

## Aanderaa Instruments Inc

234 Highland Avenue, So Attleboro, Massachusetts, 02703-6846, United States  
Tel: +1 508 761 8007 Fax: +1 508 761 8229  
Web: www.aanderaa.com email: info@aanderaa.no

Founded in 1966 is committed to serve the Oceanographic & Geophysical market, historically the company's foundation. Our goal, to be recognized as a leader: in current measurement and new product tools to study the Earth's environment. Most important is the instrument's overall performance reliability. At OI America's we introduce tomorrow's technology in the Recording Doppler Current Profiler RDCP600 and (Optical) Dissolved Oxygen Optode model 3830/3930.

**Keywords:** *Beacons & Buoys; Current Meters; Meteorology; Oxygen Meters; Profiling Systems; Velocimeters; Water Measurement; Sampling*

## Booth 750

## Abtel Universal Technology Inc

12228 South Shadow Cove Drive, Houston, Texas, 77082, United States  
Tel: +1 281 589 2400 Fax: +1 281 679 6407  
Web: www.abteluniversaltechnology.com  
email: marius@abteluniversaltechnology.com

A Robotics (ROV's) hydraulic systems and thrusters), imaging (cameras, sonars, gyros, lights, RF devices) cables, cable assemblies/cable protection, connectors, weather forecasting and in-house product development. ABTEL and SubAtlantic will launch the Navajo ROV, the new standard for true in/onshore remote operated vehicles.

*Exhibiting on the Sub-Atlantic Booth.*

**Keywords:** *Cables, Connectors; Cameras; Hydraulic Systems; ROVs; Sonar & Systems*

## Booth 737

## Acoustikos

PO Box 315, 1400 Rte 28A, Cataumet, Massachusetts, 02534, United States  
Tel: +1 508 564 7640 Fax: +1 508 564 7643  
Web: www.acoustikos.com email: sales@acoustikos.com

Acoustikos provides engineering and product development solutions to a variety of scientific and government concerns, with special emphasis on underwater acoustical engineering. Services include: acoustic system design/consulting, rapid prototyping, electrical engineering, mechanical engineering, software development, transducer design and testing, project management, government proposals/research and development, and market analysis/strategic planning.

*Exhibiting on the Falmouth Booth.*

**Keywords:** *Acoustics; Autonomous Underwater Vehicles; Cameras; Consultancy Services; Engineering Design; Sensors; Transducers*

## Booth 322

## ALEC Electronics Co Ltd

7-2-3 Ibukidai-Higashi, Nishi-Ku, Kobe, Hyogo Pref, 651-2242, Japan  
Tel: +81 78 997 8686 Fax: +81 78 997 8609  
Web: www.ijnet.or.jp/alec email: alecelec@po.ijnet.or.jp

Alec Electronics produces and sells high quality instruments for the study of coastal and ocean waters. Instruments are offered for the measurement of: Temperature, Depth, Conductivity, Dissolved Oxygen, Light Intensity, Salinity, Turbidity, Chlorophyll and Current Speed/Direction. Instruments are available for single and multiple parameter measurements.

*Exhibiting on the Alec Electronics Booth.*

**Keywords:** *Current Meters; Environmental Measurement; Sensors*

## Booth 818

## Alec Electronics, USA

10029 via Leslie, Santee, California, 92071-1550, United States  
Tel: +1 619 449 2232 Fax: +1 619 334 5969  
Web: www.alecusa.com email: alecelec@cox.net

Alec Electronics produces and sells high quality instruments for the study of coastal and ocean waters. Instruments are offered for the measurement of: Temperature, Depth, Conductivity, Dissolved Oxygen, Light Intensity, Salinity, Turbidity, Chlorophyll and Current Speed/Direction. Instruments are available for single and multiple parameter measurements.

*Also Exhibiting is Rockland Oceanographic Services.*

**Keywords:** *Current Meters; Environmental Measurement; Sensors*

## Booth 818

## AMRS Association

5685 Leeds Street, PO Box 1153, Halifax, Nova Scotia, B3J 2X1, Canada  
Tel: +1 902 491 2160 Fax: +1 902 491 2162  
Web: www.waterobserver.org email: amrsadmin@waterobserver.org

A private, not-for-profit technology association, promoting the use of remote sensing technologies in aquatic environments. Presently focusing on its education mandate, AMRS provides various print and media publications, including Backscatter magazine and a weekly online news service, and hosts sector-specific events.

**Keywords:** *Coastal Monitoring; Environmental Measurement; Hydrography; Information Services; Meteorology; Ocean Observation; Publications; Satellite Remote Sensing; Sensors*

## Booth 825

## Applanix

85 Leek Crescent, Richmond Hill, Ontario, L4B 3B3, Canada  
Tel: +1 905 709 4600 Fax: +1 905 709 6027  
Web: www.applanix.com email: stang@applanix.com

Develops, manufactures, sells and supports precision products that accurately and robustly measure the position and orientation of vehicles in dynamic environments. Applanix's Position and Orientation Systems (POSTM) are used in a variety of applications including road profiling, GIS data acquisition, aerial survey and mapping, railroad track maintenance and seafloor mapping. Applanix strives to support customers around the world with exceptional service - anywhere, at anytime. Established in 1991, Applanix Corporation has enjoyed continuous, profitable growth. It has been named one of the fastest growing Canadian companies by PROFIT magazine, and has been recognized as a leading exporter by FedEx Canada and by the Government of Ontario (as a recipient of a Global Traders award).

**Keywords:** *Current Meters; Dynamic Positioning; Environmental Measurement; Global Positioning Systems; Marine Surveyors; Photogrammetry; Position Fixing Systems; Remote Data Acquisition; Sensors*

## Booth 643

## Applied Acoustic Engineering Ltd UK

Marine House, Marine Park, Garton Hall Road, Great Yarmouth, Norfolk, NR31 0NL, United Kingdom  
Tel: +44 (0) 1493 440 355 Fax: +44 (0) 1493 440 720  
Web: www.appliedacoustics.com email: sales@appliedacoustics.com

Exhibiting with its US partner Subsea Technologies Inc. Applied Acoustics is a leading manufacturer of multi-compatible transponders, acoustic releases, beacon testers, chargers and telemetry systems. Also the industry standard CSP range of power sources and complete boomer/sparker systems for high resolution sub-bottom profiling. Exhibiting a number of new multi-compatible transponders including a new low cost micro-transponder, a superb range of low-cost acoustic release transponders and their industry standard range of compact seismic power supplies for sub-bottom profiling applications.

*Exhibiting on the Subsea Technologies Booth.*

**Keywords:** *Acoustics; Beacons & Buoys; Hydro-Acoustics; Hydrophones; Pressure Testing Facilities; Sonar & Systems; Sub-bottom Profile Equipment; Telemetry Equipment; Transducers; Transponders*

## Booth 710

## Applied Microsystems

2071 Malaview Avenue, Sidney, British Columbia, V8L 5X6, Canada  
Tel: +1 250 656 0771 Fax: +1 250 655 3655  
Web: www.appliedmicrosystems.com email: info@aml.bc.ca

Manufacturer of oceanographic, hydrographic and environmental instrumentation since 1974. Products include devices to measure/record: - oil on water (hydrocarbon leak detector) tides, currents, waves, sound velocity, conductivity, temperature, depth, dissolved oxygen, pH, Redox, turbidity and other water quality parameters. Instruments include: - CTDs, velocimeters, loggers, profilers, real-time probes, sensor chains and an in-water mass spectrometer for detection of volatile organic compounds and dissolved gases.

**Keywords:** *Anti Submarine Warfare; Conductivity Meters; Depth Indicators & Recorders; Environmental Measurement; Instrumentation Systems; Oil Spill Counter-Measures; Profiling Systems; Sensors; Sound Velocity Probes; Temperature Measurement; Tide Gauges*

## Booth 649

## Aquatec Electronics Ltd

High Street, Hartley Witney, Hampshire, RG27 8NY, United Kingdom  
Tel: +44 (0)1252 843 072 Fax: +44 (0)1252 843 074  
Web: www.aquatec.org.uk email: info@aqatec.org.uk

A specialist electronics and software design company, carrying out custom design, research, and development of subsea instrumentation, data acquisition, storage and processing products. Areas of expertise cover sonar signal processing, long term unattended data acquisition, high-speed data acquisition for laser optical and acoustic instrumentation, and attitude and vibration monitoring.

*Exhibiting on the Aquatec Group Booth.*

**Keywords:** *Acoustics; Data Acquisition/Management; Engineering Design; Environmental Measurement; Instrumentation Systems; Magnets & Magnetometers; Remote Data Acquisition; Signal Processing; Sonar & Systems; Transducers*

## Booth 626

## Aquatec Group

High Street, Hartley Wintney, Hampshire, RG27 8NY, United Kingdom  
Tel: +44 (0)1252 843 072 Fax: +44 (0)1252 843 074  
Web: www.AquatecGroup.com email: info@AquatecGroup.com

The Aquatec Group comprises three oceanographic instrumentation companies: Aquatec Electronics, Aquatec Telemetry and Aquatec Subsea. See the individual catalogue entries for each company.

**Keywords:** *Acoustics; Depth Indicators & Recorders; Echo Sounders; Engineering Design; Environmental Measurement; Hydrological Instruments; Instrumentation Systems; Remote Data Acquisition; Sonar & Systems; Temperature Measurement*

## Booth 626





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## Aquatec Subsea Ltd

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Fax: +44 (0)1252 843074

Web: [www.aquatecsubsea.com](http://www.aquatecsubsea.com)

email: [info@aquatecsubsea.com](mailto:info@aquatecsubsea.com)

Manufacturers of ultra-compact oceanographic instrumentation products. On display will be the AQUAlogger series of data logging instruments for temperature, pressure, turbidity, fluorescence, attitude, vibration and more. Their product range includes the AQUAScat acoustic backscatter sensor for suspended sediment analysis, and the AQUAMark range of acoustic marine mammal deterrents.

*Exhibiting on the Aquatec Group Booth.*

**Keywords:** Depth Indicators & Recorders; Echo Sounders; Fluorometers; Hydrological Instruments; Inclinerometers; Penetrometers; Sediment Sizing; Temperature Measurement; Vibration Monitoring

**Booth 626**

## Benthos Inc

48 Edgerton Drive, North Falmouth, Massachusetts, 02256, United States

Tel: +1 508 563 1000 x 550

Web: [www.benthos.com](http://www.benthos.com)

**Booth 326**

Fax: +1 508 563 6444

email: [flewis-souza@benthos.com](mailto:flewis-souza@benthos.com)



A leading provider of oceanographic systems and instruments used by offshore oil, underwater exploration, research and military users for measurement, inspection, data collection and

communication. Products offered include high-speed acoustic modems, sidescan sonar systems, acoustics releases, glass flotation spheres, acoustic pingers, transponders and hydrophones.

**Keywords:** Acoustics; Bathymetry; Beacons & Buoys; Hydrophones; ROVs; Sonar & Systems; Sub-bottom Profile Equipment; Towed Arrays; Transponders; Underwater Communications

## Aquatec Telemetry Ltd

High Street, Hartley Witney, Hampshire, RG27 8NY, United Kingdom

Tel: +44 (0)1252 843 072

Fax: +44 (0)1252 843 074

Web: [www.aquatec.org.uk](http://www.aquatec.org.uk)

email: [telemetry@aquatec.org.uk](mailto:telemetry@aquatec.org.uk)

Manufacturers of custom acoustic telemetry modules for data retrieval and remote command and communication, based on our AQUAModem telemetry system. Also specialise in cathodic protection and corrosion monitoring solutions for the offshore industry. Research includes wide area positioning and communication networks.

*Exhibiting on the Aquatec Group Booth.*

**Keywords:** Cathodic Protection Systems; Corrosion Detection & Protection; Navigation; Telemetry Equipment; Underwater Communications

**Booth 626**

## BOSCA

4th Floor, 30 Great Guildford Street, London, SE1 0HS, United Kingdom

Tel: +44 (0)20 7928 9199

Fax: +44 (0)20 7928 6599

Web: [www.maritimeindustries.org/about/bosca.jsp](http://www.maritimeindustries.org/about/bosca.jsp)

email: [events@maritimeindustries.org](mailto:events@maritimeindustries.org)

British Oil Spill Control Association (Society of Maritime Industries). The Society of Maritime Industries is the voice of the UK's maritime business sector promoting and supporting suppliers of equipment and services for all types of commercial and naval ships, ports and terminals infrastructure, offshore oil & gas, and pollution prevention, control and clean-up. Our main aims are:

To promote and support the domestic and export business of UK companies.

To improve the UK and European business environment for maritime industries.

To facilitate communication and networking in the maritime industries.

To provide marketing and other services to companies in the Society of Maritime Industries.

**Keywords:** Oil Spill Counter- Measures

**Booth 651**

## ARC Surveying & Mapping

5202 San Juan Avenue, Jacksonville, Florida, 32210, United States

Tel: +1 904 384 8377

Fax: +1 904 384 8388

Web: [www.arcsurveyors.com](http://www.arcsurveyors.com)

email: [psawyer@arcsurveyors.com](mailto:psawyer@arcsurveyors.com)

Arc Surveying & Mapping, Inc. is a multi-disciplined surveying and mapping firm with offices in Jacksonville Florida and Caguas Puerto Rico. Arc's personnel are equipped with the latest hydrographic and topographic surveying instruments. Our mappers are proficient in all popular software formats, including AutoCAD and Microstation.

**Keywords:** Bathymetry; Cable Laying Services; Charts & Charting; Coastal Monitoring; Consultancy Services; Corrosion Detection & Protection; Electronic Charting; Geology; Geophysics; Hydrography; Ocean Modeling; Photogrammetry; Sub-bottom Profile Equipment; Survey

**Booth 222**

## Service Argos Inc

1801 McCormick Drive, Suite 10, Largo, Maryland, 20774, United States

Tel: +1 301 925 4411

Fax: +1 301 925 8995

Web: [www.argosinc.com](http://www.argosinc.com)

email: [info@argosinc.com](mailto:info@argosinc.com)

Over 3000 drifting buoys, profiler floats and other oceanographic platforms monitored worldwide. Extremely robust satellite data collection system especially designed for harsh environments. Low power transmissions enable long-term autonomous operation. New features include two-way communication, increased data transmission capacity and fully customized access to data and results. Designed for and with its scientific users, the only satellite-based system dedicated to monitoring and protecting the environment.

*Also Exhibiting is CLS.*

**Keywords:** Data Acquisition/Management; Earth Sciences; Environmental Measurement; Environmental/Pollution; Global Positioning Systems; Ocean Observation; Remote Data Acquisition; Satellite Communications

**Booth 332**

## AST Airtime Limited

Burlingham House, Hewett Road, Gt Yarmouth, Norfolk NR31 0NN, United Kingdom

Tel +44 (0) 1493 440011

Fax +44 (0) 1493 669977

Web: [www.iridiumuk.com](http://www.iridiumuk.com)

email: [john.arnold@ast-uk.com](mailto:john.arnold@ast-uk.com)

AST is a Service Provider for Iridium, the global satellite communications company. On the stand will be the newly launched Short Burst Data module, which is designed for sending short bursts of data from remote locations including oceanographic buoys. Also shown will be the complete range of Iridium satellite phones.

**Booth 828**

## Axys Environmental Systems

PO Box 2219, 2045 Mills Road, Sidney, BC, V8L 3S8, Canada

Tel: +1 250 655 5860

Fax: +1 250 655 5856

Web: [www.axystechnologies.com](http://www.axystechnologies.com)

email: [systems@axys.com](mailto:systems@axys.com)

AES is a world leader in meteorological, oceanographic and water quality data acquisition systems. Buoy networks from around the world have adopted our TRIAXYS™ and Watchman™ technologies as the new standards. AES also manufactures ship and land based meteorological and environmental monitoring stations.

**Keywords:** Beacons & Buoys; Coastal Monitoring; Data Acquisition/Management; Environmental Measurement; Meteorology; Ocean Modelling; Port & Harbour Development; Remote Data Acquisition; Sensors; Wave & Wave Power

**Booth 551**

## CAPSUM Technologie GmbH

Max-Planck-Strasse, Geesthacht, 21502, Germany

Tel: +49 4152 871 837

Fax: +49 4152 871 888

Web: [www.capsum.com](http://www.capsum.com)

email: [info@capsum.com](mailto:info@capsum.com)

A young spin-off of the German research center GKSS, Capsum manufactures the unique underwater methane sensor METS and provides it worldwide through partners' companies, both in the scientific and industrial communities.

*Exhibiting on the Aquatec Group Booth.*

**Keywords:** Environmental Measurement; Environmental/Pollution; Geotechnics; Sensors

**Booth 626**

## CARIS

264 Rookwood Avenue, Fredericton, New Brunswick, E3B 2M2, Canada

Tel: +1 506 458 8533

Fax: +1 506 469 3849

Web: [www.caris.com](http://www.caris.com)

email: [sheri.flanagan@caris.com](mailto:sheri.flanagan@caris.com)

Developing software for hydrographic and marine organizations since 1979, CARIS understands the daily operations, technological needs and challenges faced by their extensive maritime clientele. Products suite includes software for all geospatial data collection, processing and production needs within the broad marine environment including systems for cleaning and presentation of bathymetric data through to the creation of IHO S-57 datasets in a database environment.

**Keywords:** Charts & Charting; Computer Software; Data Acquisition/Management; Defence Technology; Electronic Charting; Hydrographic Survey Software; Mapping Systems; Navigation; Ocean Modelling; Vessel Charting

**Booth 717**





## CDL

Silverfield House, Claymore Drive, Bridge of Don, Aberdeen, AB23 8GD, United Kingdom

Tel: +44 (0)1224 706 655

Web: [www.cdlttd.net](http://www.cdlttd.net)

Fax: +44 (0)1224 709 840

email: [mb@cdlttd.net](mailto:mb@cdlttd.net)

CDL design and manufacture equipment for surface and subsea use in the offshore industry. The company is based in Silverfield House; a purpose built 12,000 sq ft design and manufacturing facility in Aberdeen, Scotland. Main product areas are gyros, inertial navigation, sonar, bathymetry, multiplexers, tilt sensors, cameras & video/data transmission.

**Keywords:** Bathymetry; Batteries; Depth Indicators & Recorders; Electrical Design & Installation; Engineering Design; Gyrocompasses; Inclometers; Lasers; Navigation; Position Fixing Systems; Profiling Systems; Sonar & Systems; Telemetry Equipment; TV & Video Systems; Umbilicals; Underwater Communications

## Century Subsea

10615 Shadow Wood Drive, Suite 202, Houston, Texas, 77043, United States

Tel: +1 713 785 0788

Web: [www.century-subsea.com](http://www.century-subsea.com)

Fax: +1 713 984 0788

email: [TH@century-subsea.com](mailto:TH@century-subsea.com)

Survey and positioning services to the Offshore Industry. The company was formed in February 2000 and specialises in positioning for complex deepwater installation projects, utilising integrated long and short baseline acoustic solutions. From its offices in Aberdeen and Houston it supports projects in the Americas, Europe and West Africa. Century Subsea will be displaying its innovative Aquarius™ 4D - a real time 3D Visualisation system for offshore projects.

**Keywords:** Acoustics; Bathymetry; Hydrographic Survey Software; Navigation; Submersible Equipment; Survey

## Chelsea Technologies Group

55 Central Avenue, West Molesey, Surrey, KT8 2QZ, United Kingdom

Tel: +44 (0)20 8941 0044

Web: [www.chelsea.co.uk](http://www.chelsea.co.uk)

Fax: +44 (0)20 8941 9319

email: [rburt@chelsea.co.uk](mailto:rburt@chelsea.co.uk)

Designs and manufactures a wide range of acoustic and oceanographic sensors and systems. Extensive civil and military systems include towed undulating vehicles, multiparameter oceanographic sensors, acoustic sources, telemetry and navigation systems, echo repeaters and piezocomposite transducers. On display will be our towed vehicles, oceanographic sensors, world leading technology in AUV autopilots, correlation sonar velocity logs and POSCOM multi user, wide area navigation system.

**Keywords:** Acoustics; Autopilots; Conductivity Meters; Defence Technology; Environmental Measurement; Fluorometers; Hydrophones; Optics; Pumps & Components; Sensors; Sonar & Systems; Temperature Measurement; Towed Bodies

## CLS

8-10 Rue Hermes, Parc Technologique du Canal, Ramonville Cedex, 31526, France

Tel: +33 561 394 720

Web: [www.cls.fr](http://www.cls.fr)

Fax: +33 561 394 797

email: [info-argos@cls.fr](mailto:info-argos@cls.fr)

Over 3000 drifting buoys, profiler floats and other oceanographic platforms monitored worldwide. Extremely robust satellite data collection system especially designed for harsh environments. Low power transmissions enable long-term autonomous operation. New features include two-way communication, increased data transmission capacity and fully customized access to data and results. Designed for and with its scientific users, it is the only satellite-based system dedicated to monitoring and protecting the environment.

*Exhibiting on the Service Argos Booth.*

**Keywords:** Data Acquisition/Management; Earth Sciences; Environmental Measurement; Environmental/Pollution; Global Positioning Systems; Ocean Observation; Remote Data Acquisition; Satellite Communications

## C-Max Limited

Unit B1 Roman Hill Business Park, Broadmayne, Dorchester, Dorset, DT2 8LY, United Kingdom

Tel: +44 (0)1305 853 005

Web: [www.cmaxsonar.com](http://www.cmaxsonar.com)

Fax: +44 (0)1305 852 136

email: [sales@cmaxsonar.com](mailto:sales@cmaxsonar.com)

Showing the new CM2 sidescan sonar system for the first time in the Americas. The successor to the CM800, the digital CM2 retains the ease of use of the CM800 but is an almost entirely new design. Chief amongst the new features is the 2-wire digital tow cable telemetry with the capability to handle a wide variety of electrical cable types, up to 6km long. The new towfish features improved acoustic performance, a wider choice of frequencies, facilities for additional sensors, and a very robust stainless steel construction.

**Keywords:** Mines & MCM; Sonar & Systems

## Booth 655

## Coastal Oceanographics Inc

11G Old Indian Trail, Middlefield, Connecticut, 06455, United States

Tel: +1 860 349 3800

Web: [www.coastalo.com](http://www.coastalo.com)

Fax: +1 860 349 1982

email: [lourdes@coastalo.com](mailto:lourdes@coastalo.com)

Develops Windows-based software for the hydrographic industry. HYPACK MAX 2.12 is the latest release of its hydrographic package and is used throughout the world for survey design, data collection, graphical editing, plotting, volume computations, surface modelling, contouring and 3D data visualization. The 3DTV program is a new tool for data visualization that allows you to view in 3D any XYZ data file. You can fly the camera manually, fly it down a planned line or use the SURVEY program to position the camera in real time, using the position and heading of the vessel in SURVEY. The HYSWEEP package allows users to control and process multibeam and multiple transducer systems. The new drawing engine in MAX allows for real time display of vessel position over S-57, VPF, Ortho TIF, C-MAP, BSB Raster, DXF, DGN, and other chart formats. Coastal also develops DREDGEPACK for dredge monitoring.

**Keywords:** Data Acquisition/Management; Dredging Equipment; Environmental Modelling; Hydrographic Survey Software; Mapping Systems; Navigation; Survey

## Booth 444

## CodaOctopus

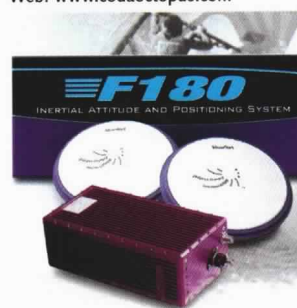
Suite 3 Business Centre, Castle Farm, Deddington, Oxfordshire, OX15 0TP, United Kingdom

Tel: +44 (0)1869 337570

Web: [www.codaoctopus.com](http://www.codaoctopus.com)

Fax: +44 (0)1869 337571

email: [info@codaoctopus.com](mailto:info@codaoctopus.com)



## CodaOctopus

CodaOctopus - formed with the merger of Coda Technologies, Octopus Marine Systems and Omnitech - are leading manufacturers of software and systems for geophysical imaging and mapping. The new range of products for geophysical acquisition, processing and interpretation includes the Coda GeoSurvey PRODUCTIVITY Suite for Windows, the F180 Attitude and Positioning System, the 460PX portable high resolution sidescan sonar system and the highly innovative Echoscope 3D imaging sonar.

**Keywords:** Data Acquisition/Management; Gyrocompasses; Hydrographic Survey Software; Mines & MCM; Navigation; Position Fixing Systems; Signal Processing; Sonar & Systems; Sub-bottom Profile Equipment; Swell Compensators

## Booth 609

## CODAR Ocean Sensors

1000 Fremont Avenue, Suite 145, Los Altos, California, 94024, United States

Tel: +1 408 773 8240

Web: [www.codaros.com](http://www.codaros.com)

Fax: +1 408 773 0514

email: [seasonde@codaros.com](mailto:seasonde@codaros.com)

Developers of the SeaSonde HF radar system for mapping the ocean surface current field. Convenient operation from shore, it provides wide area coverage with real-time data. The latest in this product line is the Long Range SeaSonde, capable of measuring currents beyond 200km from the shore.

