems in

the world. Its high speed underwater acoustic modems transport more than 95% of the world's acoustic communication data. These systems have set a series of technical performance records in field deployments all over the world. LinkQuest's line of TrackLink Acoustic Tracking Systems provide the world's most robust, accurate and cost-effective Ultra Short Baseline (USBL) solutions. LinkQuest's FlowQuest Acoustic Current Profilers and NavQuest Doppler Velocity Logs (DVL) provide highly competitive solutions for current profiling or precision underwater navigation applications. These products offer significantly longer range with high accuracy. The Micro DVL is the world's smallest and lightest Doppler Velocity Log.

LYYN

Ideon Science Park, Lund 22370 Sweden
Tel: +46462865790
Email: info@lyyn.com • www.lyyn.com
CEO & President: Bengt Sahlberg
Vice President: Andreas Ekengren
Marketing Director: Fredrik Beckman
Engineering Director: Anders Holm
Number of Employees: 4
Annual Sales (US$): $1 million

LYYN works with image enhancement for real-time video. Behind the company's technology lies many years of research in the human vision system and image technologies. LYYN offers products and solutions based on a technical platform, V.E.T. - Visibility Enhancement Technology. The platform works with images and video from common color cameras, in real time, but also in post processing of stored material. V.E.T. improves visibility in for instance fog, haze, snow, rain, dust, darkness, etc. as well as in subsea and medical applications.

The introduction of its analog video enhancer, LYYN T38, has generated a

RESON A/S

Fabriksvangen 13
3550 Slangerup, Denmark
Phone: +45 47 38 00 22
Mobile: +45 22 72 41 00
E-mail: mgi@reson.dk
www.reson.com
CEO: Allan Vestergaard
Executive VP Sales: Kim Christiansen
Marketing Manager: Michael Giese
Executive VP Development: Lars Pedersen
Executive VP Delivery: Mikael Nadelmann
Testing capabilities:
RESON A/S, Denmark: Test tanks, pressure chamber
RESON Inc, USA: Test tank, demo boat
Number of employees, worldwide: 265

RESON is a leader in underwater acoustic sensors, state-of-the-art echosounders, multibeam sonar systems, transducers, hydrophones, and software. RESON's SeaBat sonars and NaviSound echosounder systems have become an industrial standard in areas such as hydrography, dredging, offshore operations, marine research and defense & security. RESON was established in 1976 as a manufacturer of transducers. The company is growing and expanding into new markets and application areas - and its fourth generation of sonar systems will provide unprecedented performance for naval and commercial systems in terms of accuracy, resolution, depth rating, and range. RESON has its corporate headquarters in Denmark, with subsidiaries in USA, U.K., the Netherlands, Germany and Singapore.

Technology Profile: Within the last year RESON has launched a number of new products, especially within the SeaBat 7000 series.

New SeaBat 7101 multibeam sonar system

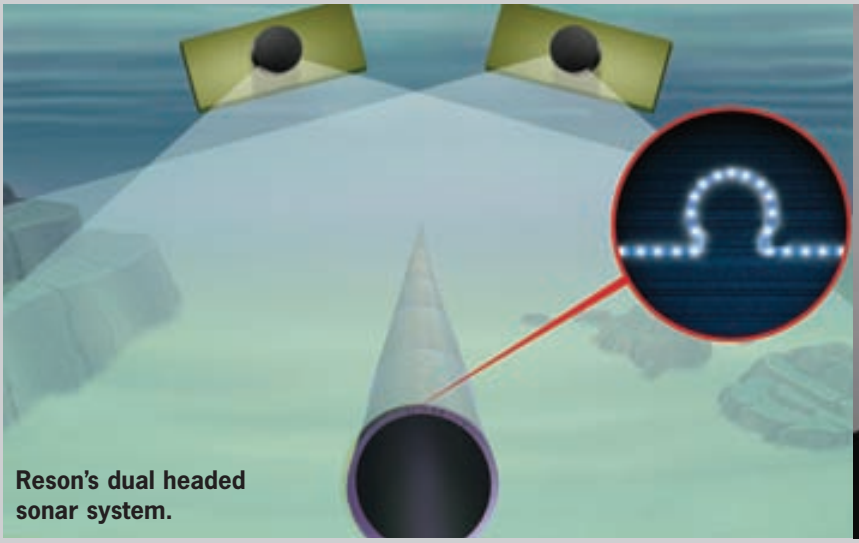
SeaBat 7101 was launched in May 2008 as a replacement of the SeaBat 8101, which has been one of the most sold sonar systems the last 15 years for shallow water surveys. SeaBat 7101 is a small and lightweight sonar with a swath of 150° to a maximum range of 500m, which can be mounted on underwater vehicles or rapidly deployed onto survey craft of opportunity. This makes it ideal for a number of applications like subsea intervention & monitoring, guidance & navigation, site & route surveys as well as rig re-entry.

New SeaBat 7112 multibeam sonar system for diver detection from RESON

The new SeaBat 7112 system consists of a circular array and projector ensonifying a cylindrical volume of water up to 1000 meters across. Designed to detect small targets such as divers with closed circuit re-breather equipment, the systems will track and alert operators of their presence on a geo-referenced map of the area.

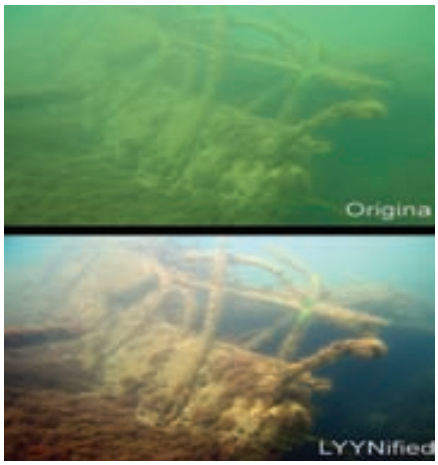
SeaBat 7125 dual-frequency sonar system

RESON launched in May 2007 the first multibeam sonar systems on the market with dual frequency for remotely operated vehicles (ROV) down to depths of 6000 meters. The new SeaBat 7125 enables exploration missions to map the sea faster, and more accurately than ever before. With the release of the updated SeaBat 7125 dual-frequency multibeam echosounder, RESON is setting new standards in deep-sea sonar survey.



Reson's dual headed sonar system.

CEO Allan Vestergaard



lot of market attention. Being a portable product it is an ideal solution for end users: It is just a matter of plugging it in directly into an existing video system, giving their system new ability in low visibility conditions. But sometimes you would rather have the LYYNification functionality inside a video system, a console or other product. To meet this demand LYYN recently launched the next generation LYYNification platform HAWK, and the first product LYYN HAWK INTEGRATION BOARD. Target audience is product manufacturers, e.g. video equipment manufacturers.

Laurel Industrial Company, Inc.

2190 Fortune Drive, San Jose, CA 95131
Tel: +1 (408) 526-9022

Laurel Industrial Company, Inc. is the World-Wide Exclusive Sales Agent for Nanyoo Subsea Engineering Co., Ltd.

Nanyoo manufactures a full line of hydraulic and electric Oceanographic Winches. Models range from large units for deploying and retrieving digital seismic streamers to portable units for lifting and lowering small instrumentation payloads. Various sizes and capacities are available for use with side scan sonars, marine magnetometers, tow bodies, water sampling instruments , subsea video, and CTD profiling. In addition, custom designed winches and A-frames are available

MacArtney A/S

Gl. Guldagervej 48, DK-6710 Esbjerg V
Tel.: +45 7613 2000
Email: mac-dk@macartney.com
www.macartney.com
CEO: Niels Erik Hedeager

The MacArtney Group is a worldwide organization of companies specializing in the sale and service of underwater technology systems and products. The group headquarters in Esbjerg, Denmark, was established in 1978 and this year celebrated it's 30th anniversary, supports subsidiary companies in Norway, Benelux, the UK, France, Germany and the U.S. Underwater technology covers a highly diverse market including offshore oil and gas geophysical exploration, development and production, diverse military activities including MCM, civil engineering, underwater security; ocean sciences, environmental studies and research and leisure activities.

Mad Rock Marine Solutions Inc.

77 Alexander Street
St. John's, NL, Canada A1E 2T8
Tel: 1 709 772 7547
Email: Info@madrock.ca
Website: www.madrock.ca

Mad Rock Marine Solutions is an advanced technology company that provides marine operators with the safe and effective evacuation system solutions. Using a wide range of engineering, regulatory, operations, and human factors expertise, Mad Rock is committed to providing the most economically effective solutions to clients evacuation system needs. Taking on one of the largest problems in the evacuation system industry, the failure of lifeboat release mechanisms, Mad Rock developed a new lifeboat release hook. Mad Rock designed a fail-safe (closed) lifeboat hook that has reliable locking stability and superior failure warning characteristics.

Makai Ocean Engineering, Inc.

PO Box 1206, Kailua, HI 96734
Tel: 808-259-8871
Email: Makai@makai.com • www.makai.com

Founded in 1973, Makai Ocean Engineering, Inc. is a leading expert in the design and deployment of large deep ocean pipelines and is the maker of the Makai Submarine Planning and Installation Software Suite. Much of Makai's ocean design work is focused on methods to produce clean, renewable and sustainable energy, such as sea water air conditioning (SWAC) and ocean thermal energy conversion (OTEC). Makai's software team continues to improve and expand upon their flagship product MakaiPlan, which has become the telecommunications industry standard in planning submarine cables. New advances have been made in accurately modeling the shapes of towed arrays from submarines and the deployment of autonomous seafloor surveillance systems. A new division has been recently launched to further the company's successful research and development of 3D/4D visualization.

