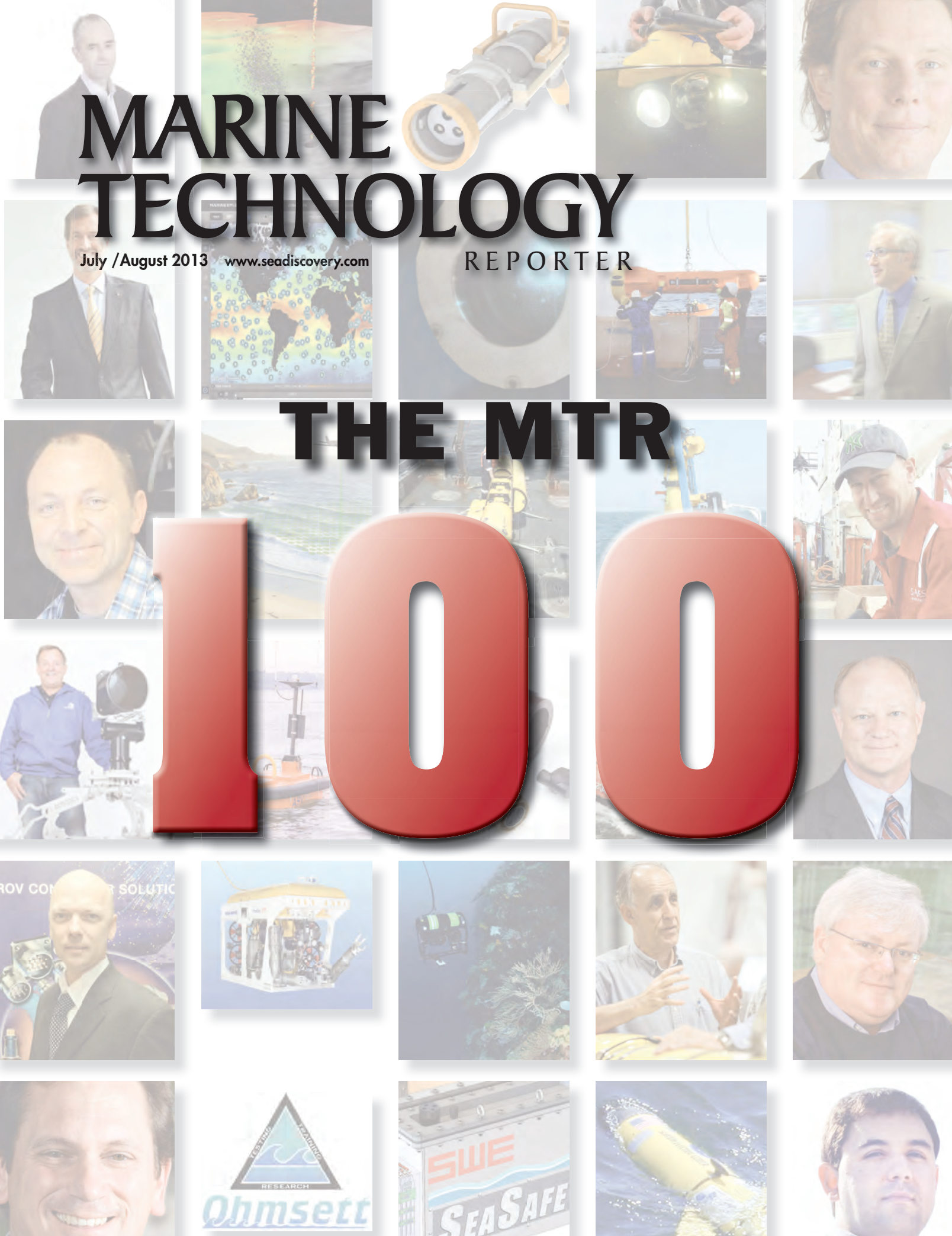
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The 8th Annual

MTR100

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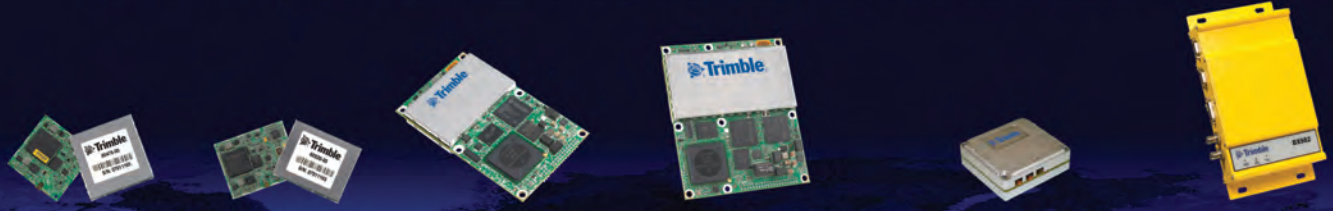

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Gregory R. Trauthwein, Associate Publisher & Editor of *Marine Technology Reporter.*
Email: trauthwein@marinelink.com

It's that time of year again, *Marine Technology's Reporter's* annual pilgrimage into the guts of the subsea marine market to present updates and insights on 100 leading companies. I approach the MTR100 each year (this being the eighth annual edition) with hauntingly familiar feelings of excitement and dread: excitement, as it truly is a chance to step back and catch up on the accomplishments of individuals and organizations; dread, as it is a perpetual logistical nightmare!

Our pain is your gain, and enclosed within is what I consider the strongest showing for the MTR100 to date, attested by a record number of applications received online at SeaDiscovery.com and via Email.

An overriding trend this year is the increased corporatization of this industry: simply put, larger companies are buying smaller companies at an increasingly rapid pace. While there are many players and drivers for the trend, we have opted to feature focus on one corporate entity in this edition, Teledyne, and its accumulation of businesses and technologies that today number 12. For exclusive insights on the evolution and future of the organization, we sought thoughts from a quartet of executives across the Teledyne brands, including Bill Kikendall, Thomas W. Altshuler, PhD, Andy Gardner and Maxwell Mulholland.

The Teledyne approach can hardly be summarized in one story, or one magazine for that matter, but we've given it our best attempt with 10 pages of coverage starting on page 44. While Teledyne serves as the umbrella, the company has worked hard to maintain the identity and strengths of the strong brands it has acquired, as one executive best summarized, providing the market with " the best of a little business and the best of a big business."

MARINE TECHNOLOGY REPORTER
www.seadiscovery.com
Vol. 56 *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 ISSN 1559-7415 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, 850 Montauk Hwy., #867, Bayport, NY 11705
Postmaster send notification (Form 3579) regarding undeliverable magazines to Marine Technology Reporter, 850 Montauk Hwy., #867
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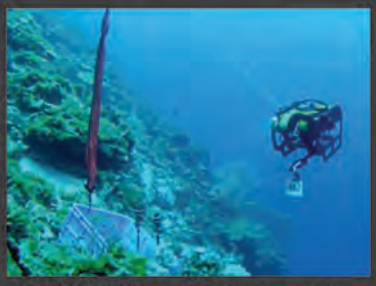

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THE MTR 100

Marine Technology Reporter's

Eighth Annual "MTR100" is a salute to 100 leading companies, people & technologies that collectively have helped to shape the history, present and future prospects of one of the world's most dynamic, fast-evolving & challenging markets.

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AXYS Technologies Inc.

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Website: www.axystechnologies.com
CEO/President: Harry Weiler
Engineering Director: Reo Phillips
Number of Employees: 40

AXYS has been designing, manufacturing, deploying and servicing marine buoy systems for over 35 years. We provide clients with systems designed to provide real-time environmental data tailored to their specifications. AXYS is an international leader in marine environmental technologies with more than 500 meteorological and oceanographic systems built and deployed worldwide.

The Tech:
AXYS designs, builds, deploys, and services a variety of marine products including moored buoys for weather, wave, and sea state forecasting, as well as buoys for specialized applications such as marine mammal monitoring, renewable energy resource assessment, tsunami, red tide, and oil spill detection. A typical buoy measures wind speed and direction, atmospheric pressure, air temperature, relative humidity, solar radiation, water temperature, currents, and directional waves. The AXYS WindSentinel is the world's first wind resource assessment buoy capable of accurately gathering wind data at turbine hub-height and across the blade span. The AXYS WatchMan500 controller was designed as the next generation of payload for marine systems to provide desktop to sensor monitoring and control, including dynamic onboard control and data storage capabilities. This controller is a solution for any application requiring data monitoring, collection, control, processing, or remote system management. AXYS now provides full data hosting and management services.

Chelsea Technologies Group

55 Central Avenue
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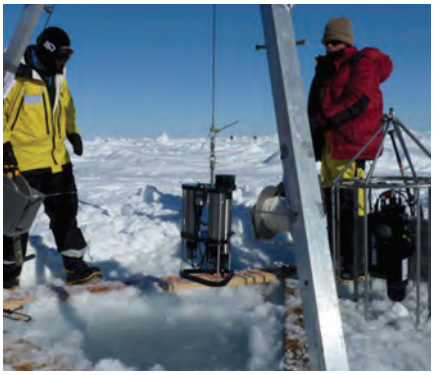
Tel: +44(0)2084819019
Email: ekeegan@chelsea.co.uk
Website: chelsea.co.uk
CEO/President: Dr. Brian Phillips
Engineering Director: Dr. John Attridge
Number of Employees: 35
Annual Sales: $3,500,000.00

Chelsea Technologies Group (CTG) started life as a spin out from Imperial College. Over the last 50 years, it has developed an reputation as a manufacturer of innovative sensors & systems for the military & civil oceanographic, environmental, acoustics & process control markets. CTG's sensor technology is being pioneered for a range of applications. It is being used to help submariners understand the oceanographic environment within which they operate, monitor water supplies to guard against chemical attack by terrorists, & monitor oceanic algae & their response to climate change. For the last two years CTG has been working with Liquid Robotics to provide it with a number of UV AquaTracka hydrocarbon sensors for integration into their Wave Gliders. The UV AquaTracka is a standard for hydrocarbon detection, a reputation proven during the Macondo Oil Spill. The UV AquaTracka is so sensitive it can detect aromatic hydrocarbons diluted a thousand billion times in water. **CTG is working on a number of other projects including providing sensors to monitor ballast water to prevent the transfer of invasive marine species. It is also producing a new range of sensors to monitor ship exhaust scrubbing systems thus preventing environmental pollution.**



The Tech:
A team of experienced scientists and engineers is engaged in manufacture of a range of oceanographic sensors, sonar systems, acoustic transducers, towed vehicle system and ship's flow through sensors. CTG is leading the way in Fast Repetition Rate Fluorometer development.
The recently launched FastOcean improves the accuracy of primary productivity measurements within diverse natural phytoplankton communities. Applications include primary productivity measurements, coastal monitoring, algal bloom detection, ballast water monitoring & the protection of water supplies. Following on from the successful launch of the Lux range of miniature high performance fluorometers, more than 200 units are in the field with users reporting excellent datasets. Applications include in-situ chlorophyll a & algae class studies, dye tracing, particulate studies, hydrocarbon & CDOM monitoring. CTG also has an established range of acoustics transducers including hydrophones, projectors, towed arrays and military sonar test & evaluation systems. CTG has a long history of working with navies and has supplied the Sonar 2115 oceanographic system for a fleet wide installation onboard the Royal Navy's new Astute class submarines. CTG is also providing post design services for support of the Trafalgar Class Sonar 2081 submarine oceanographic sensor suite.

Battelle

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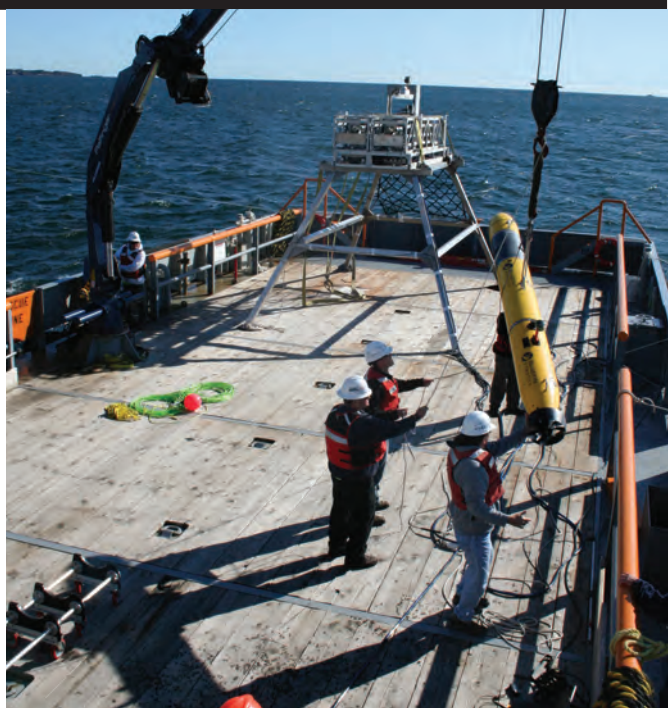
Email:	delaneyk@battelle.org
Website:	http://www.battelle.org
CEO/President:	Jeffrey Wadsworth
Vice President:	Patricia Gruber
Marketing Director:	Chris Corsbie
Sales Manager:	Fred Byus
Number of Employees:	20,000
Annual Sales:	$55,000,000,000.00



At major technology centers and national laboratories around the world, Battelle conducts cutting-edge research and development, designs and manufactures products, and delivers critical services for government and commercial customers.

The Company

Battelle, the world's largest independent research and development organization, is headquartered in Columbus, Ohio. Founded in 1929, Battelle operates in three broad areas: National Security; Energy, Health and Environment; and Laboratory Management. It offers a full service line of products and system development to enhance the efficiency and affordability of maritime operations. We provide engineering solutions and systems for maritime and underwater applications. Our high-speed data communicators, oil spill detection and tracking systems, and autonomous sensor systems are just some of the maritime technologies that will help provide safe, accurate exploration and monitoring in harsh environments. A wholly owned subsidiary of Battelle, Bluefin Robotics, manufactures unmanned undersea vehicles (UUVs) that provide increased endurance and large payload while reducing risk to operators.

The Tech

• **Submersibles**: Strengths are technology development and fielding customized systems, leveraging extensive experience in engineering undersea vehicles and subcomponents to offer nearly limitless possibilities for undersea vehicles, including greater depth, larger battery size or any number of specialized reconfigurations. The advanced capabilities of the Proteus Dual-Mode Undersea Vehicle platform also enable increased autonomy and endurance for longer and more complex missions.

• **Mission Persistence**: Battelle's UUV Docking and Recharging Station (UDRS) keeps submersibles at depth longer and reduces turnaround time to extend underwater mission performance for safer, more efficient and more discreet operations.

• **Reduced Total Ownership Cost**: Systems are designed and built for long-term use, low maintenance and cost-efficient deployment. Battelle keeps costs down by providing technology refreshment throughout a system's lifecycle and extending system maintenance cycles to maximize long-term investments and reduce total ownership cost of maritime technologies.

• **Ocean Sensors**: Battelle designs, manufactures, produces and distributes ocean sensors for a variety of commercial and military applications. Sensors such as Battelle's Seaology pCO-2monitoring system have been used by National Oceanic and Atmospheric Administration (NOAA) since 2009 to support its Global Ocean Observing System (GOOS) and measure CO2 in maritime environments.

Testing

Battelle-owned and –operated-facilities for maritime and subsea research are located at six primary locations and include a variety of testing capabilities. They include:

• Columbus, Ohio—Research pool; pressure chambers to 30,000 psi; wet and spectroscopic analytical chemistry laboratories; shock, vibration and fatigue testing; electronics, electro-optics and software laboratories. Class 100 clean room. High energy testing (explosives and ballistics) at our High Energy Research Laboratory Area (HERLA)

• Duxbury, Mass.—Environmental monitoring, water quality, ultra-trace analytical chemistry laboratories; hydrocarbon forensics

• Quincy, Mass.—Test fixtures, testing tanks and specialized equipment

• Sequim, Wash.—Oceanographic modeling, marine toxicology, environmental monitoring; Class 100 clean room

• Daytona Beach, Fla.—Corrosion and coatings testing

• Dublin, Ohio—Specialized, low to medium volume, 65,000 sq. ft. manufacturing facility

Fischer Connectors SA

Chemin du Glapin 20, St Prex, Vaud, Switzerland
Tel: +41 21 800 95 95
Email: mail@fischerconnectors.ch
Website: www.fischerconnectors.com
Number of Employees: 450

The Case

Fischer Connectors is a leader in connectors and cable assembly solutions. The Swiss based company has made its mark in the marine technology market because of the IP68 sealing of its rugged push-pull connectors. Fischer Connectors guarantees high performance even in the most difficult and harsh environments.

Fischer Connectors has been designing, manufacturing and distributing high performance connectors and cable assembly solutions for almost 60 years. Known for its reliability, precision and resistance to demanding and harsh environments, Fischer Connectors' products are commonly used in fields requiring faultless quality, such as all types of marine technology applications. Fischer Connectors' primary design and manufacturing facilities are located in Saint-Prex, Switzerland.

The Tech

Fischer Connectors' product lines include several connecting solutions for marine technology applications. Fischer Ultimate Original Series features a miniature, ultra-light and rugged design, extremely robust keying, high shock and vibration resistance, excellent shielding, and a sealing level of IP68/69K even unmated. The Fischer Core Series offers high performance push-pull connectors and cable assembly solutions. The Fischer Rugged Flash Drive is an extremely tough memory stick specially designed for safe storage and transportation of sensitive data in harsh environments. **Fischer Connectors recently released the brand-new Fischer FiberOptic Series for robust optical performance.**

Deep Ocean Engineering

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Web: www.deepocean.com

Deep Ocean Engineering, Inc. is a technology-based engineering and manufacturing company that provides Remotely Operated Vehicle (ROV) and Unmanned Surface Vehicle (USV) solutions. Deep Oceans Engineering's ROV and USV systems have been utilized in a broad range of industr: security, military, nuclear and hydroelectric power plants, inshore dams and lakes, oil and gas, scientific research, fisheries, salvage, broadcast filming, and pipeline inspections. Originally based in San Leandro, CA, Deep Ocean now resides in San Jose, CA, the heart of Silicon Valley.

The Tech:
Deep Ocean recently introduced its new line of Unmanned Surface Vehicles, the I-1650 and the H-1750. These vehicles have the ability to transmit data and be controlled up to 2km away via a dedicated WiFi connection. Not only is it's range impressive, but with the flip of a switch, the vehicle can run on autonomous mode and steer a predetermined course for hydrographic surveys, port security, or object detection.

President Bob Sabo pictured with the Triggerfish T4N.

Greensea Systems, Inc.

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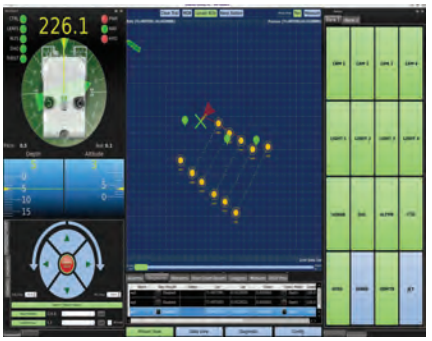
Email: info@greenseainc.com
Website: greenseainc.com
CEO/President: Ben Kinnaman
Number of Employees: 12

Greensea Systems, Inc. founded in 2006 to provide the offshore industry with advanced control and navigation software in an operator-friendly format. Since our start, we have grown steadily and have invested heavily in the development of a navigation and control technology that enables unprecedented increases in operator efficiency and capability.

The Tech:
• **openSEA**. Greensea anchors its navigation and control technology with the Open Software and Equipment Architecture, openSEA. Greensea designed and developed openSEA specifically as a modular programming environment for unmanned vehicles. openSEA is built on a robust error reporting and communication backbone and provides proven and tested software modules ranging from optimal control and Kalman filtering, to data management, to native support for hundreds of widely used sensors and devices.



• **openSEA Suite**. The openSEA Suite is a suite of software built on openSEA that can be deployed as independent applications or as linked modules to augment system capability.
Applications within this suite include a sensor server (openSENSOR), a configurable aided Inertial Navigation System (openINS), a vehicle autopilot and control system (openCMD), and a mission management and planning system (openMNGR). All applications in the openSEA Suite are integrated into Greensea's user interface framework, openVIZ. Greensea offers Software Development Kits and interface support packages for the openSEA Suite and openSEA API to facilitate system customization, private labeling, and servicing.
Leveraging the architecture of openSEA and the applications within the openSEA Suite, Greensea provides capabilities including mission management, waypoint navigation, station keeping, dynamic positioning, autopilots, and target acquisition on a native INS core.

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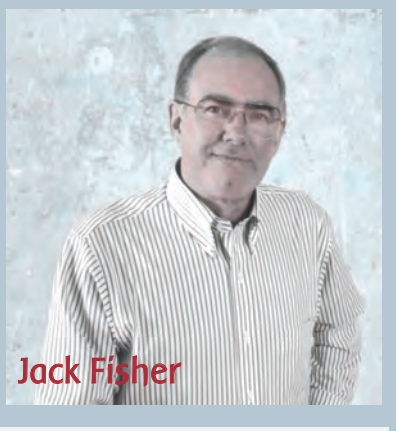

Jack Fisher

For more than 40 years JW Fishers Mfg has specialized in the design and manufacture of high-tech, reasonably priced underwater search equipment. Its side scan sonars, underwater metal detectors, ROVs, and magnetometers are in use by commercial diving companies, public safety dive teams, law enforcement agencies and military units worldwide. In 1971 JW Fishers began manufacturing underwater metal detectors for recreational scuba divers. Demand grew and commercial diving companies and police departments began asking for other types of underwater search equipment. In the late 70's Fishers expanded its product line to include boat-towed detectors, video systems, and ROVs. As knowledge in these technologies grew, the company expanded its R&D into sonar. As computers became smaller and more capable, they allowed development of powerful, low cost sonar systems. Today Fishers offers three side scan systems employing the most commonly required frequencies, 100K, 600K, and 1200K. Low frequency provides long range but lower resolution, high frequency gives the highest resolution but shortest range, and the middle frequency provides an optimal combination of both.

The Tech

Since its inception 40 years ago JW Fishers has continually developed new and better underwater search systems. The company offers one of the broadest ranges of products in its industry. Fishers designs and manufactures all of its underwater search systems at their factory in East Taunton, Massachusetts. Its extensive line of equipment includes hand-held and boat-towed metal detectors, hand-held and boat-towed magnetometers, underwater video systems, ROVs, side scan sonars, scanning sonars, acoustic pingers and receivers, and pipe and cable locators. Fishers continues to expand its line of acoustic systems with the recent addition of transponders and an interrogator. The company is also constantly updating and improving the software used with its sonar systems and boat-towed detectors, adding new features and capabilities, and making the equipment easier to use and more powerful.

Forum Energy Technologies, Inc.

920 Memorial City Way, Suite 1000, Houston, TX 77024

Tel: 281.949.2500
Web: www.f-e-t.com

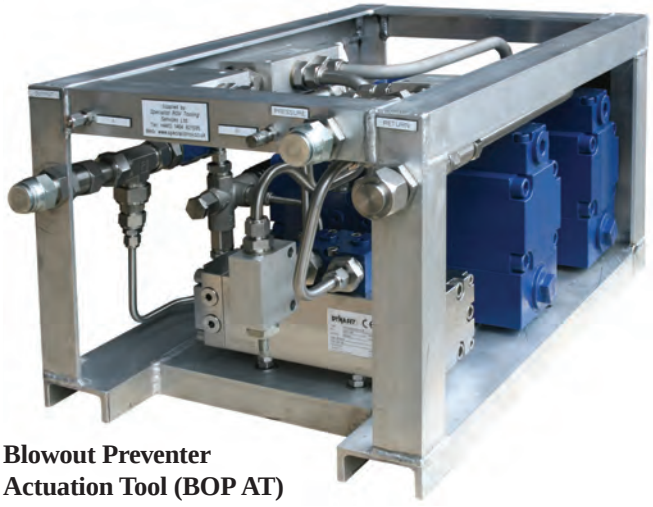
CEO & Chairman of the Board: C. Christopher Gaut
President of Drilling, Downhole and Subsea: Charles E. Jones

Forum Energy Technologies (FET) is a leading global manufacturer of mission critical, complex, stocked and custom oilfield products and related after-market technical services, for use onshore and offshore. Forum's subsea product suite includes ROVs, launch and recovery systems, tethering systems, simulation software, data acquisition software and geosciences product management.

Forum's ROV vehicle brands include two of the most well known names in the industry - Perry and Sub-Atlantic In December of 2012 Dynacon joined the Forum family and in 2013 Forum acquired Moffat Engineering, a leading manufacturer of subsea pipeline inspection gauge launching and receiving systems, and subsea connectors.

Perry XLX ROV

Perry T1200 Trencher



Blowout Preventer Actuation Tool (BOP AT)

The Tech

While Forum continues to expand its product line by acquisition, it also is busy developing new products internally. Recent additions to FET's ever-expanding Subsea Technologies' product portfolio include these three:

Perry XLX ROVs

The next generation Perry Work Class ROVs offers the industry one of the most robust, reliable and dependable ROVs in the industry. These new extremely powerful ROVs can operate to depths of 4000m supported by a payload of 250 kilograms and can be deployed in demanding environments, which make it ideal for deep-water operations that require significant power to lift, position and install subsea field equipment. Also, the XLX can be outfitted with many subsea Tooling applications to handle most any underwater application.

Perry T1200 Trencher

The Perry T1200 Trencher is a heavy trenching trenching system that can produce a trench to a depth of three meters in all seabed conditions, from sand to stiff clays. Capable of deploying non-conducting water jetting tools with backwash and educator debris clearance systems, this cable and pipe burial ROV can carry an optional backfill and pipe following tool over long stretches.

Blowout Preventer Actuation Tool (BOP AT)

This tool is designed to be operated by a Work-Class ROV with speed and accuracy to close a blowout preventer remotely, delivering over 300 liters of fluid per minute at pressures up to 7500psi. It fully actuates most BOPs in under 45 seconds, which safely and effectively seals the wellbore.

Kraken Sonar Systems Inc.