**Keywords:** Coastal Monitoring; Coastal Protection; Current Meters; Environmental Measurement; Environmental Modelling; Ocean Modelling; Radio Equipment

## Booth 438

## Colmek System Engineering

2001 South 3480 West, Salt Lake City, Utah, 84104, United States

Tel: +1 801 973 9136

Web: [www.colmek.com](http://www.colmek.com)

Fax: +1 801 973 9285

email: [sales@colmek.com](mailto:sales@colmek.com)

Provides systems integration and specialized engineering services to research, industry and military customers. We specialize in hardware and software designs for use in rugged environments. Whether undersea or in the air, Colmek can provide a custom solution to your difficult engineering applications.

**Keywords:** Acoustics; Anti Submarine Warfare; Autonomous Underwater Vehicles; Computer Equipment; Computer Software; Data Acquisition/Management; Defence Technology; Electrical Design & Installation; Image Enhancement; Instrumentation Systems; Mineral Prospecting; Mines & MCM; Polar; Remote Data Acquisition; ROVs; Sonar & Systems; Telemetry Equipment; Towed Arrays; Towed Bodies

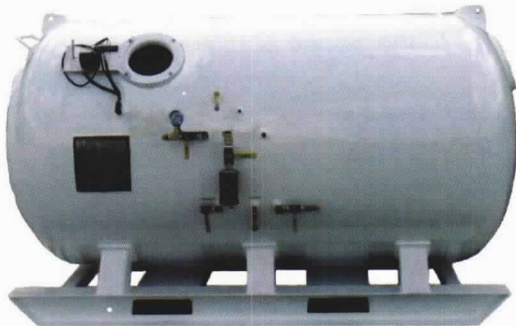
## Booth 349



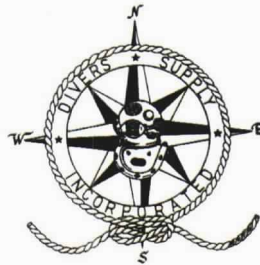


# Pressure Vessels

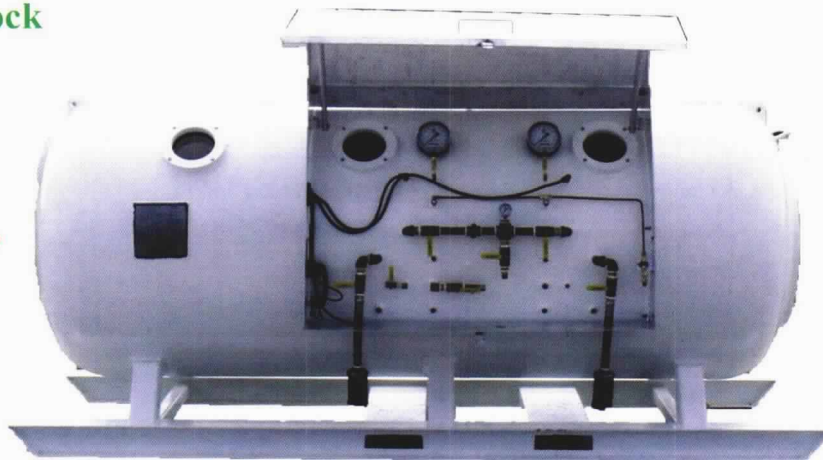
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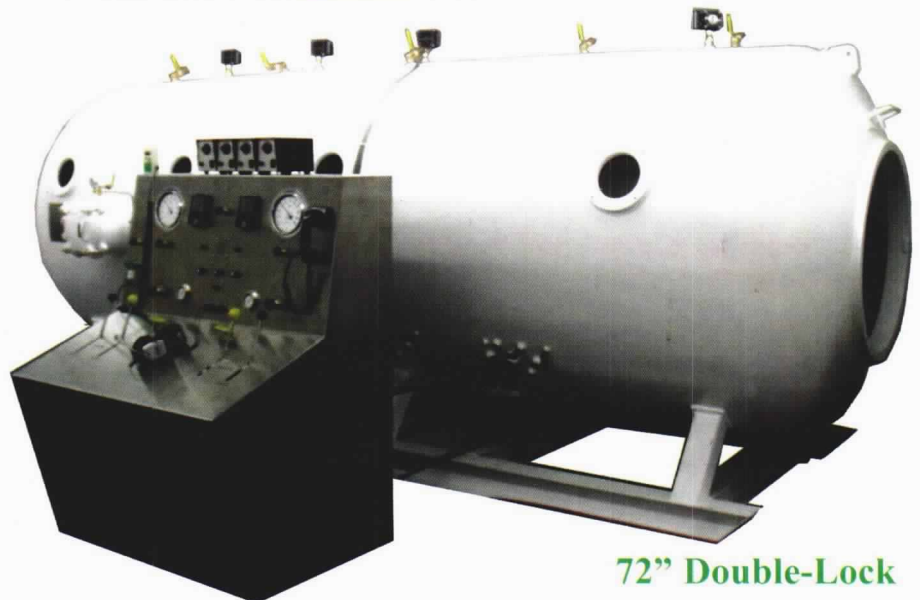
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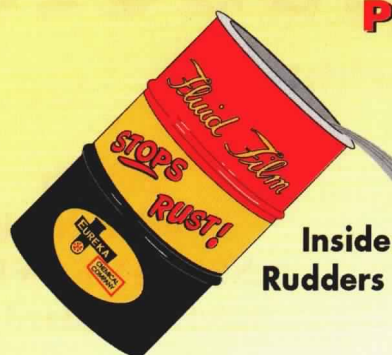
2396 Belle Chasse Hwy., P.O. Box 1663, Gretna, LA, 70056

Tel: (504)392-2800, Fax: (504)392-3920, Toll Free: **888-221-8120**

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*National stock numbers listed where applicable to type of FLUID FILM and container size.*

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Applied by spray, flotation, fill and drain, or brush. Use as a descaler over heavily corroded surfaces. Up to 2 years service.

NSN-8030-01-387-1051 ..... 5-gal. pail (20 liter)

NSN-8030-01-386-3877 ..... 1-gal. 4/case

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Applied by spray or brush over moderately corroded surfaces after removal of thick rust scale. Up to 3-5 years service.

NA ..... 5-gal. pail (20 liter)

NSN-8030-01-381-7311 ..... 1-gal. 4/case

#### FLUID FILM Gel BW

Applied by spray or brush over rusted surfaces. Long term protection. Up to 3-10 years service; submersibles to 20 years.

NA ..... 5-gal. pail (20 liter)

#### FLUID FILM Gel BEW

Applied to external appendages and components by brush.

NSN-8030-01-381-3160 ..... 5-gal. pail (20 liter)

### Wire Rope Dressings

#### FLUID FILM Liquid A

Applied by lubricator, glove, or dipping. Core penetration without lubricator.

NSN-8030-01-387-1051 ..... 5-gal. pail (20 liter)

NSN-8030-01-386-3877 ..... 1-gal. 4/case

#### FLUID FILM WRN-EP (extreme pressure)

Commercial dressing applied by lubricator or glove.

NA ..... 5-gal. pail (20 liter)

#### FLUID FILM WRO-EP (extreme pressure)

Government specification Mil-G-18458 (SH) applied by lubricator or glove.

NSN-9159-00-530-6814 ..... 35 lb. pail (15.5 kg)

### General Maintenance Aerosol/Non-Aerosol

#### FLUID FILM AS (aerosol)

NSN-8030-01-387-1131 ..... 11-3/4 oz. 12/case

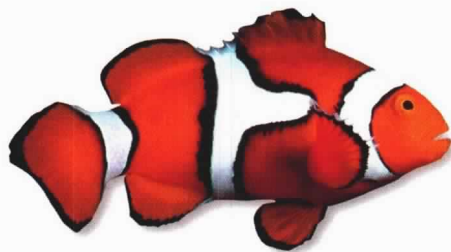
#### FLUID FILM NAS (non-aerosol)

NSN-8030-01-381-6357 ..... 12 oz. 12/case

NSN-8030-01-386-3871 ..... 1-gal. 4/case

NSN-8030-01-387-1070 ..... 5-gal. pail (20 liter)





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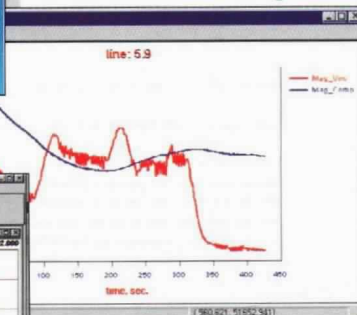


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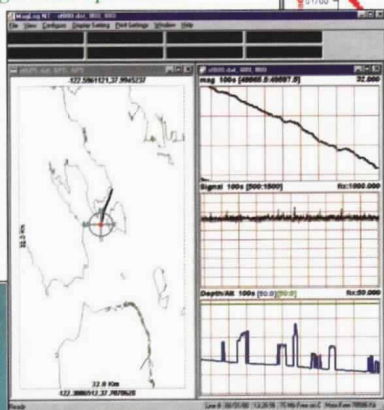
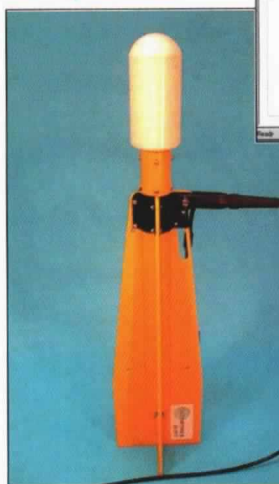


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42A Cherry Hill Drive, Danvers, Massachusetts, 01923, United States

Tel: +1 978 777 1996

Web: [www.epclabs.com](http://www.epclabs.com)

Exhibiting its newest line of network printers and acquisition systems. The Model 1086NT builds upon the popular 1086 Series by incorporating a new ethernet socket (TCP/IP) Interface. The Model MP-1086 is a multi-purpose geophysical recorder capable of interfacing directly to analog side-scan sonars, printing high resolution records, and storing data digitally. With a high speed parallel and network interface the Model 9206 is the fastest printing and fastest selling wide-bed (20 display) thermal recorder yet.

**Keywords:** Data Acquisition/Management; Plotters; Sub-bottom Profile Equipment

## Booth 223

## ESRI

Professional Services, 380 New York Street, Redlands, California, 92373, United States

Tel: +1 703 506 9515

Web: [www.esri.com](http://www.esri.com)

With annual sales of more than \$427 million, ESRI remains the world leader in the geographic information system (GIS) software industry. Our business involves the development and support of GIS software for all types of organizations - from the one-person office to multinational corporations to innovative Internet GIS solutions.

**Keywords:** Bathymetry; Computer Software; Data Acquisition/Management; Earth Sciences; Electronic Charting; Environmental Modelling; Meteorology; Oil Spill Counter- Measures; Tracking Software

## Booth 812

## Eureka Chemical Co

234 Lawrence Avenue, South San Francisco, California, 94083, United States

Tel: +1 650 761 3536

Web: [www.eurekafluidfilm.com](http://www.eurekafluidfilm.com)

Corrosion preventives, lubricants and penetrants manufactured and marketed under the trade name FLUID FILM. Products are non-solvent base being environmentally friendly. Applications are made to all metals whether coated or uncoated, clean or rusted surfaces. Examples - gears, davits, interior of rudders, wire-rope, hatch coaming, anchor chain-locker, etc.

**Keywords:** Corrosion Detection & Protection

## Booth 809

## Eurocanique S.A.

645 rue Mayor de Montricher, TECHINDUS Bat. B 21,

Aix-en-Provence Cedex 3, F-13854, France

Tel: +33 442 39 49 85

Web: [www.macartney.com](http://www.macartney.com)

Exhibiting on the Macartney A/S Booth.

## Booth 213

## EvoLogics GmbH

Storkower Str. 207, Berlin, D-10369, Germany

Tel: +49 30 31472658

Web: [www.evologics.de](http://www.evologics.de)

High performance spread-spectrum hydroacoustic communication systems for deep and shallow water channels.

**Keywords:** Autonomous Underwater Vehicles; Diving; Hydro-Acoustics; Remote Data Acquisition; Signal Processing; Transducers; Underwater Communications

## Booth 218

## Falmat Inc

1873 Diamond Street, San Marcos, California, 92069, United States

Tel: +1 760 471 5400

Web: [www.falmat.com](http://www.falmat.com)



Manufacturer of custom electrical, electro-mechanical and electro-optical cables for the oceanographic and geophysical applications including ROV, magnetometer, instrumentation, diver video, lighting, side-scan sonar, tow and fiber optic. A leading manufacturer of braided haired fairing.

Falmat rugged XtremeGreen video cables offer the best solution for inspecting dams, waterways, fisheries and other demanding applications.

**Keywords:** Cables, Connectors; Fibre Optic

## Booth 137

## Falmouth Scientific Inc

1400 Route 28A, POB 315, Cataumet, Massachusetts, 02534, United States

Tel: +1 508 564 7640

Web: [www.falmouth.com](http://www.falmouth.com)

Since 1989, Falmouth Scientific, Inc. has been an International leader in the development and manufacturing of precision oceanographic instrumentation. FSI's full range of products is used around the globe, in environments ranging from estuarine to full ocean depths. Core products include current meters, CTDs, profiling CTDs, wave gauges and other oceanographic sensors. Through a recent merger with Acoustikos Inc, the company also offers offshore acoustic instrumentation, system integration and leading edge special engineering capabilities to address a wide array of underwater applications.

Also exhibiting is Acoustikos.

**Keywords:** Acoustics; Autonomous Underwater Vehicles; Conductivity Meters; Current Meters; Fluorometers; Oxygen Meters; Salinometers; Sound Velocity Probes; Temperature Measurement; Water Measurement, Sampling; Wave & Wave Power

## Booth 322

## Farsounder Inc.

95 Hathaway Centre, Suite 5, Providence, Rhode Island, 02907, United States

Tel: +1 401 784 6700

Web: [www.farsounder.com](http://www.farsounder.com)

Exhibiting on the Materials Systems Inc. Booth.

## Booth 229

## Fischer Connectors

115 Perimeter Center Place, Suite 1060, Atlanta, Georgia, 30346, United States

Tel: +1 770 352 0606

Web: [www.fischerconnectors.com](http://www.fischerconnectors.com)

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**Keywords:** Cables, Connectors; Data Acquisition/Management; Fibre Optic

## Booth 807

## Flotation Technologies Inc

432 Elm Street, PO Box 1171, Biddeford, Maine, 04005, United States

Tel: +1 207 282 7749

Web: [www.flotec.com](http://www.flotec.com)

World leaders in the design and manufacture of deepwater buoyancy systems, specializing in FlotecTM syntactic foams. Products include ADCP buoys, trawl-resistant bottom mounts and Quick-Loc cable floats. Extensive engineering, design and custom fabrication capability. Other products include buoyancy collars, ROV buoyancy and products constructed from urethane foams and PU elastomers.

Also exhibiting is Dunlaw Engineering.

**Keywords:** Beacons & Buoys; Buoyancy Materials; Composite Materials; Mooring Equipment; Pressure Testing Facilities

## Booth 719

## General Oceanics

1295 NW 163 Street, Miami, Florida, 33169, United States

Tel: +1 305 621 2882

Web: [www.generaloceanics.com](http://www.generaloceanics.com)

Exhibiting the new 1018 Intelligent Rosette, new 2135 handheld Electronic Flowmeter, the Seakeeper sea surface and Atmospheric monitoring station, 316 CTD, UCM60 Current meter, flowmeters, plankton and oil spill sampling nets and hydroblocks.

Also Exhibiting is Idronaut.

**Keywords:** Coastal Monitoring; Conductivity Meters; Cranes, Hoists & Winches; Current Meters; Environmental Measurement; Flow Meters; Water Measurement, Sampling

## Booth 942

## Geo-Acoustics Asia Pacific Pte Ltd

30 Loyal Way #07-12, 508769, Singapore

Tel: +65 546 3687

Web: [www.geoacoustics.com](http://www.geoacoustics.com)

Exhibiting on the GeoAcoustics Ltd Booth.

## Booth 203

## GeoAcoustics Inc

25 Delano Avenue, Suite 200, Revere, Massachusetts, 02151, United States

Tel: +1 781 286 2944

Web: [www.geoacoustics.com](http://www.geoacoustics.com)

Exhibiting on the GeoAcoustics Ltd Booth.

## Booth 203

## GeoAcoustics Ltd Indian Branch

503 Arenja Corner, Sector 17, Vash, Navi Mumbai, 400705, India

Tel: +91 222 788 190

Exhibiting on the GeoAcoustics Ltd Booth.

## Booth 203

Fax: +91 222 788 193

email: [geoacousticsindia@totalise.co.uk](mailto:geoacousticsindia@totalise.co.uk)





## DSEI 2003

8th Floor, Apex Tower, New Malden, Surrey, KT3 4DQ, United Kingdom  
Tel: +44 (0)20 8949 9898 Fax: +44 (0)20 8949 9899  
Web: www.dsei.co.uk email: enquiries@dsei.co.uk



DSEI is a key event in the international exhibition calendar and offers a unique combination of exhibits, displays, equipment demonstrations, workshops and conferences, all at a single central location. DSEI 2003 (9 - 12 September 2003, ExCel, London Docklands) promises to be 25% larger than its predecessor and many new developments are planned, including increased representation from the aerospace sector, areas focusing on unmanned systems, and training and simulation.

In 2001 it confirmed its position as one of the leading defence shows in the world. At DSEI 2003 over 700 exhibitors from 20 plus countries, 20 national pavilions, 20,000 visitors, 70 Delegations from 50 countries and 8 warships from 6 countries are expected.

*Exhibiting on the Spearhead Exhibitions Booth.*

**Keywords:** Exhibitions/Events/Conferences; Information Services

## Booth 337

## Dunlaw Engineering Limited

Thainstone Business Centre, Inverurie, Aberdeenshire, Scotland, AB51 5TB, United Kingdom

Tel: +44 (0)1467 641183  
Web: www.dunlaw.com

Fax: +44 (0)1467 641185  
email: Brian@dunlaw.com

Engineer, design, test and manufacture to ISO 9001 a range of high performance elastomer products, bend restrictors, bend stiffeners, J tube seals, pipeline, riser and cable clamping systems, umbilical protection sleeves, cuproprene anti-fouling coating and vortex shedding suppression systems.

*Exhibiting on the Flotation Technologies Booth.*

**Keywords:** Cables, Connectors; Composite Materials; Marine Coatings; Markers; Pressure Testing Facilities; Umbilicals

## Booth 719

## Dynacon Inc

831 Industrial Blvd, Bryan, Texas, 77803, United States

Tel: +1 979 219 2003

Fax: +1 979 219 0947

Web: www.dynacon.com

email: dcobb@dynacon.com

Designs and manufactures winches, A-Frames, active and passive heavy compensation systems, motion-compensated cranes, hydraulic power units, overboarding sheaves, specialized launch & recovery systems. Applications include oceanography, all ROV work classes, sub sea exploration/recovery, cable burial/repair, atmospheric dive systems, and cable/umbilical lubrication systems. New products include: Model 7021 A-Frame which offers the rapid mobilization and self-erecting features of the Model 6021 A-Frame with additional telescoping boom providing 4.5m outreach and the ability to park and disassemble various payload configurations. The docking head assembly has been upgraded to include a flagging overboarding sheave and can accommodate 30 degree cable exit angles in all directions.

**Keywords:** Cranes, Hoists & Winches; Hydraulic Systems; Launch & Recovery Systems; Umbilicals; Winches & Accessories

## EdgeTech

4 Little Brook Road, Wareham, Massachusetts, 02571, United States

Tel: +1 508 478 9500

Fax: +1 508 478 1456

Web: www.edgetech.com

email: info@edgetech.com

Designs, develops and manufactures precision acoustic products, instruments and systems for the acquisition of underwater data in commercial, naval, hydrographic and scientific applications. Major products include side scan sonars, sub-bottom profilers and integrated survey systems. Featuring its latest developments in high resolution side scan sonars.

*Also exhibiting is ORE Offshore.*

**Keywords:** Acoustics; Bathymetry; Geology/Geophysics; Hydrography; Mines & MCM; Sonar & Systems; Sub-bottom Profile Equipment; Survey; Towed Bodies; Transducers

## Booth 623

## EGS (International) Ltd

Woolmer Way, Bordon, Hampshire, GU35 9QE, United Kingdom

Tel: +44 (0)1420 489329

Fax: +44 (0)1420 489434

Web: www.egssurvey.com

email: info@egssurvey.co.uk

The EGS group undertakes worldwide marine survey, oceanography and environmental monitoring for public and private sector clients in areas such as civil engineering, transport, telecommunications, power, water utility, coastal management and aggregates. Typical projects include: hydrographic and geophysical surveys for site investigations; cable and pipeline route planning; wave and tidal current monitoring; sea bed response and sediment transport patterns; water and seabed sampling; and environmental monitoring for baseline checks, impact assessments and mitigation options. EGS works in freshwater, coastal and ocean environments and undertakes desk top studies, field data acquisition, interpretation and advice and project management.

*Exhibiting on the C & C Technologies Booth.*

**Keywords:** Coastal Monitoring; Coastal Protection; Consultancy Services; Earth Sciences; Environmental Measurement; Geology/Geophysics; Hydrographic Survey Software; Seabed Sampling; Seismic Survey; Survey; Water Measurement, Sampling

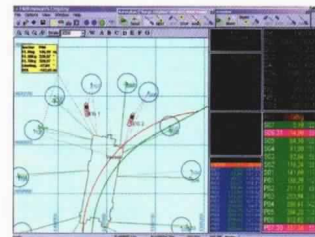
## Booth 427

## EIVA A/S

Teglbækvej 8-10, Hasselager, DK 8361, Denmark

Tel: +45 8628 2011

Web: www.eiva.dk



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*Exhibiting on the Harvey-Lynch Booth.*

**Keywords:** Data Acquisition/Management; Environmental Measurement; Hydrographic Survey Software; Instrumentation Systems; Meteorology; Mines & MCM; Navigation; Towed Bodies

## Booth 209

Fax: +45 8628 2111

email: herskind@eiva.dk

## Elkins Engineering Co Ltd

## Booth 720

Unit 3 Enterprise Park, Blackmoor Road, Ebblake Industrial Estate, Verwood, Dorset, BH31 6YS, United Kingdom

Tel: +44 (0)1202 813640

Fax: +44 (0)1202 823971

Web: www.elkinsengineering.co.uk  
email: sales@elkinsengineering.co.uk

Established in 1966 Elkins is a small precision engineering company with BS EN ISO 9001: 2000 Registered Approval providing a comprehensive sub-contract machining service to the marine, oceanology, subsea and communications industries. Carry out prototype, conventional, small, medium and large batch CNC machining.

**Keywords:** Mooring Equipment; Pressure Vessels; Submersible Equipment



## Emerson & Cuming Composite Materials Inc Booth 723

59 Walpole Street, Canton, Massachusetts, 02021, United States

Tel: +1 781 821 4250

Fax: +1 781 821 0737

Web: www.emerson.com

email: sales@emerson.com

ECCM is a highly specialist materials manufacturer servicing the oceanographic, aerospace, military and offshore markets. Developing and manufacturing a range of ultra high performance glass microspheres and syntactic based systems, ECCM's products are used in a wide variety of markets.

*Exhibiting on the CRP Group Booth.*

**Keywords:** Autonomous Underwater Vehicles; Beacons & Buoys; Buoyancy Materials; Composite Materials; Dynamic Positioning; Fenders; Mooring Equipment; Ocean Modelling; ROVs; Seismic Survey; Towed Arrays; Towed Bodies; Transponders; Umbilicals

## ENDECO/YSI Inc

13 Atlantis Drive, Marion, Massachusetts, 02738, United States

Tel: +1 508 748 0366 x 242

Fax: +1 508 748 2543

Web: www.ysi.com

email: rrace@ysi.com

Provides complete turnkey systems solutions, typically buoys, to measure water quality and quantity. Real Time data from YSI Sondes with C, T, DO, pH, turbidity, chlorophyll, depth and from the SonTek acoustic doppler products, can be telemetered via UHF, cellular or satellite. Also manufacture a complete line of towed underwater vehicles, and V-Fins.