Marine Environmental Mgmt.

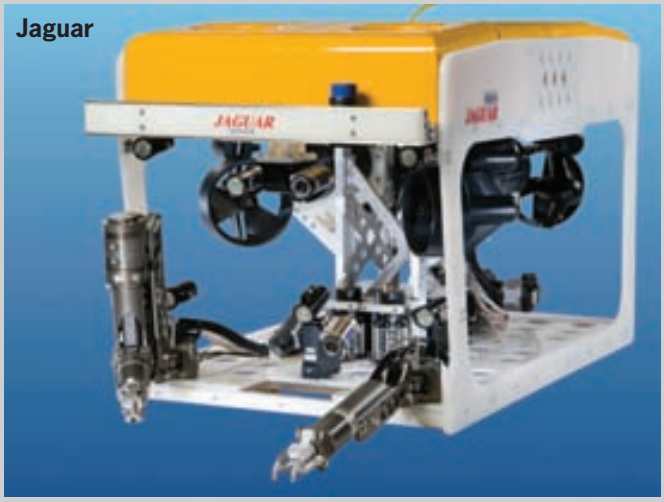
P.O. Box 686, Warrington, Pa. 18976
Tel: 215-491-0543
Email: Stu@MarineEnvironmentalMgmt.Com
www.MarineEnvironmentalMgmt.Com

Marine Environmental specializes in the utilization of "bio - remediation" technology for the degredation of hydrocarbon and organic waste. This is a non-chemical process, and will decrease costs assocaited with the pumping ashore of bilge waste, and grey / black water. It is an authorized distributor for AQUATEK (Oil

Saab Seaeye Marine Ltd

Lower Quay Rd, Fareham, Hampshire,
United Kingdom PO16 0RQ
Tel: +44 1329 289000
E-mail:rovs@seaeye.com
www.seaeye.com
Managing Director: Dave Grant
Engineering Director: Jon Robertson
Sales Director: Matt Bates
Number of Employees: 95
Annual Sales (US$): $12 million

Seaeye has, since the late 1980's, been a supplier of electric powered ROVs to mainly the offshore oil and gas industry with more than 400 systems operating worldwide in this sector conducting everything from diver support, pipeline survey, and drill support to IRM and light construction tasks. We have also supplied systems to the defence, scientific and private sectors. In 2002 Seaeye introduced its first ROV built to offshore standards but aimed at the requirements of coastal and inshore operators. This Falcon ROV has since become a leading product in its class with sales of around 150 systems achieved by mid 2008. Sales and marketing activities for Falcon and the new deeper rated Falcon DR, Panther XT and Jaguar have opened up new markets in the work class ROV market. These products have introduced Seaeye to a much wider audience beyond oil and gas resulting in sales of Lynx, Tigers, and Panther Plus to various navies, research organizations and environmental groups including the Russian Navy who use their Panther Plus for submarine rescue operations and the French Navy who use theirs for torpedo recovery.



Jaguar

Technology Profile: Seaeye Pioneered the use of brushless DC motors for reliable use in ROV thrusters and were the first to use modern plastics and composite materials in the construction of ROV frames and electronics pods. Seaeye's Falcon is the first vehicle in its class to make use of modern distributed intelligence in the control system that improves reliability and ease of use but also adds to the inbuilt diagnostics capability of the system and reduces the weight of the vehicle by eliminating a heavy electronics pod. The new Jaguar incorporates new redundancy technologies and provides more powerful and deeper rated systems to further extend the product range. This includes not only further thruster developments but also new control technology, station keeping and power distribution techniques.

Stress Subsea, Inc.

13603 Westland East Blvd.,Houston, TX 77041
Phone: 281.890-8441
Website: www.stress-subsea.com
President: Joe R. Fowler, Ph.D., P.E.

Stress Subsea, Inc. specializes in subsea tiebacks, pipeline design, field architecture development, and project management services. It offers a skilled engineering staff with an average of 19 years of experience in the offshore industry. SSI has worked on more than 200 projects for 47 companies. SSI's primary focus is to provide the offshore market with expertly engineered, cost effective solutions.

SSI is currently executing a variety of field development projects for several offshore operators, as well as sponsoring the Deepwater RUPE consortium.

Tritech International Limited

Peregrine Road, Westhill Business Park, Westhill
Aberdeen, AB32 6JL UK
Tel:++ 44 (0)1224 744111
Email:sales@tritech.co.uk • www.tritech.co.uk

The company started trading in 1990 with the aim of producing a range of sub-sea products available. Beginning life as a two-man operation working from a converted house, Tritech now produces sensors and tools for ROV (Remotely Operated Vehicles) and AUV (Autonomous Underwater Vehicles) markets. As the name implies, Tritech embraces three different technologies; sub-sea imaging and measuring systems with both acoustic and video sensors, and many state of the art mechanical and electrical products. Tritech specializes in the production and provision of high performance acoustic sensors, video cameras and mechanical tooling equipment for professional, underwater markets. Tritech Provides full acoustic survey packages including ROV obstacle avoidance sonars, profiling sonars, sidescan sonar systems, bathymetric systems, altimeters and sub-bottom profilers.

Water Separator), and Quansor (Oil Content Monitors), along with the manufacturer of the "Purificator" a stand-alone filtration unit for hydraulic systems.

Marine Magnetics

134 SPY Court, Markham, ON L3R 5H6 Canada
Tel: +1 905 479 9727
Email:info@marinemagnetics.com
www.marinemagnetics.com

Marine Magnetics manufactures magnetic exploration equipment for marine environments. It supplies mainly for the measuring, medical and controlling devices manufacturing industries. One of its main products is the SeaSPY Overhauser towed magnetometer has gradiometer capability and all SeaSPYs are interchangeable. Standard SeaSPY fish are pressurized for 300m. For those interested in deep surveys Marine Magnetics provides SeaSPY with the deep tow option, pressurized to 2000m.

Marine and Mineral Projects

Ground Floor Block B, Aintree Park, Loch Road
Kenilworth 7700, Cape Town, South Africa
Tel: +27 21 763 3965
Email: rodney.norman@marineandmineral.com
www.marineandmineral.com
MD: Rodney Norman, MD
Projects Director: Hans Smit
Annual Sales: $16m

South African based, marine engineering firm, Marine and Mineral Projects (MMP) offers world-leading technology and project management for: Offshore oil and gas support services; Marine engineering; and Underwater diamond and other mineral mining, in oceans or lakes from support vessels, using remote-controlled underwater crawlers, launch & recovery and mooring systems. Operating globally, MMP supplies equipment and expertise to offshore operations in South Africa, Namibia, Europe, UK, and Brazil. Marine and

Mineral Projects offers: Customized and standard solutions, heavy engineering design and manufacturing; Innovative products designed according to the unique needs of each client; Product training and support; Technology for extreme environmental condition; Efficient and reliable project management; and In-house mechanical, structural, electrical, automation and control expertise. MMP was founded in June 1993 as a project house to service the growing marine diamond mining industry. The business expanded its services with the acquisition of an electrical and control company. MMP is expanding its marine mining technology internationally into the deep water mining of massive sulphide deposits and other minerals, and is growing its client base in the oil and gas services industry. MMP's international clients include De Beers and Subsea 7.

Marine Underwater Electronics

20/22 Pilis St., Piraeus,Greece 185 32
Tel:+302104100656/7
Email:marhge@otenet.gr
CEO: Marinos Pittas

Marine Underwater Electronics was established in 1980 and specializes in high technology electronics for underwater use. The company's main activity is the production of video inspection systems, cameras, communication equipment, lights, headphones and microphones-all for underwater use.

Turner Designs, Inc.

845 W. Maude Avenue, Sunnyvale, CA 94085
Tel: 408-749-0994
Email: sales@turnerdesigns.com
www.turnerdesigns.com
CEO & President: James Crawford
Vice President: Tom Vasconcellos
Marketing Director: Chelsea Donovan
Number of Employees: 25

Turner Designs, Inc. was founded in 1972 by George Turner and for three decades, has manufactured rugged and reliable field, laboratory, submersible and on-line instrumentation. TDI has produced thousands of fluorometers. Turner has dealers in more than 30 countries. Its mission is to provide innovative fluorescence based instruments for basic research, water quality analysis, pollution control analysis and specialized OEM industrial applications.

Technology Profile: Turner Designs has a reputation for developing reliable laboratory, field and submersible fluorometers that vary in functionality, size and price to fit any type of user need. Traditional applications were developed for in vivo and extracted chlorophyll a pigments as well as dye tracers. TDI is continuously enhancing its line of optical configurations that now encompass blue green algae pigments, active fluorescence, applications utilizing ultra violet wavelengths such as colored dissolved organic matter (CDOM) and inorganic ammonium, as well as infra red wavelengths used to detect turbidity.

Schilling Robotics, Inc.