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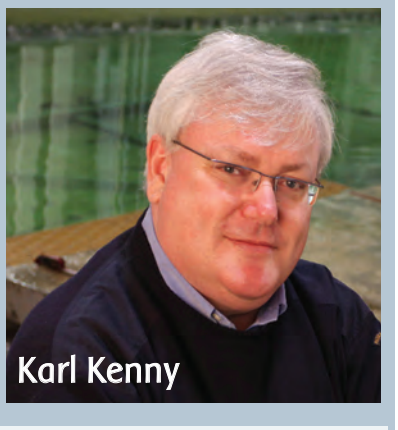
Tel: 709.757.5757
Email: kkenny@krakensonar.com
Website: www.krakensonar.com

CEO/President:
Karl Kenny
# of Employees: 12


Karl Kenny

Kraken is a developer and manufacturer of AquaPix - a Synthetic Aperture Sonar used by military and commercial operators for ultra-high resolution seabed imagery and precision bathymetry. AquaPix offers a compelling value proposition by combining seabed imaging and bathymetry into a single solution. Headquartered in St. John's, Newfoundland, Kraken Sonar Systems Inc. is a marine technology company engaged in the design and development of high performance sonars and acoustic velocity sensors for military and commercial applications. The Kraken team includes internationally recognized experts in undersea remote sensing applications.

The Tech

A new technology called Synthetic Aperture Sonar (SAS) provides the capability for ultra-high image resolution of the seabed combined with superior area survey speeds. SAS was initially developed for demanding military applications such as naval mine detection and classification. As SAS technology becomes more affordable, it's expected to also find use in commercial markets and become a valuable supplement to, and in some cases, a replacement for existing sonar technology. Typically, two different sensors have been primarily used to date for seabed mapping - a Side Scan Sonar (SSS) for reflectivity images and a Multibeam Echo-Sounder (MBES) for bathymetric maps. According to Kraken, both of these technologies are limited by their along-track resolution. Another problem, according to Kraken is that SSS and MBES often do not cover the same swath. This further decreases the area coverage rate, since most of the areas have to be surveyed multiple times to ensure full coverage. Combining Synthetic Aperture Sonar (SAS) with interferometric processing solves both of these problems. SAS images have range-independent and frequency-independent resolution and can therefore achieve both high area-coverage rates and ultra-high resolution. This allows measurement out to full range and thus significantly faster seabed imaging and mapping operations.

Oceanic Platform of the Canary Islands

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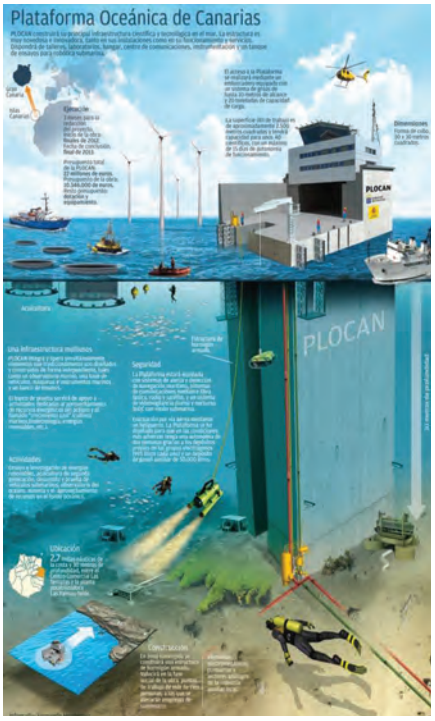
Email: carlos.barrera@plocan.eu
Website: www.plocan.eu/en
CEO/President: Dr. Octavio Llinas
Vice President Dr. Joaquin Hernandez-Brito
Number of Employees:35

The Oceanic Platform of the Canary Islands -PLOCAN- is a public consortium facility engaged to promote science and technology developments in the marine and maritime sectors through a cost-effective and sustainable multipurpose services combination as ocean observatory, test site, underwater vehicles base, highly specialized training and innovation hub.

The Tech:

The Oceanic Platform of the Canary Islands -PLOCAN- is a public consortium facility engaged to promote science and technology developments in the marine and maritime sectors through a cost-effective and sustainable multipurpose services combination as coastal and deep-ocean observatory, test site, underwater vehicles base, highly specialized training and innovation hub. PLOCAN's main goal is to make available in an efficient and sustainable way all those necessary infrastructures and equipment, enable to provide the permanent service and support required for multidisciplinary technological development related to marine and maritime technologies, as well as the multipurpose operation thereof, generating national and international synergistic cooperation scenarios with technology-based companies and institutions.



OceanScience

2245 Camino Vida Roble, Suite 100
Carlsbad, Calif., U.S. 92011
Tel: 760-754-2400
Email: ssearing@oceanscience.com
Website: www.oceanscience.com
CEO/President: Ron George
Vice President: Tricia Takacs
General Manager: Mike Wilson
Engineering Director: Ron George
Number of Employees: 26
Annual Sales: $7,000,000.00

This year represents The Oceanscience Group's 15th year serving the oceanographic, hydrographic and hydrologic industries across the globe. The company is growing rapidly causing the need to again move to larger facilities after only four years at the current location.

The Company:

Since 1998, Oceanscience has developed and manufactured oceanogrpahic, hydrgraphic and hydrologic field equipment and instrumentation for corporations, major government agencies and institutions in more than 50 countries. One third of the staff are either ocean scientists or mechanical, robotics, or ocean engineers. Oceanscience focuses on building collaborative relationships with its customers, industry partners and representatives around the globe and placing an emphasis on customer satisfaction. Oceanscience manufactures a wide range of integrated systems for measuring and monitoring the world's waterways, from the deep ocean and coastal waters to rivers, lakes and ponds.

The Tech:

- **Remotely-Operated Hydrographic Survey Boats**: The new Oceanscience Z-Boats offer a portable, fully integrated ready-to-use bathymetric survey solution for shallow waters. There's no need to mobilize a manned boat for a survey area or to complete time consuming administrative procedures before surveying hazardous waters. Instead simply launch the remotely-operated Z-Boat and start surveying. The Z-Boat depth sounder and GPS are integrated with an RF data link that lets the operator monitor the boat track in real time on a laptop.
- **Environmental Monitoring Deployment Systems**: Its seafloor and surface buoy-mounted platforms for acoustic Doppler current profilers and other instruments lead the industry in ease-of-use, reliability and ruggedness. The Sea Spider and Barnacle bottom mounts and Clamparatus buoy-of-opportunity mounts are used by major oceanographic institutions and government agencies around the world.
- **River Discharge Boats for ADCP's:** Oceanscience has shipped more than 4500 unmanned boats for a wide variety of fresh and saltwater applications. The Riverboat/ADCP system has significantly reduced discharge measurement time and labor all over the world. Flows up to 6m/s are handled with ease and available communications options complete the discharge monitoring package.

Woods Hole Group, Inc.

81 Technology Drive, East Falmouth, Mass., U.S. 02536
Tel: (508) 540-8080
Email: bhamilton@whgrp.com
Website: www.woodsholegroup.com
CEO/President: Dennis B. Aubrey

Woods Hole Group contributes new technologies related to measuring and modeling the marine environment for a diverse client base. The company has proven the ability to evolve and sustain a business centered on the coastal and ocean zone for more than 25 years. WHG focuses on: Coastal Sciences, Engineering & Planning; Applied Ecology; and Oceanography & Measurement Systems. Ocean observations are at the hear-t of WHG's The Tech:, including real-time data for safe and efficient marine operations. Teams design, build, deploy, and operate meteorological and oceanographic buoys, moorings, and platform-based systems. **The WatchDog metocean system improves data quality and reduces maintenance costs.** WHG contracts with individual port operators and NOAA to measure water level, current speed, water quality, and bridge air gap to ensure safe navigation and improve maritime commerce. Archived data provide the basis for engineering design criteria and scientific data analysis. WHG has proprietary software to turn raw data into the information required by maritime decision-makers. As a turnkey engineering company for coastal infrastructure (beach nourishment, coastal structures, wetlands restoration, and dredging), numerical models are applied to understand existing conditions and optimize engineering designs.

LinkQuest Inc.

6749 Top Gun Street
San Diego, Calif., U.S. 92121
Tel: (858) 632-9900
Email: sales@link-quest.com
Website: www.link-quest.com
CEO/President: Ning Xiao

LinkQuest Inc., of San Diego, CA, manufactures precision acoustic instruments for offshore oil exploration, construction, drilling, survey, environmental study and other oceanographic applications. The company's acoustic communication and positioning products are based on the innovative Broadband Acoustic Spread Spectrum (BASS) Technology and are widely used worldwide. LinkQuest's 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 highly robust, accurate and cost-effective Ultra Short Baseline (USBL) solutions.The FlowQuest Acoustic Current Profilers, FlowScout Acoustic Flow Meters and NavQuest Doppler Velocity Logs (DVL) were designed to provide solutions for current profiling, wave measurement, flow measurement or precision underwater navigation applications. These products offer significantly longer range with high accuracy. LinkQuest also manufactures PinPoint LBL acoustic positioning systems and Precision Marine Geodetic Systems used for tsunami and earthquake monitoring and prediction.

Marinexplore

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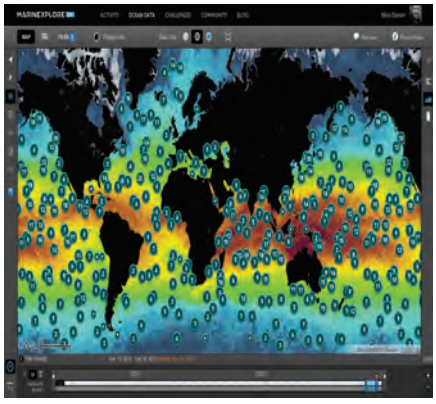
Sunnyvale, Calif., U.S. 94085
Tel: (805)2345415
Email: nico@marinexplore.com
Website: www.marinexplore.com
CEO/President: Rainer Sternfeld
Vice President André Karpištšenko
Kalle Kägi
Number of Employees: 14

The Case:
Marinexplore is providing the offshore and maritime industry with a trusted data platform to organize and make sense of diverse types of ocean data, dramatically reducing risk, effort and time associated to decision-making.

The Company:
Marinexplore is a Silicon Valley-based company founded in 2012, creating a big data platform for ocean data. The company has already aggregated and organized over 1.5 billion measurements from more than 31,000 ocean-borne platforms and 12 satellites products. The open data focused Marinexplore community has grown close to 5000 people involving ocean professionals from across the globe.

The Tech:
Marinexplore secure solutions are tailored for streamlined data connectivity, management and distribution, helping companies to understand data that is structured spatio-temporally, run analysis without moving the data and make informed decisions.



Christian Haag

Mariscope Meerestechnik

Gettorfer Str. 1, Osdorf, Schleswig
Holstein, Germany 24251
Tel: +4943466000490
Email: christian@mariscope.de
Website: http://www.mariscope.com
CEO/President: Christian Haag
Number of Employees: 20

Mariscope Meerestechnik was founded in 1994 in Kiel, Germany, with the aim to develop and construct oceanographic equipment. The main manufacturing lines are: ROVs (Remotely Operated Vehicles); Underwater cameras and communication systems; Towed vehicles; Deep Sea systems; Custom Designed systems. Today, Mariscope Meerestechnik produces all types of oceanographic instrumentation for fluvial, coastal, lakes, off-shore and deep ocean applications.

The Tech:
Mariscope designs, develops and builds almost all components in house. Fully equipped electronic and mechanic workshops in Germany for the manufacturing. Fully equipped mechanic and electronic workshops for service and repair in South America. Some systems are developed in strong cooperation with other marine technology companies in northern Germany, where Mariscope is part of a Maritime Cluster. Mariscope is also highly involved with applied oceanographic research. In Argentina Mariscope is carrying out a project on Marine Mammal research related to the Southern Right Whales.

Zupt LLC

10963 Cutten Rd, A102
Houston, Texas, U.S. 77066
Tel: 832-295-7280
Email: kv@zupt.com
Website: www.zupt.com

CEO/President: Keith Vickery
Number of Employees: 11
Annual Sales: $3,500,000.00

In an industry where change comes slowly, Zupt focuses on improving the way marine survey services are completed by increasing productivity and decreasing the time and high operational costs associated with marine construction, dynamic positioning, and deepwater drilling. Zupt is a U.S. based international integrator of surveying and positioning technologies, specializing in the applications of inertial technologies for both onshore and offshore survey and navigation services. Since the development of its underwater metrology system C-PINS in 2008, it has completed a half century of metrologies.

The Tech

Zupt delivers operationally aware technologies to improve the productivity associated with high cost operations for oil and gas exploration and field development through the use of inertial navigation systems.

The primary advantage of an inertial navigation system (INS) is that it requires no external references in order to determine its position, orientation, or velocity once it has been aligned. An INS can detect a change in its geographic position, a change in its velocity, and a change in its orientation by measuring the linear and angular accelerations applied to the system.

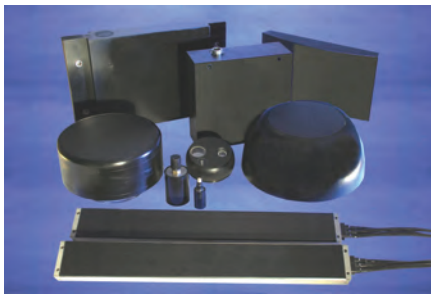
This inertial technology is integrated into C-PINS, a subsea precise inertial navigation system; D-PINS, a dynamic positioning inertial position reference sensor; EM-AHRS, a electromagnetic attitude heading reference sensor; as well as SH-ERA, a high resolution stack heading and electrical riser angle system.

Materials Systems Inc.

543 Great Road, Littleton, Mass., 01460
Tel: 978-486-0404
Email: sales@msisonar.com
Website: www.msisonar.com
CEO/President: Carol W. Bowen, Ph.D.
Vice President: Gerald Schmidt
Engineering Director: Dr. Brian Pazol
Number of Employees: 40

MSI (Materials Systems Inc.) designs and manufactures custom sonar transducers and arrays for a wide range of applications, including harbor defense, side-scan, obstacle avoidance, sub-bottom profiling, swath bathymetry, mine hunting, swimmer detection, and acoustic communications. MSI's piezo-composite technology offers extremely broad bandwidth, high receive sensitivity, high source levels, conformability for curved arrays, and reduced side lobes. MSI is in full scale production on a variety of commercial and industrial customers. MSI is ISO 9001:2008 certified.

MSI's piezocomposite arrays deliver broad bandwidth, enabling broad spectrum (chirp) and multi-frequency operating techniques which provide greater resolution. MSI's piezocomposite arrays can also be curved and shaded to



RPS Evans-Hamilton

RPS Evans-Hamilton (RPS EHI) has a reputation for excellence in physical oceanography services, meteorological conditions studies, and other water-related measurements in often difficult environments all over the world.

For more than 40 years RPS EHI has been dedicated to solving environmental problems in coastal and deep-water environments as well as inland rivers and lakes, through the use of both classical and innovative data acquisition systems, modern data analysis techniques, and focus on customer needs, and attention to detail. RPS EH has proven experience and extensive knowledge in developing and utilizing a wide variety of metocean measurement instrumentation and systems. It owns and maintains an extensive suite of oceanographic and freshwater instrumentation. In addition it has experience in building and construction oversight of a wide variety of measurement platforms both in the offshore and nearshore environments.

RPS Evans-Hamilton (RPS EHI) was founded in 1971 to provide met-ocean data collection services to the oil & gas industry as it expanded operations into the Gulf of Mexico. Over time, the company used expertise and experience gained working in the Gulf to support government agencies such as the US Army Corps of Engineers, NOAA, and the Mineral Management Service (now BOEM) as well as a variety private engineering and environmental firms. In 2011, EHI became part of the RPS Group of companies worldwide RPS is one of the world's pre-eminent consulting firms, employing more than 5,000 people internationally and providing independent advice on the exploration and production of energy and other natural resources, and the development and management of the built and natural environment. RPS has offices in the U.S., UK, Ireland, the Netherlands, Canada, Brazil, Africa, the Middle East, Australia and Asia, and undertakes projects in many other parts of the world. Now rebranded as RPS Evans-Hamilton and partnering with our sister business units of RPS ASA in Rhode Island, and RPS Metocean Engineers in Perth, Australia, form the worldwide Metocean Sciences Division of RPS.

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Union Bay Place NE,
Seattle WA 98105
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Maybank Highway,
Johns Island, SC 29455
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Fax: +1 843-377-0287

The Tech

Over the years RPS EHI has developed a wide array of methods and techniques for collecting met-ocean data. These methods are based on years of experience and innovation and are focused on providing our clients with high quality data from start to finish. The company understand that how the data is processed and analyzed is just as important as collecting it. To that end, it has developed an extensive suite of data processing tools designed to assure the quality and integrity of data through all phases of a study, from project planning and data acquisition through data analysis, submission and archival.

RPS EH has designed and manufactured an innovative trawl resistant bottom mount capable of supporting many different instrument payloads. The bottom mount comes in two sizes for varying current and sediment regimes. The mount contains a buoy retrieval system for diver-less recovery in a variety of deployment depths. Modifications are presently being made to the recovery system to provide a one-size-fits-all in rope lengths; for depths ranging from 3m to 100m depth.

In recent years, as a result of scientific measurements collected in the arctic, RPS EH builds metocean data-collecting buoys to customer specifications. These buoys have since been built for regions from the arctic to the tropics. RPS EH also provides an interactive website to display and provide critical data supporting scientists and nautical mariners navigating in the regions the buoys are deployed.

achieve a specific beampattern or to achieve a hydrodynamic profile when mounting the arrays to the curved hull of a vessel or AUV. Resonant transmit designs are in production at frequencies ranging 12 kHz to 1MHz. Receive arrays cover this same range and more, operating as low as 3 Hz in long-range surveillance arrays. MSI's piezocomposite arrays have been shown to meet full explosive shock requirements for Navy operations in both the U.S. and U.K., and can be configured for full ocean depth performance. MSI also has ongoing R&D efforts to further develop sonar technology.

Currently MSI has a number of R&D projects developing single crystal piezoceramic and piezocomposite technology for use in sonar transducers and arrays. Single crystal materials provide wider bandwidth and higher sensitivity than current piezoceramic and piezocomposite technologies.

McLane Research Laboratories, Inc.

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Tel: 508-495-4000
Email: mclane@mclanelabs.com
Website: www.mclanelabs.com
CEO/President: Dr. Susumu Honjo
Number of Employees: 15

The Company:

McLane Research Laboratories was founded in 1983 and manufactures advanced time-series oceanographic profilers, samplers, and flotation to the oceanographic community. The objective at McLane is to enable worldwide investigators to achieve their research and scientific goals by providing advanced, cost-effective instrumentation.

The Tech:

McLane manufactures a number of profilers, samplers and mooring products that are used for scientific ventures worldwide. McLane develops two Profilers: the Ice Tethered Profiler (ITP) and the McLane Moored Profiler (MMP). These autonomous time-series instruments collect data while traveling on a fixed mooring wire. Samplers that collect suspended and dissolved particulate samples in situ include sediment traps, remote access samplers, large volume water transfer systems, and zooplankton samplers. in 2013, McLane announced a new instrument - the Imaging FlowCytobot (IFCB) which an automated submersible imaging flow cytometer that generates images of particles in-flow taken from the aquatic environment. Depending on the target population, the IFCB can generate around 10,000 high resolution images per hour. McLane mooring products include glass flotation modules depth-rated to 7,000 meters, glass instrument housings, mooring recovery floats, and steel buoys.

Kongsberg Maritime

Strandpromenaden 50, Horten, Norway 3183

Tel: +47 32 28 50 00
Email: subsea@kongsberg.com
Website: www.km.kongsberg.com

CEO/President: Walter Quam
Vice President: Bjørn Jalving
Number of Employees: 4,200

Walter Quam

The Case

Kongsberg Maritime develops systems for practically all subsea applications. Its sonar, multibeam echo sounders, cameras, positioning systems and AUVs are used in survey and inspection operations worldwide. Kongsberg Maritime works closely with customers to develop technology that pushes the limits of what the subsea industry can see and do under water.

The Company

Company Mission: Maximizing performance by providing The Full Picture. Kongsberg Maritime is a global marine technology company providing innovative and reliable solutions for all marine industry sectors including merchant, offshore, subsea, naval and fisheries. A leader in technology advances, Kongsberg Maritime delivers systems that cover all aspects of various maritime applications: Dynamic positioning & navigation systems; Subsea survey and construction; Marine automation; Safety management; Cargo handling; Maritime simulation and training; Satellite positioning Integration of systems is a key driver to the success of Kongsberg Maritime. The company is dedicated to providing innovative and reliable solutions for all customers and stakeholders that ensure optimal operation at sea and onshore. Key markets are countries with large offshore, shipyard and energy exploration & production industries; Merchant marine; Offshore; Subsea; Marine info technology; Simulation; Process automation; Fisheries & fishery research (SIMRAD).

The Tech

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 many customers. Continuous research and development keeps pace with growing markets and demand as well as changes in customer requirements. Kongsberg Mesotech Ltd., the Canadian subsidiary of Kongsberg Maritime, is a leader in manufacturing underwater acoustic products, including: High-resolution scanning sonar (imaging & profiling); 2D multibeam sonar; Altimeters Characterized by exceptional engineering capabilities. Kongsberg Mesotech Ltd. focuses on providing customers with superior image resolution by producing quality and reliable equipment. The company supplies a worldwide customer base with products for search and recovery, marine engineering, security and surveillance, fisheries and various other underwater applications. Kongsberg Maritime offers complete mapping systems including multibeam echo sounders connected to positioning equipment, heading and motion sensing instruments, as well as sound velocity sensors. 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 REMUS and HUGIN AUV. HUGIN,a key technology development area since 1990, is used for a variety of civilian and military applications.

Nortek

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Tel: 47 67174500
Email: inquiry@nortek.no
Website: www.nortek-as.com
CEO/President: Tore Hofstaf
Number of Employees: 85
Annual Sales: $20,000,000.00

Nortek is a manufacturer of ADCPs and single point velocimeters designed for coastal applications. Nortek Chief Technology Officer, Atle Lohrmann, along with Ramon Cabrera, founded SonTek, Inc. in 1992 and produced in partnership with the United States Army Corps of Engineers Waterways Experiment Station, the first Acoustic Doppler Velocimeter (ADV) for laboratory use. In March 1996, Lohrmann and Cabrera dissolved their partnership and Nortek was incorporated. As acoustic Doppler current profilers began to revolutionize hydrodynamic data collection, the two companies deviated in focus and severed ties. In the early 2000s, Nortek developed a new line of acoustic Doppler current profilers and Velocimeters targeted toward the community of coastal engineers and research scientists. Later on the company developed the first fully functional deep water Doppler current meter in collaboration with WHOI and by 2005 The company had established subsurface level detection as an accurate method to measure wave height.

Acoustic Doppler current meter and current profiler are complex instruments that require a wide range of technology elements in order to perform at an optimum level. The general classification include hardware (analog and digital), digital programming (FPGA and controllers), signal processing (typically DSP implementation), software (PC or WEB), and mechanical design. The Nortek development staff consists of 15 people, all covering one or more classification elements listed. Because of the importance of transducers as part of any underwater acoustic system, Nortek in 2012 acquired the Aberdeen company PCT to further improve the operational parameters of our acoustic Doppler systems.

At this point, the expansion of the company transducer technology is proving quite successful and results are already evident through the effort to introduce a long range current profiler, referred to as the Signature75. In 2011, The company diversified into radar system through the acquisition of the Dutch company SeaDarQ. This effort, which is being spearheaded by Nortek b.v. outside Amsterdam, is currently focused on early detection of oil spills.

Ocean Sonics Ltd.

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Great Village, Nova Scotia,
Canada B0M 1L0
Tel: +1 902 655 3000
Email: ContactUs@OceanSonics.com
Website: oceanSonics.com
CEO/President: Mark Wood
Number of Employees: 9

Ocean Sonics rewrites the rule book for gathering underwater sound by introducing the concept of the Smart Hydrophone. Instead of collecting terabytes of raw data, the Smart Hydrophone provides a tool box that lets you collect just the data you need. This saves time, and reduces project risk. Post processing goes more smoothly with high quality data.

The Tech:
In the company's flagship product, icListen, all the analogue & digital electronics, telemetry, battery and memory are combined into a complete compact hand held instrument. This helps ensure highest possible signal performance and long-term calibration. The icListen Smart Hydrophone can be used as a datalogger, digital hydrophone, or both. Unique in the industry is the instrument's ability to process and store the data according to the user's needs. For example, selectively storing of time-series or spectral data based on user configured events that look for energy within certain bands. What this means is that the user can choose how the data is to be collected.

OHMSETT

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Leonardo, N.J., U.S. 07737
Tel: 732-866-7183
Email: bschmidt@ohmsettnj.com
Website: www.ohmsett.com
Number of Employees: 16

Ohmsett is the largest outdoor saltwater wave/tow tank in North America and provides independent objective performance testing. Managed by the U.S. Department of the Interior, Bureau of Safety and Environmental Enforcement, it directly supports BSEE's goal of ensuring the best and safest oil spill detection, containment and removal technologies are available to protect the U.S. coast and oceanic environments.
OHMSETT plays a critical role in developing effective response technologies and represents an intermediate step between small scale bench testing and open water testing of equipment. The facility has the capability to test and evaluate oil spill response technologies such as: chemical treating agents and dispersants, oil in ice and cold weather climate, remote sensing and detection instruments, sorbent materials, temporary storage devices, viscous oil pumping units and oil water separators. OHMSETT's wave generator can generate random waves that closely approximate waves in the ocean, such as sinusoidal and harbor chop, Pierson-Moskowitz, JONSWAP, and Frequency Modulated (FM) Slide, with scalable ocean water depth, wind speed, and model scale factor. BSEE supports the development of alternative energy devices, in particular wave energy mechanical devices, in a controlled environment. The OHMSETT test tank is large enough to handle many devices at meso-scale.

Princetel, Inc.

2560 E. State St. Ext
Hamilton, N.J. 08619
Tel: 609-895-9890
Email: bryanhorsford@princetel.com
Website: www.princetel.com
CEO/President: Barry Zhang
Number of Employees: 33

Princetel manufactures fiber optic rotary joints (fiber optic slip rings) to serve the geophysical industry. The company plays a key role as a supplier of electro-optic coupling devices to meet the ever-increasing demand for higher bandwidth for maritime applications.