*Exhibiting on the SonTek Booth.*

**Keywords:** Aquaculture; Beacons & Buoys; Coastal Monitoring; Coastal Protection; Data Acquisition/Management; Environmental/Pollution; Oxygen Meters; Pollution Control; Profiling Systems; Telemetry Equipment; Towed Arrays

## Booth 841

## The Environmental Careers Organization Booth 833

179 South Street, Boston, Massachusetts, 02111, United States

Tel: +1 617 426 4783 x 123

Fax: +1 617 426 8159

Web: www.eco.org

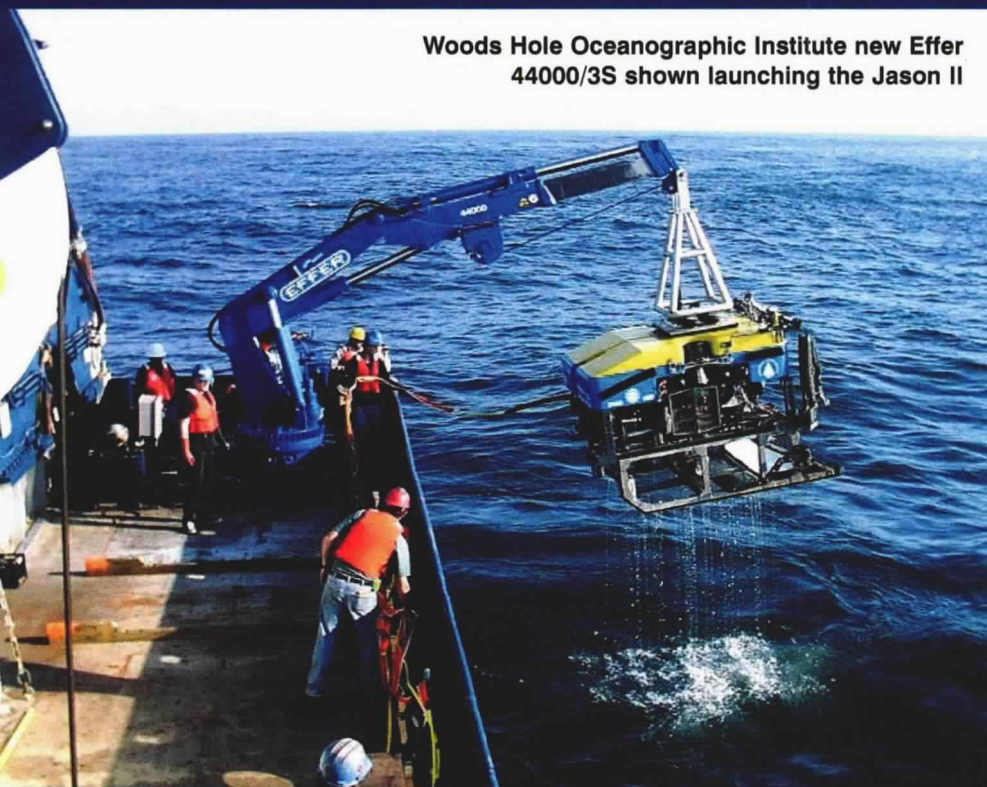
The Environmental Careers Organization (ECO) is a private, national, non-profit organization dedicated to the development of a diverse new generation of environmental professionals, including those in the ocean sciences. Since 1972, ECO has managed a wide variety of internship/fellowship programs in collaboration with government agencies, nonprofits and private companies.

**Keywords:** Personnel & Recruitment





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Tel: +1 403 259 3311

Web: [www.csi-wireless.com](http://www.csi-wireless.com)

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**Keywords:** Global Positioning Systems; Navigation; Position Fixing Systems; Satellite Communications; Satellite Navigation

## Booth 545

Fax: +1 403 259 8866

email: [tseheult@csi-wireless.com](mailto:tseheult@csi-wireless.com)

## Dredging Port Construction (DPC)

DMG World Media Ltd, Queensway House, 2 Queensway, Redhill, Surrey RH1 1QS, UK

Tel: +44 (0) 1737 855 432

email: [daviddrake@uk.dmgworldmedia.com](mailto:daviddrake@uk.dmgworldmedia.com)

DPC brings to its readers monthly in-depth coverage of the latest technical and market developments; on-going research projects; conference & exhibition reports and the latest in equipment and services. DPC's broad-based editorial features programme is designed for port & harbour authorities, dredging contractors, marine civil engineering consultants, contractors and other marine professionals.

**Keywords:** Publications

## Booth 224

Fax: +44 (0) 1737 855 025

## Delta Wave Communications

6502 Hwy 90 East #114, Morgan City, Louisiana, 70380, United States

Tel: +1 985 384 4100

Web: [www.deltawavecomm.com](http://www.deltawavecomm.com)

Specializes in marine and terrestrial remote communications solutions. We offer the latest Inmarsat (including the new Regional BGan), Iridium, Globalstar and broadband services and equipment for your global communications requirements. Specializing in the offshore oil and gas industry, our satisfied customers span the globe.

**Keywords:** Marine Communications; Satellite Communications; Telecommunications

## Booth 456

Fax: +1 985 384 4102

email: [tom.clark@deltawavecomm.com](mailto:tom.clark@deltawavecomm.com)

## Druck Inc

4 Dunham Drive, New Fairfield, Connecticut, 06812, United States

Tel: +1 203 746 0400

Web: [www.pressure.com](http://www.pressure.com)

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**Keywords:** Calibration Devices; Instrumentation Systems; Sensors; Transducers

## Booth 212

Fax: +1 203 746 2494

email: [hickeyl@druck.com](mailto:hickeyl@druck.com)

## Divers Supply, Inc.

2396 Belle Chasse Hwy, P.O. Box 1663, Gretna, Louisiana, 70056, United States

Tel: +1 504 392 2800

Web: [www.diverssupplyinc.com](http://www.diverssupplyinc.com)

Dedicated to providing top quality equipment with professional service, the Divers Supply team has over 100 years of combined experience in commercial diving, ranging from knee deep to 1500 feet of seawater. We can solve your equipment supply problems, as well as address your custom equipment needs, from fittings to complete outfitting.

**Keywords:** Diving; Hydraulic Systems; Hyperbaric Equipment; Life Support Systems; Oxygen Meters; Pressure Vessels; Salvage; TV & Video Systems; Umbilicals; Underwater Communications

## Booth 803

Fax: +1 504 392 3920

email: [RMistretta@diverssupplyinc.com](mailto:RMistretta@diverssupplyinc.com)



## CORE/NOPP

1755 Massachusetts Ave NW, Suite 800, Washington, District of Columbia, 20036, United States

Tel: +1 202 332 0063

Web: [www.coreocean.org](http://www.coreocean.org)

Fax: +1 202 332 9751

email: [jkopelson@coreocean.org](mailto:jkopelson@coreocean.org)

CORE is the Washington, DC-based association of US oceanographic research institutions, universities, laboratories and aquaria. Our 72 members represent the nucleus of US research and education about the ocean. The National Oceanographic Partnership Program is a co-operative effort between 14 federal agencies, academia and private industry to coordinate national oceanographic research and education programs. Since it was established in 1997, the consortium has awarded nearly \$80 million to more than 50 research and educational projects in ocean science.

**Keywords:** Government Organization; Oceanography; Research & Development Institutions

## Booth 641

## The Cortland Companies

PO Box 330, 44 River Street, Cortland, New York, 13077, United States

Tel: +1 607 753 8276

Web: [www.thecortlandcompanies.com](http://www.thecortlandcompanies.com)

Fax: +1 607 753 3183

Designers and producers of speciality cables, ropes and umbilicals utilising synthetic and steel strength members. Leading producers of speciality products using Kevlar, Vectran and Spectra and Zylon. The Cortland Companies are Cortland Cable Company Inc, Cortland Fibron BX Ltd and Puget Sound Rope Inc.

**Keywords:** Cables, Connectors; Ropes & Chains; Umbilicals

## Booth 448

## C-Products Ltd

27 Woolmer Way, Bordon, Hants, GU35 9QE, United Kingdom

Tel: +44 (0)1420 488 083

Web: [www.c-products.com.hk](http://www.c-products.com.hk)

Fax: +44 (0)1420 488 054

email: [AndySharp@C-Products.com.hk](mailto:AndySharp@C-Products.com.hk)

[www.C-Products.com.hk](http://www.C-Products.com.hk) will be displaying their proprietary C-Boom and C-View systems. C-Boom LVB is the latest innovation in boomers. A lightweight, low voltage system, with a catamaran mounted source, providing quality sub-seafloor geology at a competitive price. C-View SDMP is a 'windows' based system, accepting multiple inputs; it facilitates acquisition, review, interpretation, charting, reporting and imaging of the data.

*Exhibiting on the C & C Technologies Booth.*

**Keywords:** Global Positioning Systems; Mapping Systems; Profiling Systems; Seismic Survey; Sub-bottom Profile Equipment

## Booth 427

## CRP Balmoral Inc

1902 Rankin Road, Houston, Texas, 77073, United States

Tel: +1 713 780 0600

Web: [www.balgroupint.com](http://www.balgroupint.com)

## Booth 723

Fax: +1 713 780 0681

email: [sales@balgroupint.com](mailto:sales@balgroupint.com)

CRP Balmoral Inc, formerly Balmoral Group International Inc (BGII), recently joined the CRP Group significantly enhancing the overall group capabilities. CRP Balmoral Inc's purpose-built manufacturing facilities in Houston offer a wide range of tailored thermal insulation and buoyancy solutions used throughout the offshore oil and gas industries.

*Exhibiting on the CRP Group Booth*

**Keywords:** Autonomous Underwater Vehicles; Beacons & Buoys; Buoyancy Materials; Composite Materials; Dynamic Positioning; Fenders; Marine Drilling & Blasting; Mooring Equipment; Ocean Modelling; ROVs; Seismic Survey; Towed Arrays; Towed Bodies; Transducers; Umbilicals

## CRP Group Ltd

Stanley Way, Skelmersdale, Lancashire, WN8 8EA, United Kingdom

Tel: +44 (0)1695 712 000

Web: [www.crpgroup.co.uk](http://www.crpgroup.co.uk)

Fax: +44 (0)1695 712 111

email: [sales@crpgroup.co.uk](mailto:sales@crpgroup.co.uk)

Specialising in surface and subsea buoyancy systems CRP has over 30 years behind them, offering a varied yet targeted service and product range to meet the exacting requirements of the oil, gas and oceanographic industries. CRP is further supported by divisional offices located in Houston, France and Norway and an ever expanding agent network throughout Brazil and Australasia.

**Keywords:** Autonomous Underwater Vehicles; Beacons & Buoys; Buoyancy Materials; Composite Materials; Fenders; Mooring Equipment; Pipe laying; ROVs; Towed Arrays; Transponders

## Booth 723

## CRP Group Inc

2901 Wilcrest Suite 285, Houston, Texas, 77042, United States

Tel: +1 713 780 0600

Web: [www.crpgroupinc.com](http://www.crpgroupinc.com)

Fax: +1 713 780 0681

email: [sales@crpgroupinc.com](mailto:sales@crpgroupinc.com)

The US arm of the internationally recognised CRP Group Ltd offers engineering, project management and local support and development of the whole Group's activities.

**Keywords:** Autonomous Underwater Vehicles; Beacons & Buoys; Buoyancy Materials; Composite Materials; Dynamic Positioning; Fenders; Mooring Equipment; Ocean Modelling; ROVs; Seismic Survey; Towed Arrays; Towed Bodies; Transducers; Umbilicals

## Booth 723

Established in 1966 we are a small Precision Engineering Company with BS EN ISO 9001: 2000 Registered Approval carrying out Conventional, Prototype, Small, Medium and Large batch CNC machining.

Providing a comprehensive sub-contract machining service to the Marine, Oceanology, Sub-Sea and Communications industries, we are well equipped to work in many materials including Titanium, Stainless Steel, Mild Steel, High Tensile Steel, Bronze, Brass, Nylon, Tufnol etc.

## NEW PRODUCT DEVELOPMENTS

5 TON SWL Pressure Balanced Titanium Swivel

Development of our EE1 Type swivel incorporating an inductive link slip ring assembly

## ELKINS ENGINEERING SERVICES LIMITED UK

Unit 3, Enterprise Park, Blackmoor Road, Ebblake Industrial Estate, Verwood, Dorset BH31 6YS

Telephone: +44 (0)1202 813640 and 825322

Fax: +44 (0)1202 823971

Web: [www.elkinsengineering.co.uk](http://www.elkinsengineering.co.uk)

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## OWN PRODUCT

A Non-Corrosive Pressure Balanced Titanium Swivel S.W.L. 2 TON developed by this company for use by the SOUTHAMPTON OCEANOGRAPHY CENTRE U.K.

**SPECIFICATIONS** The Swivel features a rotating spindle which is located exactly within twin needle roller bearings with the inline forces being carried independently via a single heavy duty thrust race. The complete assembly is oil filled and due to its unique pressure balanced system can insure freedom of movement even at the greatest ocean depths.

Material	Titanium Grade 125
SWL	2 Tons
Max Recommended Working Depth	6000 m
Weight	2.15 kg
Overall length	211 mm
Max Diameter	70 mm

**APPLICATIONS** Ideal for long term deployment in sea water, e.g. Current meters, moored buoys, underwater towing rope and cable laying, fishing (benthic nets) North Sea oil and Gas industry, water authorities.

These swivels have been used in deep-sea water immersed for six to eight years and are well proven. We are now producing in larger batch quantities due to increased demand and are able to offer them at a competitive price. World-renowned companies already using these swivels include: Southampton Oceanography Centre, UK. North Pole Station 355640 Applied Physics Laboratory of Washington, University of Alaska, Institute of Marine Science and British Antarctic Survey. We would welcome any enquiries you may have and assure you of our best attention at all times.



VISIT US ON STAND NUMBER 720



## GeoAcoustics Ltd

Shuttleworth Close, Gaptown Hall Industrial Estate, Great Yarmouth, Norfolk, NR31 0NQ, United Kingdom

Tel: +44 (0)1493 600666

Web: [www.geoacoustics.co.uk](http://www.geoacoustics.co.uk)

Fax: +44 (0)1493 651100

email: [sales@geoacoustics.co.uk](mailto:sales@geoacoustics.co.uk)

Leading manufacturer of seabed survey equipment including side scan sonars, sub bottom profilers and swath bathymetry systems along with a full range of ancillary equipment. Introducing the new GeoChirp II high power chirp profiler system for both shallow and deep water surveys. Also on display will be the GeoAcoustics dual frequency side scan sonar, the full range of GeoPro Sonar processors and the GeoPrinter, our highly reliable photo quality thermal graphic recorder. Our low cost swath bathymetry system GeoSwath will be on show together with an impressive array of data collected by our customers and ourselves.

Also Exhibiting are Geo-Acoustics Inc., Geo-Acoustics Asia Pacific Pte Ltd, and GeoAcoustics Ltd Indian Branch.

**Keywords:** Acoustics; Bathymetry; Computer Equipment; Computer Software; Data Acquisition/Management; Geology/Geophysics; Hydrography; Image Enhancement; Mines & MCM; Sonar & Systems; Sub-bottom Profile Equipment

## Booth 203

## Harvey-Lynch Inc

12718 Century Drive, Stafford, Texas, TX 77477, United States

Tel: +1 281 240 5441

Web: [www.harvey-lynch.com](http://www.harvey-lynch.com)

## Booth 209

Fax: +1 281 240 0932

email: [rogerc@harvey-lynch.com](mailto:rogerc@harvey-lynch.com)



## Geometrics

2190 Fortune Drive, San Jose, California, 95131, United States

Tel: +1 408 954 0522

Web: [www.geometrics.com](http://www.geometrics.com)

Fax: +1 408 954 0902

email: [sales@mail.geometrics.com](mailto:sales@mail.geometrics.com)



Geometrics, a member of the OYO Corporation, manufactures, sells and services portable geophysical instruments for land, marine and air investigations of the subsurface. The product line includes proton precession and cesium magnetometers, high-resolution seismographs and electrical conductivity imaging and resistivity systems.

Geometrics' instruments are used around the world for natural resource exploration, geotechnical and environmental assessments, ordnance detection, locating archeological and treasure sites, and teaching and research.

**Keywords:** Geology/Geophysics; Instrumentation Systems; Magnets & Magnetometers; Marine Surveyors; Mineral Prospecting; Seismic Survey; Sensors; Towed Arrays; Towed Bodies

## Booth 707

## Geonav Marine Systems

11211 Katy Freeway, Suite 430, Houston, Texas, 77079, United States

Tel: +1 713 722 9697

Web: [www.geonav.com](http://www.geonav.com)

Fax: +1 713 722 9699

email: [morton@geonav.com](mailto:morton@geonav.com)



Custom software and hardware for offshore positioning. Eznav software, full featured but with an emphasis on ease of use. Microprocessor based interfaces for gyro data, event generation, and custom device pre-processing. Voyage data recorders for semi submersibles.

Also Exhibiting are Hydro Projects and Mercator.

**Keywords:** Computer Equipment; Consultancy Services; Data Acquisition/Management; Dynamic Positioning; Electronic Charting; Fibre Optic; Gyrocompasses; Hydrographic Survey Software; Instrumentation Systems; Navigation; Offshore Vessels; Pipe laying; Research Vessels; Seismic Survey; Telemetry Equipment; Tracking Software

## Booth 454

## Hydro Projects Inc

11211 Katy Fwy, Suite 430, Houston, Texas, 77079, United States

Tel: +1 713 783 1297

Web: [www.hydroprojects.com](http://www.hydroprojects.com)

Fax: +1 713 722 9699

email: [phil.garrod@hydroprojects.com](mailto:phil.garrod@hydroprojects.com)

Established in 1985, Hydro Projects provides consultancy and experienced personnel services to the land and offshore survey, subsea construction, hydrographic, dredging, seismic, ROV and HSE markets worldwide. Operating from offices in Houston, UK and the Far East, they offer project management, client representation, specialist personnel and contract survey and geophysical personnel.

Exhibiting on the Geonav Marine Systems Booth.

**Keywords:** Consultancy Services; Geology/Geophysics; Geotechnics; Hydrographic Survey Software; Hydrography; Marine Surveyors; Personnel & Recruitment; Port & Harbour Development; Survey; Training

## Booth 454

## Hydroid Inc

81 Technology Park Drive, East Falmouth, Massachusetts, 02536, United States

Tel: +1 508 457 9191

Web: [www.hydroidinc.com](http://www.hydroidinc.com)

## Booth 234

Fax: +1 508 457 6622

email: [sales@hydroidinc.com](mailto:sales@hydroidinc.com)



Hydroid, Inc. is an East Falmouth based company established by the original inventors of the REMUS system. The powerful, light-weight, low cost REMUS Autonomous Underwater Vehicle (AUV) has now entered the commercial world, and is available only through Hydroid, Inc. With over 20 system sales to their credit, Hydroid

offers their customers an unbeatable combination of technical expertise, quality production and world class service and support.

**Keywords:** Autonomous Underwater Vehicles; Hydrography; Mines & MCM; Survey; Transponders

## GITC bv / Hydro International

Nieuwedijk 43, Lemmer, 8531 HK, Netherlands

Tel: +31 514 561 854

Web: [www.gitc.nl](http://www.gitc.nl)

Fax: +31 514 563 898

email: [floris.siteur@gitc.nl](mailto:floris.siteur@gitc.nl)

Media Partner for Oceanology International. Besides the OI Show Daily, GITC bv publishes Hydro International, the well-known international informative journal for hydrography and the International Hydrographic Review, an international journal publishing mainly peer reviewed original works on all aspects of hydrography and associated disciplines, ranging from the latest technical developments to history.

**Keywords:** Consultancy Services; Hydrography; Publications

## Booth 722

## Guildline Instruments Inc.

103 Commerce Street, Suite 160, Lake Mary, Florida, 32746, United States

Tel: +1 407 333 3327

Web: [www.guildline.com](http://www.guildline.com)

Fax: +1 407 333 3309

email: [tstark@guildline.com](mailto:tstark@guildline.com)

World leader in laboratory salinity, conductivity standards, programmable towed instrumentation platforms, high accuracy temperature standards, standard seawater and calibration services. Exhibiting with Richard Branner Research, RBR provides precision instruments for freshwater, marine and cryospheric studies, submersible data logging equipment, wave gauge, geophysics equipment, mining equipment, custom engineering.

Also exhibiting is Richard Branner Research.

**Keywords:** Calibration Devices; Conductivity Meters; Depth Indicators & Recorders; Environmental Measurement; Profiling Systems; Salinometers; Temperature Measurement; Torpedoes; Towed Bodies; Wave & Wave Power

## Booth 550

## Hydroquip

Hydropark, Tern Place, Denmore Road, Bridge of Don, Aberdeen, AB23 8JX, United Kingdom

Tel: +44 (0)1224 825 321

Web: [www.hydroquip.ltd.uk](http://www.hydroquip.ltd.uk)

Fax: +44 (0)1224 703 776

email: [info@hydroquip.ltd.uk](mailto:info@hydroquip.ltd.uk)

Primarily a survey equipment rental company, dedicated to ROV sensors, high accuracy surface and subsea positioning such as TS5340 pipetrackers, laser range & bearing, Tritech sonar & bathymetry, Sonardyne acoustics LBL & HPR, CTDS, video and data transmission, gyrocompasses, Artemis, Micro-fix, ROV & underwater gyros, subsea attitude positioning systems. Hydroquip also develop underwater ROV and acoustic gyros to 2,200m (SAPS), Hydrotel data and video transmission systems. ISO 9002. Hydroquip has a 50% stake in Survey Equipment Services in Houston.

Exhibiting on the Survey Equipment Services Booth.

**Keywords:** Acoustics; Bathymetry; Compasses; Gyrocompasses; Inclometers; Lasers; Position Fixing Systems; Sound Velocity Probes; Telemetry Equipment

## Booth 228





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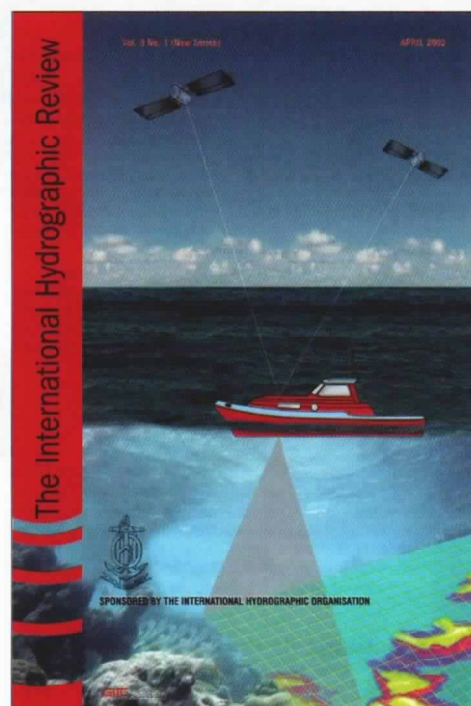
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## **GITC bv**

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Nieuwedijk 43,  
8531 HK Lemmer  
The Netherlands

Tel: +31 (0)514 561854  
Fax: +31 (0) 514 563898  
E-mail: [jeroen.zaagemans@gitc.nl](mailto:jeroen.zaagemans@gitc.nl)  
Website: [www.gitc.nl](http://www.gitc.nl)



## Hydrovision Ltd

Howe Moss Avenue, Kirkhill Ind Estate, Dyce, Aberdeen,  
AB21 0GP, United Kingdom

Tel: +44 (0)1224 772150

Web: [www.hydrovision.co.uk](http://www.hydrovision.co.uk)

Fax: +44 (0)1224 772166

email: [rovs@hydrovision.co.uk](mailto:rovs@hydrovision.co.uk)

Hydrovision and Seaeeye Marine's core business is the design and manufacture of ROV Systems. The range extends from small portable Eyeball Class systems to full specification hydraulic powered Work Class ROVs suitable for construction, intervention, trenching and survey operations along with a wide range of hydraulic system and control system building blocks.

On display will be the Seaeeye Falcon which is the first ROV designed and built by Seaeeye Marine to meet the operational requirements of coastal and inshore operators. In developing this system the same criteria of performance, reliability and ease of operation were set but with the added challenge of creating a system that was to be portable and affordable.

Exhibiting on the Macartney A/S Booth.

**Keywords:** Bathymetry; Hydraulic Systems; Lasers; Launch & Recovery Systems; Propulsion Systems; ROVs; Submersible Equipment

## Booth 213

## IEC Corporation

3100 Longhorn Blvd, Austin, Texas, 78758-7696, United States

Tel: +1 512 836 0547

Web: [www.ieccorporation.com](http://www.ieccorporation.com)

## Booth 808

Fax: +1 512 834 1082

email: [hpearson@ieccorporation.com](mailto:hpearson@ieccorporation.com)



Manufacturers of quality electrical slip rings since 1955. Today they introduce the industry's newest solution for optical rotary interfaces, the IEC-MJ. This line of fiber optic rotary joints (FORJs) are the most compact (approx 1/4 dia x 3/4 length) with the best performance and highest channel count available (up to 40). IEC can easily build an electro-optical unit to meet your exact electrical and optical specifications.

**Keywords:** Cables; Connectors; Fibre Optic; Instrumentation Systems; Optics; Slip Rings; Telemetry Equipment; Umbilicals; Underwater Communications; Winches & Accessories

## Idronaut S.r.l

Via Monte Amiata, 10, Brugherio, Milano, 20047, Italy

Tel: +39 039 879656

Web: [www.idronaut.it](http://www.idronaut.it)

Fax: +39 039 883382

email: [idronaut@idronaut.it](mailto:idronaut@idronaut.it)

A research and manufacturing company located in Milan which produces CTDs, sensors, hardware and software for profiling and monitoring down to 7000m depth, the physical and chemical properties of water (depth, temperature, conductivity, salinity, oxygen, pH, redox, chlorophyll, transmission, turbidity, suspended solids, radiance, etc) and boreholes.

Exhibiting on the General Oceanics Booth.