201 Cousteau Place
Davis, Calif. 95618-5412
Tel: 530-753-6718
E-mail: sales@schilling.com
www.schilling.com
CEO & President: Philip Otto
Marketing VPs: Wes Gerriets and Jason Stanley
Sales VPs: Wes Gerriets and Jason Stanley
Engineering VP: Steven Callori
Facilities: Davis, California; Houston, Texas; Aberdeen, U.K.
Square footage: 75,370 square feet (total, all locations)
Testing facilities: in-ground test tank
Number of employees: 300

Since its founding in 1985, Schilling Robotics has designed and manufactured remotely operated equipment for underwater environments. The company's initial products were remote manipulator systems. More than 20 years later, the company continues to specialize in the design, development, manufacture, and field service of remotely operated systems. Products now include electric and hydraulic work-class remotely operated vehicles (ROVs) and subsea control systems that integrate control, communication, and actuation in underwater packaging. The Schilling Robotics staff specializes in the design, development, manufacture, and field service of remotely operated systems. Engineering specialties include control systems, equipment packaging for marine environments, high-pressure hydraulics, system-level design, system micro-miniaturization, high-speed digital electronics, communications, data acquisition, robotics, power transmission, and precision machining.

The company has a comprehensive support system, and with the largest field service team of any ROV manufacturer, Schilling Robotics can support clients on site, 24 hours a day, with factory-trained technicians experienced in operations and technical support. Schilling's support system includes a 24-hour telephone hotline support by qualified technical staff; full spares and service support based in the U.S. and U.K., with manipulator spares and service also based in Norway; detailed technical manuals with full part lists, engineering drawings, and schematics; instant on-line access to up-to-date technical manuals and service bulletins; and a web-based customer feedback system. Privately-owned Schilling Robotics is headquartered in Davis, California, U.S.A., with regional offices in Aberdeen, U.K., and Houston, Texas. Technology Profile: Schilling Robotics produces the Remote Systems Engine (RSE), a set of modular equipment items for underwater propulsion, actuation, control, and communication. Standard products include a family of electric and hydraulic ROVs, an ROV simulator for training and mission planning, and four remote manipulator systems. All Schilling ROVs are based on RSE building blocks. The UHD is an ultraheavy-duty work-class ROV with power pack options of 150 and 200 hp. It produces an unmatched combination of vertical and horizontal thrust, and can direct full system power to tooling or propulsion as required. The EHD electric ROV, which delivers performance equivalent to a 100-hp system, offers speed, simplicity, small size, light weight, and exceptional capability. All Schilling ROVs use advanced intelligence for automatic control modes (heading, depth, altitude, attitude, StationKeep, and AutoTrack). Schilling's Digital Telemetry System (DTS) provides telemetry and power control for virtually any remotely operated system. It accommodates serial, video, and Ethernet data, allowing extremely flexible setup and control of cameras, lights, and instruments. The DTS is suited for any subsea (full-ocean depth) or hazardous environment. Schilling offers four standard telerobotic manipulator systems (TITAN 4, CONAN, ORION, and RigMaster) with a wide range of functions, sizes, lift capacities, and control systems. In the seven-function, titanium TITAN 4, all subsea electronics are inside the manipulator arm, which increases reliability, enhances troubleshooting, and decreases weight and spares requirements. Schilling also provides spare parts, maintenance/repair services, and operations/maintenance training for all of its products.

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Specific Topic Areas

- An ice-free Arctic Ocean: navigational, legal, and policy issues
- Adapting technology and instrumentation to ice-covered seas
- Long-term observation of Polar Oceans: status and challenges for the future
- Technological challenges in linking Ocean and Climate Sciences
- Ocean biodiversity and molecular technologies
- Technological challenges in biological/fisheries oceanography
- The St-Lawrence River and its deep arctic channel

Traditional Technical Tracks

- Sonar Signal/Image Processing and Communication
- Ocean Observing Platforms, Systems and Instrumentation
- Air and Space Ocean Remote Sensing
- Ocean Data Visualization, Modeling and Information Management
- Marine Environment, Physical Oceanography and Meteorology
- Subsea Optics, Imaging and E-M Systems
- Marine Law, Policy, Management and Education
- Offshore Structures and Technology
- Underwater Acoustics and Acoustical Oceanography

Important dates to remember

Abstract, Tutorial and Student Poster Submission Deadline: **15 May 2008**
Author Notification: **1 June 2008**
Advance Registration closes: **1 July 2008**
Author Registration Deadline for Publication: **22 July 2008**
Manuscript Submission Deadline: **22 July 2008**

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Sea-Bird Electronics, Inc.

1808 136th Pl. N.E.
Bellevue, WA, 98005 USA
Tel: 425-643-9866
E-mail seabird@seabird.com
www.seabird.com
President: Dr. Norge Larson, Oceanographer
Vice President: John Backes
Marketing Director: Doug Bennett
Engineering Director: Dave Murphy
Facilities: Engineering and Administrative offices, laboratories, manufacturing, CNC machine shop, warehouse.
Square Footage: approx. 30,000
Testing Capabilities: conductivity, temperature, and dissolved oxygencalibration baths (12), 10,000 psia hydrostatic pressure test vessels (3), deadweight testers, metrology laboratory - water triple-pointcells, galium melting point cells, 8400B Autosals, IAPSO Standard Seawater
Number of Employees: 95
Annual Sales (US$): 25m

Sea-Bird Electronics, Inc. is a leading manufacturer of oceanographic CTDs and integrated water sampling systems. CTDs measure conductivity, temperature, and pressure (depth), as well as dissolved oxygen and other variables, enabling oceanographers to determine salinity, density, and other properties contributing to ocean circulation, the function of marine ecosystems, and global climate dynamics. Sea-Bird has been serving customers in universities, oceanographic institutes, government agencies, engineering firms, and navies throughout the world for over 30 years, and has built a reputation for producing the most accurate data possible.

The owners and top management of the company have extensive oceanographic and sea-going experience and are dedicated to advancing the science of ocean measurement and developing new capabilities that contribute to better understanding of the oceans. Sea-Bird employs over 90 people, including 5 oceanographers, and has more than 40 products in current production to meet growing measurement challenges encountered as oceanographic research and monitoring applications employ more diverse instrument platforms.

Technology Profile: Instruments are engineered to produce the most accurate data possible under the varying dynamic conditions encountered in conventional profiling from research vessels, fixed moorings, moored profilers, autonomous drifting profilers (Argo floats), AUVs, autonomous gliders, and large-scale networked sensor arrays in ocean observatories. Highest-quality ocean data derives from Sea-Bird's focus on performing most accurate calibrations possible, designing instruments that eliminate or minimize dynamic errors, and preserving initial accuracy throughout a deployment.

Accuracy begins with stable sensors and circuits, and calibration in Sea-Bird's state-of-the-art automated bath systems for temperature, conductivity, and dissolved oxygen. The calibration facilities are backed by an in-house metrology laboratory where primary standards in temperature (water triple point and gallium melting point) and conductivity (IAPSO Standard Seawater) are maintained. Calibration bath data, reference sensor stability, and standards data are monitored daily and regularly reviewed for consistency by the chief scientist.

Marport Deep Sea Technologies

50 Harbour Drive, St. John's, Newfoundland
Canada A1C 6J4
Tel: 709-757-5757
Email: gleyte@marport.com • www.marport.com
CEO & President: Karl Kenny
Executive VP, CTO: Anthony Paul
Executive VP, Sales and Marketing: Oskar Axelsson
Engineering Director: Didier Caute, Vice President of Engineering
Number of Employees: 40
Annual Sales (US$): $7m (projected)

Founded in 1996, Marport has become a leader in the commercial subsea acoustic instrumentation, data processing and visualization business.

The company is a pioneering developer of Software Defined Sonar (SDS) systems and is a designer and manufacturer of high performance subsea acoustic solutions. Applications include underwater sensing, processing, communications and visualization for customers engaged in commercial fisheries, offshore energy exploration and retrieval, ocean science and defense. Marport has recently obtained funding from the Canadian Government to assist in the development of a new class of commercially viable AUV. Expected completion date is mid-2009. The AUV will utilize a combination of Marport's SDS technology, underwater modem and 3D acoustic image processing and display software.

Technology Profile: Marport develops and manufactures software defined acoustic products for subsea applications and is a pioneering developer of Software Defined Sonar (SDS), an adaptive future-proof solution for flexible underwater detection, sensing and communications systems. SDS replaces conventional, hardware based sonar systems with one common platform composed of programmable components that are controlled by software.

A user can change functionality or add optional features to a piece of equipment by changing the software, not the hardware. Functionality is altered by downloading new software directly to the sensor via Bluetooth download and can be done even while at sea.

Markey Machinery

4634 East Marginal Way So., Suite C-140
Seattle, WA 98134
Tel: 206 - 622- 4697
Email: bagriffin@griffinassociates.com
URL: www.markeymachinery.com
Contact Person: Barry Griffins

Founded in 1907, Markey Machinery Company is in the design and manufacturing of high quality custom deck machinery for workboat, scientific, and dockside applications. The company established a reputation for quality by delivering machinery that is built for the long haul every time.

SonTek/YSI Inc.