The Tech:
Princetel's line of fiber optic rotary joints has grown to cover more than a dozen models, one with three dozen channels in one device. Fiber channels from 1 to 12 remain the standard offering. These can be either SM or MM fiber, or a mix of the two. They are designed for rugged environments like extreme temperatures, humidity, mechanical disturbances, and water submersion (pressure compensation). Fiber optic rotary joints (FORJs) are key coupling devices in winches, robotic vehicles, wind turbines, medical OCT systems, satellite antennae, high-definition broadcasting systems, and submarines. Princetel's FORJ products are designed to comply with the popular standards, Telcordia GR1209 and GR1021 in key areas of reliability. All models meet or far exceed MIL-STD-810G and MIL-STD-167-1A for shock and vibration.

The Company:
Princetel is a small for-profit social enterprise that applies commercial strategies to maximize improvement in human and environmental well-being. It is passionate about providing a sanctuary for its employees, creating the best fiber rotary joint products.

SeeByte

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Edinburgh, Midlothian, U.K. eh4 2hs
Tel: +44 (0) 131 447 4200
Email: nicole.irvine@seebyte.com
Website: www.seebyte.com

CEO/President:Bob Black
Number of Employees: 50

The Case SeeByte provides clients in the Military and Oil and Gas sectors with advanced software to enhance the capabilities of their underwater sensors, vehicles and systems. SeeByte is also increasingly partnering with leading hardware manufacturers to provide enhanced capabilities for sensors and systems.

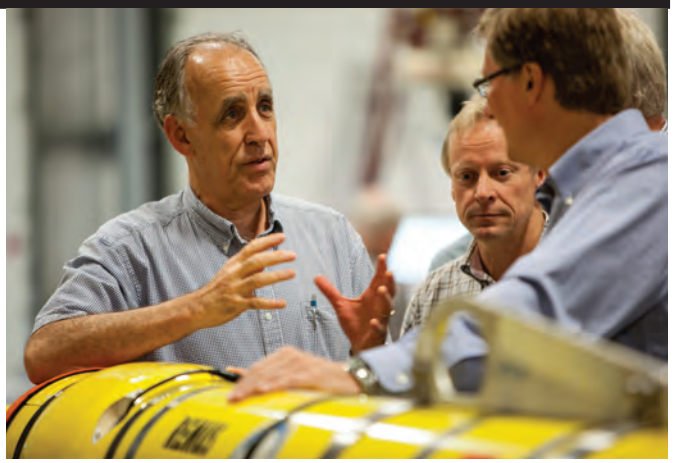
SeeByte has achieved a position of leadership in the development of smart software for underwater vehicles, sensors and systems in both the Military and Oil & Gas sectors. SeeTrack Military is a technology used by Explosive Ordnance Disposal (EOD) and Clearance Divers around the world, to achieve success in managing their off-board assets during dangerous and demanding missions. This unique system for rapid on-site analysis and fusion of sensor data has been used within numerous military & security exercises, surveys and operations. SeeTrack CoPilot is the world's most advanced, easy-to-use, plug-and play software that makes piloting any ROV a much simpler task. Through a straightforward and intuitive point and click interface, SeeTrack CoPilot has led the way in the offshore oil and gas industry. SeeTrack CoPilot permits pilot controlled auto-transit and stop-and-hover, while providing automated sonar tracking and movement relative to a target. By offering the largest available set of flight modes, SeeTrack CoPilot delivers the benefits of Dynamic Positioning in environments and scenarios not achievable using any other software product. SeeTrack AutoTracker is a record-breaking software which enables AUVs to detect and track a pipeline using existing payload sensors. The technology allows for improved inspection data, time-reductions due to fewer repeat missions and has the ability to reason logically when faced with multiple pipelines or unexpected burials. Using SeeTrack AutoTracker is designed to ensure that, throughout the survey, the correct and most accurate data is gathered by the AUV.

Hydroid, Inc., a Kongsberg Maritime Company

6 Benjamin Nye Circle, Pocasset, Mass. 024559

Tel:	508-563-6565
Email:	forrester@hydroid.com
Website:	www.hydroid.com
CEO/President:	Christopher von Alt
Vice President, Ops:	Duane Fotheringham
VP Sales & Marketing:	Graham Lester
Engineering Director:	Robert Brown
Number of Employees:	108

Facility:
New 40,000 sq. ft state of the art facility underway - scheduled for completion - Spring 2014



Christopher von Alt

Part of Kongsberg Maritime's AUV Group, Hydroid is a manufacturer of Autonomous Underwater Vehicles (AUVs). REMUS AUVs provide innovative and reliable full-picture systems for the marine research, defense, hydrographic and commercial offshore/energy markets.

The Company

Historically, the sheer magnitude of the ocean has made comprehensive exploration unfeasible. Hydroid is changing that with its full-picture REMUS AUVs. These unmanned underwater robots offer a flexible alternative to surface vessels. They can glide along the surface, dive to deep depths, explore shallow waters or hover in hazardous areas where navigation is difficult. Hydroid AUVs have reduced the high costs of ocean exploration and sampling while increasing the availability, quality and quantity of scientific marine data. Using Hydroid AUVs for undersea mine reconnaissance has helped save lives by eliminating human divers from mine fields, and the customizable robots have helped solve plane and ship disaster mysteries. Hydroid AUVs also provide scientists data on pressing global issues including climate change, the world's declining fish population and environmental disasters. As leader of the team that originally developed the REMUS AUV at Woods Hole Oceanographic Institution (WHOI), **Christopher von Alt's** knowledge of the intricate technology has been integral to the products' development and widespread adoption. After years of fabricating and developing the REMUS vehicle at WHOI, in 2001 von Alt co-founded Hydroid, creating an independent company to commercially manufacture, support and further develop the REMUS systems. In 2008 Hydroid was acquired by Kongsberg Gruppen.

The Tech

REMUS AUVs are offered in three vehicle classes: The man-portable REMUS 100 (depth rated to 100m); the highly versatile, modular REMUS 600 (depth rated to 600m or 1500m); and the REMUS 6000 (depth rated to 6000m), a deep-water workhorse. All REMUS AUVs are built on a common technology base incorporating the intuitive vehicle interface program (VIP); this keeps vehicle maintenance, mission planning, checkout, data analysis and cross-vehicle training seamless across the model line. The vehicles differ by size, endurance and payload sensor configurations. The vehicles can be equipped with many different instruments, depending on the model and the intended use. This includes advanced GPS-aided inertial navigation; Doppler velocity log; acoustic fish trackers; varying sensors; nitrate and nutrient analyzers; conductivity and temperature monitors; radiometers; side scan sonar; bathymetry; bottom-mapping, echo sounder, forward-looking sonar; video camera module; turbidity sensors; and electronic still camera with strobe and magnetometers. All vehicles incorporate embedded software.

Shark Marine Technologies Inc.

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Canada, L2N 1L2
www.sharkmarine.com
Tel: 905-687-6672
President: Jim Garrington
CFO: Wendy Garrington
Sales Manager: Jim Honey

Jim and Wendy Garrington

For more than 28 years Shark Marine has been a leader in underwater technology and product innovation. Its Navigator, diver held sonar system is currently in use by more than a dozen navies around the globe. Shark Marine Technologies, since its founding in 1984, has had a mandate to deliver underwater products and services that are innovative, high quality, dependable and cost effective. In addition to its own product lines, Shark Marine works closely with other industry leading suppliers to deliver complete integrated solutions for its customers. Shark Marine has a broad offering that includes: Diver Held Sonar Imaging and Navigation Systems; Video Systems; Remote Operated Vehicles; Survey Equipment; Tether Management Systems; On-site Operational Support; Consultation; Custom Design and Manufacture; and Training

Shark Marine's Navigator, diver held sonar and navigation system is one of the most powerful and adaptive tools an individual diver can wield. It can guide them along a pre-programmed search grid, record their track as they go and allow them to mark and record various types on information.

The recent release of the MAKO, Diver Delivery System takes the Navigator and its Divelog control software to new heights. When interfaced together, the Navigator is able to control the propulsion system of the MAKO making it an "intelligent" Diver Delivery System. For example survey routes can be programmed for the vehicle giving it almost AUV like capabilities.

Quality Positioning Services (Q.P.S.) B.V.

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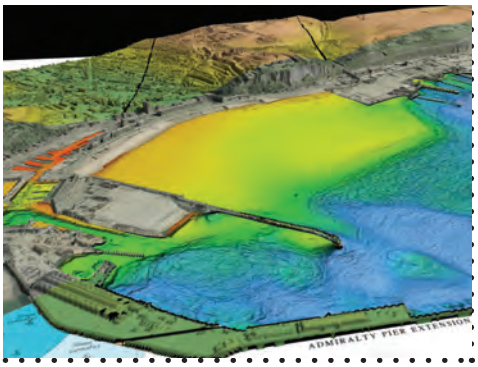
Tel: +31 30 694 1200 - Email: sales@qps.nl - Web: www.qps.nl



Modern maritime mapping projects often simultaneously collect data from multiple survey sensors, and then the data from one survey can be used a number of times. Acquisition software packages like QPS QINSy facilitate these multi-platform / multi-sensor surveys. Advanced 4D visualization software like QPS Fledermaus is key to efficiently processing the data, and fundamentally to bring together all the different datasets to analyse, create and distribute the products.

CDL

Continuing on from its previous listing as one of MTR's Top 100 CDL has launched a number of ground breaking systems in 2013. To name one - INSCAN - the world's first 3D scanning subsea laser designed for use in the oil and gas industry; a technology presenting endless capabilities. Additionally, CDL is the winner of the 2013 Subsea Industry Innovation and Technical Award presented by the Subsea UK Business Awards.

The Company:

CDL is a global engineering company that is dedicated to becoming the world's leading provider of innovative engineered solutions supporting the dynamic challenges of the oil and gas, commercial marine, yachting and defense industries. CDL offers a wide variety of market ready products and systems that feature superior technical capabilities for an unbeatable value. Pioneers of the Tiny Optic Gyro System (TOGS), CDL also provides products that satisfy the markets inertial positioning, sensor, telemetry and navigation requirements through their Fiber Optic Gyro (FOG), Ring Laser Gyro (RLG), Doppler Velocity Log (DVL), and Acoustic technologies.

The Tech:

CDL offers a wide variety of market ready products and systems. Pioneers of the Tiny Optic Gyro System (TOGS), CDL also provides products that satisfy the markets inertial positioning, sensor, telemetry and navigation requirements through their Fiber Optic Gyro (FOG), Ring Laser Gyro (RLG), Doppler Velocity Log (DVL), and Acoustic technologies. CDL also offers a variety of market ready systems for use in BOP operations, Acoustic Controls, Motion Sensing, etc.

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CEO/President: Colin Crichton
Number of Employees: 60

Silicon Sensing Systems Ltd.

Clittaford Road, Southway, Plymouth,
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Email: sales@siliconsensing.com
Web: www.siliconsensing.com

With a heritage dating back 100 years and experience of supplying >20 million devices, Silicon Sensing Systems is a leading company in the development and manufacture of MEMS gyroscopes, accelerometers and inertial systems. Our high performance products, CRS09, CRS39 and CRH01 (performance less than 0.3°/hr) provide cost effective alternatives to FOG-based products.

Silicon Sensing Systems Ltd. is one half of a joint venture based in Plymouth, UK in the southwest of England. It is a gyroscope and inertial systems engineering development company. Jointly owned by UTC Aerospace Systems, who are based on the same site in Plymouth, and Sumitomo Precision Products, the company was formed in 1999. The two companies each bring an equal strength to the joint venture.

UTC Aerospace can trace its heritage in gyroscopes and inertial sensors back to the Sperry Gyroscope Company which was founded in 1913. Sumitomo Precision Products, based in Amagasaki, Japan, bring a unique expertise in the field of silicon MEMS fabrication.

Company

Silicon Sensing has 100 years of experience in design, intellectual Property and innovation expertise of the design and development of inertial system as well as being developers and manufacturers of deep reactive-ion etchers essential for MEMS production. Its two facilities in Plymouth, UK and Amagasaki, Japan have the full range of manufacturing and test equipment to allow all of our work to be done in-house. Both sites are fully qualified to ISO 9001 and ISO14001.

SEA CON

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With 45 years in the industry, the SEA CON Group are leaders in underwater connection system solutions and connector technology and provide an extensive, diverse range of electrical, optical and hybrid system solutions that include connector assemblies, submersible switches and cable termination solutions for many applications within the oceanographic, defense, oil and gas, undersea vehicle operations, and environmental markets. The company has evolved from a small California electrical connector manufacturer in 1968 to a global system supplier with 800 employees in five countries today.

The Company

SEA CON has historically provided solutions to both current and future industry needs. It achieves this by identifying technology gaps within a market and then solving those problems. A prime example of this is SEA CON's commitment to supporting the use of fiber optics in oil and gas industry applications through development of dry-mate optical products, including the MINI-CON and OPTI-CON connector series; the successful underwater-mateable HYDRALIGHT connector; and the downhole multi-channel fiber-optic G3 connector series. To provide this broad spectrum of products and services, the SEA CON Group has six strategically located manufacturing facilities, each staffed with highly experienced design, development and manufacturing teams. SEA CON maintains multiple CNC machining departments, routinely manufacturing anything from specialized electrical contacts to components weighing hundreds of pounds. SEA CON also has extensive molding departments with a wide variety of composites/elastomers and an in-house glass-to-metal sealing facility. To complement its design and manufacturing capabilities, SEA CON has developed extensive in-house testing capabilities including electrical, optical, dimensional, pressure, shock, vibration, and axial-pull equipment, operated by experienced staff. To support its products in the field, SEA CON offers 24/7 field service support by highly trained field service teams who can provide an immediate and professional response to any service requirement in any location at very short notice.

The Tech

SEA CON has provided leading-edge products and services for operations in austere environments for more than four decades. The company's focus on technology can be traced back many years through products such as the ALL-WET connector series. These connectors not only provided the market with the ability to mate electrical connectors 'wet', but through the pioneering "All Wet split Series" also gave the flexibility of connecting multiple individual instruments (e.g., lights) to a single-interface penetration on a control pod. As industry requirements have evolved, SEA CON has adapted existing products to meet market needs. The Metal Shell Series (MSS) has been one of SEA CON's main product lines, providing high contact density and a variety of power and signal configurations. This series has also provided SEA CON with the ability to comply with American Petroleum Institute (API) standards by the inclusion of 'test ports' at seal interfaces, critical in today's offshore drilling industry. SEA CON understands the importance of not only developing technology but also ensuring that the technology is qualified in accordance with the appropriate specifications for applicable markets. This understanding and experience has been gained through many Technology Qualification Programs (TQPs) conducted by SEA CON, for products including the MINI-CON and the HYDRALIGHT connectors as well as the SEA CON Precision Hose system.

Sea-Bird Electronics

13431 NE 20th Street
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Tel: 425-643-9866
Email: seabird@seabird.com
Website: www.seabird.com
CEO/President: Dr. Norge Larson
Engineering Director: Tom Mitchell
Number of Employees: 120

Testing Capabilities

More than 40,000 calibrations performed per year, with conductivity, temperature, and dissolved oxygen calibration baths (27), 10,000 psia hydrostatic pressure test vessels (3), deadweight testers, in-house metrology laboratory (water triple-point cells, gallium melting point cells, IAPSO Standard Seawater, 8400B Autosal).

The Company:

Sea-Bird Electronics manufactures oceanographic CTDs and integrated water sampling systems. The CTDs are designed to measure conductivity, temperature, pressure (depth), dissolved oxygen, and other variables, enabling the determination of salinity, density, and other properties contributing to ocean circulation, marine ecosystem function, and global climate dynamics.

The Tech:

CTDs on research vessels, fixed moorings, moored profilers, autonomous drifting profilers (Argo floats), surface salinity floats, AUVs, autonomous gliders, and large-scale networked sensor arrays in ocean observatories present different challenges in acquiring high-accuracy data. The instruments are designed to minimize dynamic errors and

EvoLogics GmbH

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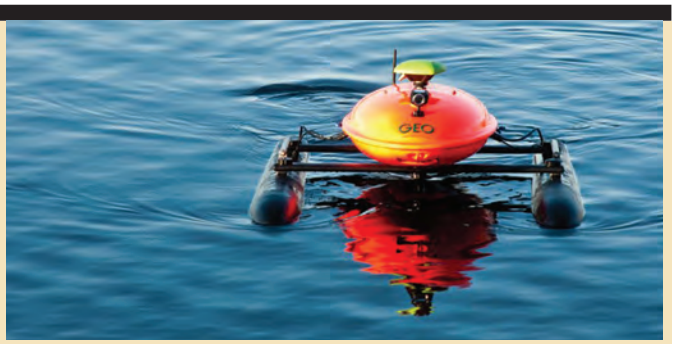
CEO/President:	Dr. Rudolf Bannasch, Dr. Konstantin Kebkal
Snr. Operations Mgr:	Francisco Bustamante
Engeneering Director	Sergey Yakovlev
# Of Employees	25



EvoLogics GmbH develops underwater information and communication systems based on bionic concepts, combining cutting edge engineering with the best ideas found in nature. The advanced product features have become enabling technologies for deep water exploration and production. EvoLogics range of products offers highly reliable, flexible and cost-effective solutions for multiple underwater communication, positioning, navigation and monitoring applications. The company strives for innovation and invest our vast experience into developing, manufacturing and supporting products that deliver an excellent performance and solve the most challenging tasks. The company was founded in 2000 in Berlin, Germany, by a group of leading international scientists and maritime engineering experts. The company focuses on developing innovative solutions for maritime and offshore industries, as well as smart robotic systems design and bionic research.

The Tech

EvoLogics' products offer highly reliable, flexible and cost-effective solutions for multiple underwater communication, positioning, navigation and monitoring applications. EvoLogics' developments are based on the patented S2C (Sweep Spread Carrier) technology - the reliable acoustic telemetry that provides an independent bidirectional data link along with positioning, broadcasting and networking capabilities. S2C devices can simultaneously facilitate telemetry and navigation of unmanned underwater vehicles. They enable retrieving information from various sensors and allow the user to control complex processes by seamlessly combining communication with highly accurate positioning. Moreover, EvoLogics caters to the needs of scientists, developers and commercial customers with a series of underwater acoustic devices and software tools that offer an open development and testing framework, providing endless opportunities for new implementations. S2C systems have been carefully designed for operations in harsh underwater environments and enhanced with special algorithms for signal processing and data management. The company's extensive experience with sensor integration allows it to provide customers with turn-key solutions ranging from initial deployment up to recovering the equipment.

Aanderaa Data Instruments, a Xylem brand

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5828 Bergen,
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Email: aanderaa.info@xyleminc.com
Website: www.aanderaa.com
CEO: Gretchen W. McClain
# of Employees: 93

Aanderaa Data Instruments AS, a Xylem brand, headquartered in Bergen, Norway, designs, manufactures and sells sensors, instruments and systems for measuring and monitoring in demanding environments. Its main market areas are Environmental Research, Marine Transportation, Oil and Gas, Aquaculture, Road and Traffic and Construction. Aanderaa is known for its ability to develop uncompromising state-of-the-art instrumentation that is both reliable and robust for long term observations of the marine environment. It is a trusted source to many Oceanographic Institutes, Universities, Geophysical Surveyors, Navies, Offshore Oil & Gas E&P Companies, Drilling Companies, Port & Harbour Authorities, Government Agencies, Water Authorities, and Electric Power Utilities internationally.

Aanderaas' new Seaguard Host and an expanding line of distributed Smart Sensor technology, as well as its new Aanderaa Real-Time Communication System, marks a turning point in distributed instrumentation for underwater and atmospheric measurements of Hydro Acoustic, Electro-Optical, Electro-Chemical, Pressure, Temperature, Meteorological data in observing networks and self-contained instrumentation.

At the core of the system is the CANBus based AiCaP protocol, which enables self-detection of connected sensors and dynamic setup of configuration menus. This protocol was developed by Aanderaa in order to achieve the extreme low power requirements of the Underwater Observatories. The master-slave protocol extends the CANBus protocol with extra signaling to efficiently wake up sensors or datalogger to receive data when necessary. Sensors on the bus perform their own measurements at the required intervals and send collected data to the Seaguard or Smartguard logger. These dataloggers assemble the datasets and package them to ensure safe communication of data to a receiving station utilizing the Real-Time communication system. Sensors on the AiCaP bus are utilizing Smart Sensor technology and can operate both in the bus configuration and as stand-alone entities. In the latter mode, they can be interfaced to any computer or logger using the RS-232 port.

preserve initial accuracy. Sea-Bird profiling CTDs share key features that minimize dynamic errors. There is an enclosed flow path within which critical sensors (T, C, DO) are located. Pumping water through the system forces all measurements to be made on the same water sample, with predictable delay and flow effects. By pumping at a constant rate, T and C sensor response times can be engineered to match and remain independent of CTD speed. This dramatically reduces salinity spiking errors produced when sensors with different response times encounter a gradient. Since the water transit time is fixed, lag times between measurements are a known constant, so measurements can be aligned and coordinated relative to pressure in hardware or data processing. Sea-Bird moored CTDs also make measurements in an enclosed flow path, for different reasons. Pumping delivers a new water sample to the conductivity and oxygen sensors, independent of ambient circulation. Between measurements, water is trapped in the sensors and plumbing; anti-foulant concentration accumulates to effective levels by diffusion, preserving initial accuracy for long deployments.

Seafloor Systems, Inc

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Email: adam@seafloorsystems.com
Website: www.seafloorsystems.com
CEO/President: John Tamplin
Number of Employees: 7

Seafloor Systems, Inc. was formed in Portland, OR in 1999 by veteran Naval Hydrographer John Tamplin to provide hydrographic survey equipment and consulting to Survey companies in the Pacific Northwest. Since then, Seafloor Systems has expanded its business to provide hydrographic survey equipment rental, sales, and manufacturing to Geophysical and Hydrographic Survey companies worldwide. With a focus on customer support and service, and a company charter to provide cutting edge products and solutions at a compelling value and quality, Seafloor is a truly customer oriented corporation

The Tech:
Seafloor Systems provides custom hydrographic survey solutions integrating multibeam echosounder systems and state-of-the art position and orientation systems into a complete, turnkey product. Seafloor is also the developer of the popular Hydrolite-TM and Sonarmite MILSpec portable survey systems, featuring our unique all-digital, Bluetooth echosounder system for shallow water surveying and mapping.

SEAMOR Marine

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Email: sales@seamor.com
Website: www.seamor.com
CEO/President: Robin Li
Number of Employees: 15

SEAMOR Marine Ltd. is among the top five manufacturers of Observation Class ROV systems.
The Tech: SEAMOR ROV systems offer a modular, open-frame layout that allows for ease of access into the 'guts' of the vehicle and aids in the integration of 3rd party tools and sensors. The result is the ability to easily assemble a customized underwater system. In addition to customer specified systems, The company currently offers seven standard ROV SEAMOR versions; three with "twisted pair" tether, three with "fiber-optic" tether and one with combined "twisted pairs"/"fiber-optic" tether. The 300F-1080p-HD model incorporates a High Definition primary video camera. All standard systems are depth rated to 1000 ft./300m and feature 150w thrusters (4 or 6 – model dependent),1800 tilting camera and lights, auto depth, auto heading, and include a 19in. monitor, intuitive control system, tether cable, manual tether winch c/w slip-ring, spares and tool kit.

www.seadiscovery.com

All American Marine

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Email: sales@allamericanmarine.com
Website: www.allamericanmarine.com
CEO/President: Matt Mullett
Engineering Director Nic de Waal
Number of Employees: 45

AAM recently launched a new class of high speed and long range hydrofoil-assisted survey catamarans with the delivery of the 62 ft. Florida II for the U.S. Army Corps of Engineers. The fuel efficient and stable platform allows the crew to travel farther and stay on site longer collecting reliable data.

The Florida II features the highly successful Teknicraft Design signature hull shape. Teknicraft's unique design utilizes hydrodynamic lift produced by a hydrofoil that is affixed amid-ship between the two demi-hulls. The hydrofoil displaces approximately one-third of the vessel's weight, which in turn reduces water being displaced by the hull and results in a smaller wake wash. Smaller wake wash mitigates environmental concerns about shoreline damage caused by the large wakes of other more conventional type catamarans. The foil also significantly enhances the performance of the vessel. The hull form is a semi-planing type catamaran. It employs a combination of symmetrical and asymmetrical sponson shapes, thereby combining the attributes of both shapes into one hull. The symmetrical bow-section ensures directional stability in short swell conditions and following seas, while the asymmetrical amidships and aft sections ensure softness of ride and reduced wetted area which enhances comfort and economy. The catamaran hull has a high tunnel ceiling with a large opening between the sponsons, which allows free movement of wind-waves without slamming on the wet-deck. Also, horizontal steps on the inside of the tunnel walls act both as chines to deflect green water from the hull surface, and to break up the solid water into spray. The high beam to length ratio of the catamaran hull provides a large deck area for placing survey equipment, deck cargo, or other supplies.

VideoRay LLC

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Web: www.videoray.com

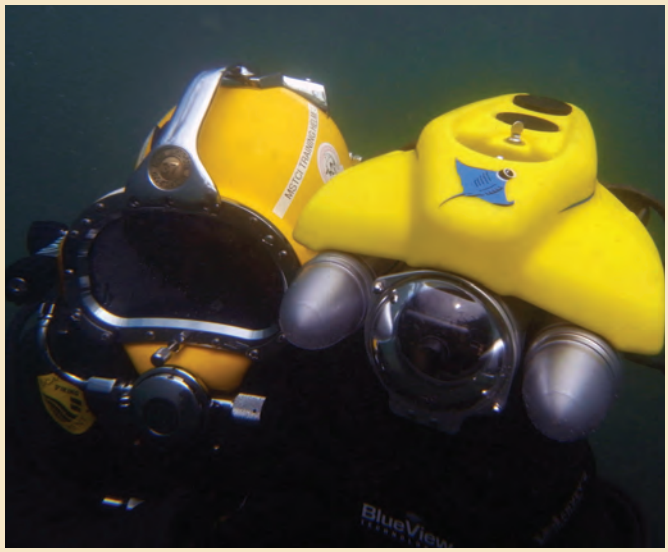
President: Scott Bentley
Employees: 45

VideoRay is a leader in observation class Remotely Operated Vehicles (ROVs) and, according to the company, the largest volume producer of ROVs in the world. With more than 2,500 units delivered to a wide range of organizations for a wide range of missions, hundreds of VideoRays work every day throughout the world underwater on multiple missions, from helping to thwart terrorism, finding and retrieving objects, inspecting infrastructure both inland and offshore, and keeping divers safe from hazardous conditions. Since the first systems were delivered, users have tried VideoRays in increasingly challenging situations and environments. Today, VideoRays can be found on every continent, and owners in a growing number of industries have learned to trust them for a variety of underwater inspection, location, and recovery applications where reliability is a necessity.