**Keywords:** Calibration Devices; Data Acquisition/Management; Environmental Measurement; Fluorometers; Oxygen Meters; Remote Data Acquisition; Salinometers; Sensors; Temperature Measurement; Water Measurement; Sampling

## Booth 942

## IMarEST

80 Coleman Street, London, EC2R 5BJ, United Kingdom

Tel: +44 (0)20 7382 2600

Web: [www.imarest.org](http://www.imarest.org)

## Booth 724

Fax: +44 (0)207 382 2670

email: [info@imarest.org](mailto:info@imarest.org)

The Institute of Marine Engineering, Science & Technology is the international professional membership body and learned society for marine professionals, with over 14,000 members worldwide, involved in all aspects of marine engineering, science and technology disciplines. Qualifications for membership are based on educational background and/or multi-disciplinary experience ensuring that high professional standards are maintained. IMarEST Publications include MER (Marine Engineers Review), The Marine Scientist, The Journal of Offshore Technology (JOT) and Maritime IT & Electronics.

**Keywords:** Hydrography; Personnel & Recruitment; Publications; Training

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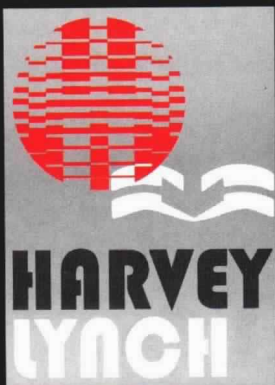
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## [www.harvey-lynch.com](http://www.harvey-lynch.com)

e-mail: [info@harvey-lynch.com](mailto:info@harvey-lynch.com)

Harvey-Lynch, Inc.

12718 Century Drive, Stafford, Texas 77477  
Telephone: + 281.240.5441 Fax: + 281.240.0932



## Innovatum Inc

10055 Regal Row, Suite 190, Houston, Texas, 77040, United States

Tel: +1 713 849 9192

Fax: +1 713 849 9611

Web: [www.innovatum.net](http://www.innovatum.net)

email: [leticia.coria-vazquez@innovatum.net](mailto:leticia.coria-vazquez@innovatum.net)

The global leader in pipeline and cable detection. They have successfully served the offshore industry for the past three decades by combining innovative solutions with superb customer service. Their Ultra System is the world's most advanced cable and pipeline surveying equipment available.

**Keywords:** Instrumentation Systems; Magnets & Magnetometers

## Booth 233

## International Ocean Systems

192 Hampton Road, Teddington, Middlesex, TW11 8HA, United Kingdom

Tel: +44 (0)20 8943 4288

Fax: +44 (0)20 8943 4312

Web: [www.intoceansys.co.uk](http://www.intoceansys.co.uk)

email: [iosd@msn.com](mailto:iosd@msn.com)

IOS is the leading European magazine serving and informing the vast and important international oceanology market. It comprehensively covers the field of ocean data gathering, underwater surveying, and instrumentation. A Diver Group publication, IOS is distributed worldwide on a bi-monthly basis.

**Keywords:** Publications

## Booth 235

## Integrated Ocean Drilling Program (IODP) Booth 834

1755 Massachusetts Ave, NW Suite 700, Washington, District of Columbia, 20036, United States

Tel: +1 202 232 3900 x 262

Fax: +1 202 232 3426

Web: [www.iodp.org](http://www.iodp.org)

email: [iwgs@joiscience.org](mailto:iwgs@joiscience.org)

IODP is an international scientific research endeavor scheduled to begin October 2003. IODP will use new resources to support technologically advanced ocean drilling research, which will enable investigation of Earth's regions and processes that were previously inaccessible and poorly understood.

**Exhibiting on the JOI/Ocean Drilling Program Booth.**

**Keywords:** Dynamic Positioning; Earth Sciences; Geology/Geophysics; Ocean Observation; Offshore Vessels; Research & Development Institutions; Research Vessels; Seabed Sampling

## International Seakeepers Society

## Booth 843

University of Miami - Richmond Campus, 11820 SW 166 Street, Miami, Florida, 33177, United States

Tel: +1 305 772 6986

Fax: +1 305 847 8279

Web: [www.seakeepers.org](http://www.seakeepers.org)

email: [rmaulini@rsmas.miami.edu](mailto:rmaulini@rsmas.miami.edu)

A US patent has been issued to the International SeaKeepers Society for its autonomous ocean monitoring module, which operates on ships, buoys and piers to autonomously gather and transmit data on a wide variety of ocean and atmospheric conditions. The module includes multiple and interchangeable miniaturized sensors, a unique anti-biofouling system that allows for long term unattended use, software that automatically records, prepares for transmission and transmits data via satellite, and other unique features. The technology was also recently awarded the Tech Museum and United Nations Award for Environmental Technology Benefiting Humanity. The module will be on display.

**Keywords:** Aquaculture; Beacons & Buoys; Coastal Monitoring; Data Acquisition/Management; Environmental Measurement; Ocean Observation; Offshore Vessels; Remote Data Acquisition; Research & Development Institutions; Research Vessels

## Interactive Visualization Systems

## Booth 331

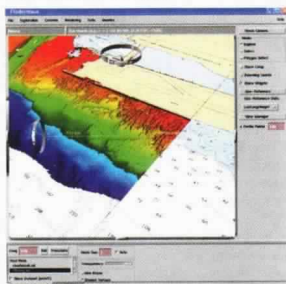
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**Keywords:** Autonomous Underwater Vehicles; Bathymetry; Charts & Charting; Coastal Protection; Data Acquisition/Management; Geology/Geophysics; Hydrographic Survey Software; Mapping Systems; Pipe laying; ROVs

## International Transducer Corporation

## Booth 713

869 Ward Drive, Santa Barbara, California, 93111, United States

Tel: +1 805 683 2575

Fax: +1 805 967 8199

Web: [www.itc-transducers.com](http://www.itc-transducers.com)

email: [itc-sales@itc-transducers.com](mailto:itc-sales@itc-transducers.com)



International Transducer Corporation

ITC designs and manufactures acoustic transducers for ship and submarine sonar, oceanographic, survey, seismic exploration, marine research, medical devices and proximity sensing. ITC transducers are used in defense, communication, navigation control and information gathering applications. They are integral to many advanced sonar systems, position

determining systems and data telemetry devices.

**Keywords:** Acoustics; Defence Technology; Echo Sounders; Hydro-Acoustics; Hydrophones; Sensors; Sonar & Systems; Sub-bottom Profile Equipment; Towed Arrays; Towed Bodies; Transducers; Transponders; Underwater Communications

# ROV Seamor



Dry weight  
16kg/40lbs

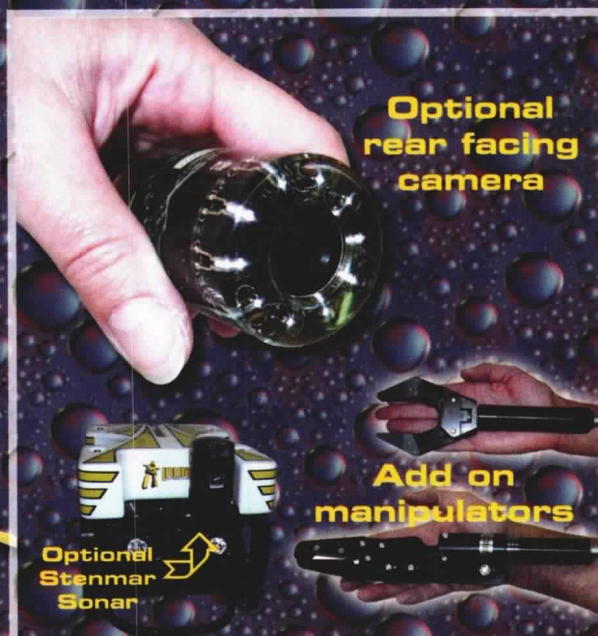
4, high  
powered  
thrusters.  
Also available  
separately

High resolution  
Sony zoom  
camera

2 x 50 w lights  
variable intensity

Tilting camera  
and light  
housing

Inuktun Services  
new inspection  
class ROV, depth  
rated to 300m/1000ft



Optional  
rear facing  
camera

Add on  
manipulators

Optional  
Stenmar  
Sonar



1-877-INUKTUN  
1-250-729-8080  
[www.inuktun.com](http://www.inuktun.com)



## InterOcean Systems Inc

3540 Aero Court, San Diego, California, 92123, United States  
 Tel: +1 858 565 8400 Fax: +1 858 268 9695  
 Web: [www.interoceansystems.com](http://www.interoceansystems.com) email: [sales@interoceansystems.com](mailto:sales@interoceansystems.com)  
 For 56 years InterOcean has been designing superior quality oceanographic equipment and instrumentation. Experience, innovation and incomparable customer/systems support enable them to provide complete engineered solutions. They are featuring NEW S4 oceanographic instruments w/internal wave processing, multi-parameter vertical profiling systems, remote data telemetry, acoustic releases, winches, slick sleuth oil spill detection and integrated monitoring systems for harbors, coasts, deep-ocean and offshore applications.  
**Keywords:** Coastal Monitoring; Current Meters; Environmental Measurement; Instrumentation Systems; Ocean Observation; Oil Spill Counter-Measures; Profiling Systems; Remote Data Acquisition; Tide Gauges; Winches & Accessories

**Booth 236**

## Inuktun Services Ltd

2569 Kenworth Road, Suite C, Nanaimo, BC, V9T 3M4, Canada  
 Tel: +1 250 729 8080 Fax: +1 250 729 8077  
 Web: [www.inuktun.com](http://www.inuktun.com) email: [inuktun@inuktun.com](mailto:inuktun@inuktun.com)  
 Specializes in the design, engineering and manufacturing of compact, remotely operated robotic inspection systems and components. For operation within confined, underwater and hazardous environments they provide standardized, modified and/or custom products and systems to meet almost any inspection and/or tooling requirements.  
**Keywords:** Aquaculture; Cameras; Defence Technology; Instrumentation Systems; Non-Destructive Testing; Ocean Observation; ROVs; Safety; Submarine Research; TV & Video Systems

**Booth 452**

## IXSEA OCEANO

Rue Rivoalon, Sainte-Anne du Portzic, Brest, 29200, France  
 Tel: +33 298 056700 Fax: +33 298 340112  
 Web: [www.ixsea-oceano.com](http://www.ixsea-oceano.com) email: [anne-laure.milhe@ixsea-oceano.com](mailto:anne-laure.milhe@ixsea-oceano.com)  
 Specialises in the design, manufacture and market of high-performance gyroscopes and underwater acoustics. It is the leading manufacturer of worldwide-known products OCTANS gyrocompass and motion sensor, PHINS inertial navigation system, POSIDONIA USBL acoustic positioning system and acoustic releases for shallow and full ocean depth operations, for mooring lines recovery or heavy load handling. Products are used by the offshore oil and gas industry, defense agencies, the scientific institutes and ports & harbours for navigation, accurate survey and positioning, mooring recovery and subsea and marine offshore construction applications. Product range now includes the MAGIS magnetometer.  
**Keywords:** Acoustics; Compasses; Gyrocompasses; Magnets & Magnetometers; Markers; Mooring Equipment; Navigation; Tide Gauges; Transducers; Transponders; Velocimeters

**Booth 509**

## John Hopkins University/ Applied Physics Laboratory

11100 Johns Hopkins Road, Laurel, Maryland, 20723-6099, United States  
 Tel: +1 240 228 8913 Fax: +1 240 228 6874  
 Web: [www.jhuapl.edu](http://www.jhuapl.edu) email: [Sezin.feher@jhuapl.edu](mailto:Sezin.feher@jhuapl.edu)  
 A not-for-profit organization, JHU/APL applies state-of-the-art oceanographic science and technology expertise to government and industry applications. APL's systems approach relies on expert understanding of first principles physics combined with an operational perspective to provide unique, application-driven solutions. Exciting new tools for ocean profile collection and analysis, surface wave studies, and underwater acoustic modelling are demonstrated.  
**Keywords:** Acoustics; Coastal Monitoring; Environmental Modelling; Meteorology; Ocean Modelling; Ocean Observation; Oceanography; Optics; Research & Development Institutions; Wave & Wave Power

**Booth 543**

## John W Fisk Company

4833 Contist. Suite 200, New Orleans, Louisiana, 70119, United States  
 Tel: +1 504 486 5411 Fax: +1 504 482 1475  
 Web: [www.jwfisk.com](http://www.jwfisk.com) email: [johnny@jwfisk.com](mailto:johnny@jwfisk.com)  
 Provides all types of insurance for oceanographic and marine construction industries worldwide. Let us assist you with your Equipment Coverage, General Liability, Workers Compensation, Maritime Employers Liability, Watercraft, Contingent Automobile Liability.  
**Keywords:** Insurance

**Booth 650**

## JOI - Joint Oceanographic Institution

1755 Massachusetts Ave NW, Integrated Ocean Drilling Program Suite 700, Washington, District of Columbia, 20036, United States  
 Tel: +1 202 232 3900 Fax: +1 202 232 3426  
 Web: [www.ioldp.org](http://www.ioldp.org) email: [efish@joiscience.org](mailto:efish@joiscience.org)  
 The Ocean Drilling Program (ODP) is an international partnership of scientists and research institutions organized to explore the evolution and structure of Earth. The Integrated Ocean Drilling Program (IODP) is an international scientific research endeavor scheduled to begin October 2003, at the close of ODP. See [www.oceandrilling.org](http://www.oceandrilling.org) and [www.ioldp.org](http://www.ioldp.org) for more information.  
 Also exhibiting is Integrated Ocean Drilling Program and Ocean Drilling Program.  
**Keywords:** Dynamic Positioning; Earth Sciences; Geology; Geophysics; Ocean Observation; Offshore Vessels; Research & Development Institutions; Research Vessels; Seabed Sampling

**Booth 834**

## Klein Associates Inc

11 Klein Drive, Salem, New Hampshire, 03079-1249, United States  
 Tel: +1 603 890 6131 x220 Fax: +1 603 890 9796  
 Web: [www.kleinsonar.com](http://www.kleinsonar.com) email: [ddurgin@kleinsonar.com](mailto:ddurgin@kleinsonar.com)  
 Featuring the new System 3000 Side Scan Sonar System. The simultaneous dual frequency system achieves exceptionally long ranges at very high resolutions. Modular and lightweight, the Model 3000 is now in use by hydrographers, oilfield surveyors, institutes, navies, and search specialists worldwide. Over 50 systems have been sold since its inception in May, 2002. The Model 3000 derives much of its technology from the Klein Dynamically Focused Multi Beam Model 5000 now in extensive use for over 6 years. There will be sample CDs available to experience the system's software, features and view sample imagery on your own computer.  
**Keywords:** Hydrographic Survey Software; Hydrography; Hydrological Instruments; Launch & Recovery Systems; Navigation; Radar Equipment; Rescue & Survival Equipment; Sonar & Systems; Sub-bottom Profile Equipment; Transducers

**Booth 815**

## Knudsen Engineering Limited

10 Industrial Road, Perth, Ontario, K7H 3P2, Canada  
 Tel: +1 613 267 1165 x 105 Fax: +1 613 267 7085  
 Web: [www.knudenengineering.com](http://www.knudenengineering.com) email: [judith@knudenengineering.com](mailto:judith@knudenengineering.com)  
 The 320 Series of echosounders provide precision water depth measurement and are used worldwide by hydrographic agencies, port authorities, navies and research institutions, as well as commercial dredging and survey companies. The 320M Marine Echosounder, 320B Blackbox, 320MP and 320BP Portable Splashproof Echosounders and the 320BR Deep Water Echosounder offer flexible software driven architecture that allows ready integration with modern marine industry survey tools including GPS, heave sensors, dataloggers and PCs. Unique product features of Knudsen Engineering echosounders include a standard SCSI port and Windows interface, and field programmable software that allows system upgrade or reconfiguration to new frequencies.  
**Keywords:** Acoustics; Bathymetry; Charts & Charting; Depth Indicators & Recorders; Dredging Equipment; Echo Sounders; Hydro-Acoustics; Hydrography; Hydrological Instruments; Marine Surveyors; Navigation; Sonar & Systems; Sub-bottom Profile Equipment; Survey

**Booth 341**

## Kongsberg-Simrad Inc

7225 Langtry Street #700, Houston, Texas, 77040, United States  
 Tel: +1 713 934 8885 Fax: +1 713 934 8886  
 Web: [www.kongsberg-simrad.com](http://www.kongsberg-simrad.com) email: [doria.i.martinez@kongsberg-simrad.com](mailto:doria.i.martinez@kongsberg-simrad.com)  
 A leading supplier of advanced maritime automation and instrumentation systems. With its strong application knowledge and trendsetting quality products, Kongsberg Simrad is able to offer unique and complete solutions for offshore oil and gas installations, and specialized purpose-built vessels. Kongsberg Simrad is a leading manufacturer of multibeam echo sounder systems for seabed mapping and underwater acoustic positioning systems.  
**Keywords:** Autonomous Underwater Vehicles; Bathymetry; Echo Sounders; Hydro-Acoustics; Hydrography; Hydrological Instruments; Mapping Systems; Sonar & Systems; Sub-bottom Profile Equipment; Transducers

**Booth 327**

## L-3 Communications ELAC Nautik GmbH

Neufeldstrasse, Kiel, 24118, Germany  
 Tel: +49 431 883 319 Fax: +49 431 883 224  
 Web: [www.elac-nautik.com](http://www.elac-nautik.com) email: [marketing@elac-nautik.com](mailto:marketing@elac-nautik.com)  
 L-3 ELAC Nautik /SeaBeam exhibit the latest generation of multibeam echosounder systems for high resolution seafloor mapping in shallow, medium and deep water plus online and postprocessing software packages. Their platform-independent software running on Windows NT as well as on UNIX Workstations is specialized in data acquisition and processing of multibeam sonars.  
 Also exhibiting is L-3 Communication Seabeam Instruments.  
**Keywords:** Bathymetry; Echo Sounders; Hydro-Acoustics; Hydrographic Survey Software; Hydrography; Mapping Systems; Ocean Modelling; Signal Processing; Sonar & Systems; Transducers

**Booth 237**

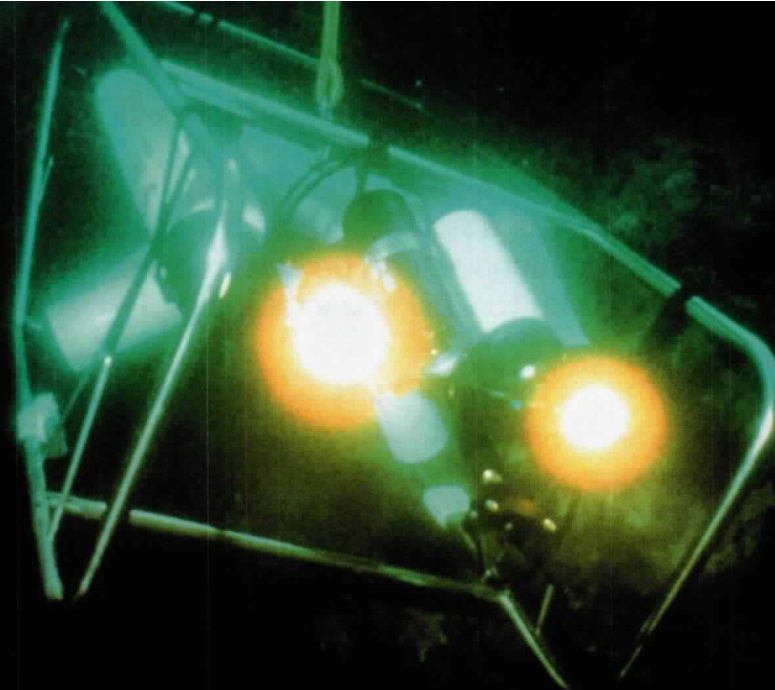
## L-3 Communication Seabeam Instruments

344 Vanderbilt Avenue, Norwood, Massachusetts, 02062, United States  
 Tel: +1 508 660 6611 Fax: +1 508 660 6622  
 Web: [www.seabeam.com](http://www.seabeam.com) email: [billings@seabeam.com](mailto:billings@seabeam.com)  
 Exhibiting on the L-3 Communications ELAC Nautik GmbH Booth.

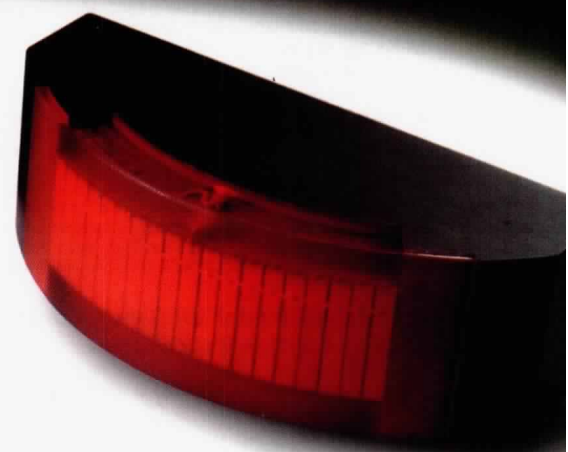
**Booth 237**







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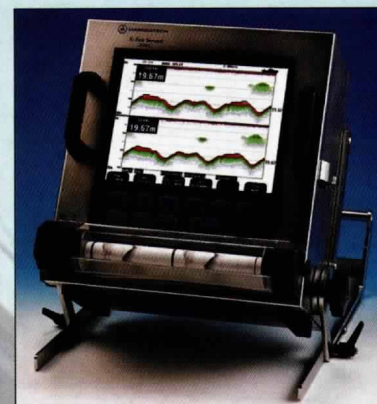
**NEW !**

## SURVEY ECHO SOUNDER

### E-Sea Sound MP 35

The new echo sounder from MARIMATECH is nothing less than a small revolution. It is a portable, dual channel echo sounder, where both frequencies can be selected individually. From as low as 12 kHz up to 250 kHz in steps of 1 kHz. Other features include:

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E-Sea Sound MP 35 dual channel multi-frequency survey echo sounder

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**MARIMATECH**

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#### LSU School of the Coast & Environment

**Booth 546**

School of the Coast & Environment, E302, Howe-Russell, Baton Rouge, Louisiana, 70803, United States

Tel: +1 225 578 3516

Web: www.lsu.edu

Fax: +1 225 578 5328

email: jriest@lsu.edu

The School moves into a new \$26 million building this spring. The academic departments and institutes housed in this beautiful facility are dedicated to helping Louisiana manage its natural resources on land and at sea. Our world-renowned faculty and research programs work at home and abroad to restore barrier islands, improve hydrology in marshes, protect fish and shellfish for commercial and sports use, provide first warning capability against devastating storms, and effect environmental remediation, to name just a few of our important research initiatives.

**Keywords:** Coastal Monitoring; Ecology; Environmental Measurement; Environmental Modelling; Geology; Geophysics; Hydrography; Ocean Modelling; Ocean Observation; Satellite Remote Sensing; Wave & Wave Power

#### Louisiana Coastal Wetlands Conservation and Restoration Task Force

**Booth 343**

Johnson Control World Services, U.S.G.S. National Wetlands Research Center, 700 Cajundome Blvd., Lafayette, Louisiana, 70506, United States

Tel: +1 337 266 8623

Web: www.LaCoast.gov

Fax: +1 337 266 8513

email: Gabrielle\_Bodin@usgs.gov

Louisiana has lost an average of 25 to 35 square miles of coastal wetlands every year for the last 50 years. Louisiana's wetlands provide many ecological, economic and cultural values to the state and nation. The Coastal Wetlands Planning, Protection and Restoration Act provides approximately \$50 million a year for coastal restoration in Louisiana.

**Keywords:** Coastal Protection; Earth Sciences; Ecology; Geology; Geophysics; Government Organization; Land Reclamation Projects

#### MacCartney A/S

**Booth 213**

Gl. Guldagervej 48, Esbjerg V, DK-6710, Denmark

Tel: +45 7613 2000

Web: www.macartney.com

Fax: +45 7511 7220

email: winnie@macartney.com

The product base is extensive and falls into a number of main categories ie dynamic cables, cable protection, connectors and handling systems, underwater robotics including remote operated and remote operated towed vehicles (ROV and ROTV) with associated equipment and sensor packages, data gathering systems including towed bodies, moored systems, ancillary equipment and sensors. MacCartney is showing their newest development - the TRIAXUS - which is a 3-D towfish 03 together with their range of NEXUS multiplexer systems.

Also Exhibiting are EurOceanique, Hydrovision, Macartney Benelux, Macartney Norge AS, Macartney Offshore, Macartney UK, MBT GmbH and Subconn Inc.

**Keywords:** Cables, Connectors; Cameras; Fibre Optic; ROVs; Slip Rings; Sonar & Systems; Telemetry Equipment; Towed Bodies; Umbilicals; Winches & Accessories

#### MacCartney Benelux BV

**Booth 213**

Westhavenkade 86, Vlaardingen, 3133 AV, Netherlands

Tel: +31 10 2041166

Web: www.macartney.com

Fax: +31 10 2480806

email: mac-nl@macartney.com

Exhibiting on the Macartney A/S Booth.

#### MacCartney Norge AS

**Booth 213**

Strandsvingen 3, Stavanger, 4032, Norway

Tel: +47 5195 1800

Web: www.macartney.com

Fax: +47 5195 1810

email: mac-no@macartney.com

Exhibiting on the Macartney A/S Booth.