9940 Summers Ridge Road, San Diego CA.921 • Tel: (858) 546-8327
Email: inquiry@sontek.com • www.sontek.com
President and CEO: Rick Omlor • Executive Vice President: Gayle Rominger • Number of Employees: 250

Founded in 1992, SonTek/YSI manufactures a range of affordable, reliable acoustic Doppler systems for water velocity measurement in oceans, harbors, rivers, estuaries, and laboratories. Since its invention of the Acoustic Doppler Velocimeter, the SonTek/YSI product line has grown into a diverse, multi-faceted mix of high-technology instrumentation. SonTek systems tell customers how fast the water is moving, where it is moving, and even if it is not moving at all. Additionally, just about all its products are offered with an array of ancillary sensors for complete environmental monitoring solutions. In July, 2001, YSI Inc., of Yellow Springs, Ohio, acquired the assets of SonTek and formed a new company, SonTek/YSI, that operates as a wholly-owned subsidiary of YSI Inc. The synergistic relationship between SonTek and YSI now makes for an integral solution to monitoring, testing and measuring global water ecosystems-our most important life-sustaining resource.

Technology Profile: SonTek's first product, the 10-MHz Acoustic Doppler Velocimeter (ADV), was developed in cooperation with the U.S. Army Corps of Engineers' Waterways Experiment Station. Originally designed for laboratory use, the ADV is a single-point, high-resolution Doppler current meter used for detailed studies of 3D velocity fields. The ADV product line includes laboratory and field instruments with options for integrated sensors (temperature, pressure, compass/tilt) and autonomous operation.

The SonTek product line expanded to include a wide range of current measurement instruments. The Acoustic Doppler Profiler (ADP) is a current profiler with profiling ranges of up to 200 m. At its introduction in 1994, the ADP revolutionized the market for current profilers.

MSI (Materials Systems Inc.)

543 Great Road
Littleton, MA 01460
Tel: 978 486 0404
Email: info@msitransducers.com
URL: www.msitransducers.com
President: Dr. Leslie Bowen
Vice President Products: Gerald Schmidt
Vice President Engineering: Dr. Brian Pazol
Business Development Manager: Rick Foster

MSI (Materials Systems Inc.) designs and manufactures custom sonar transducers and arrays for a wide range of applications, including side-scan, obstacle avoidance, sub-bottom profiling, swath bathymetry, mine hunting, swimmer detection, and acoustic communications. MSI's piezocomposite technology offers extremely broad bandwidth, high receive sensitivity, high source levels, and conformability for curved arrays. MSI personnel participated in the earliest work on piezocomposites in the late 1970's, when the performance benefits were first demonstrated under ONR and DARPA funding. Since then, MSI has developed innovative injection molding techniques for cost-effectively producing piezocomposite transducers in high and low volumes. Technology Profile: MSI's piezocomposite arrays deliver broad bandwidth, allowing multiple beams to operate in distinct frequency bands; designed to allow greater resolution and complex waveforms, enabling sonar systems to operate using many simultaneous sonar pings to achieve greater range, resolution and survey speed. MSI's piezocomposite arrays can be curved and shaded to achieve a specific beampattern or to achieve an efficient hydrodynamic profile.

Measurement Technology NW

4211 24th Avenue West, Seattle, WA 98199
Tel: 206-634-1308
Email: lci@mtnw-usa.com • www.mtnw-usa.com
LCI Engineering Director: Tom Rezanka
Sales & Marketing Director: Dave Heiss

Measurement Technology NW provides complete winch instrumentation solutions for new and retrofit installations. MTNW is more than the manufacturer of LCI-90 and LCI-100 displays, but a source for payout and tension sensors, running

RBR Ltd.

27 Monk St., Ottawa, ON, CANADA K1S 3Y7
Tel +1(613)233-1621
Email: info@rbr-global.com • www.rbr-global.com

Dr. Li Wenchao

RBR Ltd. has seen rapid growth over the past ten years, especially for its oceanography and environmental monitoring instruments. Established in 1976 as a contract R&D company, RBR served government and education institutions for its first 20 years. RBR's first autonomous data logger, developed in 1985, was a single channel temperature logger with a 12 bit dual slope a/d and 56K of battery-backed up RAM. The concept was slowly extended and developed into a range of loggers that included a CTD with one extra channel, and numerous specialised instruments for dedicated applications. In 1999 RBR focused its strategy on designing, developing and manufacturing world-class data logging equipment for harsh environments. Calibration to modern standards was needed, and RBR can now calibrate temperature to 0.002°, pressure to 0.015%, and conductivity to 0.003 mS/cm using the best available equipment and method. Calibration of DO, pH, ORP and turbidity is also carried out.The refocusing also saw an evolution of instruments to include an excellent 24 bit temperature recorder, then to extend that to other single channel and dual channel products all with a 24 bit a/d as standard. The power for these instruments was a set of "off-the-shelf" 3V lithium cell used in cameras. Memory has continued to fall in cost, with 2MB on introduction, then 4MB and now 8MB as standard for these instruments. Multi-channel instruments were based on the same technology, but with an internal serial bus and a modular construction. The basis of these instruments is a set of interface cards tailored to individual measurement sensors. These could be combined in any number of ways providing great flexibility, resulting in a series of instruments, known as the XR data loggers, which have been a great success. Recent developments for this series have included cards for a large data memory (up to 2Gbyte is now feasible), a generic serial card that can accommodate almost any serial device or sensor, and a very high resolution low power card to accept data from the resonant quartz gauges.

line tensiometers, PC software for single or multi-winch monitoring, as well as a provider of calibration services and full system instrumentation packages.

METOCEAN Data Systems

21 Thornhill Drive,
Dartmouth, Nova Scotia B3B 1R9 Canada
Tel: +1.902.468.2505
www.metocean.com

METOCEAN Data System develops and manufactures data acquisition and telemetry systems. METOCEAN specializes in the production of air-deployed and ship deployed drifting buoys, Search and Rescue buoys such as Self Locating Datum Marker Buoys, Oil Tracking Buoys such as Argospheres and Davis Drifters, Ice Platforms and Acoustic Systems.

ODOM Hydrographic Systems, Inc.

1450 Seaboard Ave., Baton Rouge, La. 70810
Tel: +1 (225)769-3051
Email: email@odomhydrographic.com
www.odomhydrographic.com

With more than three thousand echo sounders produced and distributed worldwide, Odom Hydrographic Systems, Inc., has established a standard for product reliability and customer service in the survey marketplace. Examples of Odom's continuing drive to lead the echo sounder market are the exceptional capabilities of the Echotrac MKIII and the introduction of our innovative yet affordable multibeam echo sounder, the ES3.

Phoenix International, Inc.

9301 Largo Drive West, Largo, Md. 20774
Tel: 301-341-7800
Email: tjanaitis@phnx-international.com
www.phnx-international.com

Phoenix International, Inc. is 11-year old marine service company specializing in underwater operations and engineering worldwide. The original staff of nine conducted underwater ship repairs for a single Navy customer, and grew to over 250 people whose capabilities now serve customers found throughout the ocean industry. Phoenix performs waterborne ship repairs, underwater inspections and surveys, search and recovery missions, marine construction support, submarine rescue operations, and engineering. Expertise in underwater welding, side scan sonar, ROVs, diving, and design is available from Phoenix offices located in Virginia, Texas, Maryland, Louisiana, Hawaii, and California.

Sub-Atlantic Ltd.

Woodburn Rd, Blackburn Business Park, Blackburn, Aberdeen, AB21 0PS, Scotland
T: +44 (0) 1224 798660
Email: sales@sub-atlantic.co.uk

Sub-Atlantic Inc.
0642 West Little York, Suite 100
Houston, Tx, 77041-4014, USA
T: +1 713 329 8730
Email: sales@sub-atlantic.com
www.sub-atlantic.co.uk

Sub-Atlantic is a leading manufacturer of World Class electric powered Remotely Operated Vehicles, ranging from portable units to light work class systems. Sub-Atlantic is also principal OEM supplier of Thrusters, Hydraulic Power Units, Valve Packs, Compensators and Pan & Tilt Systems to many of the world's other ROV manufacturers. Offices in the UK and USA and a worldwide network of agents.

Applied Science Associates, Inc.

70 Dean Knauss Drive, Narragansett, RI 02882
Tel: +1 401 789-6224 | f: +1 401 789-1932
Email: ldooley@asascience.com
www.asascience.com

ASA is a global science and technology solutions company. Through consulting, environmental modeling, and application development, ASA helps a diverse range of clients investigate their issues of concern and obtain functional answers.

ASA's solutions are based on applied science and advanced research. ASA's services and products, along with its staff's diverse technical backgrounds, are specialized in the analysis of marine, freshwater, air, and land resources; computer modeling of physical, chemical, and biological processes; geographic information systems (GIS); operational research; and data display.

Since 1979 and in over 100 countries, ASA has been providing services and custom solutions to sectors including energy, environment, construction, defense, security, emergency management, transportation, and shipping. ASA clients include government agencies, major corporations, environmental and regulatory consulting firms, legal firms, and research and academic institutions.

SEACON Brantner & Assoc.

1240 Vernon Way, El Cajon, Calif. 92020
Tel: 619-562-7071
Email: Seacon@seacon-usa.com
www.seacon-usa.com
President: Patrick Simar
Vice President: Denton Seichan

The SEACON Group of companies has the technology to design, prototype, qualify and manufacture an extensive and diverse range of electrical, optical and hybrid connector assemblies and cable system solutions. The Group's headquarters is based at SEACON Brantner & Associates, Inc., in El Cajon, Calif.