The Tech

The VideoRay Pro 4 is the culmination of more than a decade of ROV design and development. The Pro 4 incorporates the latest in small ROV design and technology, making it, according to the manufacturer, the most advanced, capable, and versatile small ROV on the market. Completely computer driven by a powerful software platform called VideoRay Cockpit, the Pro 4's technology and advanced internal features position well in the market.

The Pro 4's size, powerful thrusters, and minimal mass make it uniquely suited for most any task. Thanks to its compact size, comparatively low weight and ultra-low power requirements, the Pro 4 offers remote deployment capability unlike any other ROV system available – even by one person from a small inflatable boat. Equipment set-up takes only minutes, but missions can last as long as the operator is willing. The VideoRay Pro 4 allows the customer to select accessories that work best for each specific operation. With the Pro 4 hardware in position, operators can easily incorporate a variety of tools, software, and sensors developed specifically around the size and capability of the Pro 4. Available accessories can add vehicle autonomous control, a manipulator arm for retrieving objects and cutting lines, and sonar imagery and positioning systems for navigation, target marking, and target acquisition and re-acquisition. Following VideoRay's proven ideals of making its ROV systems and accessories "plug and play," capabilities can be added or removed with either a simple software update or a quick hardware add-on in the field. VideoRay's prides itself on providing highly portable, rugged and reliable ROVs capable of accomplishing assigned tasks in a wide variety of operating conditions and mission objectives. Its systems are designed for professionals demanding easy to use, portable, versatile, and cost effective technology that can make them successful. Our mission is to deliver just this.



Sensor Technology Ltd.

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Tel: +1-705-444-1440
Email: techsupport@sensortech.ca
Website: www.sensortech.ca
CEO/President: Niru Somayajula
Number of Employees: 55
Annual Sales: $5m

Sensor Technology Ltd. specializes in custom acoustic transducers and hydrophones. The company performs all production steps at one facility, from piezoelectric powder production to in-house machining of transducer components and assembly, as well as complete product testing. With 30 years of experience and a flexible manufacturing facility, Sensor Technology Ltd. can take transducer from concept to prototype to high volume production.

Sensor Technology Ltd. manufactures a large number of piezoelectric ceramic materials. Formulations include PZT equivalents to Navy Types I, II, III, V and VI, a range of lead metaniobates, lead titanate and the unique, ultra-hard BM200 material.

In-house machining capabilities allow it to produce a wide range of geometries, from small 0.070-in. (1.78mm) diameter tubes to plates almost 7-in. (177.8mm) long.

SIDUS Solutions LLC

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Website: www.sidus-solutions.com
CEO/President: Leonard Pool
Engineering Director: Marc New
Number of Employees: 14

Simply put, SIDUS Solutions builds high quality products and offers outstanding support. Founded in Septem-

Soil Machine Dynamics Ltd

Andrew Hodgson

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Website:	www.smd.co.uk
CEO/President:	Andrew Hodgson
Vice President:	Mike Jones/Peter Imlah
Marketing Director:	Richard Howarth
Engineering Director:	Steve Shoulder
Square Footage:	90,500
Number of Employees:	370
Annual Sales:	$200,000,000.00

The Case

SMD is a leading manufacturer of remote intervention equipment, employing more than 300 staff in the U.K., Singapore, U.S. and Brazil. The company has been honored with three Queens Awards, for innovation in Trenching vehicles and ROVs, and for its growing presence and success in global markets. **SMD manufactured the world's most powerful subsea tractor and world's largest trenching ROV, and is currently manufacturing the world's first deep sea mining vehicles.**

The Tech

SMD's origins are in agricultural engineering related to research at Newcastle University. In the early 1970's, the North Sea oil industry required the development of seabed geotechnical knowledge, together with theoretical analysis of the particular problems encountered in seafloor earth moving activities. SMD began to design and manufacture sea floor trenching and ploughing equipment used to lay and bury oil and gas pipelines. SMD's technology was unique in its application of land based soil mechanics principles to innovative subsea trenching machines, and a number of benchmark patents resulted from this early work. The innovation of a new range of more powerful and more capable trenching machines is helping the Offshore Wind industry meet The Tech:nical challenges identified in the early Round 1 Wind Farm Installations in U.K. waters. SMD's innovations in product, technology, and offering to market have seen The company grow from shipping its first WROV in 2005, to having the largest market share of the three major independent WROV manufacturers in 2010 (based on overall market size forecasts by the Douglas Westwood analyst group). SMD bring more than 40 years of subsea engineering experience to various markets and are currently in the process of building the world's first deep sea mining vehicles for Nautilus Minerals. SMD's Renewables business stream is dedicated to developing cost effective installation technology for marine renewable energy.

The Company

SMD is one of the world's leading manufacturers of remote intervention equipment, working in hazardous environments worldwide. Customers span a range of sectors from energy (oil and gas, marine renewables and offshore wind infrastructure), to telecoms, mining, naval/military and scientific communities. The company has recently reorganized itself along a number of key business streams: Work Class Remotely Operated Vehicles (ROVs), Subsea Trenching, Marine Renewables and Submerged Mining. SMD has 90,000 sw. ft. of manufacturing space over four production sites in and around Wallsend near Newcastle, where the head office is based. The company also has offices in, Singapore, the U.S. and Brazil.

ber of 2000 as Sidus Solutions Inc., The company was reorganized as SIDUS Solutions, LLC in April 2010 with the partnership of Rolloos Holdings (Top Side Offshore Technology), a Dutch corporation. The joint business activities are directed towards assisting, supporting and increasing safety, efficiency and control of business operations. SIDUS Solutions, LLC benefits from a broad group of agents in several strategic locations worldwide (North & South America, Europe, Asia and Australia). Recently a new Houston Area office was opened as part of SIDUS' 2012 expansion plans. Currently, one of the main focus point for SIDUS is Situational Awareness, as worldwide, on-going pressure is being placed on the safe extraction and operation in oil and gas exploration. After the Deepwater Horizon accident, the U.S. and other world governments have mandated 'Situational Awareness' to the daily operations of large and small operators. The new checks and balances help verify the safe operation of each asset.

The Tech:
SIDUS Solutions designs and manufactures cutting-edge subsea video cameras, lighting and robotic positioning devices for extreme environments. They also specialize in custom, end-to-end underwater systems including customized controllers and cabling.

South Bay Cable Corp.

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E-mail: sales@southbaycable.com
Website: www.southbaycable.com
CEO/President: Gordon Brown
Engineering Manager: Oscar Lehuede
Number of Employees: 80

Founded in 1957, South Bay Cable Corp is a leading designer and producer of special purpose cable for use in demanding and harsh undersea environments. Cable constructions incorporate electrical components for signal and power, fiber optics and a variety of synthetic and metallic strength members.

Each cable is designed specifically for its intended use. Cable uses include; ROV Tether and Umbilical, Side Scan Sonar, Tow Cable, Vertical Riser, Video Inspection, and a multitude of other unique applications. To date, more than 60,000 different constructions have been designed and manufactured by South Bay Cable Corp.
From the stranding of the individual conductors to the completion of the finished product, all stages of production are done in house. This flexibility allows the Engineer's endless design possibilities to provide the best possible cable construction. Electrical conductors can be engineered from signal voltage up to 5000 volts continuous operating. Single mode and multimode fiber optics, with proof testing to 200kpsi, are employed in both stainless steel tube and tight buffer configurations.

SubChem Systems, Inc.

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Tel: 401-783-4744, ext 102
Email: hanson@subchem.com
Website: www.subchem.com
CEO/President: Alfred Hanson
Number of Employees: 5
Annual Sales: $1,000,000.00

SubChem Systems, Inc. is a small business that was founded in Rhode Island in 1996, to focus on instrumentation technology for Underwater Chemical Sensing. The company develops, manufactures and sells, to the international market, a unique line of submersible chemical analyzers.

The Tech:
SubChem Analyzers are designed to

Bluefin Robotics Corporation

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COO:	Jeff Smith
Marketing Director/Sales Manager:	Omer Poroy
Engineering Director:	Louis Quartararo

Autonomous Underwater Vehicle manufacturer, Bluefin Robotics, has demonstrated rapid growth within the over the last two years with the build of several new vehicles and the addition of a variety of development contracts to the company's portfolio. Simultaneously, Bluefin has significantly invested in its production infrastructure and resource skill set, nearly doubling its factory square-footage and doubling its workforce.

The Company

Bluefin Robotics develops, builds, and operates Autonomous Underwater Vehicles (AUVs), subsea batteries, and related technologies for defense, commercial, and scientific customers worldwide. It offers a full range of modular, free-flooded AUV platforms. Using a core set of building blocks, it has designed over 50 different configurations. This includes over 70 different sensors on over 80 AUVs—far more than any other manufacturer. The Bluefin team brings a unique set of skills including hard-won expertise in the application of advanced materials, systems, and technologies to real-life operating conditions. It offers research and development capabilities, technology integration, full-scale manufacturing facilities, test and evaluation infrastructure, and customer support functions from training and marine operations to logistics and full life-cycle support. Headquartered in Quincy, Massachusetts, Bluefin's 55,000-square-foot facility houses three floors of engineering, manufacturing, marine operations, and corporate administrative functions. With ample space for equipment and direct ocean access, we are able to design, build and test our systems all in a single location allowing our team to work efficiently and effectively.

In 1997, Bluefin was founded by a core group of engineers from the Massachusetts Institute of Technology (MIT) AUV Laboratory, and in 2005 became a wholly-owned subsidiary of Battelle.

The Tech

Bluefin Robotics' standard AUVs are flexible, modular systems that enable easily reconfiguration to meet varying and evolving needs. Each system utilizes field-replaceable batteries and removable data storage for efficient mission turnaround and can accommodate on-deck maintenance and repairs. Bluefin vehicles are stable platforms capable of highly accurate navigation, yielding quality data even at the greatest depth. The vehicle, batteries and support equipment can be broken down and packed into easily air-shippable sections, making the system ideal for time-critical and remote operations.

Bluefin Robotics continuously advances the state of AUV technology through internal R&D funding as well as through several development contracts including those for the Hull UUV Localization Systems (HULS) production systems, Surface Mine Countermeasures (SMCM) UUV, and Deep Sea Operations Technology and System (DSOP) Development Program. Along with partners Battelle and The Columbia Group, Bluefin is developing Proteus, a large-diameter manned and unmanned vehicle that will function as a test bed. In July 2013, the team received an R&D 100 Award by R&D Magazine for the Proteus design.

The company is also building its first prototype of a hybrid ROV called the Hawkes U-4000 ROV. The designs offer scalable, modular solutions including a thin fiber-optic tether and on-board batteries that will reduce the total cost of ownership/operating costs while simultaneously outperforming existing ROV technology.

Lastly, Bluefin is engaged in several battery projects focusing on using the core components of its standard 1.5 kWh subsea battery for customer designs to support offshore infrastructure for the oil and gas sector.

be adaptable for deployment on a wide variety of ocean observation platforms including: shipboard profiling or towed sensor arrays, fixed-depth or vertical profiling moorings, autonomous underwater vehicles and gliders. It also provides environmental data collection and analysis software, environmental and ocean engineering consulting services, and technical support for water quality monitoring in freshwater, coastal and ocean observation programs.

SurfaceSupplied, Inc.

Avenue Portola
El Granada, Calif. 94018
Tel: 650-679-0234
Email: jason@surfacesupplied.com
Website: www.surfacesupplied.com
CEO/President: Jason Van der Schyff
Number of Employees: 5

Testing Capabilities:
Hydrostatic Pressure Testing, Oxygen Cleaning, Audio Signal Measurement, Light Output/Lux Measurement, Electronic Test Bench

SURFACESUPPLIED was established in early 2011 with the goal of providing state-of-the-art technology to the commercial diving industry.
The founding team has extensive experience in both the supply and manufac-

ture of commercial and military diving equipment.

Based in Northern California, close to the heart of Silicon Valley, SURFACESUPPLIED is perfectly placed to incorporate the latest in electronic development into its products. Although not a region known for a heritage in diving, Silicon Valley is one of the most condensed areas of technology development and product design in the world. With a portfolio of products and a focus on our customers, SURFACESUPPLIED is dedicated to industry leading products at the right price with exceptional availability.

The Tech:

SURFACESUPPLIED uses a combination of electronic hardware, embedded software, mechanical components and a streamlined route to manufacture in order to provide class leading technology to the commercial diving sector. Product innovation is led from all four elements and may include material selection, COTS components, custom hardware development and multi-platform software. By adopting a holistic view of each product, the correct hardware can be chosen to minimize component count, leverage mechanical packaging and place the focus on embedded software. SURFACESUPPLIED has products available for hyperbaric communication, diver's breathing gas analysis, class leading high intensity LED lighting and the hyperbaric monitoring of saturation diving systems.

Diving Unlimited International, Inc.

1148 Delevan Drive
San Diego, Calif., U.S. 92102-2499
Tel: 619-236-1203
Fax: 619-237-0378
Email: SLong@DUI-Online.com
Website: www.DUI-Online.com

CEO/President:	Susan Long
# of Employees:	76
Annual Sales:	$7,500,000.00

The Company

Since 1963, DUI has been protecting divers in the world's most hazardous environments. Whether working 500 ft. below the surface on an oil platform in the North Sea, jumping out of a helicopter in Alaska, performing a covert operation in a distant land or simply wanting the same technology in your recreational diving equipment, DUI are the people who can make that happen. DUI began as a retail dive store manufacturing our own wetsuits. Then with its invention of the hot water suit for saturation diving, everything changed and its focus became primarily the commercial dive market including elaborate hot water heating systems. DUI then took that expertise and created high performance drysuits and insulation specifically for the recreational and technical dive markets giving divers the ability to do things and go places that were never before possible. DUI also design and manufacture specialized suits and equipment for the US and friendly foreign militaries around the world. All DUI suits are built in the USA and distributed through 400 dealers in North America and exported worldwide.

For 50 years, DUI has been on the forefront in bringing new technologies and capabilities to divers around the world. DUI were one of the first to create custom wetsuits in the 60's, the inventor of the hot water suit for saturation diving in the early 70's, brought drysuits to the recreational diver in the 80's with new designs and materials and made them commonplace in the 90's, invented field replaceable seals in the early 00's and is now leading the field in complete encapsulation for public safety divers. **This year DUI is launching a high performance electrically heated undergarment as well as a completely new design of hot water suit that will bring commercial diver performance and safety to new levels.** DUI continues to be the benchmark for which all other manufacturers look to for their designs. DUI continues to design and manufacture all of their drysuits and hot water suits in the USA. DUI's obsession is to provide divers with equipment that is dependable, performs flawlessly, long lasting and feels as if it were a second skin. The goal is to make the insulation system virtually invisible to the diver underwater so that they can focus on the job, the operation or the simple pleasure of their dive.

Tritech International Ltd

Peregrine Road, Westhill Business Park
Westhill, Aberdeenshire, Scotland AB32 6JL
Tel: +44 (0) 1224 74411
Email: info@tritech.co.uk
Website: www.tritech.co.uk
CEO/President: Simon Beswick
Engineering Director: Jeff Chambers
Number of Employees: 100

Tritech has provided reference standard products for subsea operations for more than 20 years and its products are tried, tested and relied upon in ROV/ AUV markets. Established in 1991, Tritech International Limited [Tritech] began with the aim of producing an innovative range of subsea products for the offshore oil & gas industry, military and other world-wide subsea markets. As specialists in the production of high performance acoustic sensors, sonars, video cameras and mechanical tooling equipment it serves professional underwater markets, including; defense, energy, engineering, survey and underwater vehicles.

The Tech: Obstacle Avoidance & Target Recognition Sonar. Tritech's SeaKing sonar is the sonar of choice for many of the world's ROV fleets. For fast, reliable and complete operational flexibility, all products in the SeaKing family can be run simultaneously on a single ArcNet communications link, using the same processor and display. The Super SeaKing family of products provide all around obstacle avoidance and target search and recognition capability to any underwater vehicle, offering Digital Sonar Technology (DST) and low power consumption (suitable for AUV platforms). **Real-Time Multibeam Imaging Sonar – Gemini.** Tritech is a leader in the mechanical scanning sonar market; however as underwater vehicles become more powerful and time constraints become more critical offshore. Gemini's real-time imaging eliminates the restrictions in low-visibility conditions. Current R&D initiatives include the development of the Gemini range and further multibeam applications as recently showcased at Ocean Business. **RAMS is a real-time, field-proven system which detects the presence, integrity and position of mooring lines and risers deployed beneath a FPSO.**

Beswick

www.seadiscovery.com

Meridian Ocean Services, LLC

10 Spring Wharf, Newport, RI 02840

Tel: (401) 439-8738
Web: www.meridianocean.com

Sales Agent:
Rainmaker LLC, 50 Briar Hollow Lane W., Ste. 405
Houston, TX 77027
Tel: (713) 202-5549
Web: www.rainmakerresults.com

Meridian Ocean Services, LLC seeks to differentiate itself from other subsea survey and inspection providers through its intense focus on innovation and creative deployment of vehicles. Meridian seeks ways to optimize ROV and AUV deployment, operating lower cost and highly efficient mid-sized vehicles. Meridian is focused on "right-sizing" vehicle deployment, recognizing that not every job requires the expense, manpower and resource requirements of work class vehicles. By combining this streamlined approach with an intense focus on identifying the premier imaging and survey tools available, Meridian can provide its clients with tailored, effective, cost efficient and rapidly deployable solutions.

The Company

Meridian Ocean Services, LLC provides critical subsea surveying and inspection services via the deployment and operation of ROVs, Autonomous Underwater VehiclesAUVs and advanced subsea imaging technology. Meridian's equipment is ideal for short and long term deployments in the pipeline and oilfield, engineering support, salvage response and oceanographic research markets.

Meridian specializes in operating mid-size vehicles that provide tremendous flexibility for both inshore and offshore deployments. The company devotes extensive time and development efforts towards optimizing solutions that leverage both ROV and AUV capabilities simultaneously, allowing it to provide innovative solutions to a variety of marine and government clients. The company also seeks to combine its subsea vehicle expertise with scalable technology solutions that automate many of the manual inspection processes still found in the shipping and offshore industries.

Meridian was founded in 2012 and has offices in Newport, RI, Houston, TX and Nassau, Bahamas. The Company operates its own fleet of vehicles and maintains an extensive partner network that enables Meridian to identify, locate and deploy - for any job, any client and at any time - the ideal vehicle, from micro to work class system.

The Tech

Meridian uses the latest in mid-sized ROVs and AUVs including Saab Seaeye, VideoRay and Iver vehicles, and advanced imaging technology from vendors including Edgetech and Coda Octopus. Additionally, Meridian has developed patent-pending processes that focus not only on automating the inspection of ballast tanks and other liquid filled structures, but also providing objectivity, analytics and monitoring capabilities where limited resources exist today.

Blake Nolan

Triton Imaging

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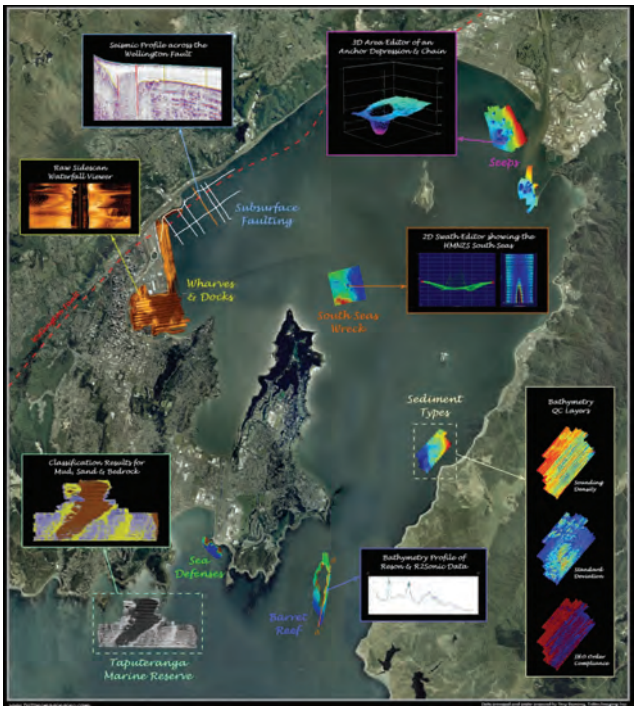
Tel: +1 831 722 7373
Email: jthomas@tritonimaginginc.com
Website: www.tritonimaginginc.com
CEO/President: John Thomas
Engineering Director: Geoff Shipton
Number of Employees: 15

Triton Imaging is a leader in the development and sale of seafloor imaging software. For more than 30 years Triton has been providing innovative software solutions to customers in the global defense, commercial survey, hydrographic, port security, marine archaeology, oil and gas, and academic markets. With more than 2000 systems sold worldwide Triton has the experience needed to deliver software solutions that meet and exceed today's demanding accuracy, speed, and data volume requirements.

The Tech:
Triton's new Perspective software incorporates the latest in software technology in a unique application that supports the processing, visualization, and fusion of the three main sonar types: sidescan, multibeam, and subbottom profiler in a common map-based, GIS environment. The integrated capabilities of this one application eliminate the need to use different software packages, and the attendant difficulty of moving data from one to the other, in projects that involve the production processing and interpretation of large multi-sensor, multi-temporal survey data sets.



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TELEDYNE RD INSTRUMENTS – TSS – GEOPHYSICAL INSTRUMENTS – BENTHOS – WEB

The Teledyne "Twelve"

Teledyne Marine has steadily built an armada of technologies and brands serving nearly every facet of the subsea sector through systematic acquisition, investment and organic growth. Recently MTR solicited the insights of a quartet of executives representing the various brands to discuss the evolution and future direction of the Teledyne Marine brand.

Executives offering insights included **Bill Kikendall**, President of the newly formed Marine Sensors and Systems Group at Teledyne Technologies, Inc., **Thomas W. Altshuler, PhD**, VP and Group GM for Teledyne Marine Systems; as well as **Andy Gardner** and **Maxwell Mulholland**, Co-Managing Directors of Teledyne Marine Interconnect Solutions (TMIS).

By Greg Trauthwein

While there are an increasing number of brands under the Teledyne Marine corporate umbrella (12 and counting), the company has, since the inception of its plan to grow the subsea business through acquisition, been astute to carefully choose the companies it sees as leaders in the field, and then once in the fold encourage them to maintain individual identities, while leveraging the advantages of the collective group. "We're trying to balance the aggregation of businesses under a single name, and amalgamate best practices while letting the underlying essence of what the business was survive," said Thomas W. Altshuler, PhD, VP and group GM for Teledyne Marine Systems. "We are buying highly successful businesses with incredible name recognition, all of which is important to the customer base. I think what Teledyne has done well is keeping that feel … the best of a little business and the best of a big business."

With that as a backdrop, MTR sought insights on the creation and future direction of the Teledyne brand in the subsea sector.

Q: What do you consider to be the top three individual (company) highlights?

Kikendall I'd like to answer that question for all companies at the same time because I believe that the highlights and strengths are common and a key element of why Teledyne was attracted to these businesses and how we will continue to operate. Each of these companies has a long-standing reputation for introducing products that in some way have revolutionized the marine market sectors that they serve. Our individual reputations span decades of delivering high performance, reliable products that operate in very harsh environments. Our companies operate in partnership with our customers in meeting their objectives. We feel the pain if something does not go as expected, and we feel the excitement when things go right and new discoveries are made or operational efficiencies are achieved.

Second, the application of our products and technologies is very broad. We love to hear about the ways our instruments are being used around the globe to advance a business or science objective, especially when they're used in manners that we did not anticipate. In the hands of our customers, our products are part of some amazing accomplishments.

Finally we are very proud of our sustained innovation. Across our Teledyne Marine businesses we make a significant investment in research and development.

Gardner and Mulholland Teledyne Marine Interconnect Solutions aligns, integrates and standardizes the sales, marketing, business development, tendering and customer relationship management processes of Teledyne Impulse, Teledyne DGO and Teledyne ODI into a single, high performance, customer-facing organization. The combined footprint of its manufacturing, engineering and customer service operations includes major facilities in San Diego (CA), Portsmouth (NH), Daytona Beach (FL), and Alton (U.K.). A new 50,000 sq. ft. Technology Center dedicated to the development of advanced technologies was opened in 2013 in Daytona Beach.

Teledyne Impulse delivers electrical and optical interconnect systems for a broad range of harsh environment applications. The organization's comprehensive product line of dry-mate, wet-mate and underwater-mate products contains metal-shell, rubber-molded electrical, fiber optic, Ethernet and hybrid systems. Teledyne Impulse incorporates these products into custom engineered cable assemblies using neoprene, polyethylene and polyurethane over-molding technologies. Teledyne DGO specializes in "severe environment" interconnect equipment and delivers systems which are used to provide power and signals across critical boundaries subjected to extreme pressures and temperatures. Teledyne DGO's core technology is the glass-to-metal seal. This dry-mate technology not only demonstrates outstanding resistance to extremely high pressures, it is also made of an inorganic material and thus possesses long-term stability and can withstand conditions that quickly degrade and deteriorate other types of sealing materials. Teledyne ODI is a leader in high power subsea interconnect products, and delivers rugged dry-mate and wet-mate connectors designed for electrical, fiber optic and hybrid applications. Teledyne ODI has achieved tremendous success supporting the development of ocean observatories and sea floor sensor networks, and it's wet-mate systems are based on patented oil-filled and pressure-balanced technologies.