#### MacCartney Offshore Inc.

**Booth 213**

3660 Westchase Drive, Houston, Texas, 77042, United States

Tel: +1 713 266 7575

Fax: +1 713 266 7519

Web: www.macartney.com

email: offshore@macartney.com

Advanced applied technology company providing engineered services and hardware to customers in marine, naval and oil & gas environments. Complete project solutions for oil & gas, civil engineering and construction industries. Mechanical, electronic and fiber optic engineering expertise is held in-house in order to service our customers quickly and efficiently.

Exhibiting on the Macartney A/S Booth.

**Keywords:** Cables, Connectors; Engineering Design; Fibre Optic; Instrumentation Systems; Marine Civil Engineering; ROVs; Slip Rings; Submersible Equipment; Telemetry Equipment; Winches & Accessories

#### MacCartney UK Ltd

**Booth 213**

Howemoss Drive, Kirkhill Industrial Estate, Dyce, Aberdeen, AB21 8GD, United Kingdom

Tel: +44 (0)1224 358500

Web: www.macartney.com

Fax: +44 (0)1224 358510

email: mac-uk@macartney.com

Exhibiting on the Macartney A/S Booth.





# Less is More



**Light weight, compact size and ultra low power consumption make the Explorer mini marine magnetometer the ideal tool for shallow water surveys, especially when deployed from a small craft.**

On the more side, Explorer's small size makes it ideal for towing behind side scans and deep tow platforms where it's deep tow options are 1000m, 3000m and 6000m.

Explorer gives you high sensitivity, unmatched accuracy, and the ability to operate around the world without any restrictions. And speaking of no restrictions, this professional tool will fit in your boat *and* your budget.





# NEW WAVE RADARS



## DIRECTIONAL WAVE AND CURRENT MONITORING WITH EITHER OF TWO MIROS SYSTEMS:

- **MIROS DIRECTIONAL WAVE AND SURFACE CURRENT RADARS**  
Range-gated microwave doppler radars of high accuracy.
- **WAVEX**  
Maritime radar wave and current extractors approved for use on vessels and offshore structures (DNV type approval certificate)



DIRECTIONAL WAVE RADAR



WAVEX MARINE RADAR ANTENNA



TYPICAL SYSTEM DISPLAY

## MIROS DIRECTIONAL WAVE AND SURFACE CURRENT RADARS ARE WELL SUITED FOR USE ON:

- Offshore Structures and Vessels
- Catamarans and High Speed Vessels
- Naval Vessels
- Traditional Merchant Marine Vessels
- Research and Service Vessels
- Shore Installations for Coasts and Ports

## RANGE FINDER

- Wave profile and air gap from vessels and offshore structures
- Tidal variations, water level in rivers, canals and lakes
- 20, 50 and 85 meter range
- Long term stability
- Error < 1 mm (averaged)
- No fog, rain or water spray influence



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Tel: +47 66 98 75 00, Fax: +47 66 90 41 70  
E-mail: office@miros.no, Web site: www.miros.no

## MIROS A/S WINNING INTERNATIONAL RECOGNITION AND MARKETS

MIROS is well known as supplier of Met-Ocean Systems and its own Remote Ocean Sensors supplied since 1984, in particular for its **Directional Wave and Surface Current Radar**, which is a microwave Doppler radar. It has won high recognition and has to a large extent replaced wave buoys in many offshore markets. It is the dominant Ocean Sensor on the Norwegian Continental Shelf, and is installed also in the UK, Denmark, Canada, Korea, USA and Brazil.

**WAVEX**, another Miros directional wave and current monitoring system, using a marine X-band radar as sensor, is now gaining broad confidence of users. Some fifty systems have been sold worldwide since the installation of the first system in 1996.

WAVEX is used on conventional ships, high speed vessels, on fixed and mobile offshore units and from shore stations. The System features a bridge display for monitoring wave parameters in real time such as actual wave height, period and direction. Wavex is a valuable tool for sea state evaluation, for applications such as passage planning and reduction of hull and cargo damage. For high-speed crafts, Wavex provides information on operational parameters such as significant wave height. Wavex can be used as a stand-alone system or as part of a hull monitoring system. The system is compact, and can normally use a ship's existing X-band radar antenna for signal input.

MIROS is cooperating closely with DNV, in particular, in development of active operator guidance systems incorporating the use of Wavex. Wavex was type approved by DNV for use on vessels and offshore structures as early as in 1998.

MIROS is furthermore looking into the use of Wavex for Oil Spill Detection and has performed very successful tests during controlled oil spill off the coast of Norway.

Visit us at  
Stand No. 736

## RANGE FINDERS

MIROS developed its first microwave altimeter in the early 90's. This sensor has been successfully in use on high speed vessels and on offshore platforms, and has demonstrated reliable performance without need of recalibration for those first units delivered in 1994.

Its successor, the Range Finder was introduced to the market in year 2000. The sensor has a vastly improved accuracy and is in use by an increasing number of customers in many areas of usage. The sensor is now also used for tide monitoring and for monitoring of vessel sailing clearance under bridges.

The Range Finder, with new electronic components is a highly competitive sensor under further development to meet new challenges. Miros is continuing its verification programs to study performance, sensor development and application of the sensor in cooperation with customers. Operators of commercial high speed vessels, navies, offshore operators and government authorities are now prime customers of large numbers of the Miros Range Finders.



**Marine Electronics Ltd**

Unit 10 Barras Lane Industrial Estate, Vale, Guernsey, GY6 8EQ, United Kingdom  
 Tel: +44 (0)1481 253 181 Fax: +44 (0)1481 253 182  
 Web: [www.marine-electronics.co.uk](http://www.marine-electronics.co.uk) email: [sales@marine-electronics.co.uk](mailto:sales@marine-electronics.co.uk)

Designers and manufacturers of underwater acoustic instruments and systems. Electronically scanned imaging and bathymetry sonars for ROV and AUV navigation and survey. High definition programmable imaging and profiling sonars for scientific applications, eg sand ripple measurements. 3D-profiling sonars for seabed/inland waterway mapping. New multi-return altimeter, echo sounders, acoustic release systems, cavity and borehole survey probes, transponders, tracking, telemetry and acoustic navigation systems. High-speed real-time internal pipe inspection sonars. ISO9002 accredited.

**Keywords:** Acoustics; Bathymetry; Echo Sounders; Hydrography; Profiling Systems; Sonar & Systems; Telemetry Equipment; Transponders

**Booth 434****Marine Magnetics**

52 W Beaver Creek Road #16, Richmond Hill, Ontario, L4B 1L9, Canada  
 Tel: +1 905 709 3135 Fax: +1 905 709 0805  
 Web: [www.marinemagnetics.com](http://www.marinemagnetics.com) email: [info@marinemagnetics.com](mailto:info@marinemagnetics.com)

**Booth 631**

Designs and manufactures high sensitivity marine magnetometers. Of particular note are the SeaSPY and SeaQuest magnetometer and gradiometer systems that are in use by navies, research institutes, universities, archaeologists, geophysicists and survey companies around the world. New launches include the Explorer Mini Marine Magnetometer. Explorer's lightweight (7lbs) and compact size (33.75) make it the ideal tool for shallow water surveys, especially when deployed from a small craft.

**Keywords:** Anti Submarine Warfare; Defence Technology; Earth Sciences; Geology; Geophysics; Instrumentation Systems; Magnets & Magnetometers; Ocean Observation; Sensors; Surveillance; Towed Arrays

**Marine Sonic Technology Ltd**

PO Box 730, White Marsh, Virginia, 23183, United States  
 Tel: +1 804 693 9602 Fax: +1 804 693 6785  
 Web: [www.marinesonic.com](http://www.marinesonic.com) email: [rwmsn@marinesonic.com](mailto:rwmsn@marinesonic.com)

**Booth 318**

MSTL manufactures the Sea Scan PC, a high-resolution, low cost side scan sonar system. Producing almost photo quality underwater images, the system is used worldwide in the fields of law enforcement, search and rescue, surveying, research, salvage, underwater construction and military operations. The system is available mounted on a towfish, magules or miniaturized for AUV/ROV applications.

**Keywords:** Autonomous Underwater Vehicles; Defence Technology; Rescue & Survival Equipment; ROVs; Sonar & Systems

**Materials Systems Inc**

543 Great Road, Littleton, Massachusetts, 01460, United States  
 Tel: +1 978 486 0404 Fax: +1 978 486 0706  
 Web: [www.matsysinc.com](http://www.matsysinc.com) email: [jschmidt@matsysinc.com](mailto:jschmidt@matsysinc.com)

**Booth 229**

Designs and manufactures acoustic transducers for a wide range of systems including side-scan, sub-bottom profiling, swath bathymetry, mine hunting, acoustic communication and large area conformal arrays for ROV/AUV sonar. MSI's piezocomposite technology offers high receive sensitivity, high source levels, low self-noise and full ocean depth performance

Also exhibiting is Farsounder Inc.

**Keywords:** Acoustics; Bathymetry; Engineering Design; Hydrophones; Non-Destructive Testing; Sensors; Sonar & Systems; Transducers; Underwater Communications

**MBT GmbH**

Wischhofstrasse 1 - 3, Gebaude 1, Kiel, 24148, Germany  
 Tel: +49 431 7 20 72 01 Fax: +49 431 7 20 72 07  
 Web: [www.m-b-t.com](http://www.m-b-t.com) email: [info@m-b-t.com](mailto:info@m-b-t.com)

**Booth 213**

A sales and engineering company for marine technology. Since 1997 MBT has represented major international manufacturers of oceanographic and hydrographic instrumentation. In addition MBT provides installation and system integration services. Great importance will be donated to extensive support of clients during installation, setting to work and training. MBT is the competent partner in all aspects for all those who have to measure and take samples in the ocean, rivers, lakes and harbours and who have to process and present their data. Since 2000 MBT has been a member of the Danish MacCartney Group, an international leading supplier of marine technology.

Exhibiting on the MacCartney A/S Booth.

**Keywords:** Coastal Monitoring; Coastal Protection; Current Meters; Data Acquisition/Management; Environmental Measurement; Hydrography; Instrumentation Systems; Remote Data Acquisition; ROVs; Telemetry Equipment; Towed Bodies

**Mercator Inc**

11211 Katy Freeway, Suite 430, Houston, Texas, 77079, United States  
 Tel: +1 713 464 4353 Fax: +1 713 464 2762  
 Web: [www.mercat.com](http://www.mercat.com) email: [alastair@mercat.com](mailto:alastair@mercat.com)

**Booth 454**

Rents and sells GPS systems for a number of applications including dredging, civil engineering, hydrographic survey, land survey, pipelines, roads, GIS and environmental. The company provides in-house and field training as well as full repair service.

Exhibiting on the Geonav Marine Systems Booth.

**Keywords:** Global Positioning Systems

**METOCEAN Data Systems**

21 Thornhill Drive, Dartmouth, NS, B3B 1R9, Canada  
 Tel: +1 902 468 2505 Fax: +1 902 468 4442  
 Web: [www.metocean.com](http://www.metocean.com) email: [leigh@metocean.ns.ca](mailto:leigh@metocean.ns.ca)

**Booth 702**

METOCEAN Data Systems Limited is a research, development and manufacturing company based in Dartmouth, Nova Scotia Canada. Since the company's inception in 1985, METOCEAN has been a world leader in state-of-the-art data acquisition and telemetry systems through air-deployed and ship-deployed drifting buoys. During this time METOCEAN has produced thousands of drifting buoys for such programs as WOCE and TOGA, search and rescue buoys such as Self Locating Datum Marker Buoys, oil tracking buoys such as Argospheres and Davis, various ice platforms and acoustic systems to customers all over the world. METOCEAN is an ISO 9001 registered company and is one of the few manufacturers of oceanographic, meteorological and military systems in the world to have received this internationally recognized quality registration.

**Keywords:** Acoustics; Beacons & Buoys; Data Acquisition/Management; Defence Technology; Engineering Design; Environmental Measurement; Global Positioning Systems; Ocean Observation; Profiling Systems; Tracking Software

**Minerals Management Service**

1201 Elmwood Park, MS 5060, New Orleans, Louisiana, 70123, United States  
 Tel: +1 504 736 2596 Fax: +1 504 736 2944  
 Web: [www.mms.gov](http://www.mms.gov) email: [edward.tilton@mms.gov](mailto:edward.tilton@mms.gov)

**Booth 243**

The Minerals Management Service (MMS) is the Federal agency in the U.S. Department of the Interior that manages the Nation's oil, natural gas, and other mineral resources on the Outer Continental Shelf (OCS) in an environmentally sound and safe manner.

**Keywords:** Bathymetry; Biological Resource Exploitation; Coastal Monitoring; Current Meters; Earth Sciences; Ecology; Environmental Measurement; Environmental Modelling; Geology; Geophysics; Government Organization; Ocean Modelling; Ocean Observation; Oceanography; Oil Spill Counter-Measures; Publications; Risk Assessment; Seabed Sampling; Seismic Survey

**Miros AS**

Solbråvn 32, PO Box 364, Asker, 1372, Norway  
 Tel: +47 66 98 75 00 Fax: +47 66 90 41 70  
 Web: [www.miros.no](http://www.miros.no) email: [office@miros.no](mailto:office@miros.no)

**Booth 736**

One of the leading met-ocean suppliers in Europe and a major world wide supplier of MIROS' own remote ocean sensors which include MIROS directional wave and surface current radars (microwave doppler radars),

MIROS WAVEX wave monitoring system for use onboard vessels and from shore sites using marine radar as sensor and MIROS downward-viewing radars - microwave altimeter and range finder - used for air gap, tide and wave monitoring and for monitoring of bridge sailing clearance. The sensors are used on ships fixed or floating offshore platforms and from shore sites for coastal water or harbour monitoring.

**Keywords:** Current Meters; Data Acquisition/Management; Environmental Measurement; Meteorology; Ocean Observation; Oil Spill Counter-Measures; Radar Equipment; Remote Data Acquisition; Sensors; Tide Gauges; Wave & Wave Power

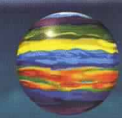
**Mississippi State University**

MSU/ERC, Bldg 1103, Rm 233, Stennis Space Center, Mississippi, 39529, United States  
 Tel: +1 228 688 3575 Fax: +1 228 688 7100  
 Web: [www.gri.msstate.edu](http://www.gri.msstate.edu) email: [mehra@erc.msstate.edu](mailto:mehra@erc.msstate.edu)

**Booth 450**

MSU's GeoResources Institute combines mission areas of the Remote Sensing Technologies Center, Mississippi Water Resources Research Institute, Computational Geospatial Technologies Center, and Visualization, Analysis and Imaging Laboratory. These entities conduct research in the areas of remote sensing; water problems; computational geospatial information products; and, scientific visualization applied to real-world problems.

**Keywords:** Computer Software; Data Acquisition/Management; Earth Sciences; Environmental Modelling; Image Enhancement; Meteorology; Ocean Modelling; Research & Development Institutions; Satellite Remote Sensing





## Museum of Man in the Sea

17314 Panama City Beach Parkway, Panama City Beach, Florida, 32413, United States  
Tel: +1 850 235 4101 Fax: +1 850 235 4101

**Booth 816**

## NASA Earth Science

Enterprise, NASA Goddard Space Flight, Greenbelt Rd, Greenbelt, Maryland, 20771, United States  
Tel: +1 301 614 5560 Fax: +1 301 614 6530

**Booth 319**

Since its creation in 1958, NASA has been studying the Earth and its changing environment by observing the atmosphere, oceans, land, ice and snow, and their influence on climate and weather. In 1991, NASA launched Earth Science Enterprise Program to study the Earth. Using satellites and information from ground-based sources, and working together with nations of the world, we hope to improve our knowledge of the Earth system, and use that knowledge for the benefit of future generations.

## NASA Oceanography

1200 N Veitch Street, Ste 1404, Arlington, Virginia, 22201, United States  
Tel: +1 703 527 1924 Web: www.jpl.nasa.gov

**Booth 319**

As a technology organization utilizing the unique vantage-point from space, NASA Oceanography conducts a program of satellite missions and research projects to enable global ocean science. Through continued observation of the state and patterns of change in the ocean NASA contributes to innovations in climate prediction and weather forecasting.

**Keywords:** Earth Sciences; Ocean Observation; Oceanography; Remote Data Acquisition; Research & Development Institutions; Satellite Communications; Satellite Navigation; Satellite Remote Sensing

## NASA/JPL Ocean Surface Topography

Jet Propulsion Lab, TOPEX/Poseidon Jason-1 Outreach, Radar Data & Outreach Center, Mail Stop 300-233, Pasadena, California, 91109-8099, United States  
Tel: +1 818 354 2386 Fax: +1 818 393 2640  
Web: www.jpl.nasa.gov

**Booth 319**

NASA's Jet Propulsion Laboratory, in collaboration with the French Space Agency, employ satellite, ocean altimeters which obtain precise, global ocean-surface topography measurements with 4.2 cm accuracy. The data are used for a variety of scientific and operational applications. Jason-1, launched in 2001, continues the observations begun in 1992 by TOPEX/Poseidon.

**Keywords:** Earth Sciences; Geology; Geophysics; Meteorology; Ocean Modelling; Ocean Observation; Remote Data Acquisition; Satellite Remote Sensing

## NASA/JPL Physical Oceanography DAAC

299 N. Euclid Ave., Suite 500, Pasadena, California, 91101, United States  
Tel: +1 626 744 5458 Fax: +1 626 744 5506  
Web: www.podaac.jpl.nasa.gov email: monika@seanet.jpl.nasa.gov

**Booth 319**

PO.DAAC provides physical oceanographic data from spaceborne instruments. We will be highlighting data and educational products and applications from the SeaWinds on QuikSCAT scatterometer, the TOPEX/Poseidon and Jason-1 altimeters, and the AVHRR and MODIS SST instruments.

**Keywords:** Earth Sciences; Geology; Geophysics; Meteorology; Ocean Modelling; Ocean Observation; Remote Data Acquisition; Satellite Remote Sensing

## National Imagery and Mapping Agency

Maritime Safety Information Division, 4600 Sangamore Road, Mail Stop: D-44, Bethesda, Maryland, 20816-5003, United States  
Tel: +1 301 227 7646 Fax: +1 301 227 3731  
Web: www.nima.mil email: doherty@nima.mil

**Booth 744**

The National Imagery and Mapping Agency's Maritime Safety Information Division collects and analyzes maritime safety information in support of a nautical database maintenance environment to produce, promulgate, and provide worldwide access to standard nautical, digital and customer tailored hydrographic and bathymetric safety of navigation data.

**Keywords:** Bathymetry; Charts & Charting; Electronic Charting; Government Organization; Hydrography; Mapping Systems; Marine Communications; Navigation; Satellite Communications

## National Science Foundation

4201 Wilson Boulevard, Suite 725N, Arlington, Virginia, 22230, United States  
Tel: +1 703 292 8580 Fax: +1 703 292 9085  
Web: www.geo.nsf.gov/oc/ email: kbinkley@nsf.gov

**Booth 442**

The Division of Ocean Sciences (OCE) supports disciplinary and interdisciplinary research efforts and the means, particularly ships and other equipment, necessary to access the oceans from the surface to deep in the seafloor. Consistent with NSF as a whole, integrating research and education is a priority for the Division.

**Keywords:** Research & Development Institutions

## Naval Meteorology and Oceanography Command

1100 Balch Blvd, Stennis Space Center, Mississippi, 39529-5005, United States  
Tel: +1 228 688 4384 Fax: +1 228 688 5743  
Web: www.pao.cnmc.navy.mil email: willisc@cnmc.navy.mil

**Booth 503**

The Naval Meteorology and Oceanography Command is a worldwide organization comprised of approximately 3,000 military and civilian personnel at about 60 locations. The command provides forecasts of weather and ocean conditions necessary for successful military operations. The command will showcase ocean modelling capabilities, survey technology and community and educational outreach.

**Keywords:** Bathymetry; Environmental Modelling; Government Organization; Hydrography; Meteorology; Navigation; Ocean Modelling; Survey

## Naval Research Laboratory

Public Affairs Office, Code 7030.4, Stennis Space Center, Mississippi, 39529-5004, United States  
Tel: +1 228 688 5328 Fax: +1 228 688 5552  
Web: www.nrl.navy.mil email: brotundo@nrlssc.navy.mil

**Booth 701**

Conducts basic and exploratory research in oceanography and related sciences. Laboratories in microscopy, map data formatting, visualization, remote sensing/numerical modelling, acoustic and oceanographic computation, instrumentation, and analysis and testing are just a few examples of the wide scope of research and development conducted by NRLSSC.

**Keywords:** Acoustics; Geology; Geophysics; Ocean Observation; Research & Development Institutions; Wave & Wave Power

## Neptune Oceanographics Ltd

Sapharey House, Sturt Road, Charlbury, Oxon, OX7 3SX, United Kingdom  
Tel: +44 (0)1608 819177 Fax: +44 (0)870 4581979  
Web: www.neptune.gb.com email: info@neptune.gb.com

**Booth 626**

Provides comprehensive oceanographic and environmental measurement and monitoring services for offshore operators worldwide. Neptune's services include subsea pipeline leak detection using long established fluorescence and acoustic techniques. More recently, Neptune has introduced a real time system that detects hydrocarbons (methane, oil, etc.) to depths of 3500m.

*Exhibiting on the Aquatec Group Booth.*

**Keywords:** Acoustics; Coastal Monitoring; Consultancy Services; Environmental Measurement; Fluorometers; Measuring Services; Ocean Observation; Sensors; Water Measurement, Sampling

## Neptune Sciences Inc

40201 Highway 190 East, Slidell, Louisiana, 70461, United States  
Tel: +1 985 649 7252 Fax: +1 504 649 9679  
Web: www.neptunesci.com email: mearle@neptunesci.com

**Booth 345**

NSI is featuring their full line of WAVE SENTRY real-time wave measurement buoys ranging from micro and mini hand-deployed and air-deployed buoys to buoys for long-term deployments. Optional addition of Acoustic Doppler Current Profiler (ADCP) measurements is now available.

**Keywords:** Beacons & Buoys; Coastal Monitoring; Consultancy Services; Data Acquisition/Management; Defence Technology; Engineering Design; Environmental Measurement; Information Services; Meteorology; Ocean Observation; Water Measurement, Sampling; Wave & Wave Power

## Nichiyu Giken Kogyo Co

2-22-1 Minami-Ikebukuro, Toshima, Tokyo, 171-0022, Japan  
Tel: +81 3 3986 5222 Fax: +81 3 3983 6537  
Web: www.nichigi.com email: ocean-g@nichigi.co.jp

**Booth 216**

Exhibiting acoustic releases. They apply a unique mechanism using gas generator. Also develop and manufacture innovative oceanographic equipment; non-bio-contaminated water sampler; portable time-series sediment trap; underwater winch, etc.

**Keywords:** Acoustics; Depth Indicators & Recorders; Mooring Equipment; Pressure Vessels; Profiling Systems; Remote Data Acquisition; Water Measurement, Sampling

## NOAA

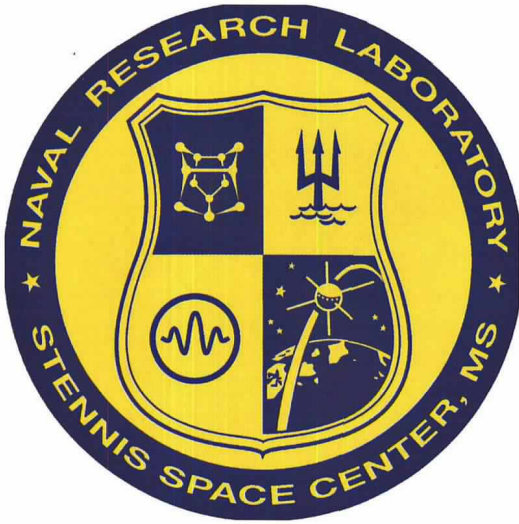
12227 Wilkins Avenue, Rockville, Maryland, 20852, United States  
Tel: +1 301 413 0100 Fax: +1 301 413 0200  
Web: www.noaa.gov email: tlallen3892@msn.com

**Booth 519**

The National Oceanic and Atmospheric Administration (NOAA) conducts research and gathers data about the global oceans, atmosphere, space, and sun, and applies this knowledge to science and service that touch the lives of all Americans.

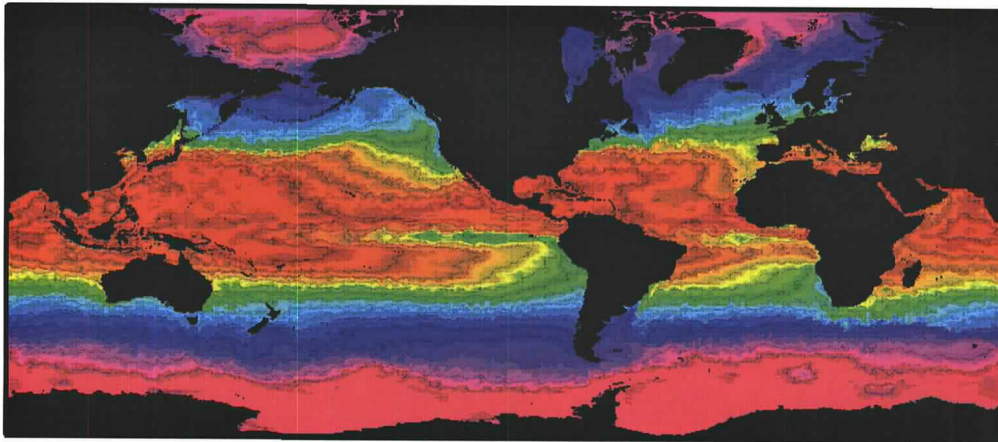






The Naval Research Laboratory....  
conducting basic and exploratory  
research and development in  
oceanography and related sciences.