SEACON (europe) Ltd. (formerly Sea Connections Systems) was the first international addition to the group in 1987. Design, engineering, manufacturing, quality control and testing all take place within this facility. A successful range of products which include the Wet-Con, Metal

Teledyne Marine

Facilities:
Teledyne D.G.O'Brien (Headquarters)
Teledyne Instruments, Inc.
Seabrook, New Hampshire USA

Teledyne D.G.O'Brien UK
Teledyne Limited
Sales and Service Center, North Somerset, UK

Teledyne Geophysical Instruments (Headquarters)
Teledyne Instruments, Inc., Houston, Texas USA

Teledyne Geophysical Instruments Europe
Teledyne Limited
Manufacturing and Service Center
Gloucester, England

Teledyne Singapore
Private Limited, Manufacturing and Service Center
Singapore

Teledyne Benthos, Inc. (Headquarters)
N. Falmouth, Massachusetts USA

Teledyne Impulse (Headquarters)
Teledyne Instruments, Inc., San Diego, California

Ocean Design, Inc. (Headquarters)
Daytona Beach, Florida USA

Ocean Design, Inc. Houston
Test and Service Center, Houston, Texas USA

Ocean Design Europe, Ltd.
Test and Service Center, Ellon, Scotland

Ocean Design Ltda.
Test and Service Center, Rio de Janeiro, Brasil

Teledyne RD Instruments, Inc. (Headquarters)
Poway, California USA

Teledyne RD Instruments Europe
Teledyne Limited, Sales and Service Center
La Gaude, France

Teledyne RD Technologies (Shanghai) Co., Ltd.
Research and Development Center
Shanghai, China

Teledyne TSS Ltd. (Headquarters)
Watford, England

Teledyne TSS Ltd., Aberdeen, Scotland

Teledyne TSS Ltd.
Teledyne Instruments, Inc., Houston, TX USA

Teledyne RD Instruments

Facilities:
Teledyne RD Instruments, Poway, CA
Teledyne RDI Europe, La Gaude, France
Teledyne RD Technologies, Shanghai, China

Teledyne Marine

14020 Stowe Drive
Poway, CA 02644
Tel: +1-508-539-6960
Email: mnewcombe@teledyne.com
www.teledynemarine.com

Teledyne Marine is a group of undersea technology companies that have been assembled by Teledyne Technologies Incorporated. In keeping with Teledyne's philosophy, the member companies within the Marine Group remain committed to their technical heritage. These companies now combine their talents and technology under the Teledyne Marine umbrella to provide their customers with a new level of collaborative technology, innovation, and worldwide support. Each Teledyne Marine company is a leader in its respective field, with a shared commitment to providing premium products backed by unparalleled service and support. In total, these companies have over 316 years of experience providing undersea solutions to the defense, offshore, and academic communities.

The Teledyne Marine companies are deeply entrenched in the oceanographic, offshore and defense industries, providing a wide array of products and solutions in some of the world's most extreme offshore environments.

Teledyne Marine's company capabilities include:

- Teledyne Benthos provides a wide array of oceanographic instrumentation and sensor solutions for use in marine environments. Products include acoustic modems, acoustic releases, seafloor mapping systems, Remotely Operated Vehicles, and glass flotation products.
- Teledyne D.G.O'Brien incorporates the unmatched reliability of glass-to-metal seals into optical and electrical solutions.
- Teledyne Geophysical Instruments designs and manufactures marine seismic exploration products including hydrophones and streamer cables.
- Teledyne Impulse designs and manufactures electrical and optical interconnection systems for a wide range of harsh environments.
- ODI (Ocean Design, Inc.) designs and manufactures subsea electrical, fiber optic, hybrid and high power interconnect systems.
- Teledyne RD Instruments designs and manufactures acoustic Doppler products for current profiling, waves measurement, and underwater navigation and imaging.
- Teledyne TSS designs marine navigation gyrocompasses, pipe and cable survey systems, and out-of-straightness tools, combined with a range of high-tech, accurate sensors for heading and motion measurement.

Teledyne RD Instruments

14020 Stowe Drive, Poway, CA 02644
Tel: +1-858-842-2600
Email: rdisales@teledyne.com
www.rdinstruments.com
General Manager: William Kikendall
Vice President Sales/Marketing: Harry Maxfield
Marketing Manager: Margo Newcombe
Engineering Manager: Joe Geisemann
Square Footage (Poway, CA): 80,000 sq ft.
Testing capabilities: Test tank, company boat
Number of employees: 210

Teledyne RD Instruments, Inc., located in Poway, CA, specializes in the design and manufacture of underwater acoustic Doppler products for a wide array of current profiling and precision navigation applications. Originally founded as RD Instruments, the company was formed in 1982 by Fran Rowe and Kent Deines as a result of their development of the industry's first Acoustic Doppler Current Profiler (ADCP), a revolutionary device capa-

ble of profiling currents at up to 128 individual points in the water column. Through the years, RD Instruments experienced steady growth and remained dominant in the industry by providing an unwavering commitment to new product development, superior data quality, and the highest level of customer service and support. In August 2005, RD Instruments was purchased by Teledyne Technologies, and now operates as a wholly owned indirect subsidiary of Teledyne Technologies, Inc. Upon acquisition, the company's name was changed to Teledyne RD Instruments. Teledyne RDI is also now a member of the growing Teledyne Marine group, which also includes: Teledyne Benthos, Teledyne Geophysical Instruments, Teledyne DG O'Brien, and ODI.

Through market growth and product diversification, the Teledyne RDI is now comprised of three distinct business units:

• **Marine Measurements:** Acoustic Doppler current profiling and wave measurement products for coastal and deep water oceanographic environments.

• **Navigation:** Precision navigation products for the marine environment.

• **Water Resources:** Discharge and flow-measurement products for inland environments.

Teledyne RDI continues to lead the industry by providing our customers with innovative Doppler technology backed by unparalleled customer service and support.

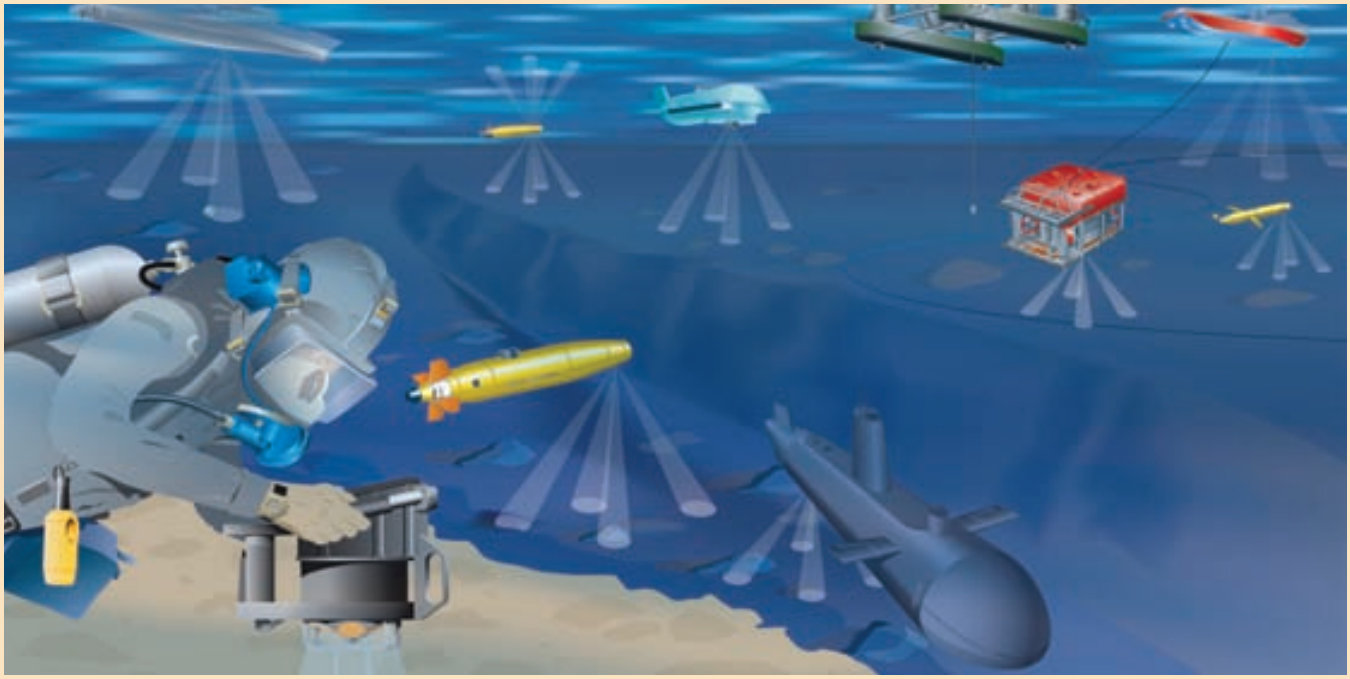
Technology Profile: From it's inception in 1982, Teledyne RDI has continually expanded its core acoustic Doppler technology to create a wide array of current profiling products for environments ranging from the shallowest stream to the deepest ocean. Today, Teledyne RDI's ADCP's are the de facto standard instrument used worldwide by scientists and field engineers to improve their understanding of water current circulation. With well over 10,000 ADCPs delivered worldwide, Teledyne RDI delivers the industry's most field- proven ADCPs available. Teledyne RDI's ADCPs offer the following advantages:

• Patented BroadBand processing for significantly improved data quality, power efficiency and error detection;

• A patented two (2) dimensional phased array transducer design for significantly reduced size, weight, and deployment complexity;

• A unique 4-beam configuration to ensure data quality and reliability.

