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## CARIS 2007 Call for Papers



CARIS is now inviting submissions for abstracts to be presented at CARIS 2007, 11th CARIS User Group Conference and Educational Sessions, March 5 - 9 in Kuala Lumpur, Malaysia.

CARIS 2007 organizers are seeking submissions that are applicable to one or more of the following topics:

### Hydrographic Operations

- Survey Field Operations, Methods and Procedures
- Data validation and Quality Control
- Techniques in Processing and Visualization
- Compilation and Management of Source Bathymetry
- Hydrographic Survey Projects and Applications

### Data Production, Management, and Distribution

- Database-driven Cartographic/Hydrographic Production System
- Data Distribution, Data Encryption and Related Issues
- Unique Applications

- Data Validation and Quality Control
- Inland/River Electronic Navigational Charting

### Ports and Waterways

- Port & Harbour Information Integration
- Dredging Assessment and Monitoring
- Web-based Mapping
- Supervision and Maintenance of Ports and Waterways

### Geospatial Standards: Advantages

- National Spatial Data Infrastructure
- Interoperability
- Open Geospatial Consortium, Inc.<sup>TM</sup> (OGC) Standards

### Law of the Sea

- Maritime Boundary Delimitation
- Desktop Study and Results

CARIS is offering free conference registration for those speakers selected. Abstract submission deadline is November 15, 2006. Full details on the submission process are available online at [www.caris.com/caris2007](http://www.caris.com/caris2007).

Through distribution of this publication, CARIS intends to keep its users informed with the latest in development, tips, industry news and company events. If there are any features or columns that you would like to see more of, please let us know. Guest articles and contributions are also welcome. To be added to our mailing list or to submit your article ideas, contact  
Sheri Flanagan at:  
Tel: +1-506-458-8533  
Fax: +1-506-459-3849  
E-mail: [coastlines@caris.com](mailto:coastlines@caris.com).

## Our offices

### Global Headquarters CARIS

(New Brunswick, Canada)  
Tel +1-506-458-8533  
Fax +1-506-459-3849

### CARIS USA

(Maryland, United States)  
Tel +1-410-418-8907  
Fax +1-410-418-8957

### CARIS BV

(Heeswijk, The Netherlands)  
Tel +31-0-413-296-010  
Fax +31-0-413-296-012

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

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## Product Feature

# CARIS ChartServer

## Internet-based Hydrographic Product Distribution System

With the now widespread availability of digital hydrographic products from organizations such as Hydrographic Offices, and the common use of the Internet for information retrieval, there is a need to allow clients to view product catalogues online, and to order and download products and their updates. CARIS ChartServer addresses this need.

ChartServer is a highly customizable server-based software system which gives clients, using their web browsers, the abilities to:

- browse graphical and textual product catalogues
- order and download digital products
- retrieve product updates

On the server side, the solution involves three parts.

1. A database stores information on products, their updates, customers, orders and updating services. The database includes support for S-57 ENC's, raster charts (BSB and HCRF), paper charts and booklets. It is easily maintained by a purpose-built administrative application, which also provides the system's order reporting capabilities.
2. Web pages and related objects supply the services seen by customers, such as catalogue browsing, product ordering, and digital product download. These components operate together with a third party Web Server and Servlet Container.
3. A Java-based graphical catalogue applet displays a geo-referenced basemap overlaid by product boundaries derived from the database. The applet, which is

downloaded to clients' web browsers on-the-fly, includes navigational controls and display filters and can be operated simply as a catalogue or as a product selection and ordering tool. The basemap is rendered on-the-fly from GIS datasets resident on the server. The basemap image can be quite basic, or it can be sophisticated, for example displaying the actual ENC data with S-52 presentation, as USACE does (<http://chart.tec.army.mil/ChartServerV2.0/jsp/index.jsp>).

Recently, the system has been enhanced to allow BSB raster charts to be browsed and downloaded, allowing NOAA to distribute both BSB charts and ENC's through ChartServer (see <http://chartmaker.noaa.gov>).