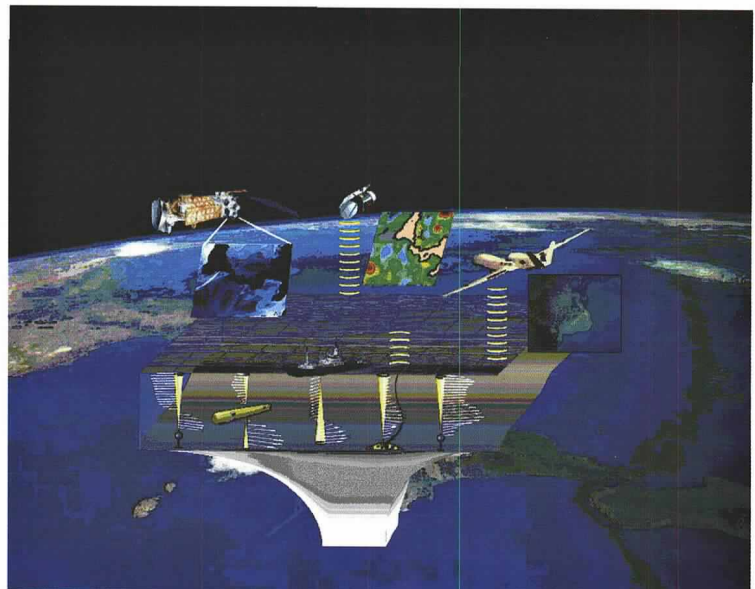
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shore to shore

Learn about NRL at  
<http://www.nrlssc.navy.mil>  
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# **Offshore Engineer**

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## **OCEANOLOGY INTERNATIONAL**

**Stop By Stand 814 to  
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### **AustralAsian Oil & Gas - Stand 21**

19-21 March, 2003, Perth, Western Australia

### **OMC - Pavilion A Stand 101**

26-28 March, 2003, Ravenna, Italy

### **OTC - Booth 1401**

5-8 May, 2003, Houston, TX, USA

### **Oil & Gas Technology Indonesia**

22-24 May, 2003, Jakarta, Indonesia

### **Caspian Oil & Gas**

3-6 June, 2003, Baku

### **Oceanology International**

4-6 June, 2003, New Orleans, LA, USA

### **Brasil Offshore**

4-6 June, 2003, Macae, Brazil

### **Latin American Petroleum Show**

21-23 October, 2003, Maracaibo, Venezuela

### **OGA**

14-17 July, 2003, Kuala Lumpur, Malaysia

### **Offshore Europe - Stand 586**

2-5 September, 2003, Aberdeen, Scotland

### **SPE ATCE - Booth 1245**

5-8 October, 2003, Denver, CO, USA

### **LAGCOE**

28-30 October, 2003, Lafayette, LA, USA



**NOAA/CICEET**

Environmental Technology Building, 35 Colovos Road, Suite 130, Durham, New Hampshire, 03824, United States

Tel: +1 603 862 3580

Web: [www.ciceet.unh.edu](http://www.ciceet.unh.edu)

Fax: +1 603 862 2940

email: [dwright.trueblood@noaa.gov](mailto:dwright.trueblood@noaa.gov)

The Co-operative Institute for Coastal and Estuarine Environmental Technology (CICEET) was established in 1997 as a national center for the development and application of innovative technologies to address problems associated with pollution and habitat degradation in estuaries and coastal waters. The Institute is managed jointly by the University of New Hampshire and NOAA.

**Keywords:** Coastal Monitoring; Environmental/Pollution; Pollution Control; Research & Development Institutions; Satellite Remote Sensing; Sensors; Water Measurement; Sampling

**Booth 242****NOBSKA**

62 Musket Lane, Mashpee, Massachusetts, 02649, United States

Tel: +1 508 539 0404

Web: [www.nobska.net](http://www.nobska.net)

Fax: +1 508 539 0808

email: [dan-schaaf@att.net](mailto:dan-schaaf@att.net)

NOBSKA, located near Woods Hole, is the world leader in low noise, high resolution 3-D Current Measurements. They will be celebrating their 6th year of business by introducing their new MWAVES Software for Windows. MWAVES Software calculates and plots Directional Wave Spectra from data collected using the MAVS-3 Acoustic 3-D Current Meter equipped with Pressure Sensor. The MAVS-3 Acoustic 3-D Current Meter will also be on display. The MAVS-3 Current Meter is a true 3 axis Acoustic Current Meter which employs a differential travel time measurement technique. The current meter takes measurements across 4 acoustic paths to provide a true vector averaged velocity measurement.

**Keywords:** Current Meters; Tide Gauges; Velocimeters

**Booth 625****Nortek AS**

Vangkroken 2, Rud, 1351, Norway

Tel: +47 67 17 45 00

Web: [www.nortek-as.com](http://www.nortek-as.com)

Fax: +47 67 13 67 70

email: [inquiry@nortek.no](mailto:inquiry@nortek.no)

Nortek's line of Aquadopp current profilers and single-point current meters is expanding. The last addition to these small and lightweight instruments includes an all-titanium 6000-m version. In addition, a new suite of PUV software for processing wave directional data collected with the Aquadopp is introduced.

**Keywords:** Current Meters; Velocimeters; Wave & Wave Power

**Booth 443****Ocean Data Equipment Corporation**

88 Royal Little Drive, Providence, Rhode Island, 02904-1859, United States

Tel: +1 401 454 1810

Web: [www.oceandata.com](http://www.oceandata.com)

Fax: +1 401 454 1806

email: [philibert@oceandata.com](mailto:philibert@oceandata.com)

Design and manufacturing of acoustic solutions for a global marketplace. ODEC offers a complete line of sensors and instruments to support marine geophysical and hydrographic applications. Products include: portable hydrographic survey echosounders, chirp subbottom profilers and thermal recorders, as well as Acoustic Core; remote acoustic marine sediment classification.

**Keywords:** Acoustics; Bathymetry; Depth Indicators & Recorders; Echo Sounders; Environmental Measurement; Geology/Geophysics; Hydrography; Marine Civil Engineering; Remote Data Acquisition; Seismic Survey; Sub-bottom Profile Equipment

**Booth 328****Ocean Drilling Program (ODP)**

1755 Massachusetts Ave, NW Suite 700, Washington, District of Columbia, 20036, United States

Tel: +1 202 232 3900 x 224

Web: [www.oceandrilling.org](http://www.oceandrilling.org)

Fax: +1 202 462 8754

email: [info@joiscience.org](mailto:info@joiscience.org)

The Ocean Drilling Program (ODP) is an international partnership of scientists and research institutions organized to explore the evolution and structure of Earth. ODP provides researchers around the world access to a vast repository of geological and environmental information recorded far below the ocean surface in seafloor sediments and rocks. By studying ODP data we gain a better understanding of Earth's past, present, and future.

*Exhibiting on the JOI/Ocean Drilling Program Booth.*

**Keywords:** Dynamic Positioning; Earth Sciences; Geology/Geophysics; Ocean Observation; Offshore Vessels; Research & Development Institutions; Research Vessels; Seabed Sampling

**Booth 834****Ocean News & Technology**

7897 SW Jack James Drive, Suite A, Stuart, Florida, 34997, United States

Tel: +1 772 221 7720

Web: [www.ocean-news.com](http://www.ocean-news.com)

Fax: +1 772 221 7715

email: [mjmcduffee@ocean-news.com](mailto:mjmcduffee@ocean-news.com)

Ocean News & Technology is an international publication covering the worldwide ocean industries including defense, science, communications, underwater vehicles, offshore oil & gas and much more. ON&T is published by Technology Systems Corporation. TSC also publishes Offshore Source, a monthly publication covering the oil and gas industry in North America, primarily the Gulf of Mexico. TSC is the organizer of the Offshore Communications Conference and the Renewable Ocean Energy 2004 Conference.

**Keywords:** Engineering Design; Fibre Optic; Marine Communications; Publications; Satellite Communications; Survey; Telecommunications; Underwater Communications; Wave & Wave Power

**Booth 837****Oceansp@ce**

8th Floor, Apex Tower, High Street, New Malden, Surrey, KT3 4DQ, United Kingdom

Tel: +44 (0)20 8949 9222

Web: [www.oceanspace.net](http://www.oceanspace.net)

Fax: +44 (0)20 8949 8186

email: [oceanspace379@aol.com](mailto:oceanspace379@aol.com)

Circulating worldwide weekly to some 17,000 subscribers by email, 'Oceansp@ce' is the voice of the global ocean business community. It is edited by Mr. David Graham and provides up to date news and comment. New subscribers can register to receive their free copy of the newsletter via [www.oceanspace.net](http://www.oceanspace.net)

*Exhibiting on the Spearhead Exhibitions Booth*

**Keywords:** Publications

**Booth 337****Odom Hydrographic Systems, Inc**

1450 Seaboard Avenue, Baton Rouge, Louisiana, 70810-6261, United States

Tel: +1 225 769 3051

Web: [www.odomhydrographic.com](http://www.odomhydrographic.com)

Fax: +1 225 766 5122

email: [email@odomhydrographic.com](mailto:email@odomhydrographic.com)



Manufacturer of precision hydrographic surveying instruments for over 20 years. Products include the dual frequency ECHOTRAC MKIII, single frequency HYDROTRAC, digital black box HT100, ECHOSCAN shallow water multibeam, DIGIBAR PRO sound velocity probe, ATLAS Fansweep multibeam systems, STEMA Densitune density meter and SILAS software, and the C-MAX CM2 Side Scan.

**Keywords:** Bathymetry; Calibration Devices; Depth Indicators & Recorders; Echo Sounders; Environmental/Pollution; Global Positioning Systems; Mapping Systems; Sound Velocity Probes; Transducers; Velocimeters

**Booth 741****Office Of Naval Research**

800 North Quincy Street, Arlington, Virginia, 22217, United States

Tel: +1 703 588 2167

Web: [www.onr.navy.mil](http://www.onr.navy.mil)

Fax: +1 703 696 5940

email: [james\\_boyle@onr.navy.mil](mailto:james_boyle@onr.navy.mil)

From laser technologies to blood substitutes, from basic research to manufacturing technologies, the Office of Naval Research has a long history of funding innovations that change the world. ONR continually seeks to fund the best Naval-relevant science and technology that the industrial and academic communities have to offer.

**Keywords:** Acoustics; Anti Submarine Warfare; Defence Technology; Electronic Warfare; Environmental Modelling; Hydro-Dynamics; Meteorology; Noise Reduction; Reconnaissance; Research Vessels; Torpedoes; Wave & Wave Power

**Booth 642****Office of the Oceanographer of the Navy**

US Naval Observatory, 3450 Massachusetts Avenue NW, Washington, District of Columbia, 20392-5421, United States

Tel: +1 202 762 1045

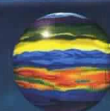
Web: [www.oceanographer.navy.mil](http://www.oceanographer.navy.mil)

Fax: +1 202 762 1025

email: [robert.freeman@navy.mil](mailto:robert.freeman@navy.mil)

The Oceanographer of the Navy is a special assistant to the Chief of Naval Operations responsible for oceanography, meteorology, geospatial information and services, precise time, and astrometry. He leads a globally-distributed organization, including a fleet of seven multi-mission oceanographic survey ships and world's largest dedicated oceanographic computing facility.

**Keywords:** Information Services; Meteorology; Navigation; Oceanography

**Booth 800**



## Offshore Engineer Magazine

1635 W Alabama, Houston, Texas, 77006, United States

Tel: +1 713 831 1768

Web: [www.offshore-engineer.com](http://www.offshore-engineer.com)

Offshore Engineer provides topical and authoritative coverage of the global offshore oil & gas industry. Established in 1975, it now has a monthly circulation of over 32,000 copies. Register for your free subscription while visiting the show.

**Keywords:** Information Services; Publications

## Booth 814

Fax: +1 713 523 7804

email: [rob@oilonline.com](mailto:rob@oilonline.com)

## Offshore Europe 2003

8th Floor, Apex Tower, 7 High Street, New Malden, Surrey, KT3 4DQ, United Kingdom

Tel: +44 (0)20 8949 9888

Web: [www.offshore-europe.co.uk](http://www.offshore-europe.co.uk)

Fax: +44 (0)20 8949 9889

email: [oe2003@spearhead.co.uk](mailto:oe2003@spearhead.co.uk)



Offshore Europe takes place 2-5 September 2003 in Aberdeen, Scotland, UK. It is the biennial meeting place for the international offshore oil and gas industry. Showcasing technology, hardware and services for the offshore industry worldwide, OE03 also includes a free conference featuring key E&P executives discussing current and future global industry issues. Offshore Europe is the Eastern hemisphere's largest offshore oil and gas event and is organized by the Offshore

Europe Partnership, a partnership between Spearhead Exhibitions and the Society of Petroleum Engineers.

*Exhibiting on the Spearhead Exhibitions Booth.*

**Keywords:** Exhibitions/Events/Conferences; Information Services

## Optech Incorporated

100 Wildcat Road, Toronto, ON, M3J 2Z9, Canada

Tel: +1 416 661 5904

Web: [www.optech.on.ca](http://www.optech.on.ca)

Fax: +1 416 661 4168

email: [inquiries@optech.on.ca](mailto:inquiries@optech.on.ca)

Combining laser radar technology with an airborne platform, Optech's laser surveying systems are fast, accurate and cost-effective in precisely those survey applications where conventional systems are most limited - shallow water, the land/water interface, hazardous areas and areas requiring rapid environmental assessment. Optech's airborne laser bathymetry system, the SHOALS-1000, acquires both bathymetric and high density topographic information rapidly and efficiently.

**Keywords:** Bathymetry; Coastal Monitoring; Data Acquisition/Management; Hydraulic Systems; Hydrography; Lasers; Mapping Systems; Measuring Services; Photogrammetry; Sensors

## Booth 419

## Orcina Cable Protection Ltd

North Lonsdale Road, Ulverston, Cumbria, LA12 9DL, United Kingdom

Tel: +44 (0)1229 583914

Web: [www.ocpltd.com](http://www.ocpltd.com)

Fax: +44 (0)1229 581695

email: [sales@ocpltd.com](mailto:sales@ocpltd.com)

OCP are leading designers and manufacturers in the provision of the ultimate cable protection systems for the seismic industry. Offering bespoke manufacture of bending stiffeners, restrictors and clamps to support and control the overbending of cables, umbilicals and flexible pipes used by the offshore seismic survey sectors.

*Exhibiting on the CRP Group Booth.*

**Keywords:** Autonomous Underwater Vehicles; Beacons & Buoys; Buoyancy Materials; Composite Materials; Dynamic Positioning; Fenders; Ocean Modelling; Remote Data Acquisition; ROVs; Seismic Survey; Towed Arrays; Towed Bodies; Transponders; Umbilicals

## Booth 723

## Orcina Ltd

Daltongate, Ulverston, Cumbria, LA12 7AJ, United Kingdom

Tel: +44 (0)1229 584 742

Web: [www.orcina.com](http://www.orcina.com)

Fax: +44 (0)1229 587 191

email: [orcina@orcina.com](mailto:orcina@orcina.com)

Orcina is an engineering consultancy specialising in the fields of offshore dynamics, risers, moorings, towed systems and installation procedures. We develop and sell leading edge commercial software packages including OrcaFlex, the VIV Toolbox, OrcaLay and OrcaBend. We also undertake feasibility and design studies, design audit, and engineering systems analysis.

**Keywords:** Computer Software; Consultancy Services; Engineering Design; Finite Element Analysis; Hydro-Dynamics; Pipe laying; Structural Engineers; Towed Arrays

## Booth 523

## ORE Offshore

4 Little Brook Road, Wareham, Massachusetts, 02571, United States

Tel: +1 508 495 6673

Web: [www.ore.com](http://www.ore.com)

email: [sales@ore.com](mailto:sales@ore.com)

ORE designs, develops and manufactures precision acoustic products, instruments and systems for the control, positioning, and communications of underwater platforms including vehicles, moorings, and bottom mounted frames. ORE major products include acoustic releases, transponders, USBL positioning, and acoustic command and control systems. ORE will be featuring its new heavy load release system, and a lightweight, easy to maintain shallow water release.

*Exhibiting on the Edgetech Booth.*

**Keywords:** Acoustics; Beacons & Buoys; Mooring Equipment; Navigation; Position Fixing Systems; Telemetry Equipment; Tracking Software; Transponders; Underwater Communications

## Booth 623

## Outland Technology Inc

38190 Commercial Court, Slidell, Louisiana, 70458, United States

Tel: +1 985 847 1104

Web: [www.outlandtech.com](http://www.outlandtech.com)

## Booth 143

Fax: +1 985 847 1106

email: [buddy@outlandtech.com](mailto:buddy@outlandtech.com)

Manufactures underwater video systems, cameras, lights, video overlay systems and the Outland 1000 ROV. For 19 years they have provided the diving community - including the Navy - with imaging products for underwater use.

**Keywords:** ROVs; Surveillance; TV & Video Systems

## Paine Electronics

2401 South Bayview Street, Seattle, Washington, 98144, United States

Tel: +1 206 329 8600

Web: [www.painelectronics.com](http://www.painelectronics.com)

## Booth 742

Fax: +1 206 329 1615

email: [dan@painelectronics.com](mailto:dan@painelectronics.com)

Manufactures precision pressure instruments in standard and custom configurations for petroleum, hydraulic, aerospace and military applications. Paine's highly accurate transducers are designed to operate flawlessly in the most extreme environments, from down-hole well logging and sub-sea production pods to missile and satellite applications.

**Keywords:** Calibration Devices; Depth Indicators & Recorders; Hydraulic Systems; Instrumentation Systems; Sensors; Transponders

## Paroscientific Inc

4500 148th Ave NE, Redmond, Washington, 98052-5194, United States

Tel: +1 425 883 8700 x303

Web: [www.paroscientific.com](http://www.paroscientific.com)

Fax: +1 425 867 5407

email: [support@paroscientific.com](mailto:support@paroscientific.com)

Paroscientific manufactures and sells a complete line of high precision pressure instrumentation from a fraction of an atmosphere to thousands of atmospheres (3 psid to 40,000 psia). Resolution of better than 0.0001% and typical accuracy of 0.01% are achieved even under difficult environmental conditions. Other desirable characteristics include high reliability, low power consumption, and excellent long-term stability. Absolute, gauge, and differential transducers have been packaged in a variety of configurations including intelligent transmitters, depth sensors, portable standards, water level systems and meteorological measurement systems.

**Keywords:** Anti Submarine Warfare; Bathymetry; Beacons & Buoys; Calibration Devices; Coastal Monitoring; Depth Indicators & Recorders; Earth Sciences; Environmental Measurement; Hydrological Instruments; Instrumentation Systems; Laboratory Supplies & Apparatus; Pressure Vessels; Tide Gauges; Transducers

## Booth 801

## Perry Slingsby Systems

821 Jupiter Park Drive, Jupiter, Florida, 33458, United States

Tel: +1 561 743 7000

Web: [www.perryslingsbysystems.com](http://www.perryslingsbysystems.com)

Fax: +1 561 743 1313

email: [bruce.lokay@us.perrymail.com](mailto:bruce.lokay@us.perrymail.com)

World leader in design and manufacture of underwater ROVs and related subsea equipment. Developer of subsea intervention technologies for oil and gas, telecom, military and specialist markets. Comprehensive range of state-of-the-art ROVs, robotic tooling products and robotic engineering capabilities backed by worldwide service and support. (Locations: US and UK).

**Keywords:** Engineering Design; Launch & Recovery Systems; Manipulators; Manned Submersibles; Pressure Testing Facilities; Rescue & Survival Equipment; ROVs; Submersible Equipment; Trenching; Winches & Accessories

## Booth 408

## Phillystran Inc

151 Commerce Drive, Montgomeryville, Pennsylvania, 18936, United States

Tel: +1 215 368 6611

Web: [www.phillystran.com](http://www.phillystran.com)

Fax: +1 215 362 7956

email: [rlombardo@phillystran.com](mailto:rlombardo@phillystran.com)

Manufactures custom-designed, high tech, fiber ropes from Kevlar, Spectra, Twaron, Vectran, Dyneema, Technora and Zylon. Specialize in stranded wire lay, braided and parallel constructions. Experts in terminating ropes and cables from a hand splice to a resin poured socket utilizing the company's own Socketfast Blue potting compound.

**Keywords:** Cables, Connectors; Mooring Equipment; Ropes & Chains; Towed Arrays

## Booth 729

## Piezo Composite Transducers Ltd

Crombie Lodge, Aberdeen Science & Technology Park, Campus 2, Balgownie Drive, Aberdeen, Grampian, AB22 8GU, United Kingdom

Tel: +44 (0)1224 355 280

Web: [www.pct-ltd.co.uk](http://www.pct-ltd.co.uk)

Fax: +44 (0)1224 355 281

email: [info@pct-ltd.co.uk](mailto:info@pct-ltd.co.uk)

PCT Limited Leading designers and manufacturers of high performance acoustic transducers based upon the most advanced transduction technologies. Our unique capabilities offer customers the ability to improve the range, resolution and clarity of their acoustic systems.