Kikendall

Altshuler Teledyne Benthos is a 51 year old company focused on an array of marine systems, really deepwater systems so the core competency is putting systems deep into the ocean. In 2008 Teledyne acquired Webb Research, focused on getting an autonomous platform. Webb had the Apex float, a free floating autonomous system and the Slocum glider. The focus was on winning a Navy program for gliders, the Littoral Battle Space Gliders, a contract to provide 150 gliders for the Navy to provide oceanography to the fleet which was won in 2009. Gavia in Iceland presented an exciting technology ready to blossom. In Gavia, we acquired a propeller driven underwater autonomous vehicle; Low logistics, high performance vehicles with the focus on the survey market, and also the foreign military market.

Each of the three businesses are technology based, and the underlying theme was to accelerate the growth of the technology portfolio. We invest heavily in Research and Development and we are aggressive in looking at how we are going to generate the next-generation technology for ocean observation. In the glider world we introduced a modification to the Slocum glider that allows us to use it as a propeller driven vehicle, so you can use it in gliding mode or a more classic AUV. Very low speed but very energy efficient, but it really increases the operational envelope. In the float world we are in the very early open water testing of our next generation APEX float that will be able to go to 6,000m.

What do you consider to be the overriding collective group strength?

Kikendall The group strength is a combination of the people, the focus provided by our organizational structure and the broad resources of Teledyne. We are fortunate to have many very experienced and capable people in our organizations that have tremendous domain and technical knowledge. We are also fortunate to produce products that, in many cases, are the standards within the industry. With respect to organization, we have organized in a manner that is customer/application focused. Whether we are talking about sensors, telemetry products, underwater vehicles or navigation tools, we are focused on providing the independent solutions that are leading the industry. Collectively, we strive to provide high level systems that incorporate a variety of Teledyne Marine components for those seeking innovative, turn-key solutions; however, we do not want to dictate that our systems will only be offered with Teledyne components. This approach allows our customers to choose the individual components that best meet their overall objective.

Teledyne Technologies, our parent company, is a diverse and

unique organization. Within the larger corporation is a broad range of applicable technologies and capability which are at the disposal of the Teledyne Marine companies to augment our capabilities. This includes a corporate R&D laboratory, Teledyne Scientific Company, (**www.teledyne-si.com**); the world's foremost pure-play MEMs foundries, Teledyne Dalsa (**www.teledynedalsa.com**); and a highly capable systems engineering business, Teledyne Brown Engineering (**www.tbe.com**).

Gardner

Altshuler I think the group strength is the depth of engineering. We've got a very broad engineering group. We have a voracious appetite for engineers. And the goal is to take that core competency and have each of the businesses accelerate their product development and if possible to have collaboration across the businesses.

Gardner and Mulholland Teledyne Marine Interconnect Solutions is a unique competitor in the marine equipment industry. This new organization not only designs, develops and manufactures a range of high performance, high reliability electrical interconnect systems, it is also backed by the unparalleled scientific and R&D capabilities of Teledyne Scientific. The collective group strength of the combined TMIS organization is the ability to deliver to customers the broadest available portfolio of cutting-edge electrical, fiber optic, hybrid and Ethernet interconnect products that are optimized for use in mission-critical applications which are required to function flawlessly – under extreme conditions and in any expected operational environment.

The "MTR100" is an annual list of leading companies in the subsea sector: Why are the companies under your 'group' worthy of inclusion in this annual presentation?

Altshuler I think something you would find across the company is a focus on a broad set of technologies that address the submerging marine market. I think the marine market really is emerging, if you look at offshore oil and gas, if you look at where science is going particularly in terms of the study of climate change, and if you look at the defense, with the U.S.' shift in focus to the Asia Pacific. Teledyne has identified the areas that will be exciting growth markets and is investing to grow those markets.

Kikendall I believe what is unique about the Teledyne Marine companies is the extended period over which these businesses have been supporting the subsea sector with innovative products that are very broadly applied to applications within the market. Each of our marine businesses are "go-to" companies with an earned reputation for delivering precise and dependable measurements and solutions that can be relied upon to deliver results in the very challenging subsea environment. In many cases these Teledyne products have been a key part of significant scientific discoveries that have influenced the understanding of our environment.

As consolidation continues in the subsea sector, and Teledyne sits as a driving force, what do you see as the chief benefits to housing multiple companies, multiple capabilities, under the Teledyne banner?

Kikendall We touched on this earlier when we discussed our collective group strength and our independent market focus for all product offerings. I will try to address this in a somewhat different manner. Teledyne's products are generally used to acquire information that is used to improve our understanding of the marine environment. This information may be used to make and/or influence significant decisions. The subsea market is very attractive to Teledyne, as we believe there is a need to continue the expansion of mankind's understanding of this unique and diverse environment. Through the various sensors and systems that we offer, we believe that we can make this information gathering process more precise and efficient, fostering informed decisions on important topics affecting the health and stability of our environment, our economies and our planets' diverse inhabitants.

Gardner and Mulholland Teledyne Marine Interconnect Solutions is a market-focused and process-centered organization that develops and delivers innovative solutions to its customers. TMIS was formed for the very purpose of harnessing the combined engineering resources, technical and design capabilities, manufacturing capacities and business competencies of three affiliated Teledyne businesses, and utilizing these

important assets in a smart and effective manner to deliver to its marine customers interconnect systems that are 1) innovative, 2) competitively priced and 3) which possess the highest levels of quality, reliability and performance. In addition, the single go-to-market organization allows TMIS to better leverage its collective talents in the collaborative pursuit of business growth opportunities and provides greater value to customers by simplifying their interactions with Teledyne. From these attributes TMIS intends to develop lasting and durable business partnerships and become a "trusted advisor" to its customers.

And what are the challenges?

Kikendall Challenges should be discussed in the context of objectives. From a business perspective, we always face competition. Strong competition is good for the market and truly fosters an acceleration of information. Competition leads to better products at lower costs which ultimately results in more, high quality information. From an industry service perspective, challenges include uncertainty of markets which makes it difficult to plan and create a truly efficient business model. From a technical perspective, our challenge is to offer increased capability via smaller, lower power, less expensive solutions. From a staffing perspective, it is an ongoing challenge to attract the talent required to continually advance the technology within our industry. This includes fostering interest in students of every age in the wonder and excitement of marine science and technology.

Mulholland

Gardner and Mulholland As with any large business integration effort, there are always maturation issues that need to be overcome as previously separate organizations get accustomed to aligning their internal activities along common policies and begin standardizing their processes in accordance with defined "best practices."

Where do you see growth opportunities in the sectors you serve?

Altshuler I think that the offshore energy is still going to be the hottest growth market. In the science market there are incredible requirements, but the funding is challenged. There's the need; the question is; is there money? When you look at offshore, including renewable and oil and gas, those projects have very large, longer-term plays. So we're seeing a very dynamic market, specifically in Southeast Asia. The other area where you have incredible pent-up opportunity is in the Polar region. There is much unknown, but there are substantial potential opportunities both from the military and the energy markets.

Altshuler

Kikendall We see broad growth opportunities. Specifically, we continue to see growth in the energy markets, whether it is deep ocean oil and gas or renewable energy. We have also seen growth over the past couple of years in the transportation infrastructure support market, particularly in the dredging and underwater inspection sector. On a worldwide basis, the autonomous underwater vehicle market continues to grow as this technology matures and expands in its capabilities. This, in turn, drives the sensing solutions as well as navigation solutions required to support these missions. On a regional basis, the inland and offshore market in China has been very strong for several years.

How is your organization investing to further penetrate these opportunities?

Kikendall Investments at Teledyne are strategically broad in nature and include: **People and processes** – the right team using the right tools to yield continuous improvement; **New products development** to replace our legacy products, offering more precise and efficient information gathering; expansion into adjacent markets and business and product line acquisitions in the sensors, platforms, infrastructure, systems and navigation areas; and **Advanced material sciences** to help us understand and improve how our products will perform in harsh environments.

Teledyne RD Instruments – TSS – Geophysical Instruments – Benthos – Web

TELEDYNE ODI
www.odi.com

TELEDYNE IMPULSE
www.teledyneimpulse.com

TELEDYNE DGO
www.dgo.com

Teledyne Marine Interconnect Solutions (TMIS) was created in 2013 to align, integrate, and standardize the sales, marketing, business development, and tendering processes of three Teledyne subsea interconnect businesses – Teledyne Impulse, Teledyne DGO, and Teledyne ODI – into a single, high performance, customer-facing organization.

The formation of Teledyne Marine Interconnect Solutions introduces a highly capable competitor in the subsea equipment industry, and establishes a powerful new brand in the industry, with a very strong market position and a highly compelling value proposition.

Key elements of the value proposition include the following customer-critical attributes:

1) Complete access to a broader and deeper range of high performance interconnect capabilities than is currently available today from any other single interconnect company.

2) The ability to order and receive complex, higher-order systems that integrate cross-platform technologies into advanced, value-added solutions.

3) A single point of contact for global customer support activities.

4) Full support of the combined technical, engineering, R&D, service, and productive capabilities found across the Teledyne companies.

The combined TMIS organization can deliver to customers the broadest available portfolio of cutting-edge electrical, fiber optic, hybrid, and Ethernet interconnect capabilities that are optimized for use in mission-critical applications where they are required to function flawlessly under any expected operational conditions. Solutions for these harsh environments include wet-mate and dry-mate connectors, pressure boundary penetrators, cable assemblies, and high power systems.

Teledyne Marine Interconnect Solutions is a unique competitor in the marine equipment industry. This new organization not only designs, develops, and manufactures a range of high performance, high reliability electrical interconnect systems, it is also backed by the unparalleled scientific and R&D capabilities of Teledyne Scientific, one of the world's most prominent materials science research institutes.

ODI Product

The rich scientific talents and world class laboratories of Teledyne Scientific provides the TMIS organization with unmatched insights into the physical and chemical characterization of materials, and gives TMIS engineers the rigorous scientific knowledge they need to solve difficult mechanical-electrical challenges. No other competitor in the interconnect marketplace can provide its customers equivalent scientific expertise. The three Teledyne businesses that together form

Impulse Product

TDGO Product

Teledyne Marine Interconnect Solutions bring their impressive technology portfolios and outstanding engineering capabilities to the organization.

Teledyne Impulse

Teledyne Impulse delivers electrical and optical interconnect systems for a broad range of harsh environment applications. The organization's comprehensive product line of dry-mate, wet-mate, and underwater-mate products contains metal-shell, rubber-molded electrical, fiber optic, Ethernet and hybrid systems. Teledyne Impulse incorporates these products into custom engineered cable assemblies using neoprene, polyethylene and polyurethane over-molding technologies.

Teledyne DGO

Teledyne DGO specializes in "severe environment" interconnect equipment, and delivers systems which are used to provide power and signals across critical boundaries subjected to extreme pressures and temperatures. Teledyne DGO's core technology is the glass-to-metal seal, which is superior to all other existing sealing technologies for electrical systems. This dry-mate technology not only demonstrates outstanding resistance to extremely high pressures, it is also made of an inorganic material and thus possesses long-term stability and can withstand conditions that quickly degrade and deteriorate other types of sealing materials.

Teledyne ODI

Teledyne ODI is a world leader in high power subsea interconnect products and delivers rugged dry-mate and wet-mate connectors designed for electrical, fiber optic and hybrid applications. Teledyne ODI has achieved tremendous success supporting the development of ocean observatories and sea floor sensor networks, and its superior wet-mate systems are based on patented oil-filled and pressure-balanced technologies. Altogether, Teledyne Marine Interconnect Solutions provides an astonishing variety of interconnect components and value-added systems that guarantee reliable operation in all ocean environments and at every depth – "from the surface to the sea floor."

TELEDYNE BENTHOS Everywhereyoulook™

www.benthos.com

TELEDYNE GAVIA ehf. Everywhereyoulook™

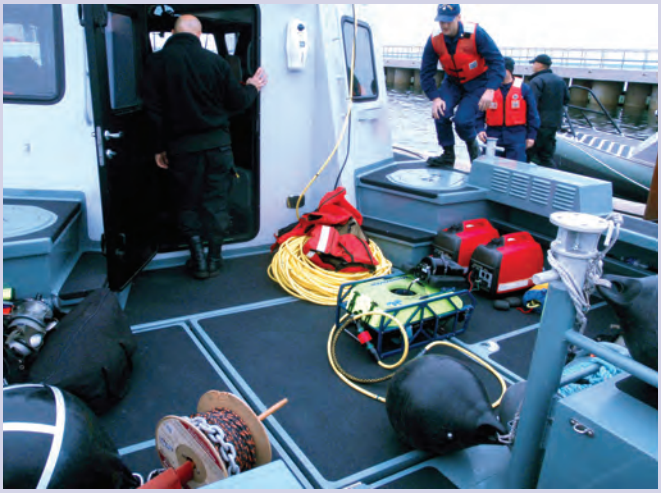
www.gavia.is

TELEDYNE WEBB RESEARCH Everywhereyoulook™

www.webbresearch.com

Teledyne Marine Systems includes Teledyne Benthos, Teledyne Webb Research and Teledyne Gavia, all with rich histories in the marine industry. The oceanographic equipment we design and develop allows scientists, industry and governments to gain valuable information from the world's oceans.

The MiniRover



www.seadiscovery.com

While its companies serve many markets, its commitment to solving complex problems with highly engineered systems continues to be a driving force. Teledyne Marine Systems product lines draw upon shared leadership in engineering and manufacturing and a coordinated sales team that connects modems to gliders and more. Three strategic business units come together as an integrated provider of advanced undersea systems.

Teledyne Benthos

Located in North Falmouth, Massachusetts, Teledyne Benthos is an industry leader with a history of more than 50 years of innovation in marine technology. Benthos designs and manufactures rugged, reliable oceanographic instrumentation and infrastructure for marine environments. Teledyne Benthos products include acoustic releases, acoustic telemetry modems, positioning systems, hydrophones, remotely operated vehicles (ROVs), glass flotation spheres and instrument housings and locating devices. These tools provide the building blocks of ocean observing systems for diverse users. Benthos technologies were part of the discovery of the RMS Titanic, contribute to astrophysical observatories and provide access to the deepest ocean depths.

Teledyne RD Instruments – TSS – Geophysical Instruments – Benthos – Web

Teledyne Webb Glider

Teledyne Gavia AUV

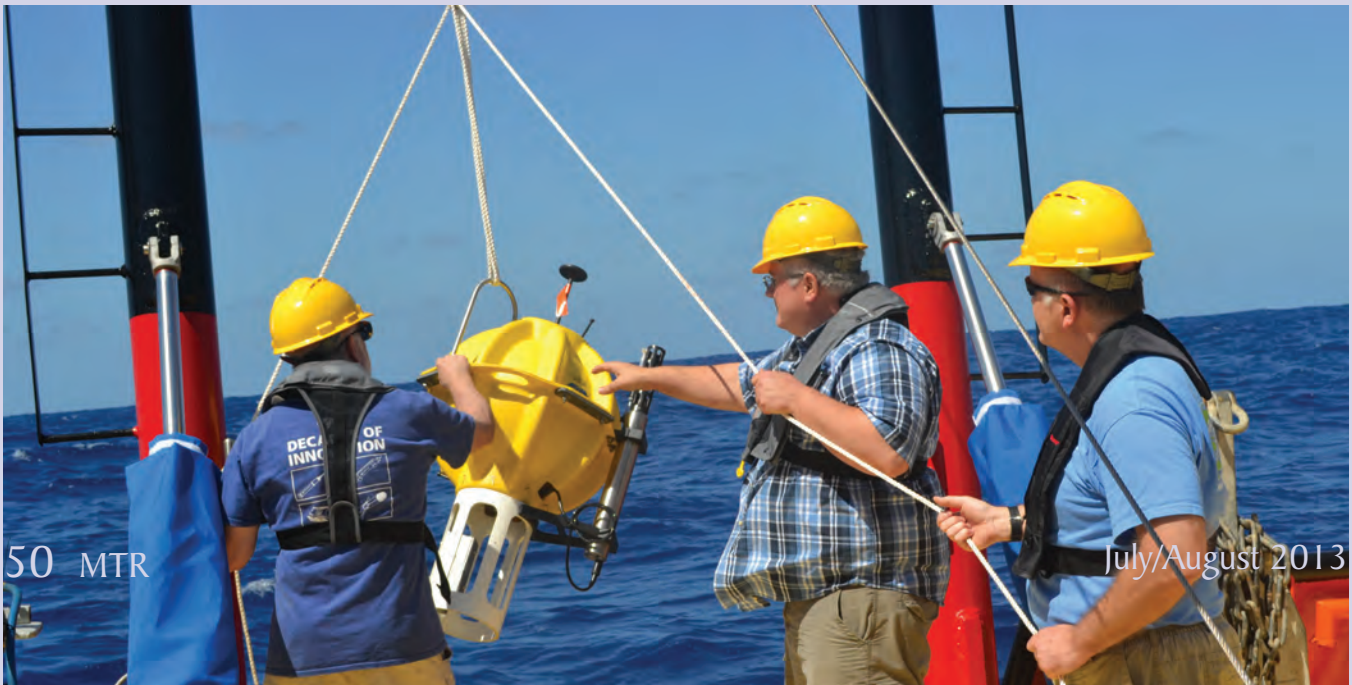
Teledyne Webb Research

Joining Benthos in a dramatically expanded North Falmouth facility in later 2013, Teledyne Webb Research has been serving oceanographic research, commercial, and government customers for more than 30 years. Webb Research designs and manufactures scientific instruments for oceanographic research and monitoring with a focus on extended observations over both time and space. Teledyne Webb Research specializes in three areas of ocean instrumentation: Neutrally buoyant, autonomous drifters and profilers, autonomous underwater gliding vehicles, and moored underwater sound sources. These systems are core to several major ocean monitoring programs including the international Argo array, the National Science Foundation Ocean Observatories Initiative and the US Navy Littoral Battlespace Sensing – Glider (LBS-G) program of record. A Webb Research slocum glider, the Scarlet Knight, was the first unmanned vehicle to cross an ocean.

Teledyne Gavia

Located in Kópavogur, Iceland, Teledyne Gavia provides turnkey survey solutions to customers undertaking a variety of tasks for defense, commercial and scientific applications. The Gavia Autonomous Underwater Vehicle (AUV) can carry an array of sensors and custom payload modules that make it well suited for any research, monitoring or surveillance task where autonomy, cost and ease of deployment matters. Its modular design allows for rapid sensor reconfiguration and battery replacement. While compact and “low logistics” the Gavia is also extremely capable, rated to 1000 meters depth and proven with a variety of sensor systems.

As an Icelandic technology and compatible with sensors from other international sources, the Gavia AUV is widely exportable and the chosen low logistics AUV of commercial survey firms operating around the world.



TELEDYNE RD INSTRUMENTS Everywhereyoulook™

TELEDYNE TSS Everywhereyoulook™

TELEDYNE GEOPHYSICAL INSTRUMENTS Everywhereyoulook™

Teledyne RD Instruments

Teledyne RD Instruments, Inc., located in Poway, CA, specializes in the design and manufacture of underwater acoustic Doppler products and oceanographic sensors for a wide array of commercial, academic, and defense applications.

Originally founded in 1982, RD Instruments developed the industry's first Acoustic Doppler Current Profiler (ADCP), a revolutionary device capable of profiling currents at up to 128 individual points in the water column. Through the years, this innovation has spawned a full line of ADCPs for current profiling in environments ranging from the shallowest stream to the deepest ocean. Expanding on this technology, the company now also offers: a full line Doppler Velocity Logs (DVLs) for precision underwater navigation; the Citadel family of CTD (Conductivity, Temperature, and Depth) sensors; and most recently, C02 and CH4 Carbon Sensors.

Teledyne RDI Product Family

www.rdinstruments.com
Email: rdi.sales@teledyne.com

www.teledyne-tss.com
Email: tsssales@teledyne.com

Teledyne TSS

Teledyne TSS is a leader in the design and manufacture of marine sensors including - DMS motion systems for motion compensation applications, Orion inertial navigation systems, Meridian mechanical gyrocompasses and SGB2000 solid state gyrocompasses; and the renowned TSS 440 and 350 pipe and cable detection and survey systems.

Teledyne Geophysical Instruments

Teledyne Geophysical Instruments' innovative offshore product developments date back to the 1960s. Through the years, the organization has remained at the forefront of technology advancements and today is among the largest, highest quality independent suppliers of streamer cables and hydrophones in the seismic exploration industry.

Teledyne Geophysical Instruments' expertise in providing complete streamer cable and ocean bottom cable (OBC) sensor line solutions, coupled with innovative gel-filled solid streamers, free-flooding stretch isolators, and a range of transition-zone and OBC capabilities, aims to ensure its customers achieve maximum utilization of equipment and lower operating costs.

Geo Streamers
www.teledyne-tss.com
Email: tsssales@teledyne.com

Teledyne Marine Imaging

TELEDYNE RESON Everywhereyoulook™

TELEDYNE ODOM HYDROGRAPHIC Everywhereyoulook™

TELEDYNE BlueView Everywhereyoulook™

Teledyne BlueView

BlueView Technologies, Inc. is the leading provider of state-of-the-art compact acoustic underwater measurement and imaging solutions for defense, energy, civil engineering, transportation, and port security applications worldwide. BlueView's advanced sonar systems have been adopted by leading manufacturers and service providers to support mission critical underwater operations.

More than 500 BlueView commercial systems have been successfully deployed on ROVs, AUVs, diver hand-held units, boat mount systems, and tripod platforms. These systems have been delivered to energy groups around the world, over 25 major US port security groups, US and international navies, NOAA, and global defense contractors for a wide range of underwater vision applications. In addition, many AUV systems have been deployed to provide integrated gap-fill, obstacle avoidance, automated homing, and 3D imaging capabilities on most major platforms.

BlueView customers enjoy a low cost of ownership with reliable operation, exceptional service, on-site training, extensive online information, and worldwide after-sale support.

Technology Profile

BlueView Technologies, Inc., is a leader in compact acoustic underwater measurement and imaging solutions. BlueView uses proprietary, breakthrough technology to deliver high performance acoustic capabilities for the first time in compact, low power systems. BlueView has developed a broad line of 2D and 3D commercial systems that operate from 225 kHz to 2.25 MHz to meet a broad range of underwater measurement and imaging needs. Within the last year, and at the direct request from multiple industry segments, BlueView has expanded its line of 2D imaging sonar with multiple field-of-view options, including a breakthrough 130°..

In 2010, BlueView launched a new line of 3D mechanical scanning systems that are a quantum leap forward in underwater 3D visualization and mapping.

The new BlueView 3D systems deliver accurate high-resolution data and imagery at levels akin to topographic 3D laser scanners establishing new standards in imaging and mapping underwater structures and areas.

The first systems are currently deployed in the energy and civil engineering segments.

Since its founding, BlueView has worked closely with the US Navy to develop AUV systems for a variety of specific applications. More than 45 AUV systems have been delivered to provide integrated obstacle avoidance, automated homing, and 3D imaging capabilities on a variety of AUV platforms. Recently, BlueView developed a new, unique 3D MicroBathymetry solution that provides high-resolution imagery for side scan gap-fill and target identification. The new system covers the region directly below the AUV, a gap typically present with side scan systems, increasing area coverage and significantly reducing mission times.

www.blueview.com

Email: swa_sales@teledyne.com

Teledyne Odom Hydrographic

www.odomhydrographic.com
Email: odom@teledyne.com

Teledyne Reson

Teledyne Odom Hydrographic

Teledyne Odom has more than 25 years' experience manufacturing high performance sonar systems with a hard earned reputation for durability, precision and customer service. From portable dual frequency single beam echo sounders to fully integrated multibeam systems, Teledyne Odom Hydrographic has equipment to meet the most challenging demands.

Teledyne Odom are now pleased to announce the transition of the Teledyne Benthos Geophysical product line over to Odom, which includes their Sub Bottom Profiler and Sidescan Sonar systems.

Teledyne RESON

The Teledyne RESON name is the hall mark of class leading sonar equipment, transducers, hydrophones and survey software that you can count on. Headquartered in Denmark, Teledyne RESON has a global presence with offices and representatives around the world. Teledyne RESON flagships are the Seabat Multibeam Echosounders and our Data Acquisition Software PDS2000.

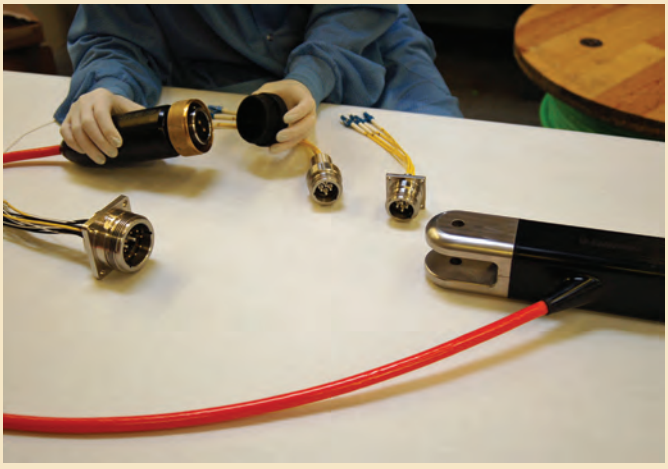
www.teledyne-reson.com
marketing@teledyne-reson.com

***(Editor's Note:** On July 1, Teledyne reorganized its marine businesses into three operating groups. **Teledyne Oil & Gas** with Mike Read as President; **Teledyne Marine Acoustic Imaging** with Kim Lehmann as President and **Teledyne Marine Sensors and Systems** with Bill Kikendall as President.*

Birns Inc.

1720 Fiske Place, Oxnard, Calif., U.S. 93033

Tel:	805-487-5393
Email:	service@birns.com
Website:	www.birns.com
CEO/President:	Eric Birns
Marketing Director	Amy Brown
General Manager	Keith Gear
Engineering Director	Jeff Kirby
Square Footage	11,400
Number of Employees:	30



Since 1954, BIRNS has provided solutions trusted in the planet's most demanding environments—from deep ocean and marine applications to military programs and nuclear power facilities. With sophisticated lines of high performance connectors, custom cable assemblies, ABS PDA certified penetrators and lighting systems, BIRNS is an ISO 9001:2008 certified industry leader committed to a long legacy of developing new technology for highly competitive markets.