Teledyne RDI has also applied its ADCP technology to a line of Doppler Velocity Logs (DVLs) and diver navigation products. Teledyne RDI's Workhorse Navigator DVL provides high rate, high precision velocity and altitude updates for a wide array of applications spanning the military, commercial, and scientific markets. Most recently, Teledyne RDI launched the new Explorer DVL. Explorer's compact size, weight and low power requirements make it ideally suited for today's littoral vehicles.



VideoRay LLC

580 Wall Street
Phoenixville, Pa. 19460
Tel: +1 (610) 458-3000
Email: info@videoray.com
www.videoray.com
President: Scott Bentley
Vice President: Tom Glebas
Marketing Director: Chris Gibson
Sales Manager: Erick Estrada
Engineering Director: Marcus Kolb
Facility: 20,000sq ft with machine shop, warehouse, production floor, and corporate
Square Footage: 20,000
Testing Capabilities: (ie. test tanks, boats):3,000 Gallon Micro-ROV Test Tank
Number of Employees: 30
Annual Sales (US$) $7.5m

VideoRay was founded in 1999 on the premise of making ROVs (Remotely Operated Vehicles) more accessible to more people who want to explore and capture underwater worlds on video. Now, with more than 1,000 ROVs in service around the world, VideoRay has clearly become a leader in Micro-ROV technology. Starting at just $5,995 and weighing just 8 pounds, VideoRay is as a versatile, portable, affordable, and reliable solution for underwater operations including surveys, offshore inspections, search & recovery, homeland & port security, science & research, fish farming, and other unique applications in underwater environments. Plug and play technology allows customers to quickly attach sensors and accessories in the field. VideoRay is currently available on the General Services Administration (GSA) schedule.

Technology Profile: The VideoRay line of Remotely Operated Inspection Systems combines state of the art materials, electronics, optics, and hydrodynamics to produce the highest quality video in the smallest, lightest, and most easily deployed unit available. This feat of engineering was accomplished by some of the world's top underwater engineers and scientists. VideoRay's design has been perfected over years of extensive field experience. VideoRays have been deployed all over the world —from the warm, clear, calm waters of the Caribbean to hostile environments in the Arctic. VideoRays have been used in water too polluted for humans and in many places too confined or dangerous for divers to enter. Tough materials — acrylic domes, anodized aluminum, stainless steel, and Kevlar — used in the VideoRay ensure it will withstand repeated and extended use. The careful assembly, quality controls, and pressure testing in our assembly plants ensure that each unit will continue to provide service for years. Our ongoing R&D, extensive spare parts supplies, and trained technicians ensure that our customers stay productive with VideoRay technology for years to come.


Scott Bentley

Shell (MSS), 55 series, Sea-Mate and U-Mate ranges are manufactured at SEACON (europe). As the industry switches over to fiber optics for more applications subsea, these range from a single way through to a 48 channel and has led to the introduction of a range of standard, drymate, fiber optic, hybrid connectors named Opti-Con.

SEACON Global Production was created in 1989 in order to provide a quality, low cost solution for the manufacture of underwater electrical connectors. As a result of continuous success, SEACON Global Production has become the main rubber molded and composite connector manufacturer within the SEACON Group. With two manufacturing facilities located in Tijuana and Xalapa, Mexico, SEACON Global Production has the capability to produce high volume, low cost quality connectors with very quick turnaround times. In addition, the specialized engineering and product development departments can design and produce special application connectors to meet individual requirements. SEACON Global Production's product range includes the original Marsh & Marine, Rubber Molded and Glass Reinforced Epoxy (GRE) connectors, as well as the manufacture of the All-Wet, Wet-Con/Micro Wet-Con/Micro Wet-Con Split, Hummer and the newly released Globe-Con and CS-MSAJ series.

SEACON Advanced Products, LLC., was formed by the Group in 1999, to focus directly on the Lockheed Martin designed HydraStar and CM2000 high integrity underwater mateable connectors. Based in Bellville, Texas SEACON Advanced Products, LLC., continue to develop state-of-the-art products which include the HydraLight & MicroStar optical wet-mate connectors, which are based on the HydraStar technology, together with the S-Series and Photon optical connector ranges. In addition to the underwater mateable connectors, SEACON Advanced Products, LLC., also design and man-

SeaVision Marine Services LLC

302 Maple Hill Road, Naugatuck, CT 06770 (USA) • Tel: 1-203-605-8959
jsnyder@seavisionmarine.com • www.seavisionmarine.com
President: Jeffrey Z. Snyder
Annual Sales: $250,000 to $500,000

SeaVision Marine Services LLC (SeaVision) is a small business located in Connecticut, specializing in hydrographic survey, remote underwater investigation, and inshore bottom characterization services. Founded in 2005, SeaVision provides a variety of hydrographic survey and remote underwater services to clients with inshore and nearshore interests, with occasional support to offshore clients. Technical Profile: In three years, SeaVision's projects have taken them from their home waters of Connecticut to the arctic tundra of northwestern Canada to the Gulf of Mexico and the Caribbean; a diverse client list has allowed SeaVision to establish a solid foothold in their northeast U.S. regional market while maintaining the flexibility to service clients nationwide and internationally. When he started SeaVision, company president Jeff Snyder saw an opening in the regional market for a hydrographic services provider with intimate knowledge of the pressures that the project owners, engineers, and contractors experience when driving their projects to completion. There also seemed to be opportunities for a services provider who committed to bridging the gap between traditional hydrographic survey services and ROV services, and desired to find new ways to integrate those services within a single business model that could scale the solutions for both inshore and offshore projects.

To that end, SeaVision consistently performs hydrographic surveys using RTK-GPS positioning and singlebeam or multibeam echosounders, sidescan sonar surveys, shallow sub-bottom profiling, and sediment sampling for nearshore projects up and down the eastern United States. SeaVision also provides mini-ROV services for both inshore and offshore inspection services, and complements inspection-class ROV services with subsea survey support, particularly using inertial navigation systems and 3-D models to provide real-time inspection monitoring.

Snyder sees a bright future for SeaVision. "What we feel makes SeaVision special and worthy of mention in the MTR 100 is that as an emerging business we are doing some things that you rarely hear about from our regional competition or even the larger survey firms. It's what sets us apart - we are equally comfortable working from a 12-ft jon boat to perform a single-beam bathymetric survey in a marina serving Long Island Sound or sitting side-by-side with a pilot to run an inertial navigation system for an inspection-class ROV in a flooded mine in Canada."

ufacture single & multiple channel optical fiber penetrators. SEACON Advanced Products, LLC., also provides full service and support for optical underwater mateable connectors and electrical underwater mateable connectors as well as consultancy services and is committed to working closely with customers to determine appropriate optical and electrical connection systems.

Plymouth Marine Laboratory

Prospect Place, The Hoe
Plymouth, Devon UK PL1 3DH
Tel: +44 1752 633100
Email: forinfo@pml.ac.uk
www.pml.ac.uk

PML is an independent, impartial provider of scientific research, contract services and advice on the marine environment, with a focus on understanding marine ecosystems and reducing uncertainty about the complex processes and structures that sustain life in the seas and their role in the Earth system. To help deliver its knowledge transfer most effectively PML has a wholly owned trading subsidiary, PML Applications Ltd, which has been created to facilitate the exploitation and application of PML research and to provide a more appropriate interface for working with end users, industrial and commercial partners.

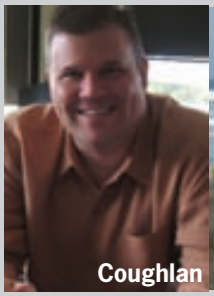
Woods Hole Group

www.woodsholegroup.com

The Woods Hole Group, Inc. was founded in 1986 by Dr. David Aubrey, who assembled a team of coastal sciences, engineering, and planning personnel. Earliest projects involved shore protection, coastal measurements, numerical modeling, and environmental permitting in the U.S., Gulf of Mexico, and Caribbean. The firm then established an international reputation for improving transboundary environmental policy with projects in the Black and Caspian Seas. To bolster offshore capabilities, an oceanographic equipment company was acquired in 1991, adding oceanographic and engineering personnel. An analytical chemistry laboratory also was acquired in 1996. Building upon a standard product line of wave, tide, and current meters (WHISL), the emerging oceanogra-

Tyco Telecommunications

60 Columbia Road, Morristown, NJ 07960
Tel: 866.892.6611
Email: sales-hq@tycotelecom.com • www.tycotelecom.com
President: David Coughlan
Number of Employees: 1200
Annual Sales (US$): $1 billion


Coughlan


Cable Installation.