**Keywords:** Acoustics; Composite Materials; Sonar & Systems; Transducers

## Booth 710





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## Planning Systems Inc

115 Christian Lane, Stennis Space Center, Mississippi, 39529, United States  
Tel: +1 228-689-8408 Fax: +1 228-689-8499  
Web: www.PlanningSystemsInc.com email: ljugan@psistennis.com  
PSI will showcase a suite of products and services in support of ocean observing systems. The suite includes sensor network products, information management tools, and system integration services. Featured will be the launch of PSI's new family of Ethernet-based products for building Internet-compatible undersea and coastal sensor networks.  
**Keywords:** Coastal Monitoring; Data Acquisition/Management; Engineering Design; Fibre Optic; Information Services; Instrumentation Systems; Ocean Modelling; Ocean Observation; Sensors; Telemetry Equipment

## Booth 646

## Pressure Systems Inc

34 Research Drive, Hampton, Virginia, 23666, United States  
Tel: +1 757 865 1243 Fax: +1 757 865 8744  
Web: www.pressuresystems.com email: sales@pressuresystems.com  
Manufacturer of precision, resonant quartz and hydrostatic pressure sensors and transducers. The precision, resonant quartz sensors are ideally suited for OEM wave, tide, and barometric pressure measurement. The hydrostatic pressure sensors are available in titanium or stainless steel construction making them ideal for level measurement in fresh or saltwater applications.  
**Keywords:** Sensors; Transducers

## Booth 653

## PMI Industries Inc

5300 St Clair Avenue, Cleveland, Ohio, 44103, United States  
Tel: +1 216 881 4914 Fax: +1 216 881 4920  
Web: www.pmiind.com email: sales@pmiind.com  
Cable products and engineered solutions to cable problems; reliable terminations and protection accessories; factory tested and fabricated cable systems; specialized testing of cable, components and systems; maintenance and repair of operational equipment.  
**Keywords:** Cables, Connectors; Engineering Design

## Booth 842

## Prizm Advanced Comm Electronics Inc

6655-R Amberton Drive, Elkridge, Maryland, 21075, United States  
Tel: +1 410 379 6658 Fax: +1 410 379 5325  
Web: www.prizminc.com email: fiber@prizminc.com  
Leading manufacturer and designer of fibre optic multiplexer systems for video, data, sonar and media conversion. Support for ethernet, arcnet, USB and other custom interfaces. Electro optical slip rings and CVDs for complete system solutions. Also wireless 802.11 products. Prizm specializes in custom engineering and manufacturing services to meet your optimum system needs.  
**Keywords:** Engineering Design; Fibre Optic; Slip Rings; Telecommunications; Telemetry Equipment; Underwater Communications

## Booth 451

## PNI Corporation

5464 Skyline Blvd, Suite A, Santa Rosa, California, 95403-1084, United States  
Tel: +1 707 566 2260 Fax: +1 707 566 2261  
Web: www.pnicorp.com email: sales@pnicorp.com  
Manufactures a line of compass products which display heading, pitch, roll, and temperature all while drawing less than 100mW. These Tilt Compensated Modules (TCMs) are the world's most advanced and reliable digital compasses. PNI's included proprietary software offers a simple, intuitive graphical user interface.  
**Keywords:** Autonomous Underwater Vehicles; Beacons & Buoys; Coastal Monitoring; Compasses; Inclinometers; Magnets & Magnetometers; Marine Surveyors; Navigation; Sensors; Towed Arrays

## Booth 627

## QinetiQ

Building A22, Rm 203, Winfrith Technology Centre, Dorchester, Dorset, DT2 8XJ, United Kingdom  
Tel: +44 (0)1305 212678 Fax: +44 (0)1305 212550  
Web: www.QinetiQ.com email: sllong@QinetiQ.com  
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**Keywords:** Acoustics; Autonomous Underwater Vehicles; Electronic Charting; Environmental Modelling; Fibre Optic; Low Frequency Noise; Ocean Modelling; Pressure Testing Facilities; Sonar & Systems; Underwater Communications

## Booth 709





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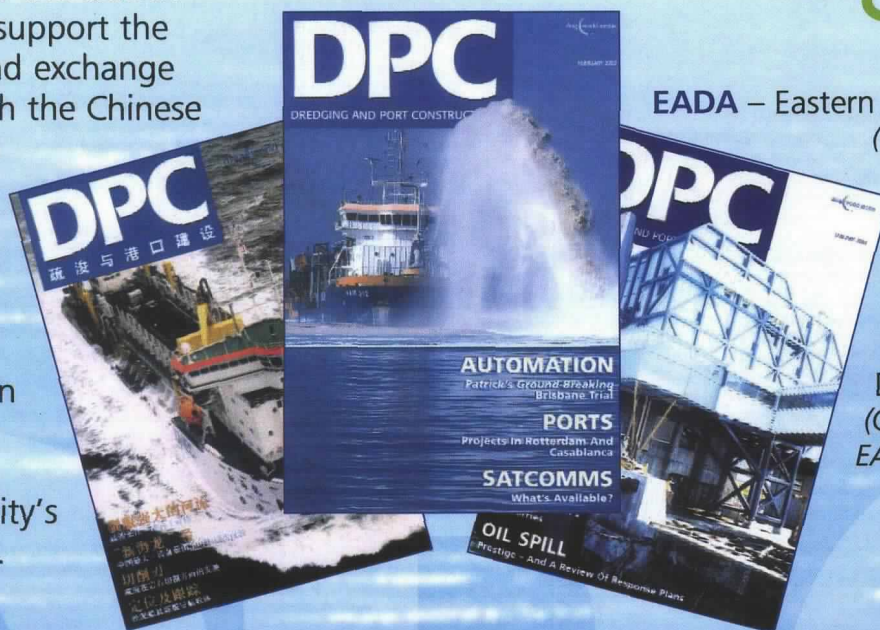
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Specialises in the development of software for the navigation community. The company have been in operation for 10 years with offices in both the UK and USA with agents also located in the Middle East. The company offers development solutions, mapping and charting products, data management, training and GPS, geodesy and GIS.

consultancy within the areas of  
*Exhibiting on the Harvey-Lynch Booth.*

**Keywords:** Cartographic Materials; Charts & Charting; Computer Software; Data Acquisition/Management; Echo Sounders; Global Positioning Systems; Gyrocompasses; Hydrographic Survey Software; Magnets & Magnetometers; Sonar & Systems

## Quester Tangent Corporation

Marine Sciences Division, 99-9865 West Saanich Road, Sidney, British Columbia, V8L 5Y8, Canada

Tel: +1 250 656 6677

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**Keywords:** Acoustics; Anti Submarine Warfare; Aquaculture; Biological Resource Exploitation; Coastal Monitoring; Environmental Measurement; Remote Data Acquisition

## RBR Ltd

27 Monk Street, Ottawa, Ontario, K1S 3Y7, Canada

Tel: +1 613 233 1621

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*Exhibiting on the Guildline Instruments Booth.*

**Keywords:** Conductivity Meters; Data Acquisition/Management; Depth Indicators & Recorders; Environmental Measurement; Fluorometers; Hydrological Instruments; Inclometers; Oxygen Meters; pH meters; Tide Gauges; Wave & Wave Power

## Booth 550

## RD Instruments

9855 Businesspark Avenue, San Diego, California, 92131, United States

Tel: +1 858 693 1178

Web: [www.rdinstruments.com](http://www.rdinstruments.com)



## RD Instruments

RD Instruments' Acoustic Doppler Current Profilers (ADCPs) are the worldwide de-facto standard for profiling water currents and measuring waves. RDI's Workhorse products combine ease-of-use and reduced cost. They include RDI's patented BroadBand technology for faster, more accurate high-resolution profiling in every environment - from the shallowest stream to the deepest ocean. RDI's Navigator Doppler Velocity Logs (DVLs) are used around the globe, providing precision navigation to a wide array of surface vessels and underwater vehicles.

**Keywords:** Current Meters; Flow Meters; Hydrological Instruments; Navigation; Water Measurement, Sampling; Wave & Wave Power

## Booth 241

Fax: +1 858 695 1459

email: [glopez@rdinstruments.com](mailto:glopez@rdinstruments.com)

## Rockland Oceanographic Services Inc.

1112 Reno St., Victoria, BC, V9A 4B6, Canada

Tel: +1 250 370 1688

Web: [www.alecvictoria.com](http://www.alecvictoria.com)

Offers technical services and equipment for oceanographic research and monitoring, with particular focus on microstructure turbulence measurements. Founded in February 2002 Rockland O/S is the North American representative of three major equipment manufacturers for microstructure instrumentation and CTD technology: Alec Electronics Co Ltd, Japan; Sea & Sun Technology, Germany; and RGL Consulting Ltd, Canada. This setup gives customers access to a wide variety of microstructure measurement equipment, and allows them to benefit from the extensive technical and scientific expertise offered by Rockland O/S.

*Exhibiting on the Alec Electronics Booth.*

**Keywords:** Conductivity Meters; Environmental Measurement; Fluorometers; Temperature Measurement

## Booth 818

Fax: +1 250 370 0234

email: [fabian@wolk.org](mailto:fabian@wolk.org)

## Rosenstiel School of Marine Sciences/ University of Miami

University of Miami, 4600 Rickenbacker Causeway, Miami, Florida, 33149, United States

Tel: +1 305 361 4994

Web: [www.rsmas.miami.edu](http://www.rsmas.miami.edu)

## Booth 715

Fax: +1 305 361 4711

email: [mrowand@rsmas.miami.edu](mailto:mrowand@rsmas.miami.edu)

The University of Miami Rosenstiel School of Marine and Atmospheric Science is one of the nation's premier research and education institutions. Located on a 16-acre campus on Virginia Key in Miami, The Rosenstiel School focuses its research and education mission on topics of societal significance such as fisheries, climate change, hurricanes, coral reefs, aquaculture, oceans and human health and natural hazards.

**Keywords:** Meteorology; Oceanography; Research & Development Institutions





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Tel: +1 902 492 4780

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**Keywords:** Coastal Monitoring; Data Acquisition/Management; Environmental Measurement; Environmental Modelling; Instrumentation Systems; Nutrient Analysers; Ocean Modelling; Ocean Observation; Optics; Profiling Systems; Remote Data Acquisition

## Booth 135

## SEA CON Brantner & Associates Inc

1240 Vernon Way, El Cajon, California, 92020, United States

Tel: +1 619 562 7070

Web: [www.seacon-usa.com](http://www.seacon-usa.com)

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email: [rparras@seaconbrantner.com](mailto:rparras@seaconbrantner.com)

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**Keywords:** Cables, Connectors; Engineering Design; Fibre Optic; Instrumentation Systems; Switches, Underwater; Towed Arrays

## Booth 941

## Sea Technology Magazine

1501 Wilson Blvd., Suite 1001, Arlington, Virginia, 22209, United States

Tel: +1 703 524 3136

Web: [www.sea-technology.com](http://www.sea-technology.com)

Fax: +1 703 841 0852

email: [seatechads@sea-technology.com](mailto:seatechads@sea-technology.com)

A worldwide leader for the marine, science and engineering businesses published monthly for over 39 years and circulated in more than 105 countries. Sea Technology is edited for management engineers, scientists and educators serving the offshore/diving, government, civilian/military and science/research worldwide marine markets.

**Keywords:** Publications

## Booth 214

## Sea-Bird Electronics Inc

1808 - 136th Place NE, Bellevue, Washington, 98005, United States

Tel: +1 425 643 9866

Web: [www.seabird.com](http://www.seabird.com)

Fax: +1 425 643 9954

email: [dbennett@seabird.com](mailto:dbennett@seabird.com)

The world's leading manufacturer of CTD instruments and multi-bottle water samplers. Instruments are offered for moorings or real-time use. Sea-Bird's full line of nearly 50 instruments is represented in this year's exhibit.

**Keywords:** Conductivity Meters; Environmental Measurement; Instrumentation Systems; Oxygen Meters; Sensors; Submersible Equipment; Tide Gauges; Water Measurement, Sampling

## Booth 619

## Seatronics Inc

10801 Hammerly Boulevard, Suite 220, Houston, Texas, 77043, United States

Tel: +1 713 464 3311

Web: [www.seatronics-group.com](http://www.seatronics-group.com)

Fax: +1 713 464 6111

email: [mikes@seatronics-group.com](mailto:mikes@seatronics-group.com)

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**Keywords:** Cameras; Current Meters; Diving; Echo Sounders; Gyrocompasses; Hydro-Acoustics; Magnets & Magnetometers; Sub-bottom Profile Equipment; Tide Gauges; Ultrasonic Testing

## Booth 541

## Sequoia Scientific, Inc.

2700 Richards Road, Suite 107, Bellevue, Washington, 98005, United States

Tel: +1 425 641 0944

Web: [www.sequoiasci.com](http://www.sequoiasci.com)

Fax: +1 425 643 0595

email: [devoss@sequoiasci.com](mailto:devoss@sequoiasci.com)

Manufactures the LISST series suspended sediment sensors and the HYDROLIGHT radiative transfer computation software. The LISST-100 measures size-distribution, LISST-ST measures settling velocity distribution, and LISST-25 measures true concentration of suspended sediments unaffected by changes in particle size or color. Sequoia is also active in sponsored basic research.

**Keywords:** Coastal Monitoring; Dredging Equipment; Environmental Measurement; Environmental/Pollution; Hydrological Instruments; Optics; Sediment Sizing; Water Measurement, Sampling

## Booth 836

## Shark Marine

23 Nihan Drive, Unit 4, St Catharines, Ontario, L2N 1L2, Canada

Tel: +1 905 687 6672

Web: [www.sharkmarine.com](http://www.sharkmarine.com)

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A manufacturer and supplier of Remotely Operated Vehicles, camera systems, oceanographic equipment and related services serving the oceanographic community since 1984. They offer a full line of oceanographic equipment for all your underwater investigation, research and construction needs. Over the years, Shark Marine has gained global respect for their developments in undersea technology and the expertise they bring to on-site operations. As a manufacturer they have made significant advancements in underwater imaging equipment, remotely operated vehicles and other survey systems. In their services they have provided consultation, software development, custom manufacture, hydrostatic testing, equipment rentals and location operations.

**Keywords:** Autonomous Underwater Vehicles; Cameras; Data Acquisition/Management; Defence Technology; Magnets & Magnetometers; Port & Harbour Development; ROVs; Sonar & Systems; Survey; TV & Video Systems

## Booth 316

## Society for Underwater Technology

80 Coleman Street, London, EC2R 5BJ, United Kingdom

Tel: +44 (0)20 7382 2601

Web: [www.sut.org.uk](http://www.sut.org.uk)

Fax: +44 (0)20 7382 2684

email: [admin@sutadmin.demon.co.uk](mailto:admin@sutadmin.demon.co.uk)

The SUT is an international body actively promoting the development, dissemination and exchange of ideas, information and technology arising from or related to the underwater environment. Founded in 1966, the Society brings together organizations and individuals from over 30 countries with a common interest in underwater technology, ocean science and offshore engineering. The Society has several branches worldwide including one in Houston, Texas.

**Keywords:** Information Services; Publications

## Booth 817

## Sonardyne Inc

11210 Steeplecrest Dr., Suite 360, Houston, Texas, 77065, United States

Tel: +1 281 890 2120

Web: [www.sonardyne.com](http://www.sonardyne.com)

Fax: +1 281 890 7047

email: [sales@sonardyne.com](mailto:sales@sonardyne.com)

Design and manufacture a range of underwater acoustic equipment including acoustic releases, acoustic positioning equipment (LBL, USBL), acoustic telemetry and control equipment. Sonardyne's latest FUSION system and Compatt 5 will be featured, both of which offer significant improvements in performance from current systems.

**Keywords:** Acoustics; Dynamic Positioning; Hydro-Acoustics; Survey; Telemetry Equipment; Tracking Software; Transponders; Underwater Communications

## Booth 703

## Sonatech Inc.

879 Ward Drive, Santa Barbara, California, 93111, United States

Tel: +1 805 683 1431

Web: [www.sonatech.com](http://www.sonatech.com)

Fax: +1 805 683 4862

email: [marketing@sonatech.com](mailto:marketing@sonatech.com)

A leader in underwater acoustics since 1973, Sonatech develops and manufactures sonar and navigation systems for military, commercial, and research applications. These include SSBL/LBL systems; forward-looking, obstacle-avoidance, homing/docking, acoustic-telemetry, side-scan, and synthetic-aperture sonars; portable ranges; and distress beacons. As our Quality Policy mandates, we deliver quality products that meet our customers' performance requirements using approved materials, processes and procedures.

**Keywords:** Acoustics; Echo Sounders; Hydrophones; Markers; Penetrometers; Position Fixing Systems; Sensors; Sonar & Systems; Telemetry Equipment; Towed Arrays; Transducers; Transponders; Underwater Communications

## Booth 727

## Sonotronics

3250 S. Dodge Blvd, Suite 6, Tucson, Arizona, 85713, United States

Tel: +1 520 746 3322

Web: [www.sonotronics.com](http://www.sonotronics.com)

Fax: +1 520 294 2040

email: [sales@sonotronics.com](mailto:sales@sonotronics.com)

Sonotronics manufactures systems for the relocation of equipment, divers, or other items which may need to be recovered from a marine environment. These systems include acoustic transmitters (pingers), deck unit receivers, underwater diver receivers, hydrophones, and other accessories. Sonotronics was founded in 1971 and has since been a leader in underwater tracking systems in the fisheries and equipment relocation industries.

**Keywords:** Acoustics; Beacons & Buoys; Data Acquisition/Management; Echo Sounders; Underwater Communications

## Booth 542





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### JANUARY

Annual Review and Forecast

### FEBRUARY\*\*

Instrumentation: Measurement, Processing & Analysis  
*U.S. Hydro, March 24-27, Biloxi, MS*

### MARCH

Electronic Charting/Vessel Management/Ports & Harbors/Dredging

### APRIL\*\*

Offshore Technology/Ocean Engineering  
*OTC 2003, May 5-8, Houston, TX*

### MAY\*\*

Communications, Telemetry, Data Processing  
*Oceanology International Americas, June 4-6, New Orleans, LA*  
*Coastal Zone Conference, July 13-17, Baltimore, MD*

### JUNE

Seafloor Mapping/Sonar Systems/Vessels

### JULY

Deck Gear, Cable, Connectors & Power Systems

### AUGUST\*\*

Ocean Resources Development & Coastal Zone Management  
*Oceans 2003 MTS/IEEE, September 22-26, San Diego, CA*

### SEPTEMBER\*\*

Geophysical Exploration/Seafloor Engineering  
*SEG 2003, October 26-31, Dallas, TX*

### OCTOBER

Environmental Monitoring, Remote Sensing & Pollution Control

### NOVEMBER

Undersea Defense/Antisubmarine Warfare

### DECEMBER\*\*

Diving, Underwater Vehicles & Imaging  
*Underwater Intervention 2004, February 17-19, New Orleans, LA*

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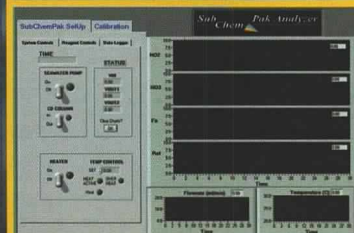
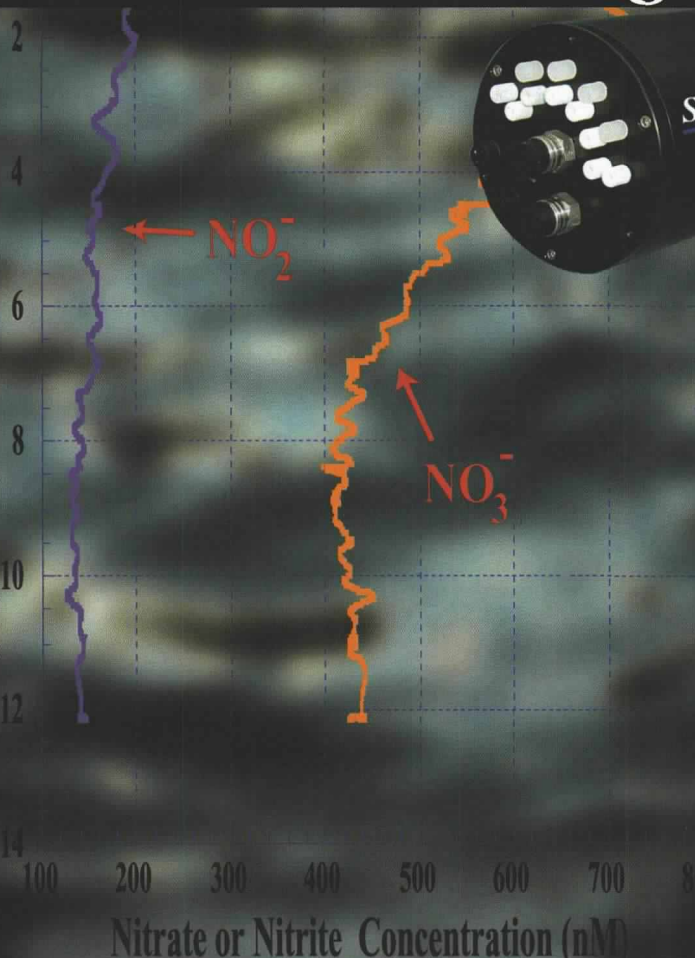


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In situ Calibration**

The SubChemPak Analyzer is a rapid response, in situ chemical analyzer designed for high-resolution, real-time measurements of environmentally important chemicals. The four-channel, continuous-flow spectrophotometric analyzer is comprised of two modules: 1) the SubChemPak reagent delivery module and 2) the ChemStar, a 4-channel absorption detector manufactured by WET Labs, Inc.

The SubChemPak Analyzer uses optimized analytical methods for rapid *in situ* measurements of dissolved nitrate, nitrite, phosphate, iron, and other nutrients and metals. A computer remotely controls the operation, automated in situ calibration, and data acquisition. The concentrations of nutrients are instantaneously displayed on the monitor and logged to disk. The SubChemPak Analyzer can be readily integrated with oceanographic CTDs and other sensors on vertical and horizontal profiling platforms.



**SubChem Systems, Inc.**

655 North Main Road  
Jamestown, RI, USA 02835

Tel: 401-874-6294  
Fax: 401-874-6898  
Email: sales@subchem.com  
internet: www.subchem.com

## SonTek Inc.

6837 Nancy Ridge Drive, Suite A, San Diego, California, 92121, United States

Tel: +1 858 546 8327

Web: www.sontek.com

SonTek/YSI Inc. provides the widest variety of acoustic Doppler current measurement systems of any manufacturer in the world. Their product line includes acoustic Doppler current profilers ADP, velocimeters ADV, current meters and Doppler velocity logs. These sensors and integrated systems are made for measuring water velocity, directional waves and flow in any body of water.

Also Exhibiting is Endeco/YSI.

**Keywords:** Acoustics; Coastal Monitoring; Current Meters; Flow Meters; Hydrological Instruments; Velocimeters

## Booth 841

## Sub-Atlantic

Unit 12, Airways Industrial Estate, Pitmedden Road, Dyce, Aberdeen, AB21 0DT, United Kingdom

Tel: +44 (0)1224 723623

Web: www.sub-atlantic.co.uk

Designs and builds a range of electric powered observation and light workclass ROVs - Apache, Mohawk, Cherokee and Super Mohawk. A new addition to the range is the world-beating Navajo. Systems to meet all needs and water depths. A full range of hydraulic thrusters all with DNV-witnessed testing, valve packs, HPUs, pan & tilts and specialist bespoke engineering.

**Keywords:** Diving; Launch & Recovery Systems; Ocean Observation; ROVs; Salvage; Submersible Equipment; Trenching; TV & Video Systems

## Booth 737

## South Bay Cable Co

PO Box 67, Idyllwild, California, 92549, United States

Tel: +1 909 659 2183

Web: www.southbaycable.com

Manufacturer of electrical, optical, mechanical cables with over 45 years of manufacturing leadership and 50,000 highly engineered designs. Our products have been put to the test in the most demanding applications including geophysical, undersea exploration to naval defense. Towed arrays, video pipe inspection, coastal engineering and remotely operated vehicles.

**Keywords:** Anti Submarine Warfare; Cables, Connectors; Fibre Optic; Minesweepers; ROVs; Seismic Survey; Sensors; Sonar & Systems; Towed Arrays; Umbilicals

## Booth 232

## SubChem Systems Inc

665 North Main Road, Jamestown, Rhode Island, 02835, United States

Tel: +1 401 874 6294

Web: www.subchem.com

Offers a new class of submersible chemical analyzers for contemporary oceanographic and environmental applications. The four channel SubChem Analyzers enable real-time profiling for dissolved inorganic nutrients - nitrate, nitrite, phosphate, silicate, ammonium and iron in marine waters with fast response times (seconds), and low detection limits (nanomolar).

Also Exhibiting is WETLabs.

**Keywords:** Autonomous Underwater Vehicles; Coastal Monitoring; Coastal Protection; Consultancy Services; Environmental Measurement; Environmental/Pollution; Explosives & Ordnance; Mapping Systems; Measuring Services; Nutrient Analysers; Ocean Observation; Profiling Systems; Sensors; Submarine Research; Survey; Towed Bodies; Water Measurement, Sampling

## Booth 141

## Spearhead Exhibitions Ltd

8th Floor, Apex Tower, New Malden, Surrey, KT3 4DQ, United Kingdom

Tel: +44 (0)20 8949 9222

Web: www.spearhead.co.uk

## Booth 337

Fax: +44 (0)20 8949 8186  
email: enquiries@spearhead.co.uk



International exhibition and conference organizers in marine science, energy, defence and aerospace. Oceanology International next takes place in London 16-19 March 2004 and to date more than 55,000ft2 nett exhibit space has been reserved. The fifth UUVS Unmanned Underwater Vehicle Showcase takes place in Southampton, UK 24-25 September 2003. Oceansp@ce is a free email newsletter circulating weekly to more than 17,500 readers.

Also Exhibiting are DSEi, Offshore Europe and Oceansp@ce.

**Keywords:** Exhibitions/Events/Conferences; Information Services; Publications

## Subconn Inc

40 Western Way, PO Box 2793, Duxbury, Massachusetts, 02331, United States

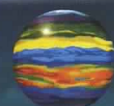
Tel: +1 781 934 0790

Web: www.macartney.com

Exhibiting on the Macartney A/S Booth.

## Booth 213

Fax: +1 781 934 3281  
email: mac-us@macartney.com





# Offshore Survey and ROV Services are more reliable where you find the Thales point

Wherever you find the Thales point, you will find our world leading offshore survey services. Thales GeoSolutions delivers proven integrated global solutions and services via its worldwide network of operating companies, teams of experts and its state-of-the-art equipment and vessel fleet. For further details contact us on: +44 (0)870 601 0000.