The Company

In 2014, BIRNS will celebrate its 60th year in the subsea industry, with a long and successful history of contributing important technology along the way. In the 1950s, the company was first called upon to develop subsea systems for the US Navy, and today the Company is proud to have more than half a century of consecutive partnership with the US Navy, as well as other military organizations worldwide. Recent BIRNS' lighting contributions include the next generation of extreme depth subsea lighting systems, such as robust LED solutions, and the BIRNS Aurora a high intensity 14,000 lumen Light Emitting Plasma (LEP) deep submergence light. BIRNS launched its Connector Division in 1990, responding to customer and industry demand for quality and reliability. The division quickly met with huge success, and led to the development of several flagship connector lines, including the 6km rated BIRNS Millennium range—miniature, high-density metal shell connectors that set the benchmark for elevated bandwidth delivery. With configurable inserts for both high (= 3.6kV) and low (= 600V) voltage, the typical loss for a cable assembly of the series is < .5 dB. Today, BIRNS leads the industry in the development of fiber optic advances, both in penetrators and connector systems, and has been called upon to develop numerous unique Electro-Opto-Mechanical (EOM) cable assemblies, all with immense performance capabilities, and capable of providing load strengths of >50,000 lbs.

The Tech

BIRNS is trusted globally by customers with demanding marine and offshore applications to provide lighting and connector systems for manned and unmanned submersibles, commercial diving applications, and security requirements. Therefore, BIRNS consistently ensures that its certifications and standards meet or exceed the most exacting industry demands. BIRNS' cable shop is SUBMEPP-certified to NAVSEA S9320-AM-PRO-020 (one of only seven commercial firms and five US Navy yards to be so certified) and its Quality System is certified to ISO 9001:2008 by DNV and complies with NRC 10CFR50, Appendix B. All BIRNS QA personnel and production technicians are certified to both J-STD-001 Class 3 and WHMA-A-620-A Class 3. The company has held ABS Product Design Assessment (PDA) Certification for its commercial submarine and man-rated SAT-system penetrators for ABS-classed vessels since 2011.

2G Engineering

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Sun Prairie, Wisconsin
53590
Tel: (608) 825-4799
E-mail: tbonnell@2g-eng.com
Website: www.2g-eng.com

CEO/President: Hal Glenn
Vice President: Emily Glenn
General Manager: George Heindl
Employees: 6

The Case:

2G Engineering is excited to share its new line of Underwater Actuators that can be utilized in a number of fields; from the oil and gas industry to deep water exploration. 2G is also a manufacturing broker with a diverse base of high quality suppliers for the underwater industry.

The Company:

2G Engineering is a privately owned company located in Southern Wisconsin. It incorporated in 2005 by founders Hal and Taylor Glenn. It has been expanding its engineering expertise throughout the years by tackling diverse projects that have ranged from all electric vehicle power systems on land to controls systems for ROV's that operate over a mile deep in the ocean. The company was started because the founders wanted the freedom to work on the types of engineering projects that they felt had worth. Because of this, the company has become eclectic and created its very own niche in custom engineering and product design, and in sourcing and producing quick turn, high quality prototype components. 2G Engineering has many facets and specialties in the engineering world, mechanical, electrical and computer. The combination and continual development of these skills in our employees enables it to tackle problems holistically from start to finish. Providing its customers with a fully optimized and cutting edge product.

The Tech:

- Mechanical/Electrical Design
- Battery Management Systems
- Oil & Gas
- Underwater Products Underwater Actuators, Underwater Lights
- Green Energy Technology
- Motor Drive Systems

Xsens

Pantheon 6, Enschede,
OV, The Netherlands
7521 PR
Tel: +31889736700
E-mail: info@xsens.com
Website: www.xsens.com

CEO/President: Casper Peeters
Employees: 144

The Case:

Xsens is a leader in MEMS IMUs, VRUs and AHRSs in the $1000-$5000 class. These products regularly go head to head with FOGs when it comes to integration in maritime applications. The 4th generation MTi that has been introduced in 2012 has proven itself in new applications.

The Company:

Xsens is a developer and global supplier of 3D motion tracking products and solutions, based on MEMS inertial technology. The company operates in four business segments: Industrial Applications, Entertainment, Movement Science and IP Licensing.

Entertainment and Movement Science focus on (full) body motion capture for games, movies, sports and revalidation. IP Licensing supplies sensor fusion software for mobile devices. The Industrial Applications segment is the largest of Xsens and supplies powerful Motion Trackers to control & stabilization, measurement & correction and navigation applications. In the maritime market, the fit with the Xsens MTi has been proven by a large customer base of successful system integrators in e.g. USBL, ROV and echo sounder solutions: almost a quarter of the companies in the MTR 100 of 2012 are Xsens' customers.

Xsens was founded in 2000 and has gained a strong position in the MEMS business landscape. With an installed base of approximately 25,000 MT's, the two offices in Enschede, the Netherlands and Los Angeles, Xsens has proven to be a reliable choice. Research and development is conducted by the in-house R&D team, comprising 50% of the company head count.

Xsens offers solutions at several integration levels, depending on the requirements and wishes of the customer. Integration levels range from IMU's without sensor fusion to tight integration projects in joint development with the customer's engineering department.

The Tech:

The core of Xsens technology is Xsens' set of sensor fusion algorithms. The Extended Kalman Filter XKF3 is used in Xsens' products, with modifications for specific sensor suites, platforms, applications and accuracy requirements.

OneOcean Corporation

2201 Sixth Ave., Seattle, Wash. 98121

Tel:	(877) 876-9167
Email:	info@OneOceanCorp.com
Website:	www.oneoceancorp.com
CEO/President:	Don Davis
Number of Employees:	39
Sales Manager	John Lee

The Company

OneOcean Corporation is changing the way big spatial data is managed, accessed and exchanged around the world. OneOcean's ClipCard presents a rich abstract of source data that can be viewed and shared anywhere, giving users an instant understanding of what complex data contain, the means to grant secure access when needed, and the ability to market data assets for value. The ClipCard platform is backed by a global cloud infrastructure and delivered as an easy monthly service. OneOcean is on a mission to help industry, governments, and researchers alike take command of their information.

The Tech

The ClipCard platform is a cloud-based service for managing spatial data. ClipCard features a lightweight summary of source data along with visual previews, associations, spatial extents and other critical information. ClipCards are linked to their source, but are only a fraction of the size, so they can be viewed and shared anywhere. ClipCard puts data in context, helping users understand what they have and communicate quickly with others.The platform can be used to grant secure access to source data via the cloud; to make data available publicly, privately, or for sale; and to request data and services directly from a map.

All-Sea Underwater Solutions

1458 Rupert Street,
North Vancouver, BC V7J 1E9
Tel: (604) 980-9613
E-mail: office@all-sea.com
Website: www.all-sea.com
CEO/President: Vincent Cummings
Employees: 75

All-Sea Underwater Solutions has evolved from humble beginnings into one of the leading global underwater service companies. With a high qualified, well-trained, and experienced team of Divers, Engineers, and Subsea technicians, it provides underwater ship repairs and solutions worldwide, from the most pristine to the most unforgiving of environments.

Established in 1978, All-Sea Underwater Solutions has evolved to become one of the world's leading underwater ship repair and maintenance companies. With offices in Vancouver, St. Catharine's, Saint John, Halifax, and Busan, South Korea – and a global network of affiliates – All-Sea undertakes hundreds of underwater projects annually on behalf of many of the world's leading shipping, oil & gas, and construction industry companies. By using specially designed cofferdams and hyperbaric chambers, defective shell plating sections can be replaced underwater by class-approved permanent dry welding. What before was thought impossible underwater, is now not just a possibility, but a reality. All-Sea has worked extensively to develop and adapt to the world market.

Fugro LADS Corporation

7 Valetta Road, Kidman Park,
South Australia, Australia 5025
Tel: 08 8161 4100
Email: lads@fugrolads.com
Website: www.fugrolads.com
CEO/President: Mark Sinclair
Number of Employees: 49

Fugro LADS Corporation is a leader in the design, manufacture, support and provision of Airborne LiDAR Bathymetry services, having been involved in The technology from the early 1990s. Fugro LADS Corporation designs, builds, supports and operates Fugro's Laser Airborne Depth Sounder (LADS) systems worldwide.

Fugro LADS Corporation (FLC) is an Australian registered company, based in Adelaide, South Australia. FLC is part of the Offshore Survey Division of Fugro NV, based in the Netherlands, which is the largest hydrographic surveying company in the world. FLC, and its antecedents, have been engaged with ALB since the early 1990s and have pioneered the provision of contract ALB services to government agencies and industry since the late 1990s. Commencing in 1998, firstly as LADS Corporation and later as Tenix LADS Corporation, FLC was the first company in the world to provide such services on a commercial basis. FLC designs, manufactures, supports and operates the "Laser Airborne Depth Sounder" (LADS) ALB systems. These systems are equipped with a high-power laser, high efficiency optics and a large dynamic range receiver including patented automatic gain control to ensure the best signal-to-noise ratio possible is achieved for each sounding, even in areas of marginal water clarity. The LADS ALB sensors acquire both bathymetric soundings and topographic elevations, along with high resolution digital imagery and can also generate seabed relative reflectance data used for seabed classification and habitat mapping applications. Maximum depths can be measured to 80m, subject to water clarity.

L-3 Communications Klein Associates

11 Klein Dr., Salem, N.H 03079
Tel: (603) 893-6131
Email: Deborah.Durgin@L-3com.com
Website: klein.com
CEO/President: John Cotumaccio
Vice President: Michael Mitchell
Engineering Director: Ronald Allen
Number of Employees: 55

L-3 Klein Associates is a leading supplier of side scan sonar equipment, and waterside security and surveillance systems to navies, shipbuilders, secure installations, researchers, oil & gas explorers, and hydrographers all over the globe. It manufactures and develop advanced Sonar systems and technologies and is continuing to work with its customers, industries, and government agencies worldwide to produce the most innovative and productive systems possible.

The Company

Founded by Marty Klein in 1968, in a small factory in Salem, New Hampshire, Klein Associates became the first commercial manufacturer of side scan sonar in the world. Since then, L-3 Klein Associates has become a leading supplier of side scan sonar equipment, and waterside security and surveillance systems to navies, shipbuilders, secure installations, researchers, oil & gas explorers, and hydrographers all over the globe. In 2010, Klein announced that in addition to its successful product lineup that includes the workhorse Klein 3000,

Continued on page 59

Chet Morrison Contractors

9 Bayou Dularge Road, Houma, La., U.S. 70363

Tel:	(985) 868-1950
Email:	kreeves@chetm.com
Website:	www.chetmorrison.com
CEO/President:	Chet Morrison
Number of Employees:	1,700

The Case

Chet Morrison Contractors provides construction, maintenance and abandonment services to the oil and gas industry. With locations in the Gulf of Mexico and international facilities, Chet Morrison Contractors delivers integrated solutions that leverage the skills of our performance-driven teams with the efficiencies of in-house capabilities and resources.

The Company

Chet Morrison Contractors provides integrated oil and gas industry services and creative project solutions for upstream, midstream and downstream clients operating in land and marine environments. Our multidisciplinary team is committed to providing superior service, top technical support and exceptional safety performance on every job. It leverages in-house capabilities and resources to provide seamless integration of work scopes without the need for multiple subcontractors. Founded by CEO Chet Morrison in 1983, Chet Morrison Contractors remains a privately held company and has steadily grown from an inland marine operation to the multidisciplinary diverse service company it is today. Through integration, long-range vision, selected acquisitions and project diversification, he has expanded his business model and continues to guide The company's vision of offering innovative solutions to its customers. Chet Morrison's expansive infrastructure includes locations in the Gulf of Mexico, Houston, New Orleans, Mexico and Trinidad. Chet Morrison Contractors' diversified fleet of vessels enables it to provide a full spectrum of subsurface construction, repair, inspection and decommissioning services to support the production and transportation of oil and natural gas. Whether it be an emergency response, a pipeline leak or an upcoming project in the Gulf of Mexico, The company's state-of-the-art fleet can handle any challenge and deliver uninterrupted service with a single point of contact.

The Tech

Chet Morrison Contractors is powered by strong leadership and driven by a veteran team of dedicated professionals who provide unparalleled customer service and unique solutions at every opportunity. The company's innovative team recently developed a game-changing innovation in subsea P&A cutting that's safer and more efficient than other existing methods. **Known as SHARC (Subsea Hydraulic Abrasive Rotating Cutter), this new technology in subsea plug and abandonment virtually eliminates the need for high-power jetting and explosives — and reduces overall job time by 60%.** The prototype for SHARC was developed during a 2012 four-well Subsea P&A project for Helix ERT in three fields in the Gulf of Mexico. It proved so successful (saving the client millions of dollars) that following the project, engineers at Chet Morrison Contractors spent many months testing and refining the prototype to develop the new assembly. SHARC needs only a diver or ROV to position it over the pipe opening — then operations can be controlled and monitored from the surface. SHARC can make clean, even cuts on pipes two inches and larger, handle walls up to three inches thick with multiple strings and can cut any size caisson or jacket leg from surface or subsea to depths up to 500 feet. Another advantage is that SHARC can be deployed by Chet Morrison's 240 foot, four-point DSV Joanne Morrison, thus avoiding the higher cost of larger spreads.

Markey Machinery Co., Inc.

7266 8th Ave S, Seattle, Wash., U.S. 98108
Tel: (206) 622-4697
E-mail: jdempke@markeymachinery.com
Website: www.markeymachinery.com

CEO/President: Blaine Dempke
Employees: 44

The Case:

Markey is constantly developing new products and making deck equipment safer and safer through good engineering practices and customer feedback

The Company:

A 100 year old company in Seattle's Industrial District

The Tech:

Safer winches and deck equipment through the use of state of the art technology

Applied Acoustics

Marine House, Marine Park, Gapton Hall Road
Great Yarmouth, Norfolk, U.K. NR31 0NB
Tel: +44 1493 440355
E-mail: sales@appliedacoustics.com
Website: www.appliedacoustics.com

CEO/President: Adam Darling
Employees: 45

Applied Acoustics manufactures subsea positioning and USBL tracking systems, and seismic sub-bottom profiling systems for seabed geophysical surveys. Founded almost 25 years ago in the U.K., The company now supplies commercial companies and academic institutions throughout the world via a network of distributors and service centers. Major product launches this year alone include an evolutionary sparker with durable, long-life electrodes and a cost-effective positioning system for multiple, fixed subsea targets.

the Klein 3900 SAR,a true Multi-beam Klein 5000 V2 (available with interferometric bathymetry), and the most powerful minehunting SSS, the Klein 5900. In 2011 it introduced the all-new HydroChart 5000 hydrography system that combines high-resolution 455 kHz Multibeam side scan sonar with high-definition Interferometric bathymetry sonar for spectacular IHO quality imagery. In addition, we also introduced the UUV-3500 High Resolution Side Scan sonar for UUVs. The UUV-3500 operates exclusively with L-3 Klein's proprietary wideband technology providing unmatched side scan range and resolution performance in a low power, compact and lightweight payload. In 2012 it introduced the all-new HydroScan, professional-grade side scan sonar for shallow water and rapid-deployment applications.

The Tech

The System 5900 Multi-Beam Side Scan Sonar represents Klein's advanced multi-function sonar platform and includes the following key features: high resolution multi-beam side scan sonar, swath bathymetry sonar, gap filler sonar, and integrated tow body sensor and subsystems. The sonar employs advanced signal processing techniques and superior acoustic design to improve overall along track target resolution. The S5900 high speed, high resolution, side scan sonar performance capabilities, when coupled with the gap filler sonar for fast coverage rates makes the system an ideal choice for MLO detection, classification, Q-Route surveys and rapid area reconnaissance. The UUV 3500 was developed as a side scan sonar with the benefit of an advanced bathymetry payload for the growing Autonomous Underwater Vehicle (AUV), Remotely Operated Underwater Vehicle (ROV) and UUV markets. The HydroChart 5000 represents the latest technology for the acquisition; display and processing of highly accurate bathymetry data integrated with high resolution side scan imagery, meeting IHO SP-44 Special Order Standards. The HydroChart 5000 utilizes a phase difference measurement technique and Linear FM (Chirp) processing, to produce the highest quality data sets for the hydrographic industry.

Sonardyne International Ltd.

8280 Willow Place Drive North, Houston, TX 77070

Tel:	+1 281 890 2120
Email:	usa.sales@sonardyne.com
Website:	www.sonardyne.com
CEO/President:	John Ramsden
Engineering Director	Simon Partridge
Number of Employees:	300

The Case

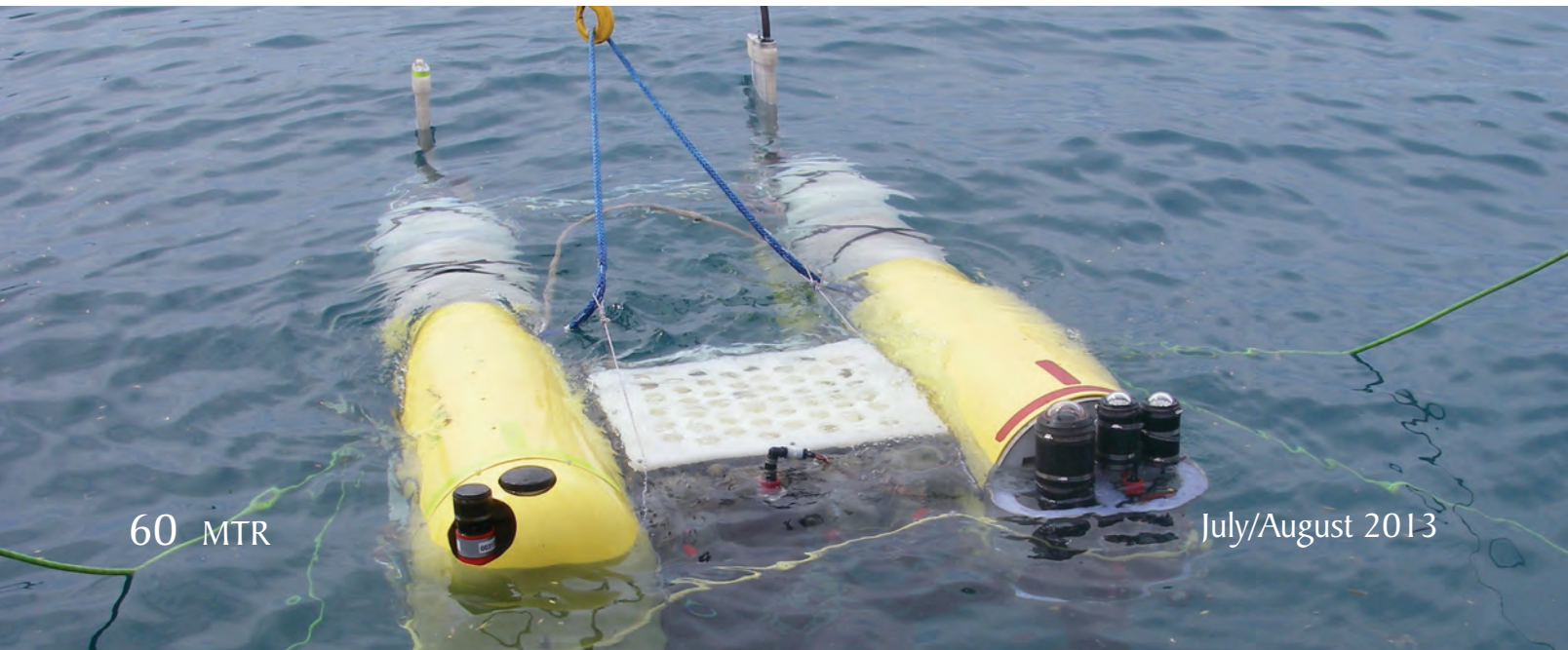
Sonardyne's integrated low risk subsea technologies reach far beyond the company's origins in acoustic positioning, with sonar imaging, wireless communications and inertial navigation now integral to its offering. Sonardyne remains an independent manufacturing business with more than 300 employees worldwide supporting the company's custom engineering, project planning and field support activities.

The Company

Four decades after the company was founded, Sonardyne has remained true to its roots as a subsea pioneer. Innovation and performance have maintained Sonardyne's reputation for technical leadership and today it has a portfolio of acoustic and non-acoustic technologies for use in the most challenging marine environments. Sonardyne's expertise ranges from autonomous undersea networks of wirelessly controlled seabed sensors, monitoring safety critical positioning and control systems around offshore platforms through to the early detection of deadly tsunami waves. As much as innovation has grown the company, it is its people and the support they give to clients that sets Sonardyne apart. Its team of highly experienced personnel work closely with their clients to understand all aspects of their projects, balancing performance, costs, vessel operations and risk to find the best possible solution. Furthermore, as a vertically integrated company with research, design, manufacturing, testing, marketing, distribution and support all under one roof, Sonardyne has the ability to quickly respond to the needs of its clients and the markets that it services. This speed of response coupled with its commitment to the development and creation of innovative technologies along with its expertise and level of service has helped build Sonardyne into one of the most vibrant companies in the global subsea industry today.

The Tech

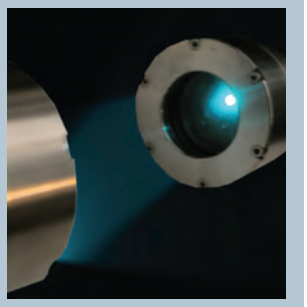
Sonardyne's technology portfolio covers four categories: Acoustic Positioning - Sonardyne's USBL, LBL and LUSBL systems are operational in every deepwater development, helping to precisely navigate underwater vehicles, install subsea structures and position multiple surface vessels. Sonardyne's sixth generation (6G) platform uses ultra-wide bandwidth acoustic signals to provide exceptional subsea navigation, communications and positioning performance. Inertial Navigation - This offers contrasting and complementary characteristics to acoustic and satellite positioning. The seamless integration of these technologies produces a single solution offering the best of both – a continuous position output with no drift. Sonardyne INS systems tailored for DP reference and subsea vehicle positioning deliver greater overall precision and accuracy than acoustics, GPS/GNSS or inertial alone. Wireless Communications – Reliable through-water acoustic communications is something that Sonardyne is renowned for. In 2012, The Company: introduced a unique optical communications system developed in collaboration with WHOI; BlueComm has since been used to successfully control a tetherless underwater vehicle. Sonar Imaging - Sonardyne technology is protecting vulnerable waterside facilities and vessels from the threat of attack, enabling AUVs to gather pixel-perfect imaging of the seabed, monitoring a billion cubic feet of water for the smallest oil leaks and detecting hazardous underwater obstacles.



Aquatec Group Ltd.

High Street, Hartley Wintney, Hampshire, U.K. RG27 8NY
Tel: +44 (0) 1252 843072
E-mail: epaull@aquatec-group.com
Website: www.aquatec-group.com

CEO/President: Andy Smerdon
Employees: 10



The Case:

Aquatec are designers of standard and custom instruments for the ocean science and offshore energy sectors, including acoustic and optical products. Breakthrough technologies include wireless temperature and depth loggers with automatic data transmission, processing and display, long range fluorometers for subsea leak detection, and unique acoustic suspended sediment profilers.

The Company:

The Aquatec Group are creators of innovative instruments, services and solutions for measurement, monitoring and communication underwater. It provides instrumentation solutions for all water environments, including offshore structures and pipelines; oceans, estuaries, rivers and lakes; and marine mammals and fisheries.

Aquatec was founded by the current managing director in 1990 as a specialist consultancy in oceanographic instrumentation design. Since then, The Company: has established a diverse portfolio of products for measurement of physical oceanographic and process parameters including temperature, depth, suspended sediment, motion, orientation, cathodic protection, subsea leaks and marine mammal activity, as well as through and above water data communication systems, and marine mammal deterrents.

Aquatec Group employs qualified engineering personnel with expertise in oceanographic and offshore applications. In-house expertise includes: Oceanographic instrumentation Low power data loggers Digital signal processing Temperature and pressure measurement Underwater optical instrumentation Suspended sediment acoustic characteristics High frequency acoustics Underwater acoustic communication

PCCI, Inc.

300 North Lee Street, Suite 201, Alexandria, Virginia, 22314
Tel: 703-684-2060
Email: eroos@pccii.com
Website: pccii.com
CEO/President: Bob Urban
Vice President: Frank Marcinkowski
Engineering Director: Tony Kupersmith
Number of Employees: 48
Annual Sales: $35,000,000.00

For more than 30 years, PCCI, Inc. has provided sensible solutions to difficult engineering and environmental problems in coastal, ocean, and inland environments. Hands-on experience in environmental planning and protection, marine equipment engineering and fabrication, and ocean project management, has allowed PCCI to deliver intelligent and concrete answers to our client's most demanding engineering and environmental questions.

PCCI, Inc. is a privately owned marine and environmental engineering firm established in 1977. Company headquarters is located in Alexandria, VA, and project offices are in Williamsburg, VA; Ventura, CA; Anchorage, AK; and Honolulu, HI. 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**; **Underwater Cofferdams**; **Salvage Engineering** and **Hyperbaric Systems**.

ECA

Z.I.Toulon Est BP 242, Toulon Cedex 9, Var, France 83078

Tel:	+33 494 08 90 00
Fax:	+33 494 08 80 62
Email:	ds@eca.fr
Website:	www.eca-robotics.com

CEO/President:	Guénaël Guillerme
Vice President:	Jean-Jacques Periou
Sales Manager:	Daniel Scourzic
General Manager:	Jean-Louis Sambarino
Engineering Director:	Claude Cazoulou
Number of Employees:	600
Annual Sales:	$168,000,000.00

ECA provides Unmanned Underwater and Surface Vehicles (USV, AUV, ROV), electric subsea manipulator arms, subsea cameras, hull cleaning systems and inspection robots to navies and offshore companies around the world. It also provides power converters, IPMS, electric motors, steering systems and ranging systems for submarines and surface ships.

The Company

ECA's main ambition is to spare human life in potentially threatening, hazardous situations such as mine warfare, subsea inspection, harbor protection, coast guard and anti terrorism actions. Its robots are designed to help carrying out these missions while keeping operators safe, to increase knowledge of environmental risk factors, help keeping borders and marine installations such as harbours, merchant ships, offshore platforms secure and maintained. ECA helps to increase awareness of threats and decrease vulnerability.