Tyco Telecommunications, an industry pioneer in undersea communications technology and marine services, is a leading global supplier for undersea communications requirements. With more than five decades of operation, Tyco Telecommunications has designed, manufactured, and installed more than 80 undersea fiber optic systems around the world. Technology Profile: To meet the needs of the world's demand for reliable bandwidth capacity and marine services, Tyco Telecommunications continues to develop and build on its technology, with a commitment to forward-looking, customer-focused solutions. Current research and development efforts are driven by customer demand for lower-cost solutions that enable long-term growth. Most recently, those efforts have focused on creating solutions to serve the oil and gas industry. As production-demands increase, oil and gas platforms are moving farther offshore and into deeper waters, therefore also increasing the demand for reliable and robust communications networks. To meet those demands, Tyco Telecommunications installs cable connecting rigs to rigs and rigs to land. Using Optical Add/Drop Multiplexing (OADM) technology and its own developed suite of interconnect devices and submarine line terminal equipment, Tyco Telecommunications deploys self-healing ring topologies, ensuring systems continue to operate even if one rig's connectivity suffers a breakdown. With its combined focus on traditional and offshore cable installation, Tyco Telecommunications has deployed more than 402,000 km of cable worldwide: an amount that would circle the earth 10 times. Tyco Telecommunications also offers complete marine support for undersea networks of any size, including route survey and engineering; cable installation; terrestrial constructions; cable data management; deep and shallow water repair; cable recovery and retrieval. The company's fleet of Reliance-class vessel cable ships and remote-operated vehicles (ROVs) not only provide the most efficient means for cable installation, but also ensure the rapid recovery and repair of damaged cable.

phy and measurement systems team grew to specialize in real-time systems, and developed proprietary software for data display and management. The team specializes in real-time measurement systems and physical oceanographic/engineering studies for offshore energy and port/harbor applications worldwide, including a network of international representatives in 20 countries.

So far in the 21st century, Woods Hole Group added an office in Houston, TX to service the growing needs of the offshore oil and gas industry. A mid-Atlantic operation also was established in Delaware to support multi-year government contracts for operation and maintenance of NOAA's Physical Oceanographic Real Time System (PORTS). Building on its international experience, Woods Hole Group also established an office in Riyadh, Saudi Arabia to service its extensive client base in the Middle East, and to strengthen the environmental assessment & remediation team.

Technology Profile: Woods Hole Group, Inc. is an international environmental service organization focused on: Coastal Sciences, Engineering & Planning; Oceanography & Measurement Systems; and Environmental Assessment & Remediation. Consulting specialties include coastal geology and engineering, dredging and shore protection project implementation, numerical modeling, marine survey/data collection, real-time measurement systems, physical

Triton Imaging, Inc.

125 Westridge Drive, Watsonville, CA 95076
Tel: 831-722-7373
Email: info@tritonimaginginc.com • www.tritonimaginginc.com
Sales Manager: John Thomas

Triton Imaging is a developer of high-performance, highly automated software tools for seafloor mapping and underwater imaging applications. Triton products are designed to acquire, process, fuse, visualize, and interpret data from a wide array of seafloor imaging sensors including: sidescan sonars, single and multi-beam echo-sounders, and seismic sub-bottom profilers. Since its inception in 1983, Triton has built a loyal, worldwide community of customers that use its products and services in a wide variety of applications. Triton customers include naval mine-hunting units; commercial survey companies; government hydrographic organizations, oceanographic institutes; marine archeologists; treasure hunters, offshore diamond miners; and homeland defense agencies. Triton's collaboration with its diverse group of customers contributes to the ongoing development of practical, advanced software technologies.

Technology Profile: In 2008 Triton introduced its new Perspective product line. This innovative architecture takes advantage of the latest in software technologies including: multi-core parallel processing, indexed cache files, workflow wizards, XML project files, multi-resolution tiling, and dB-based rendering to deliver products that are fast, accurate, efficient, easy to use, and that provide the tools necessary for a broad range of real-world marine applications. Perspective Map, Triton's GIS-based mapping package forms the foundation of this new line by integrating the new Triton MosaicOne, TargetOne, BathyPro, SeaClass, PipeTrack, and SB-Interpreter software modules into a cohesive suite capable of processing, fusing, and displaying sidescan, bathymetric, and seismic data. Each module is controlled from the Perspective Map environment via common, embedded user-interface, tools, and displays. The output from these modules is displayed as multi-layer, co-registered survey tracks, sidescan sonar images, bathymetry DTMs, target icons and images, and seabed classification areas and boundaries. Having Perspective Map as the common foundation of all of these modules facilitates the fusion of these diverse data types into the comprehensive, accurate solutions that are needed to solve today's complex problems. With unparalleled performance, ease of use, versatility, and image quality, the new Triton new MosaicOne makes the production of high quality geo-registered sidescan mosaics a simple process. This new software employs the latest in software technologies to deliver advanced capabilities such as the innovative One-Button Mosaic feature. MosaicOne images are created by simply dragging and dropping raw data files into the Triton Perspective multi-layer map view. On dual and multi-core PCs, high-resolution mosaics are produced in seconds rather than minutes due to the parallel software architecture of MosaicOne. Innovative processing options such as nadir delete, far range clipping, and single-channel select, coupled with a comprehensive set of navigation processing tools, result in superior quality mosaics suited to specific application needs and collection regimes.

oceanography, and environmental risk/impact assessment. The staff includes primarily Masters and Ph.D. scientists and engineers providing scientifically-defensible solutions for government, oil, power, manufacturing, defense, private, and research organizations worldwide. WHG's coastal sciences, engineering & planning team has developed unique computer models for waves, tides, currents, sediment transport, and contaminant transport and fate. These models are applied to design shore protection, dredging, habitat restoration, and remediation projects. Its oceanography & measurement systems team designs, integrates, installs and operates real-time met-ocean monitoring systems for offshore oil and gas applications, as well as port and harbor environments. Proprietary software was developed to turn real-time data into the information required by marine decision-makers. This team is actively involved with new research and development initiatives involving sea bed telemetry of deepwater currents. Our environmental assessment & remediation team is at the forefront of international programs world wide, merging the environmental concerns and policy of multi-national regions. This teams also completes environmental impact states (EIS) and risk assessments for proposed projects, including offshore energy development (e.g., LNG and wind power), navigation improvements, and shore protection infrastructures.

SRD

Annie Reed Road, Grovehill Industrial Estate
Beverley, HU17 0LF United Kingdom
Phone: +44 1482 869559
Email: andy.smith@srduk.com
URL: www.srduk.com

Product: The Eclipse 3D Imaging Sonar is ideally suited for all but the smallest subsea vehicles, and is based around SRD's digital acoustic multi-beam technology. The acoustic beam width of Eclipse is 120°. The unit contains both vertical and horizontal transmitter and receiver arrays. Three modes of operation are available - 3D Volume Visualization, Forward Looking and Profile Imaging.

Sonardyne International

11210 Steeplecrest Drive, Suite 360, Houston, Texas 77065 • Tel: +1 281-890-2120
Email: usa.sales@sonardyne.com • www.sonardyne.com
Managing Director: Barry Clutton • VP Americas: Spencer Collins
Sales Director: Richard Binks • Marketing Director: Rob Balloch
No. of Employees: 250

Sonardyne engineer with tsunami monitoring system buoy.

Sonardyne is an international subsea engineering company delivering trusted solutions for subsea navigation, positioning, communication and control to the offshore oil and gas, oceanographic maritime defense industries.Established in 1971, the company today employees over 250 people worldwide. Sonardyne's manufacturing, research and development is located at its headquarters in Yateley, 40 miles south-west of London, UK. Operating subsidiaries in Aberdeen, Houston, Singapore and Brazil provide sales, field engineering, training and 24 hour customer support. Sonardyne's core subsea engineering expertise centers on low power, wide-band signal processing combined with reliable acoustic communications and robust mechanical construction. Compatt 5 is the workhorse of the company's subsea positioning product range. Since its first commercial deployment in 2005, Compatt 5 has been used in every major field development and for types all subsea operation including; template installation, pipeline survey, DP reference and high accuracy metrology. Sonardyne's expertise in underwater instrumentation is also helping to develop solutions for the protection of the environment. The company's capability in sensor integration and communication in deep water has recently provided an immediate and cost-effective solution to the problem of detecting tsunami waves. Lodestar is a combined AHRS and Acoustically Aided INS system that is a natural extension of the Sonardyne product range and has been developed for seamless integration with the company's widely used LBL (Long BaseLine) and USBL (Ultra-Short BaseLine) acoustic positioning systems. In the area of homeland security, Sentinel is a new generation of wideband sonar that provides complete underwater domain awareness and security for civilian and military installations and assets. It is claimed to be the smallest, lightest and most cost-effective of the diver detection sonars currently available and has already been selected by the US Navy and other high profile customers as their preferred sonar for underwater security.

SeaBat: 15 Years of Continuous Service with EMC

As the international market for multi-beam sonar systems becomes more competitive, Danish company RESON continues to focus on quality, reliability and durability as key factors in maintaining its leadership.