## Environmental & Metocean Services

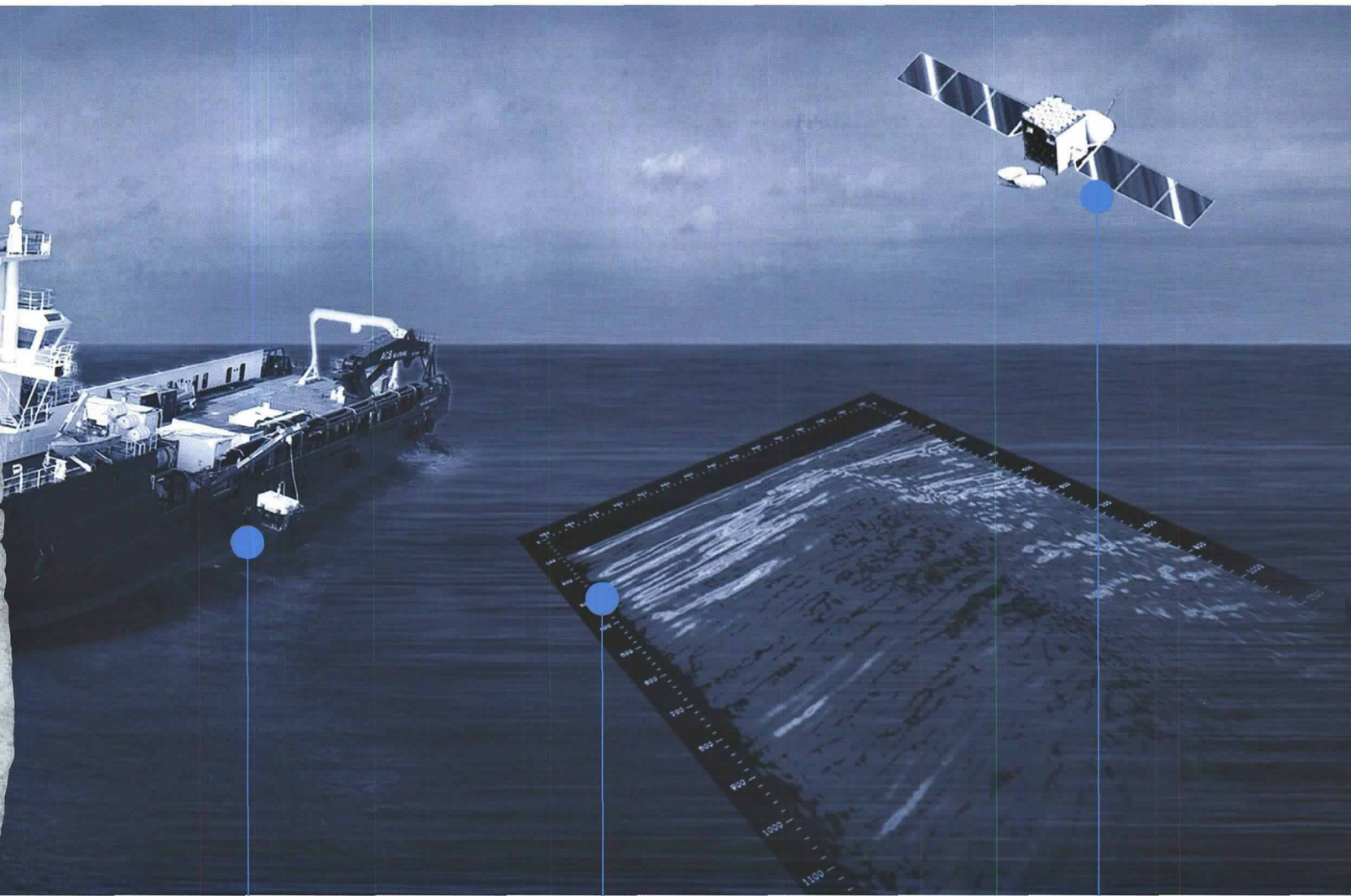
Qualified professionals and technologically advanced equipment offer comprehensive deep and shallow water oceanographic data collection and monitoring services.

## Precise Positioning

A pioneer of commercial GPS, Thales has one of the world's largest Differential GPS networks in the world providing highly reliable precision positioning on land and sea.



# THALES



## ROV & Construction Service Support

Air and saturation diving, in addition to in-house design and manufacture of one of the world's largest ROV fleets including deep-water vehicles, capable of operating in depths of 4,000m.

## Integrated Geosciences

Comprehensive hydrographic, geophysical and geotechnical capability throughout the world utilising dedicated survey vessels and state-of-the-art equipment.

## Tracking & Telemetry

Thales offers UHF, VHF and satellite-based tracking and telemetry systems developed to provide robust solutions that can work in harsh environments on land and sea.



# Data Logging Done Easy!

Temperature (°C)



- Sensors:**
- Salinity
  - Temperature
  - Depth



Depth (m)

- Underwater temperature recorder
- Temperature accuracy  $\pm 0.05^{\circ}\text{C}$
- Memory capacity of 87,200 measurements
- Battery life of 5 years
- Communication cable plugs from recorder directly to a PC computer
- Recorder plug becomes accessible by unscrewing the end cap
- User friendly supporting software for Windows
- Robust and non-corrosive housing, plastic or titanium
- Depth ratings are 400 m (plastic) and 11,000 m (titanium)
- Size 130 mm x 25 mm

- Temperature, depth and salinity (optional) recorder
- Temperature accuracy  $\pm 0.1^{\circ}\text{C}$
- Depth accuracy  $\pm 0.4\%$  of selected depth range
- Conductive measurements, 12 bit resolution
- Memory capacity of 43,500 measurements pr. sensor
- Battery life of 3 years
- Wireless communication to the DST through a reader
- User friendly supporting software for Windows
- User defined settings through the software
- Depth rating is 750 m
- Small size: 46 mm x 15 mm
- Low cost

Measurement time: 29.8.2002 - 30.8.2002

**Star-Oddi** Vatnagarðar 14, 104 Reykjavík, Iceland  
Tel: +354 533 6060 Fax: +354 533 6069

Email: star-oddi@star-oddi.com

[www.star-oddi.com](http://www.star-oddi.com)

## Subsea Technologies Inc

1305 FM 359, Suite G, Richmond, Texas, 77469, United States

Tel: +1 281 341 1607

Web: [www.subseatechnologies.com](http://www.subseatechnologies.com)

Fax: +1 281 754 4401  
email: [sjl@subseatechnologies.com](mailto:sjl@subseatechnologies.com)

A specialist supplier of high technology underwater equipment for the offshore survey, ROV and diving industries. As the US distributor and service center for a number of industry leading manufacturers, they supply individual products or complete integrated systems, on a sale or rental basis, together with unrivaled 24/7 technical support.

Also Exhibiting are Applied Acoustic Engineering, Piezo Composite Transducers and Tritech International.

**Keywords:** Acoustics; Bathymetry; Beacons & Buoys; Cameras; Computer Software; Defence Technology; Echo Sounders; Geology/Geophysics; Global Positioning Systems; Hydraulic Systems; Hydro-Acoustics; Navigation; Plotters; Profiling Systems; ROVs; Sonar & Systems; Sub-bottom Profile Equipment; Swell Compensators; Tracking Software; Transponders; TV & Video Systems; Underwater Communications

## Booth 710

## Systea Srl

Loc. Paduni, 2A, Anagni, FR, 03012, Italy

Tel: +39 0775 776058

Web: [www.systea.it](http://www.systea.it)

Specialists in the development and production of innovative analytical devices for chemical analysis in water and sea water. The deep-sea version of DPA, the new microLFA (micro Loop Flow Analysis) in-situ monitoring probe able to measure at trace levels the four nutrients (ammonia, nitrate, nitrite, orthophosphate) using a single reactor will be shown.

**Keywords:** Coastal Monitoring; Environmental Measurement; Instrumentation Systems; Mooring Equipment; Nutrient Analysers; Pollution Control; Submersible Equipment

## Booth 436

## Survey Equipment Services Inc

1424 West Sam Houston, Parkway Suite 160, Houston, Texas, 77043, United States

Tel: +1 713 827 0430

Web: [www.ses-services.com](http://www.ses-services.com)

Fax: +1 713 827 8093  
email: [info@ses-services.com](mailto:info@ses-services.com)

Hire/sale/lease purchase of marine survey and navigation equipment: - sonars, sub bottom profilers, gyros, acoustics, underwater gyros, GPS receivers, telemetry etc.

Also Exhibiting is Hydroquip.

**Keywords:** Acoustics; Antennae; Current Meters; Hydrographic Survey Software; Hydrophones; Inclometers; Magnets & Magnetometers; Navigation; Sub-bottom Profile Equipment; Telemetry Equipment

## Booth 228

## TDI-Brooks International, Inc.

1902 Pinon Dr., College Station, Texas, 77845, United States

Tel: +1 979 696 3634

Web: [www.tdi-bi.com](http://www.tdi-bi.com)

Fax: +1 979 693 6389  
email: [Drjmbrooks@aol.com](mailto:Drjmbrooks@aol.com)

A research and service company specializing in surface geochemical exploration; deep-water heat flow surveys; environmental chemistry; multi-disciplinary oceanographic and environmental projects; and other offshore survey projects for federal agencies and private industry. TDI-Brooks owns and operates two 150ft multi-use oceanographic research vessels.

**Keywords:** Coastal Monitoring; Consultancy Services; Data Acquisition/Management; Environmental Measurement; Environmental/Pollution; Geology/Geophysics; Offshore Vessels; Remote Data Acquisition; Research Vessels; Risk Assessment; Survey

## Booth 832

## Sutron Corporation

21300 Ridgetop Circle, Sterling, Virginia, 20166, United States

Tel: +1 703 406 2800

Web: [www.sutron.com](http://www.sutron.com)

Fax: +1 703 406 2801  
email: [sales@sutron.com](mailto:sales@sutron.com)

Since 1975 Sutron real-time equipment & systems have remotely monitored and controlled water resources all over the world. Sutron's NOS-approved tide station includes our Xpert Datalogger with a 486 processor & 8 com ports and SatLink, our HDR multi-satellite logger & transmitter combined with rainfall, SDI-12 & pocket PC interfaces.

**Keywords:** Data Acquisition/Management; Hydrological Instruments; Instrumentation Systems; Meteorology; Remote Data Acquisition; Satellite Communications; Satellite Remote Sensing; Telemetry Equipment; Tide Gauges; Water Measurement, Sampling

## Booth 548

## Tenix Lads Inc

2548 Beach Boulevard, Suite 200, Biloxi, Mississippi, 39531, United States

Tel: +1 228 594 6800

Web: [www.TenixLADSUSA.com](http://www.TenixLADSUSA.com)

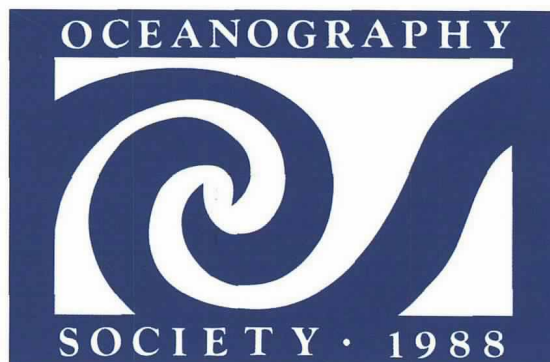
Fax: +1 228 594 6887  
email: [michael.janus@tenix.com](mailto:michael.janus@tenix.com)

Internationally recognized as the world leader for accurate bathymetric lidar surveying in coastal waters up to 70m deep. Our qualified, experienced survey team provides contract survey services to governments and industrial customers throughout the world in a broad range of environmental conditions.

**Keywords:** Bathymetry; Hydrography; Lasers; Survey

## Booth 645





## Join the Society dedicated to a multidisciplinary and interdisciplinary view of Oceanography!

Through its activities and publications, The Oceanography Society aims to link and support all the ocean sciences, marine-related technology and industry, and those involved in public policy related to the ocean sciences.

All members receive Oceanography magazine. Regular membership (US \$50) is available to oceanographers, scientists, or engineers active in ocean-related fields, or persons who have advanced oceanography through management or other public service. With proper certification, student membership (US \$25) is available for students enrolled at least half time in an oceanography or ocean-related program at the baccalaureate or higher level. Organizations and companies may subscribe annually as corporate members (US \$500). Annual library subscriptions (US \$135) are also available.

All members are entitled to exercise the rights and responsibilities of active participation in the Society, including the vote. All applications for membership are subject to approval by the Society's membership committee. To obtain more information about membership benefits as well as a membership application, visit the membership page on the TOS website: [www.tos.org/membership.htm](http://www.tos.org/membership.htm), or contact the Society directly at the address below.

### **The Oceanography Society**

P.O. Box 1931

Rockville, MD 20849-1931 USA

Tel: 301/251-7708, Fax: 301/251-7709

E-mail: [info@tos.org](mailto:info@tos.org), Web: [www.tos.org](http://www.tos.org)



## Texas A & M University

Booth 743

Oceanography Department, 1204 O & M Building, College Station, Texas, 77845 - 3146, United States

Tel: +1 979 845 7211

Fax: +1 979 845 6331

Web: [www.oceanography.tamu.edu](http://www.oceanography.tamu.edu)

email: [wgardner@ocean.tamu.edu](mailto:wgardner@ocean.tamu.edu)

We address compelling oceanographic/environmental questions through interdisciplinary research. We study both natural and anthropogenic factors that impact the world's oceans, the biota that inhabit them, and the geology of the basins that contain them in diverse environments - from estuaries to deep ocean basins.

**Keywords:** Charts & Charting; Data Acquisition/Management; Earth Sciences; Ecology; Environmental Measurement; Environmental Modelling; Environmental/Pollution; Geology/Geophysics; Hydrography; Ocean Modelling; Ocean Observation; Satellite Remote Sensing; Training

## Thales GeoSolutions Group Ltd

Booth 409

Compass House, Davis Road, Chessington, Surrey, KT9 1TB, United Kingdom

Tel: +44 (0)870 601 0000

Fax: +44 (0)20 8391 1602

Web: [www.thales-geosolutions.com](http://www.thales-geosolutions.com)

email: [contact@thales-geosolutions.com](mailto:contact@thales-geosolutions.com)

Unveiling a new decimetric positioning system in addition to bringing you the latest hydrographic, geoscience, metocean and environmental news from the Group, which has offices in all corners of the globe. Find out what's new from Thales.

Also exhibiting is Thales Navigation.

**Keywords:** Autonomous Underwater Vehicles; Data Acquisition/Management; Environmental Measurement; Geology/Geophysics; Geotechnics; Hydrography; ROVs; Satellite Navigation; Survey; Tracking Software

## Thales Navigation

Booth 409

471 El Camino Real, Santa Clara, California, 95050, United States

Tel: +1 408 615 5100

Fax: +1 408 615 5200

Web: [www.thalesnavigation.com](http://www.thalesnavigation.com)

A global leader in the GPS industry, Thales Navigation develops and manufactures equipment for positioning, navigation, communication and guidance applications. The company offers the broadest range of GPS-based solution in the market, from the compact hand-held GPS receivers with Magellan trademark, to the most sophisticated systems for land or marine surveys through its Thales Navigation products. At OI 2003 they will introduce an innovative range of GPS based heading and attitude solutions. These dynamic new products complement the well-established Thales Navigation product portfolio, specifically featuring dual-frequency LRK, used in many marine survey applications such as hydrography, dredging and offshore construction.

Exhibiting on the Thales Geosolutions Booth.

**Keywords:** Bathymetry; Dynamic Positioning; Global Positioning Systems; Gyrocompasses; Marine Civil Engineering; Navigation; Position Fixing Systems; Satellite Navigation; Survey; Tide Gauges

## The Oceanography Society

Booth 802

P.O. Box 1931, Rockville, Maryland, 20849-1931, United States

Tel: +1 301 251 7708

Fax: +1 301 251 7709

Web: [www.tos.org](http://www.tos.org)

email: [info@tos.org](mailto:info@tos.org)

Founded in 1988 to disseminate knowledge of oceanography and its application through research and education, to promote communication among oceanographers, and to provide a constituency for consensus-building across all the disciplines of the field. The Oceanography Society is a non-profit, tax-exempt organization.

**Keywords:** Publications

## Trimble Navigation

Booth 445

1440 Lake Front Circle #110, The Woodlands, Texas, 77380, United States

Tel: +1 281 363 4700

Fax: +1 281 292 8876

Web: [www.trimble.com](http://www.trimble.com)

email: [gretchen\\_hartley@trimble.com](mailto:gretchen_hartley@trimble.com)

The world's most experienced source of precise GPS marine survey and construction positioning solutions. Since 1984, Trimble products have been used for demanding marine survey, marine construction and positioning applications on rivers, lakes, harbors, offshore and oceans around the world. Trimble combines centimeter or submeter GPS accuracy with easy to use HYDROpro software to meet the tough challenges of most marine applications - eg hydrographic survey, dredging, pile driving, tide gauge replacement, rig & structure placement, beach profiling, gyro replacement or backup.

**Keywords:** Global Positioning Systems; Gyrocompasses; Hydrographic Survey Software; Land Reclamation Projects; Navigation; Seismic Survey; Tracking Software

## Tritech International Ltd

Booth 710

Peregrine Road, Westhill Business Park, Aberdeen, AB32 6JL, United Kingdom

Tel: +44 (0)1224 744111

Fax: +44 (0)1224 741771

Web: [www.tritech.co.uk](http://www.tritech.co.uk)

email: [sales@tritech.co.uk](mailto:sales@tritech.co.uk)

A multiple award-winning company specialising in underwater sensors for ROV and AUV use. Renowned for their industry leading obstacle avoidance sonar, the 'Super SeaKing'. Innovative and constant product development results in an extensive range of state of the art sonars, profilers, bathymetric systems, cameras, hydraulic tooling, laser systems, cable tracking, acoustic modems and defence systems.

Exhibiting on the Subsea Technologies Booth.

**Keywords:** Acoustics; Bathymetry; Cameras; Conductivity Meters; Defence Technology; Echo Sounders; Profiling Systems; Sonar & Systems; Sub-bottom Profile Equipment; Underwater Communications

## Triton Elics International Inc

Booth 733

125 Westridge Drive, Watsonville, California, 95076, United States

Tel: +1 831 722 7373

Fax: +1 831 722 1405

Web: [www.tritonelics.com](http://www.tritonelics.com)

email: [sjustus@tritonelics.com](mailto:sjustus@tritonelics.com)

TEI is an industry leader in hydrographic survey and mapping technology. They develop high performance data acquisition and processing systems that interface to most acoustic survey sensors available today. TEI systems are compatible with side scan sonars, multibeam sonars, sub-bottom profilers and many other sensors (single beam echosounders, magnetometers, etc).

**Keywords:** Bathymetry; Computer Equipment; Computer Software; Data Acquisition/Management; Hydrographic Survey Software; Mapping Systems; Seismic Survey; Sonar & Systems; Sub-bottom Profile Equipment; Survey

## Ultra Electronics Sonar & Communication Systems

Booth 732

Waverley House, Hampshire Road, Weymouth, Dorset, DT4 9XD, United Kingdom

Tel: +44 (0)1305 784738

Fax: +44 (0)1305 777904

Web: [www.sonarsystems.com](http://www.sonarsystems.com)

email: [sgoodwin@ultra.co.uk](mailto:sgoodwin@ultra.co.uk)

Ultra Electronics is a group of specialist business designing, manufacturing and supporting electronics and electromechanical systems, sub-systems and products for international defence, scientific, and commercial markets.

**Keywords:** Acoustics; Bathymetry; Electrical Design & Installation; Hydrography; Mines & MCM; Non-Destructive Testing; Records, Digital & Graphic; Sonar & Systems; Telemetry Equipment; Ultrasonic Testing

## Underwater Contractor International

Booth 235

55 High Street, Teddington, Middlesex, TW11 8HA, United Kingdom

Tel: +44 (0)20 8943 4288

Fax: +44 (0)20 8943 4312

Web: [www.divernet.com](http://www.divernet.com)

email: [jenny@divermag.co.uk](mailto:jenny@divermag.co.uk)

Underwater Contractor International (UCI) is a high-quality bi-monthly publication catering for the commercial underwater industry. A Diver Group publication, UCI is recognised by governmental, commercial and learned organizations as a primary vehicle for communicating with and disseminating information to the whole industry.

Exhibiting on the International Ocean Systems Booth.

**Keywords:** Publications

## Universal Technology (UK) Ltd

Booth 622

Suite 12, Software Center, Science and Technology Park, Bridge of Don, Aberdeen, AB22 8GU, United Kingdom

Tel: +44 (0)1224 355 200

Fax: +44 (0)1224 355 201

Web: [www.universaltechnologyuk.com](http://www.universaltechnologyuk.com)

email: [sales@universaltechnologyuk.com](mailto:sales@universaltechnologyuk.com)

Universal Technology UK Ltd (UTL) is active as a supplier of technology products both current and new innovation designs to the U/W and Marine sectors.

UTL supplies own product modular design Scanning Sonars for ROV/AUV's; special acoustic products for U/W Structure Monitoring; Sonar Processing and Inspection CCTV systems: ROV/AUV products and subsystems for Commercial and Defence markets.

**Keywords:** Acoustics; Anti Submarine Warfare; Artificial Intelligence; Autonomous Underwater Vehicles; Cameras; Diving; Hydrographic Survey Software; Sensors; Sonar & Systems; TV & Video Systems; Underwater Communications





## Valeport Limited

St Peters Quay, Totnes, Devon, TQ9 5EW, United Kingdom

Tel: +44 (0)1803 869292

Web: [www.valeport.co.uk](http://www.valeport.co.uk)

## Booth 309

Fax: +44 (0)1803 869293

email: [kedwards@valeport.co.uk](mailto:kedwards@valeport.co.uk)

Showing both new and upgraded products. Midas Surveyor is a new, cost effective, dual frequency echo sounder which will complement our tide gauge and bar check products. A revised directional wave recorder using proven PUV methods will feature strongly amongst our popular CTDs, SVPs, current meters and logging packages.

**Keywords:** Bathymetry; Coastal Monitoring; Conductivity Meters; Current Meters; Depth Indicators & Recorders; Echo Sounders; Environmental Measurement; Flow Meters; Hydrological Instruments; Instrumentation Systems; Profiling Systems; Salinometers; Sensors; Sound Velocity Probes; Tide Gauges; Velocimeters; Water Measurement, Sampling; Wave & Wave Power

## Veridian

PO Box 134008, Ann Arbor, Michigan, 48113-4008, United States

Tel: +1 734 994 1200 x2986

Web: [www.veridian.com](http://www.veridian.com)

## Booth 136

Fax: +1 734 998 1449

email: [michelle.minor@veridian.com](mailto:michelle.minor@veridian.com)

Provides GIS and marine engineering consulting services including concept, requirements and system development, prototype RDT&E, database design, data conversion and analysis, ocean modelling, operations, and survey planning. GIS global data products include: maritime claims and boundaries, ports, wrecks, piracy, shorelines, bottom sediments, seasonal surface currents, seasonal sea state, bathymetry, historical/daily notices to mariners (NOTOMS), gunnery exercise areas, chart corrections and drilling rig positions.

**Keywords:** Cartographic Materials; Coastal Monitoring; Coastal Protection; Mapping Systems; Offshore Vessels; Port & Harbour Development; Salvage; Seabed Sampling; Telecommunications

## VideoRay LLC

400 Eagleview Blvd, Exton, Pennsylvania, 19341, United States

Tel: +1 610 458 3000

Web: [www.videoray.com](http://www.videoray.com)

## Booth 657

Fax: +1 610 458 3010

email: [erick.estrada@videoray.com](mailto:erick.estrada@videoray.com)

Need to see underwater but want to stay on dry land? Then VideoRay ROV is the tool you have been waiting for. Ready for action in just minutes, VideoRay gets in the water faster than divers, and accesses areas that are too deep, confined or hazardous for humans

**Keywords:** Coastal Protection; Diving; Marine Surveyors; Non-Destructive Testing; Position Fixing Systems; Rescue & Survival Equipment; ROVs; Salvage; Surveillance; TV & Video Systems

## VT Halter Marine, Inc.

14055 Seaway Road, Gulfport, Mississippi, 39503, United States

Tel: +1 228 896 0029

Web: [www.vthaltermarine.com](http://www.vthaltermarine.com)

## Booth 637

Fax: +1 228 897 4848

Email: [sales@vthaltermarine.com](mailto:sales@vthaltermarine.com)

VT Halter Marine Shipyards have recently delivered more Oceanographic, Surveillance and Research ships than any other shipbuilder in the world. This unsurpassed experience results in ships that provide modern oceanographic capabilities in coastal or deep-ocean applications. Whether listening to the ocean depths, researching what lies beneath or tracking its surface, VT Halter Marine delivers.

## VT TSS Ltd

1 Garnett Close, Greycaine Industrial Estate, Watford, Hertfordshire, WD24 7JZ, United Kingdom

Tel: +44 (0)1923 470800

Web: [www.vttss.com](http://www.vttss.com)

## Booth 441

Fax: +44 (0)1923 470842

email: [cjones@tssuk.co.uk](mailto:cjones@tssuk.co.uk)



VT TSS designs and manufactures a complete range of marine motion sensors, subsea pipe and cable detection systems, gyrocompasses and voyage data recorders. The company is part of VT Group Plc.

**Keywords:** Dynamic Positioning; Gyrocompasses; Hydrography; Navigation; Survey; Vibration Monitoring

## WET Labs Inc

PO Box 518, Philomath, Oregon, 97370, United States

Tel: +1 541 929 5650

Web: [www.wetlabs.com](http://www.wetlabs.com)

## Booth 141

Fax: +1 541 929 5277

email: [wetlabs@wetlabs.com](mailto:wetlabs@wetlabs.com)

WET Labs, Inc. designs and manufactures underwater optical instruments for characterization of our environment. These measurements include spectrophotometry, absorption, attenuation, scattering, turbidity, and fluorescence. We also provide OEM manufacturing of instruments and an array of data acquisition and control systems.

*Exhibiting on the Subchem Systems Booth.*

**Keywords:** Coastal Monitoring; Data Acquisition/Management; Environmental Measurement; Environmental/Pollution; Fluorometers; Ocean Observation; Optics; Profiling Systems; Remote Data Acquisition; Sensors

## Wuxi Haiying-Cal Tec

## Electronic Equipment Co Ltd

20 Liangxi Road, Wuxi, Jiangsu, 214061, China

Tel: +86 510 588 4899

Web: [www.haiying.com.cn](http://www.haiying.com.cn)

## Booth 314

Fax: +86 510 581 0445

email: [haica@public1.wx.js.cn](mailto:haica@public1.wx.js.cn)

The largest acoustic equipment manufacturer in China and an industry leader since 1958 in the design, development, production and representation of high quality acoustics and hydrographic equipment including ceramics, transducers, echosounders and sonars.

**Keywords:** Acoustics; Current Meters; Echo Sounders; Hydro-Acoustics; Instrumentation Systems; Profiling Systems; Sensors; Sonar & Systems; Sound Velocity Probes; Transducers; Velocimeters