The Tech

ECA provides technology helping to protect infrastructure and people in maintaining homeland security. Major goals are to reduce the risk factor for humans carrying out missions in hostile and dangerous environments, to enhance efficiency of such operations and to provide additional knowledge for the future. End users are Naval and Land Forces, Civil Security, Hydrographic Services, the Nuclear Industry and the Offshore Industry. Systems offered include: Autonomous Surface and Underwater Vehicles; Unmanned Ground Robots; Inspection Systems and manipulator arms; which are designed to carry out missions from Mine Warfare, Hydrographic Surveys, Reconnaissance, Explosive Ordnance Disposal, Chemical/Radiological detection, Reconnaissance and Rapid Environment Assessment. In addition ECA systems offer fleet protection: Multi-Influence Ranging systems; Deperming and Degaussing Systems; Portable Magnetic Ranging Systems. Naval Simulation Systems include:

Guénaël Guillerme

Warship, Submarine and Mine Hunter Simulators, Helicopter, Aircraft and Joint Tactical Warfare Simulators, Ship Handling, Navigation and Special task Simulators. Data-acquisition and processing software, Mine Warfare Data Center and IPMS.

ASI Group Ltd.

P.O. Box 2205, 250 Martindale Road
St. Catharines, Ontario, Canada L2R 7R8
Tel: (905) 641-0941
E-mail: rgicante@asi-group.com
Website: www.asi-group.com

CEO/President: Carmen Sferrazza
Employees: 120

The Case:

ASI Group Ltd. (ASI) was founded in 1987 as Aquatic Sciences Inc. by a team of industry professionals committed to providing integrated engineering, marine and ecological services to local clients. Over the past 25 years of business operations, ASI has expanded equipment and personnel resources to establish working relationships with many global clients.

The Company:

ASI Group is a full-service engineering and technology based company with a focus on all aspects of underwater infrastructure inspections, maintenance, and repair; as well as the design, build and operation of water and wastewater treatment facilities. The company is comprised of an exceptional blend of water and wastewater engineering, construction management and marine operations personnel. Presently, the team consists of more than 100 experts including professional engineers, certified engineering technologists, environmental and engineering technicians, water quality analysts, licensed commercial divers, surveyors and hydrography specialists. Throughout the past 25 years in business, its strongest asset has been the ability to offer a full service approach - from initial problem identification to the development and implementation of the appropriate solution. The head office is situated in St. Catharines, Ontario, Canada with additional regional branches located in Sarnia, Ottawa and Haliburton. We also operate an office identified as Aquatic Sciences L.P. in Orchard Park, New York, USA.

The Tech:

ASI Group owns and operates a diverse fleet of advanced remotely operated vehicles (ROV's) that services a wide range of industries. Combined with the latest in video capture and sonar imaging, specialized ROV tooling and inspection techniques, ASI's ROV division has earned international reputation for the highest standards of quality.

Rapp Hydema NW LLC

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

Rapp Hydema, founded in 1907, is a leader in the design, production and supply of deck machinery. Rapp Hydema has, within the last three years, won five major research contracts. Each includes complete outfittings of winches for new government research vessels with a variety of state-of-the-art winches, plus launch-and-recovery systems (LARS) and sophisticated winch control and powering devices. South Africa, Australia, Namibia and the U.S. are represented among the customers here. The largest-scale deck machinery package for a research vessel ever recorded—for Australia's CSIRO vessel—was one of the five. This package includes no less than 180 tons of deck machinery.

Apart from multimillion-dollar research vessel contracts involving provision of varied deck machinery, Rapp also won a key ROV winch contract with UNOLS member Woods Hole Oceanographic Institute in 2012. This winch, with Active Heave Compensation (AHC) and other technological advances, will be sea trialed soon.

Rapp Hydema has grown substantially recently as a result of these activities. Rapp, providing integrator services as a Single-System Vendor (SSV) in recent years, purchased Seattle-based Hydra Pro, a manufacturer of cranes and A-frames, in 2011. Hydra Pro's production facility, which is ISO 9001: 2008 certified, marks a sharp upgrade for Rapp's U.S-based manufacturing footprint. Rapp also purchased a nearby property with a 3200-sq. ft. warehouse. Present plans for further expansion include likely acquisition of a Kodiak, AK, service center.

MacArtney Underwater Technology Group

MacArtney A/S (Headquarters)
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Email: info@macartney.com

Group Managing Director/CEO:	Niels Erik Hedeager
Sales & Marketing Director:	Marco MacArtney
Sales mgr. - Connectors & Cables;	Kurt Lund
Sales mgr. - Ocean Science:	Hans-Jørgen Hansen
Sales mgr. - Oil & Gas:	Mikkel Juul
Sales mgr. - Renewable Energy:	Jens Henrik Gadeberg
Sales mgr. - Launch & Recovery:	Klaus Brix
Sales mgr. - Global Rep Network:	Steen Frejo
Employees:	260

MacArtney
UNDERWATER TECHNOLOGY

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Torsten Turla, Managing Director

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Lars F. Hansen, President

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mac-au@macartney.com

The Company

The MacArtney Underwater Technology Group is a global supplier of underwater technology specializing in design, manufacture, sales and service of a wide range of systems to offshore operators, surveyors, the renewable energy sector, ocean sciences and navies across the world. MacArtney's systems and components are backed by an international network of subsidiaries and representatives, providing local access to global service.

MacArtney has been supplying products and engineering solutions for more than 35 years and is a privately owned corporation with group headquarters in Esbjerg on the west coast of Denmark. From its head office, it has been providing logistical, technical, financial and marketing support to all of the companies within the group since 1978.

The Tech

The MacArtney Group supplies and services a wide range of integrated systems and products designed, developed and manufactured by MacArtney. It is also trusted representatives of leading manufacturers of underwater products.

MacArtney supply includes underwater connector (SubConn, OptoLink and Mac API) and cable systems, advanced NEXUS fiber optic telemetry systems, electric CORMAC and MERMAC launch and recovery systems with active heave compensation winches for ROV systems. Its range of fast and precise remotely operated towed vehicles (ROTV) includes the MacArtney FOCUS-2 and TRIAXUS vehicles. Moreover, MacArtney supplies a versatile range of LUXUS underwater cameras, lights and media controllers.

System design and integration by qualified, experienced engineers is an important part of the MacArtney portfolio. Combined with a wide range of products and systems, MacArtney can offer turnkey solutions designed specifically for requirements and installed ready for use wherever needed.

MacArtney holds more than 35 years of experience in underwater technology solutions and has specialist knowledge that is essential for providing reliable advice and quality technologies and products, and MacArtney systems and products are backed by 24-hour support.

The Testing

MacArtney has a network of testing facilities available at our workshops in Europe and in the U.S. Our in-house facilities include large full ocean depth computer controlled pressure test vessels, an 8x3x3 m test tank and a cable tensioning rig. Some of our sites offer portable and mobile testing facilities, performing a range of tests on site.

All testing procedures are documented and we also work closely with external companies and institutes that specialize in such disciplines as hydrodynamics, corrosion and cable dynamics.

AXSUB Inc.

112, Montee Industrial #200
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Canada G5M 1B1
Tel: (418) 731-1539
E-mail: eric.gaudreau@axsub.com
Website: www.commercialdivingsupplies.com

CEO/President: Eric Gaudreau
Employees: 4

The Case:

Within only two years of operation, AXSUB Inc. is now in 2013 a key supplier for the commercial diving & hyperbaric industries in Canada.

The Company:

Hyperbaric and Subsea Environments Data Acquisition Systems: Over the last 10 years, the team has designed several different types of monitoring systems for the Underwater and Hyperbaric Industry. It is capable of developing reliable custom systems in a very short period of time related to: Diving and Hyperbaric systems; Tunneling; Equipment performance test beds; Marine and Aquatic Biology. AXSUB is a Manufacturer of Diving Equipement such as Digital Video Recorders, Low voltage LED Lamps, Underwater Cameras, Electronic Depthmeter and Breathing Gas Analyser. It is a distributor of: AMRON International NUVAIR (compressors & analyzers); Oxylance (cutting & welding rods); BIRNS Aquamate (underwater connectors); and Subsalve (lift bags).

The Tech:

Using current state of the art industrial communication protocols, the AxDDM can utilize several different types of sensors that can be mounted on the diver, in the compressed gas analyzer or in the environment. The information is displayed on the screen in a user friendly manner. Whether you only want to record the video streaming of the job, or to log the data from the whole operation for Training, Insurance or Quality Control Purposes, the AxDDM is designed to support custom operational and management requirements. Other Specialities: 1) Hyperbaric and Subsea Environments Data Acquisition Systems 2) Qualification of Diving methods for High Risks Environments 3) Design, Inspection and Certification of Diver Stages and Lifting Devices 4) Maintenance, Refurbishment and Certification of Hyperbaric Systems 5) Compressed Breathing Air and Gas Systems Design 6) Regulatory Audits 7) Health and Safety consulting

Remote Ocean Systems (ROS)

5618 Copley Drive, San Diego, CA 92111 USA
Tel: (858) 565-8500
Email: sales@rosys.com
Website: www.rosys.com
CEO/President: Robert Acks
No. of Employees: 50
Annual Sales: $11m

Remote Ocean Systems (ROS) is a leader in the development, design and manufacture of advanced technology inspection and lighting systems for the most severe offshore, oceanographic, industrial and military applications. The ROS product line includes the most complete selection of underwater video cameras, lights, pan and tilts and control systems available in the industry. ROS' Quality Management System complies with ISO 9001 with a commitment to ensure customer satisfaction and continuous improvement. ROS' headquarters, design and manufacturing facility is located in San Diego, CA.

The Tech:

The ROS Lightning is the most versatile LED Light available. This new technology design offers breakthrough LED features that include: various power and control options to match specific needs, spot or floodlight configuration options and more. The ROS Lightning generates 10,000 lumens from a 36 LED Ultra-High Intensity White Array and is depth rated to 6000 meters. A variety of connectors are available for ease of change-out and service. ROS continues to pace the industry in the development of High Intensity LED Lighting technology that offers high performance, long-life and energy saving benefits for the Oceanographic Industry. ROS also offers Next Generation Video Camera Systems, including the MANTIS HD High Definition Color Zoom Camera and the Spectator 36:1 with an ultra-wide 88° Diagonal Field of View.

Autonomous Surface Vehicles (ASV)

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Portchester, Hampshire, U.K. PO6 4PX

Tel:	+44 02392 382573
Fax:	+44 02392 178718
Email:	vince.dobbin@asvglobal.com
Website:	www.asvglobal.com
CEO/President:	Dan Hook
Engineering Director:	Richard Daltry
Number of Employees:	25
Annual Sales:	$2,750,000.00

In three years ASV has grown from five people to 25 to become one of the world's leading suppliers of Unmanned Marine Systems and by 2020 aims to be a $50m company. ASV has a vibrant a team of highly specialized, dynamic engineers who are continually challenging themselves to design and build unmanned systems for use in harsh maritime environments.

The Company

ASV is committed to building advanced innovative Unmanned Marine Systems ((UMS) for the Commercial and Military markets. Established in 1998 and rebranded in 2010, ASV has built a talented company of naval architects, mechanical, software and electronics engineers specialising in the design and construction of UMSs. The company works in the international oil & gas, scientific and research, security and military markets. ASV has achieved an enviable reputation for rapid, cost-effective realisation of demanding tasks, for the quality of its products and, most importantly, for delivering solutions and services on time and to specification. ASV has supplied over 30 different Unmanned Surface Vehicles (USV) for a wide range of tasks. Its products are in service with the UK MoD, government organizations, defense primes and several navies and businesses around the world. ASV has also carried out specialist military research into mine countermeasures (MCM) platforms and recently completed the design and build of an 11m composite vehicle specifically for use as a MCM Sweep vessel. The company is recognized as a leading designer of novel autonomous vehicles and has recently won a competitive research contract to design and build a Long Endurance USV through the Natural Environment Research Council. ASV is part of the Global Fusion group and operates alongside sister company C&C Technologies which is a leading survey company in the operation of UUVs.

The Tech

ASV continuously develops USV technology through internal R&D funding and with external research organizations. A recent project won in competition through the Natural Environment Research Council will see ASV leading a team of specialized companies and a University to develop a long endurance Uunmanned Surface Vehicle.

The company continues to build its portfolio of Target Drones and by the end of this year will have built "C-Target" craft of 3m, 6m, 9m, and 13m size. In addition to this ASV was subcontracted by Thales UK to design and build a dedicated Mine Counter Measure vehicle for mine sweeping, which was completed and successfully delivered in March 2013.

The mobile Station Keeping Buoy "C-Stat," developed for a university in Japan, recently conducted a 72 hour endurance trial in the Solent. Following a recent acceptance and some customer requested modifications this vehicle was shipped to Japan for operations in May 2013. Other projects recently completed are the conversion of an existing craft for beach reconnaissance. **Finally alongside sister company, C&C Technology, ASV are designing and building a "C-Worker" which will be the World's first Work Class ASV. This vehicle will be operated as a service vessel by C&C Technologies.**

BioSonics

4027 Leary Way NW - Seattle, Wash., U.S. 98107
Tel: (206) 782-2211
E-mail: emunday@biosonicsinc.com
Website: www.biosonicsinc.com

CEO/President: Tim Acker
Employees: 17

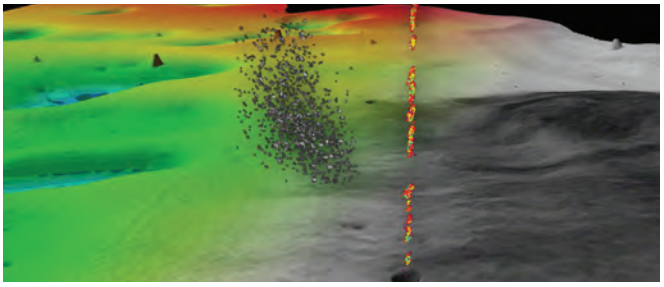
BioSonics has manufactured scientific echosounders for more than 34 years. BioSonics first introduced fixed-location hydroacoustic fish monitoring in 1980. Clients include hundreds of federal, state, and provincial agencies, research institutions, and private sector entities worldwide.

The Tech:

BioSonics technology centers around focused, split beam and single beam hydroacoustics. Core products are the DT-X and MX series mobile echosounders for fisheries and aquatic habitat assessment. Digital transducers with superior signal to noise ratio, extremely low side-lobes, and sophisticated multi-frequency, multi-channel systems are some of the unique technology advantages offered. Recent innovations include:

- In partnership with Liquid Robotics, development of the Wave Glider DT-X SUB – A persistent, long-range hydroacoustic data collection system that is self-powered and capable of trans-oceanic surveying, with automated data collection and reporting capabilities.
- Development of entirely new echosounder system and specialized data processing/visualization software – The MX Aquatic Habitat Echosounder and Visual Habitat Software for aquatic vegetation, substrate classification, and bathymetric assessment and mapping.
- Custom-built automated salmon counting system for the Quinault Nation utilizing split-beam DT-X technology and programmable pan/tilt aiming software
- DT-X SUB autonomous submersible echosounder deployed in SCINI ROV for Moss Landing Marine Labs

CARIS



115 Waggoners Lane
Fredericton, New Brunswick, Canada E3B 2L4
Tel: (506) 458-8533
E-mail: info@caris.com
Website: www.caris.com

CEO/President: Dr. Salem Masry
Employees: 170

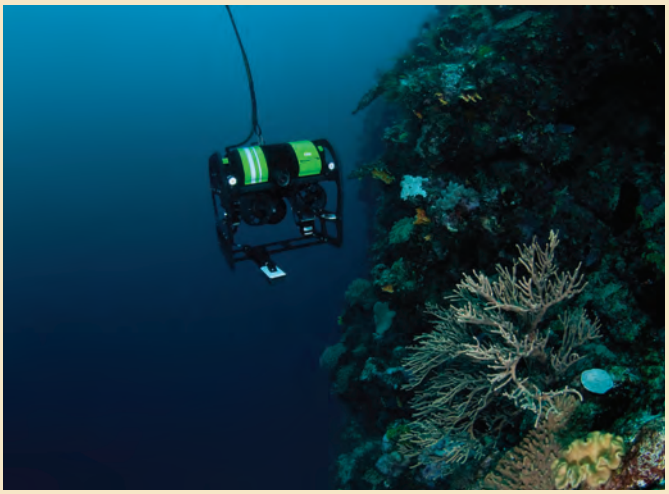
Established in 1979, CARIS is a leading developer of geospatial software designed to cater the marine GIS community and is built on decades of hydrographic experience. The CARIS Ping-to-Chart solution is designed to deliver an integrated and seamless solution for the entire workflow of hydrographic information from processing the echo-sounder ping to the production and distribution of the chart. This integrated software solution provides resource optimization and a true operational advantage. CARIS offers training sessions, consulting and technical support services, as well as an extensive series of courses to make sure that its clients fully utilize the software's capabilities. Users can also gain swift access to qualified technical experts via on-line services, multilingual telephone support and email. CARIS is a privately held company with more than 170 engineering, IT and business professionals employed in its headquarters in Fredericton, Canada, as well as in CARIS offices in the Netherlands, the US, Australia and the United Kingdom. In addition, CARIS has a network of more than 20 worldwide distributors.

The Tech:

The CARIS Ping-to-Chart product line is designed to deliver an integrated software solution for the entire workflow of hydrographic information from processing the echo-sounder ping to the production and distribution of charts. CARIS software enables the processing and visualization of large bathymetric datasets, geospatial data management, spatial analysis, paper, ENC and military chart production, calculating maritime limits and boundaries based on United Nations guidelines, port and waterway engineering and Web mapping and discovery. Through liaisons with the International Hydrographic Organization (IHO) CARIS has been closely involved in the development of industry data standards and has worked on various consulting and development projects.

SeaBotix

WWW.SEABOTIX.COM



SeaBotix is a pioneer in the development and manufacture of observation class MiniROVs providing a wide range of capable compact ROVs. As a participant in the SAVER (Systems Assessment and Validation for Emergency Responders) review program, SeaBotix scored favorably and continues to be on the leading edge with tethers, thrusters, video systems and emerging technologies such as the revolutionary LBC Crawler System and Containerized Delivery System.

The Company

SeaBotix is a manufacturer of underwater MiniROVs (Little Benthic Vehicles) that perform a multitude of tasks including but not limited to: maritime security, search and recovery, hull and pipeline inspection, hazardous environment intervention, aquaculture and beyond dive-restriction oceanographic research.

SeaBotix continues to deliver evolutionary advancements to a diverse suite of MiniROV systems. These advances along with customer service and training have contributed to an more than 42% increase in sales each year over the past couple of years.

In search of establishing the finest ROV facility in the US that will cater to client's complete needs, SeaBotix moved into a 17,000 sq. ft. waterfront facility with state-of-the art design, production, testing, training, and service areas. The facility, a formal naval training center, includes a pier, boat launch, and direct access to the harbor and open waters for professional training. Training, service and repair for all products is provided from this facility but also worldwide, through an established full service distribution network or by sending a factory authorized technician directly to the preferred customer site.

The Tech

SeaBotix has been manufacturing observation class MiniROVs for more than 12 years. The LBV (Little Benthic Vehicles) line of vehicles provide a diverse suite of systems in a multitude of industries such as military, police, commercial, scientific, aquaculture, hydro and more.

The SeaBotix product line ranges from the shallow water LBV (Little Benthic Vehicle) systems to the vLBV (vectored Little Benthic Vehicle) system with up to 10 thrusters and capable of depths of 4000m.

The LBC (Little Benthic Crawler) is designed to provide unprecedented stability on ship hulls and other hard surfaces. The Little Benthic Vehicles line is powerful, stabile and innovation. Innovations include.

vLBV – vectored Little Benthic Vehicle – a truly vectored MiniROV. Six powerful brushless DC thrusters provide equal power in all directions without drifting off target. Adjustable variable vectored thrusters offer equal horizontal thrust in all directions, or extreme pulling power for long penetrations and high currents.

CDS –Containerized Delivery system - a rapid-response, fully self-contained, single-point pick system capable of operating ROVs, marine sampling devices, sonar systems and many other marine technologies up to 4,000 meters deep.

LBC – Little Benthic Crawler – a revolutionary system approach to ship hull inspections and other maritime security applications - includes a patented crawler attachment with unique vortex attractor for stability.

SeaLift – Four additional powerful vectored thrusters have been added to the vertical position of the vLBV giving a 18kg lifting capability while still maintaining the portable small vLBV design to allow for precise lifting/deploying/retrieving heavy objects.

Tether – ultra-low drag strong tether with 8.9mm (0.35in) nominal diameter and 100kg f (220 pd f) working load has minimal impact on ROV performance.

CONTROS Systems & Solutions GmbH

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Website: www.contros.eu

CEO/President: Daniel Esser
Vice President: Volker Sallandt
Employees: 21

The Case:

CONTROS estbalished in 2006 as a GmbH is a leader for dissolved gas measurements and building systems for the total carbon cycle helping to understand ocean acidification. Also Contros is in the forefront for early leak detection at subsea structures conserving the subsea environment.

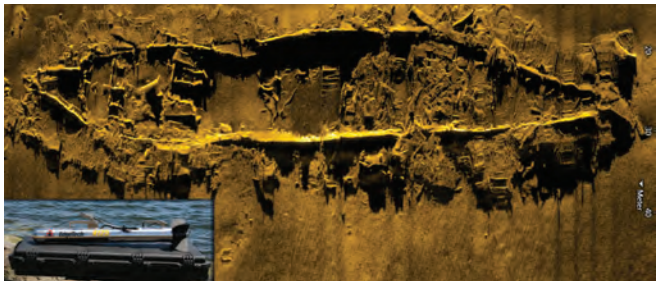
The Company:

The Kiel, Germany based CONTROS Systems & Solutions GmbH develops, produces and markets in-situ underwater sensor systems to detect hydrocarbons (e.g. methane), CO2 and oil in water (polycyclic aromatic hydrocarbons, PEG) down to a full ocean depth in any condition. The company's products are mainly used for early leak detection and environmental assessment within the Offshore Oil & Gas industry, ranging from mobile inspections of pipelines and subsea structures to stationary Monitoring, Measurement and Verification (MMV) systems for subsea structures. The versatile CO2 systems are widely used for scientific campaigns in the field of climate studies, methane hydrate research, air-sea exchange and ocean acidification, CO2 sequestration applications (CCS), fish farming and limnology.

The Tech:

CONTROS aim is to sustain the current strength and to develop new technologies in order to deliver sensor systems to measure the total carbonate system in any liquid application ranging from pH, CO2 through to TA. With the HydroC™ CONTROS overcomes the fact that it is not possible to measure dissolved and gaseous methane (CH4) and carbon dioxide (CO2) directly in the water phase (in-situ) by combining the proven and highly precise non-dispersive infrared technology (NDIR, Laser) with a unique and worldwide patented membrane module.

EdgeTech



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Tel: (508) 291-0057
E-mail: info@edgetech.com
Website: www.edgetech.com

CEO/President: R. Jablonski
Employees: 100

EdgeTech is a leader in underwater technology solutions including: side scan sonars, sub-bottom profilers, bathymetry systems, AUV and ROV-based sonar systems, combined and customized solutions. Additionally, EdgeTech provides reliable USBL systems, transponder beacons, acoustic releases, MRUs and customized underwater acoustic command and control systems. The company is known worldwide and has been in business for more than 45 years.

The Company:

EdgeTech designs, manufactures, sells and supports a variety of standard and engineered-to-order underwater sonar systems including side scan sonars, sub-bottom profilers, bathymetric, combined and modular systems. The systems are available in a range of configurations for towed, deep towed, AUV, ROV, ROTV and custom platforms providing clearly superior underwater imaging. Additionally, EdgeTech provides highly advanced and reliable USBL acoustic tracking and positioning systems, transponder beacons, deep sea acoustic releases, shallow water and long life acoustic releases, motion reference units (MRU), underwater acoustic command and control systems and custom-engineered acoustic products. With its worldwide network, EdgeTech serves and services customers including the US Navy, foreign navies, survey firms and the oil & gas industry on every continent. The company employs more than 90 people between two locations in Wareham, Massachusetts and Boca Raton, Florida. EdgeTech has extensive in-house testing facilities including a test pool, acoustic test tank, pressure test chamber and two company research vessels for sea trials. These facilities allow The company to fully test and calibrate every system to ensure the highest quality product is delivered.

Falmouth Scientific, Inc.

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Tel: (508) 564-7640
E-mail: fsi@falmouth.com
Website: www.falmouth.com

CEO/President: John Baker
Vice President: Fred Hegg (Engineering)
Employees: 15

The Case:

Falmouth Scientific, Inc. (FSI) has proven itself throughout the years to be a leading manufacturer of precision instrumentation and systems for global oceanographic applications.

The Company:

Founded in 1989, FSI's experience includes the design, manufacture, and integration of stand-alone and turnkey systems to collect and relay oceanographic data in real time. Personnel include experienced engineering, technical, production, and quality assurance staff that are skilled in the manufacturing and testing of precision sensors and systems. Proven processes and personnel have successfully delivered numerous marine systems and instruments to customers around the world. Core competencies include system and design engineering; on-site volume production, rapid prototyping, encapsulation, and assembly; and electrical, acoustic, and system testing.

FSI specializes in precision marine sensors, specialty transducers, and integrated oceanographic systems. Its products and systems are used in environments ranging from estuarine to full ocean depths. Besides offering a suite of standard products the FSI team has engineered many custom solutions to meet specific and varied customer needs. FSI operates from a state-of-the-art manufacturing facility located in the marine technology corridor on Cape Cod, MA.

The Tech:

ASI Group owns and operates a diverse fleet of advanced remotely operated vehicles (ROV's) that services a wide range of industries. Combined with the latest in video capture and sonar imaging, specialized ROV tooling and inspection techniques, ASI's ROV division has earned international reputation for the highest standards of quality.