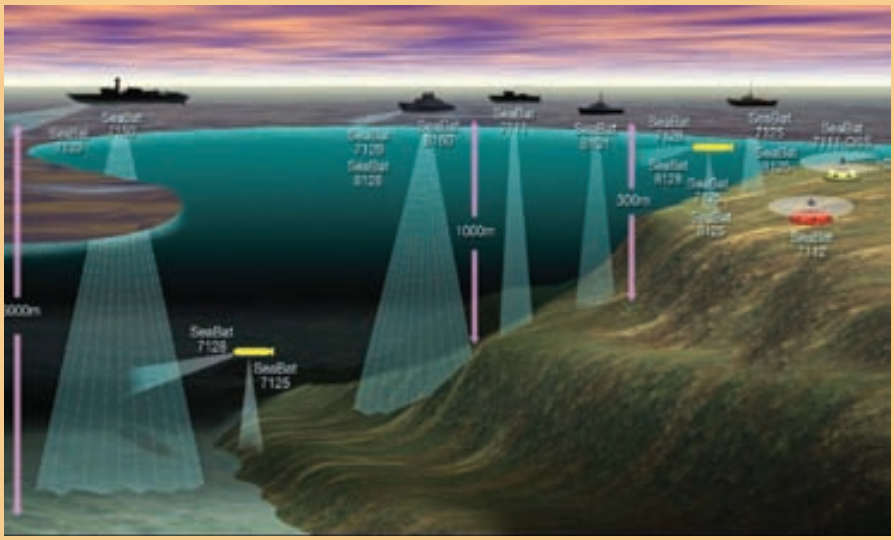
In service with customers worldwide since 1991 the RESON SeaBat range exemplifies these qualities as it continues to provide users with high quality data output and reliability over many years.

“When selecting a sonar system it is not enough simply to look at price alone, we have systems that are still meeting our customers exacting requirements after more than 15 years continual service thus providing exceptional value for money,” said Michael Giese, Global Marketing Manager at RESON.

"For example our customer EMC bought two SeaBat 9001s in 1990 then traded them in for a SeaBat 8101 in 1993 and they are still providing excellent service today."

EMC Inc. established in 1978, is a multidiscipline survey company encompassing the disciplines of Topographic, Hydrographic, Geophysical and Geotechnical Survey. Based in Greenwood, Mississippi they have carried out two million line miles of hydrographic survey data for both government and commercial customers in the US.

“We are using the SeaBat primarily on US Army Corps of Engineers and National Oceanic and Atmospheric Administration (NOAA) contracts,” said Mark Mattox President of EMC. “The Corps is responsible for all inland waterways and navigation channels in the U.S. We typically use SeaBat on a monthly basis for channel and bank surveys in rivers and harbors from the Mississippi river to South Florida. These surveys are generally for navigation and dredging projects. We have found the SeaBat to be very reliable with limited repairs necessary.



The new 7K sonar suite from Reson.

The SeaBat 8101 is capable of high accuracy depth measurements over a swath of the bottom equal to five times the water depth. It is a highly accurate multi-beam system that uses one hundred and forty transducers, mounted in a two hundred and ten degree array, to survey the sea floor. Full coverage one-half foot plus accuracy are achieved with the 8101 system. This is an economical system with unlimited potential for many hydrographic and other applications.”

He added: "The 8101 continues to meet and exceed the performance test standards set by the US Army Corps of Engineers and we perform these tests prior to every survey."

“When selecting a sonar system it is important to be sure that the system you select has the durability and reliability to keep performing well into the future, reducing maintenance costs and giving real value over the life-cycle of the system," said Giese. "With more than 225 sold units, SeaBat 8101 is the most used SeaBat sonar at the market. The only multibeam sonar systems on the market that offer higher resolution and accuracy are the SeaBat 8125 and 7125."

RESON has recently introduced the SeaBat 7101 which is based on the success of SeaBat 8101, but with a number of new features. SeaBat 7101 can be upgraded from SeaBat 8101.

The SeaBat Sonar Systems are used by a wide variety of customers in a diverse range of roles, including military mine hunting, harbor and coastal security, oil and gas exploration and dredging.

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Tyrebagger Works, Clinterty, Kinellar
Aberdeen, AB21 0TT
United Kingdom
Phone: +44 (0)1224 790100
Email: info@ac-cess.com
URL: www.ac-cess.com
Product:The AC-ROV is aportable micro ROV.

Advex Marine, LLC
10 Dogwood Lane
Old Saybrook, CT 06475
Phone: (860) 395-1252
Email: advex@sbcglobal.net
Product: ROV, manipulator, sonar, video enhancer sales

Curtin University of Technology
Kent Street, Bentley, WA 6102, Australia
Phone: +61 8 9266 7380
Email: aw37@about3d.info
www.cmst.curtin.edu.au/products/3d/mini3d.html
Product: The Mini-3D underwater stereoscopic video camera is the smallest underwater 3D video camera in the world. It is rated to a depth of 1000m and can be used on a wide range of ROV systems.

DeepQuest LLC
2757 Dorchester Square, #116
Cambridge, MD 21613
Phone: 410-228-7711
Email: tcurtis@deepquestengineering.com
URL: www.deepquestengineering.com
Product: Developer of custom unmanned underwater vehicles and equipment. Rapid response, from design through fabrication and testing.

ECA
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Phone: +33 494 08 90 46 / +33 678 79 89 21
Fax: +33 494 08 90 70
Email: offshore@eca.fr
URL: www.eca.fr

EdgeTech
4 Little Brook Road
West Wareham, MA 02576
Phone: 1-508-356-9704
Email: reeves@edgetech.com
URL: www.edgetech.com

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Email: esne.ct@snet.net
URL: www.esalesne.com
Product: Underwater cameras, connectors, cables, side scan sonar, imaging sonar, sector scan sonar, motions sensors, single beam and multibeam echosounders, Sediment classification software, ROV's, Imaging software, Magnetometers

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Email: jason-tisdall@generalrobotics.co.uk
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l.pool@sidus-solutions.com
http://www.sidus-solutions.com
Contact: Leonard Pool

Sidus Solutions' new SS429Day/Night IP Camera constructed of robust titanium and features an impressive 5 megapixel digital streaming video camera. Integrated features include a pair of 10mw scaling lasers and 16 ultrabrite LEDs which provide ample illumination for detailed applications. The accompanying SS120 titanium pan & tilt offers an impressive 10 ft/lbs of torque and high precision position feedback. Best of all, the entire system can be remotely controlled through a single Cat5 network cable.

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Germany
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Website: www.helzel.com
E-mail: wera@helzel.com

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URL: www.ise.bc.ca
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55 Avenue Auguste Renoir, Marly le Roi, 78160 France
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Email: info@ixsea.com
URL: www.ixsea.com

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Campus 1, Science and Technology Park,
Balgownie Road, Bridge of Don,
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Email: km.camsales.uk@kongsberg.com
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Email: sales@ocean-server.com
URL: www.ocean-server.com
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Email: john.rhodes@perrymail.com
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Phone: 1.301.341.7800
Fax: 1.301.499.0027
Email: tjanaitis@phnx-international.com

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Fax: +45 47 38 00 66
Email: reson@reson.dk
URL: www.reson.com
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Phone: 281-598-4100
Email: jason.stanley@schilling.com
URL: www.schilling.com
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Ontario, L2N 1L2 Canada
Phone: 905-687-6672
Email: jhoney@sharkmarine.com
URL: www.sharkmarine.com

Sidus Solution
2785 Kurtz St. Ste 1, San Diego, CA 92110
Phone: 619 275 5533
Email: m.weston@sidus-solutions.com
URL: www.sidus-solutions.com
Product: Sidus Solutions offers a complete line of state-of-the-art subsea video systems.

SRD
Annie Reed Road, Grovehill Industrial Estate
Beverley, HU17 0LF United Kingdom
Phone: +44 1482 869559
Email: andy.smith@srduk.com
URL: www.srduk.com
Product: The Eclipse 3D Imaging Sonar is suited to all but the smallest vehicles, and is based around digital acoustic multibeam technology.

Submersible Systems Development
1306 Hoolaulea St., Pearl City, HI 96782
Phone: 808 779-1588
Email: RickLaney@SSD.US
URL: www.SSD.US
Product: Marine engineering and marine electrical. Submarines, diver propulsion vehicles. Underwater equipment design and fabrication. Submersible Sonar and Navigation systems.

U.S. Submarines, Inc.
9015 17th Place, Vero Beach, FL 32966
Phone: +1 772-770-1995
Email: patrick@ussubmarines.com
URL: http://ussubs.com
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Woodburn Rd Blackburn Business Park Blackburn
Aberdeen, AB21 0PS United Kingdom
Phone: +44 (0)1224 798660
Email: sales@sub-atlantic.co.uk
URL: www.sub-atlantic.co.uk
Product: manipulator skid These can be supplied for our professional ROV systems in different formats.

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Phone: 610-458-3000
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This VideoRay/National Geographic expedition explored sacred sinkholes, called Cenotes, in the Yucatán. The VideoRay entered several Cenotes in search of Mayan artifacts and cave biology and found skeletons of victims who had been sacrificed in ancient times. Unlike divers, the 8-pound VideoRay traveled to depths up to 450 feet and could stay there indefinitely, gathering video, still pictures, and scientific readings."

Submitted by: Brian Luzzi, Sales & Marketing Coordinator, VideoRay LLC
Phone: +1 (610) 458-3015; Email: Brian.Luzzi@videoray.com; www.videoray.com

This space is reserved each month for the month's most interesting, off-beat image. Submit your images (300 dpi/.jpg) and a short (approximate 100-word) description to Greg Trauthwein at trauthwein@marinelink.com.

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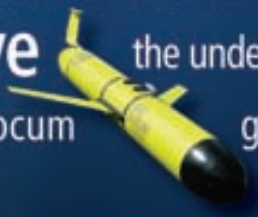

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