Rockland Scientific

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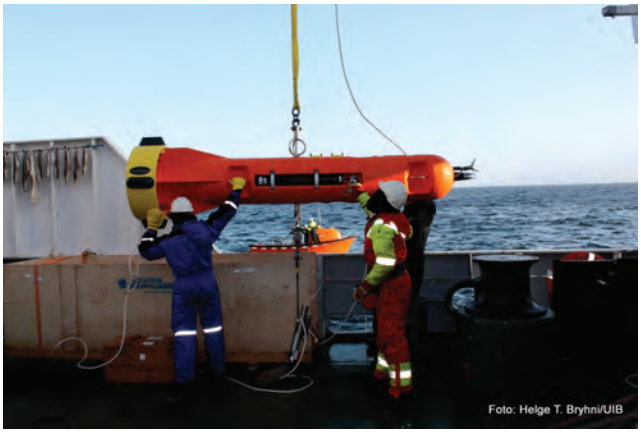
Tel: +1.250.370.1688
Email: jeremy@rocklandscientific.com
Website: www.rocklandscientific.com
CEO/President: Rolf Lueck
Vice President: Fabian Wolk
Engineering Director: Peter Stern
Number of Employees: 12
Annual Sales: $2,000,000.00



Ocean turbulence is a key component in understanding climate change and the challenges of harnessing tidal energy. In 2013 RSI added three employees and signed a strategic partnership with Partrac for tidal energy services in Europe. Rockland Scientific continues growth as the foremost expert, innovator and supplier of turbulence measurement instrumentation.

Rockland Scientific offers a wide range of turbulence measurement systems for operation in the upper ocean and down to 6000 m. The product lineup falls into three major categories: vertical profiling instruments; modular sensor packages for deployments on AUV, gliders and other autonomous platforms; and customized measurement solutions for science, engineering, and security applications. The vertical profilers come in a variety of sizes that can be deployed in a range of environments, from lakes and coastal zones to deep ocean areas. The flag-ship profiler is the VMP-6000 profiler, a completely autonomous profiling robot that can can prove turbulence levels in the deep ocean down to depths of 6000 m. The modular MicroRider system is successfully deployed and used on AUV platforms such as Hydroid's Remus 100, 600 and 6000 AUVs and other platforms such as the Teledyne Webb Slocum Glider.

The most recent application of the MicroRider is the integration with the Scripps Institution of Oceanography WireWalker platform, which makes it possible to conduct repeated turbulence measurement profiles autonomously for many weeks.

ROMOR Ocean Solutions

51 Raddall Ave., Dartmouth,
Nova Scotia, Canada B3B 1T6
Tel: 1-902-466-7000
Email: sales@romor.ca
Website: www.romoroceansolutions.com
CEO/President: Darrin Verge
Number of Employees: 7

ROMOR Ocean solutions is a Nova Scotia based company with 30 years of experience in the ocean technology industry. ROMOR provides technical services and integrated instrumentation solutions for the geophysical, oceanographic, defense and oil & gas industries.

The ROMOR C-ROM (Compact Recoverable Ocean Mooring) is an oceanographic subsurface mooring solution that offers a reliable and compact design to mooring and recovering oceanographic instrumentation. The C-ROM consists of a subsurface flotation collar that provides approximately 80 lbs positive buoyancy for use in a seawater environment for depths up to 500m without degradation of the materials or the flotation value for a minimum of five years. The C-ROM floatation collar encloses a customer specified acoustic release assembly as well as the client specified instrument that can be accommodated within the dimensions of the design. The ROMOR Elliptical Mooring is another oceanographic tool generated by ROMOR to assist in higher current areas for various types of subsea instrumentation. The standard units are depth rated to 750m and 1500m, with optional 2500m, 3500 and 6000m available.

UTEC Survey

7240 Brittmore Road, Suite 110, Houston, Texas, U.S. 77041
Tel: 713-984-8688
Email: robyn.riley@utecsurvey.com
Website: www.utecsurvey.com
CEO/President: Martin O'Carroll
Number of Employees: 300

UTEC Survey is one of the world's largest independent survey companies providing a wide range of survey services including offshore positioning, construction support, geophysical (conventional towed and AUV) surveys, dimensional control (including laser scanning and £D modeling) as well as geotechnical (consultancy and sampling) services. UTEC has offices located around the world including: Australia, Brazil, Canada, Italy, Singapore, UAE, U.K. and U.S..

geoROV is the innovative ROV-conveyed geotechnical testing and sampling system developed in-house to address industry requirements. It is a cost-effective way of gathering high precision geotechnical data. geoROV has an established track record in the North Sea and Asia-Pacfic regions and has just completed its first project in the Gulf of Mexico.

FarSounder, Inc.

151 Lavan Street Warwick, R.I. 02888
Tel: +1 401 784-6700
E-mail: info@farsounder.com
Website: www.farsounder.com

CEO/President: Cheryl M. Zimmerman
Employees: 12

FarSounder is a leader in the design, manufacture &marketing of 3D sonar systems. The company applies its 3D technology to commercial, recreational, defense & homeland security markets, internationally as well as domestically. From advanced 3D long range navigation to underwater Diver Detection, it provides a new vision underwater. The technology is suitable for surface/sub-surface vessels & along waterside perimeters. The FarSounder-1000 is FarSounder's flagship navigation sonar & offers benefits to safe navigation: 3D forward looking navigation information out to over 1/2 nautical mile (1000m) ahead of the vessel. Delivering the three critical readings required: range, bearing, & depth, FarSounder challenges the boundaries of sonar technology to provide operators with a practical addition to navigation safety.

Hemisphere GNSS

8444 N. 90th Street, Suit 120 Scottsdale, Ariz. 85258
Tel: (480) 348-6380
E-mail: LRomancho@hemispheregps.com
Website: www.hemispheregps.com

CEO/President: Phil Gabriel
Employees: 54

Hemisphere GNSS designs and manufactures innovative, cost-effective GNSS products for positioning, heading, and navigation applications in marine, land survey, construction, mapping, OEM, and other markets. The company holds numerous patents and other intellectual property and sells globally with several leading product brands, including Crescent, Eclipse and Vector, for precise GNSS applications.

Hemisphere GNSS designs and manufactures innovative, cost-effective GNSS products for positioning, heading, and navigation applications in marine, land survey, construction, mapping, OEM, and other markets. The company holds numerous patents and other intellectual property and sells globally with several leading product brands, including Crescent, Eclipse and Vector, for precise GNSS applications. Hemisphere GNSS is a North American subsidiary of Beijing UniStrong Science & Technology Co. Ltd. and is headquartered in Scottsdale, Arizona with a product development, sales, and marketing facility in Calgary, Alberta.

Saab Seaeye Ltd.

20 Brunel Way, Segensworth East, Fareham,
Hampshire, PO15 5SD UK

Tel:	+44(0)1489 898 000
Fax:	+44(0)1489 898 001
Email:	rovs@seaeye.com
Web:	www.seaeye.com
Managing Director:	Jon Robertson
Sales Director:	Matt Bates
Operations Director:	Mark Exeter

The Company

Saab Seaeye is a manufacturer of electric ROVs, and now includes Saab's underwater vehicle range of tethered and hybrid underwater vehicle systems for both the defenxe and commercial markets. Accredited by DNV to ISO 9001 and ISO 18001, Saab Seaeye is a leading supplier of electric ROVs to the oil and gas industry, and a major ROV resource for defense forces, marine science and hydro-engineering. **Saab Seaeye has facilities in both the UK and Sweden and employs more than 200 people. It has a turnover of $54 million and recently doubled the size of its manufacturing and engineering operations in the UK.** Exports stand at over 80% of sales with the company represented and supported in 27 countries around the world, and Saab Seaeye has now opened an office in Houston, Texas.

More than 600 ROV systems have been sold, fitted with a range of standard and custom designed tooling that includes cameras, manipulators, survey sensors, cutters, tracking systems, sonar, torque tools and water jetting. The company also designs and manufactures a range of ROV handling devices including Tether Management Systems.

The Tech

Technologically, the Saab Seaeye range comes in size, power and tasking options that extend from the easily manhandled Falcon ROV, to the work-class Jaguar, rated to 3000m with an option to 6000. **Across all systems a new concept is evolving called Technology Toolbox.** This allows the distillation of core technology across the company's entire range of products into a common architecture with a purity that creates the lowest number of parts at the least possible cost for the highest possible performance and quality. Commonalty of both software and hardware across vehicles of all complexities offer customers simpler repair and maintenance and easier upgrades. It also results in simplified and common training for operators using and maintaining the systems. Simplifying and standardizing system architecture reduces the number of components and subsystems, increases flexibility, promotes understanding, reduces risk during system development and makes it easier and faster to bring new products to market and react quickly to changes. The Technology Toolbox is important in the further development of breakthrough concepts like the Intelligent Control of Nodes (iCON). This vital innovation makes every device within an underwater vehicle aware of its own status, predict failure and able to take action as necessary to keep the vehicle working.


Jon Robertson

iCON also lets engineers reach across the world into the heart of a vehicle through an internet gateway that gives them ready access to diagnostics, software upgrades and system inventory. Commercial Range outline.

- **Falcon** – A portable ROV for rapid deployment. Rated 300 and 1000m, with a one to one power to weight ratio.
- **Tiger** - Industry standard observation ROV. Rated 1000m.
- **Lynx** - with an additional vertical thruster and outlets for survey sensors. Rated 1500m.
- **Cougar XT** - Powerful and compact observation package with under-slung skid able to handle work tasks at lower cost with heavy-duty tooling. Four vector thrusters and two vertical thrusters give great power and manoeuvrability. Rated 2000m.
- **Cougar XT Compact** – A powerful new low-profile design ideally suited for working in the strong currents of shallow water and difficult-to-access places.
- **Cougar XTi** – A new concept ROV with self-diagnostics and modular control system. Rated 3000m.
- **Panther XT** - Large and powerful ROV that challenges hydraulic work ROV systems. Rated 1500m.
- **Panther XT Plus** – 50% more powerful than its class and with 10 powerful thrusters, the fastest swimming ROV.
- **Jaguar** - The largest in the range. An electric work class ROV with full redundancy and rated to 3000m with option to 6000m.
- **Sabertooth** is a hybrid AUV/ROV concept that combines the technologies of both AUV and ROV into a single unified resource with the autonomy functions and on-board power of an AUV and maneuverability and tooling of a light-work ROV.

HELZEL MESSTECHNIK GMBH

Carl-Benz-Strasse 9
Kaltenkirchen,
Schleswig-Holstein,
Germany 24568
Tel: +49-4191-9520-0
E-mail: wera@helzel.com
Website: www.helzel.com

CEO/President: Thomas Helzel, Matthias Kniephoff
Employees: 12

The Case:

The shore-based ocean radar "WERA" provides reliable data of ocean surface currents and significant wave height and direction pixel by pixel with an outstanding spatial and temporal resolution for VTS, SAR and environmental protection applications.

The Company:

Helzel Messtechnik GmbH founded in 1995, specializes in development and production of environmental and oceanographic measurement systems. Its passion for environmental and oceanographic measurement technology is reflected in WERA – Remote Ocean Sensing, a shore-based over-the-horizon radar to measure ocean currents, waves and wind up to ranges of more than 200 km. This technique provides important ocean parameters for coastal management and offshore operators as well as for research institutes. Due to the reliable high-quality of its output data, WERA enjoys a unique reputation as leading system and is installed more than 20 countries world wide.

The Tech:

The WERA system is the only system that can be configured with a compact antenna system or an array type antenna, according to the compnay. Our dynamic team offers all required support from the definition phase of a project by assisting to work out proposals, identify suited sites for instrument installation and help to prepare infrastructure and installation of the systems. Helzel Messtechnik provides all services and training to configure the WERA systems and software according to the operational requirements. To provide the most effective and best service for our world wide WERA users, we co-operate with local service providers.

SeaView Systems, Inc.

7275 Joy Road, Dexter, Mich. 48130
Tel: 734-426-8978
Email: marlaisenstein@seaviewsystems.com
Website: www.seaviewsystems.com
CEO/President: Matthew Cook
Number of Employees: 6
Annual Sales: $750,000.00

Leaders in the provision of world-class custom underwater technology solutions to the inshore market place, SeaView Systems' capabilities include expertise in electronic, software and mechanical design. Other capabilities include electro/mechanical assembly and integration, machining and fabrication. SeaView Systems was founded on experience in the world of maritime electronics and offshore ROVs. It is a small, growing group with skill sets covering ROV operations and high end underwater surveys including the use of Inertial Navigation Systems (INS) for geo-referencing and 3D sonar & laser modeling.

Its portfolio of in-house developed high-tech custom devices range from fiber multiplexers, a modular smart hydraulic control stack (patented), dimmable networked LED lamps, HD cameras and other electronic/electro-mechanical devices and software. Its operations include inshore/offshore ROV operations, various forms of underwater sonar survey and the deployment of custom tooling.

Its solutions use off-the-shelf components and original systems to enable the company to provide its clients with unique inspection, survey and intervention services. In-house developed systems include: Inspection technologies: Long Distance ROV: 10k ft internal tunnel and pipeline inspections through restrictions down to 18" diameter; Custom articulated ROV with DVL aided INS dynamic positioning, HD video and multibeam sonar profiling; SeaView Serpent: Articulated ROV for inspection of small pipelines; SeaView PipeWalk 3D sonar visualization software; and much more.

Imagenex Technology Corp.

209 – 1875 Broadway Street, Port Coquitlam, BC, Canada V3C 4Z1
Tel: 1(604) 944-8248
E-mail: imagenex@shaw.ca
Website: www.imagenex.com

President: Willy Wilhelmsen
Employees: 25

The Company:

Imagenex was founded in 1988 by pioneers in the development of high-resolution imaging and profiling sonar. Within two years, the company had produced its first sonar – an imaging head for the commercial underwater industry that was the unheard-of size of a coffee mug and rated for 300 m depth. Company milestones include introducing the industry's first digital color imaging sonar that could be operated from a computer without a dedicated processor in 1995; introducing a sidescan sonar in 2000 with a revolutionary price/performance ratio; and developing a high quality, compact and cost-effective multibeam sonar with obstacle avoidance or profiling configurations and optional depth ratings to 6,000 m.

It is the company's development of the lightweight, cost-effective Delta T multibeam sonar that is successfully bringing the benefits of real-time, high-resolution, 3D visualization within reach of operators that previously had to use mechanical scanning single-beam devices. The combination of reduced cost, high quality imaging and functionality of the Delta T and other Imagenex products has been increasing its popularity in the scientific market, and for commercial, recreational and search and rescue (SAR) applications around the globe.

The Tech:

Imagenex has developed a reputation for products that break new ground for depth capability, size, cost, imaging quality and functionality. Innovation is both a goal and methodology for the company, which closely manages its product development, in order to control quality. As Imagenex continues to bring new products to market, it adds variations and improvements to existing equipment. New additions to the Imagenex line of cost-effective products have recently hit the market. The new DT100 Sensor Interface Relay (SIR) provides a central connection point for all your bathymetric sensors including sonar (1 or 2 units), GPS, MRU, Gyro/Heading, and Sound Velocity.

Southwest Electronic Energy Group

823 Buffalo Run, Missouri City, Texas 77489
Tel: 281-240-3586
Email: info@swe.com
Website: www.swe.com
CEO/President: Len Benckenstein
Engineering Director: JJ Tumlinson
Number of Employees: 75
Annual Sales: $30,000,000.00

Testing: Southwest Electronic Energy (SWE), successfully completed 10,000psi pressure testing of its SWE SeaSafe Smart Battery Module. The exhaustive two day test conducted in the 30 inch hyperbaric chamber at the third party test laboratory included nine complete pressure cycles up to 10,000 PSI and back down to zero psi while continuously performing live charge and discharge.

In 2013, battery solutions innovator Southwest Electronic Energy Group announced breakthrough subsea ready, Li Ion battery products. SWE SeaSafe with its patented BMS (battery management system) safely powers subsea vehicles or infrastructure with 4X energy. SeaSafe is available in Smart Modules for enclosure or multi-module, pressure equalized battery systems.

The Tech:

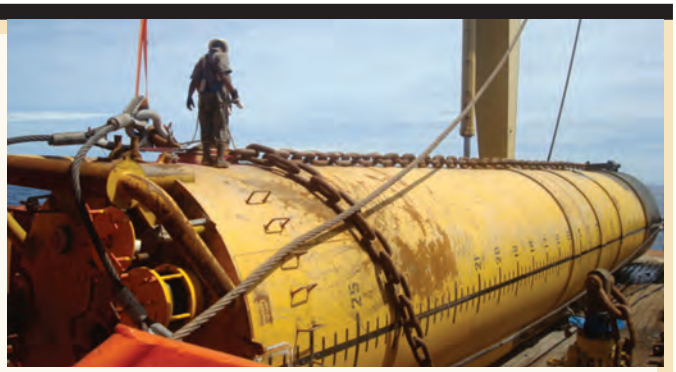
SWE is continuously innovating battery technology for subsea. SeaSafe Li-ion batteries incorporate a patented battery management system (BMS) delivering longer missions, longer life, breakthrough safety, reliability and configure-to-order flexibility. SeaSafe Smart Modules are easy to use battery building blocks for customers to integrate in their own enclosures. Modules are available in 29V or 24V sizes and can be connected in series or parallel to meet voltage and capacity (Ah) needs. A single 29V smart module delivers 28Ah and 812 Wh of capacity when charged to 90% state of charge. Each smart module is autonomous (self-sufficient) with its own BMS containing advanced algorithms for automatic and continuous safety protection, charge control and balancing. Modules are pressure tolerant to 6000m sea depth. Modules are charged with a standard power supply eliminating the need for custom chargers. State-of-Charge (SOC) can be configured to optimize mission life and output profile. Modules are UN/DOT certified. SeaSafe Battery Systems hold up to four Smart Modules in a subsea ready pressure equalized case. Each system delivers up to 130V/112Ah max. The pressure equalized case is built rugged from 316 stainless steel with Seacon Wet-Con connectors standard. SeaSafe Battery Systems are pressure equalized and tolerant to a 6000m sea depth. SWE has also developed SeaSafe Observer software. Observer is a powerful support tool to monitor the status of SeaSafe Smart Modules or SeaSafe Battery Systems.

InterMoor

900 Threadneedle, Suite 300 Houston, Texas, U.S. 77079
Tel: (832) 399-5070
E-mail: florence.kosmala@intermoor.com
Website: www.intermoor.com

CEO/President: Tom Fulton
Employees: 260

With locations in the U.S., West Africa, Brazil, South East Asia, Norway and Mexico, InterMoor has performed more than 2,500 rig moves and has completed preset mooring campaigns in many countries. InterMoor, an Acteon company, is a mooring, foundations and subsea services provider delivering innovative solutions for rig moves, mooring services and offshore installation projects. InterMoor supports operators and contractors worldwide with Engineering, Fabrication, Shore Base, Survey & Positioning and Inspection services. Deepwater mooring technology has evolved in the last 20 years, and much of the industry's progress has been pioneered by InterMoor: Patented Suction Embedded Plate Anchor (SEPLA); Deepwater mooring record off the coast of Malaysia; Installation of the first full polyester rope mooring system in the Gulf of Mexico; Deepwater MODU mooring record off the coast of Brazil; Designed and installed the first suction pile in the Gulf of Mexico



The Tech:

Developed by InterMoor, in conjunction with sister company, Pulse Structural Monitoring, the **Inter-M Pulse is a long term mooring connector that has the capability to monitor and track the in situ tension of each mooring line and transmit tension data acoustically to the topside control room.** With the introduction of various sensors, the Inter-M-Pulse can also detail inclination of the mooring line.

Turner Designs

845 W Maude Avenue, Sunnyvale, Calif. 94085
Fax: 408-749-0998
Email: sales@turnerdesigns.com
Website: www.turnerdesigns.com

CEO/President: James Crawford
Vice President Pam Mayerfeld

Turner Designs has provided sensitive, reliable, easy-to-use fluorometers to the marine community for more than 40 years. The company contends that it supplies more filter fluorometers than any other company.

Turner Designs provides innovative fluorescence-based solutions for basic environmental research, water quality analysis, environmental monitoring, and pollution control analysis. Turner Designs is continuously expanding its repertoire of optical instruments to meet new application requirements. Standard optical configurations include in vivo and extracted Chlorophyll, blue-green algal pigments such as phycocyanin and phycoerythrin, active fluorescence for measuring fluorescence yield in marine research as well as ballast-water compliance checking, Dissolved Organic Matter (Algal as well as Terrestrial), ammonium, optical brighteners and tryptophan for wastewater monitoring, dye tracers, and crude and refined oils as well as infrared wavelengths used to detect turbidity. Custom optical configurations are readily available for most packages. Standard package configurations include submersible, handheld, field, laboratory, online, and configured for integration into vehicles.

Data acquisition is available real-time and through several datalogging possibilities. Submersible instruments can be configured for depth profiling, long-term monitoring and horizontal mapping with GPS-integration at depths up to 6000 meters. Solid Secondary Standards which enable quick instrument verification and calibration checks are available for most applications and are known to hold their value over several years of usage.

WFS: Wireless for Subsea

7 Houstoun Interchange Business Park, Livingston,
West Lothian, UK EH54 5DW
Tel: 845-862-6600
Email: info@wfs-tech.com
Website: http://www.wfs-tech.com
CEO/President: Brendan Hyland
Number of Employees: 20
Annual Sales: $3,900,000.00

WFS is a leader in the delivery of subsea wireless instrumentation and control solutions to the Offshore Oil & Gas and Renewables industries worldwide. The company employs 20 staff, mainly in the Edinburgh office, with representation in Houston. Now in its 10th year of business, WFS launched what it claims was the world's first commercially available underwater radio modem, seatooth S200, in 2006. Its broadband data link, now known as seatooth S300, was launched in January 2007 and later that year, the world's first hybrid Radio/Acoustic modem was launched to the subsea market. In 2010, our compact modem seatooth® S100 arrived, closely followed by our subsea wireless video camera, viewtooth® in 2011. Our Wireless Power Transfer solution was launched this year in April.

The Tech:

WFS's game-changing products have revolutionised control, communications and power transfer in underwater environments. Subsea wireless technology based on radio frequency (RF) has the distinct advantage that it will operate in adverse water conditions, is unaffected by acoustic noise, operational in shallow water, is immune to multipath and its Doppler effects are minimal. Hybrid products incorporating radio (i.e. acoustic, power, optical) build on the benefits afforded by RF to offer even more flexible and robust solutions for subsea challenges in deep water. Critically, WFS products support data transmission across the water/air and ground/air boundaries, cutting through the surf zone, ice, harbour walls, and other materials normally considered to be impenetrable. WFS is successfully addressing a broad range of short/medium range applications, supporting safety, reliability and efficiency offshore. These include deployments in the North Sea, Gulf of Mexico and SE Asia and include;

- Wireless subsea video (saving ROV time and improving reliability)
- Wireless data gathering from subsea sensors using an ROV or AUV (fast reliable download without physical connection)
- Wireless backup to maintain control of equipment, trigger alarms or initiate emergency sequence (providing an extra level of redundancy and real-time alerting)
- Wireless powering and recharging of subsea equipment and sensors without the use of wet mate connectors (downtime if the connection fails).

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MTS marine technology society · IEEE OES

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MacArtney
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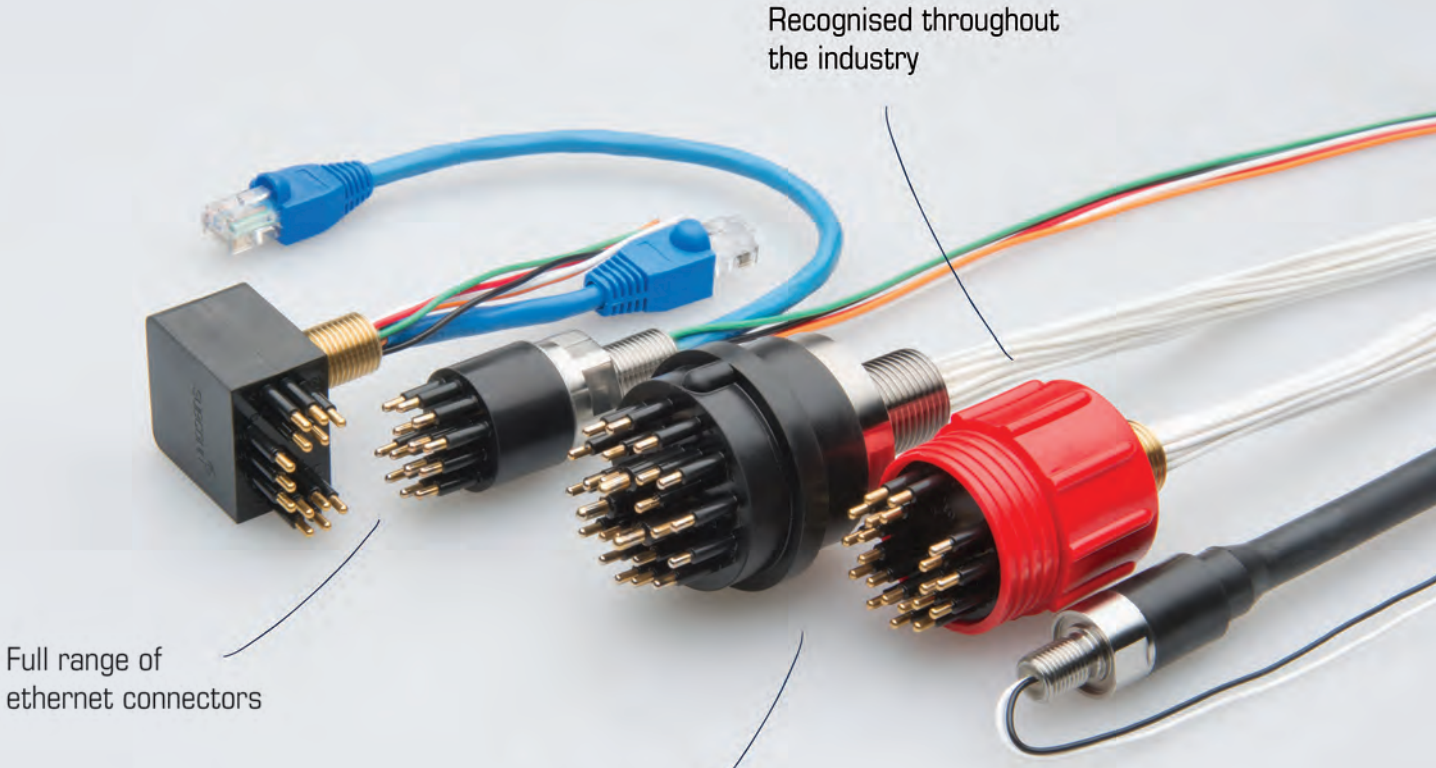

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everything remotely possible™

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