The new 2.2 release of ChartServer features improved capabilities for managing "assembly products", which are assemblies of atomic products such as ENC's and BSB charts. For instance, a Hydrographic Office may have hundreds of ENC's. These can be assembled into a few regional assembly products, each comprising many ENC's. ChartServer simplifies the definition and publication of these assembly products, and automatically places them into clients' FTP directories upon ordering. Also new is a capability to regularly and automatically create update sets for these assembly products, with them being "pushed" to subscribers' FTP directories for the clients to download at their convenience.

# Ping to Chart World Tour Update

The CARIS Ping to Chart World Tour 2006 is a unique series of five-day hands-on workshops that cover the workflow of hydrographic information from the echosounder “ping” through to the production and distribution of the “chart”.

## World Tour Stops

- Shanghai, China, March 27-31
- Valparaíso, Chile, April 24-28
- Kuala Lumpur, Malaysia, June 12-16
- Cairns QLD Australia, June 19-23
- Copenhagen, Denmark, July 3-7
- Hyderabad, India, September 18-22
- Charleston, SC United States, October 16-20

Every workshop hosted to date has been a sold out event! Register today for a workshop near you. Registration information is available online at [www.caris.com/worldtour](http://www.caris.com/worldtour). Photos from past Ping to Chart tour stops can also be found there.



*Shanghai, China*



*Valparaíso, Chile*



*Kuala Lumpur, Malaysia*

# Gearing up for NOAA Contracts

On February 21, 2006, the National Oceanic and Atmospheric Administration (NOAA) announced that it has awarded five-year contracts to five hydrographic services providers including C&C Technologies Inc., SAIC, David Evans and Associates, Fugro Pelagos and TerraSond LTD.

All five contracts are subject to available budget funding and are national in scope covering all waters for which NOAA has nautical charting responsibility.

These service providers will collect and process up-to-date hydrographic survey data to be used by NOAA in the maintenance and production of up-to-date nautical charts.

Since the awards announcement, CARIS has been busy providing the software tools and services to many of these service providers in support of their NOAA work.

In April, David Evans and Associates, Inc. (DEA) made a big investment into CARIS for their hydrographic survey processing and production operations. DEA selected two Notebook licenses for digital field data update, four new HIPS licenses for survey processing and BASE Editor. Using BASE Editor, DEA can integrate and compare all of its bathymetric data sources.

Fugro Pelagos also purchased Notebook in April as a digital alternative for mak-

ing its survey field notes. A customized advanced CARIS course featuring BASE Editor, CUBE processing and Notebook was also conducted in San Diego in March. The software will enable Fugro to collect, attribute and process hydrographic field data as S-57 objects. Digital field survey data is easily transferred by Fugro to cartographers, shortening the path to S-57 ENC production.

Ten TerraSond LTD representatives visited CARIS' Fredericton headquarters in April for a five-day SIPS training session. Since visiting, TerraSond has also selected BASE Editor and Notebook for its hydrographic operations.

# President Receives Honorary Doctor of Science Degree

On Thursday, May 18th, 2006, Dr. Salem Masry, CARIS President and CEO accepted an Honorary Doctor of Science Degree from the Board of Governors of the University of New Brunswick.

The degree was conferred upon him at the 177th Spring Encaenia at the Aitken University Centre of the Fredericton campus.

Recognizing his expertise in computerized mapping and geographic information systems, Dr. Masry received this Degree before graduates in the faculties of science, engineering, forestry and environmental management, and computer science.

Salem Masry is founder, president and CEO of CARIS. A professor at UNB for 20 years, Dr. Masry achieved international recognition in the fields of computerized mapping and GIS. He developed several new ideas in the field of geomatics, co-invented and patented a technique for laser plumbing in mining, and developed a series of digital mapping courses that became the basis for UNB's GIS program. He also initiated several digital mapping research projects, including a project to investigate mapping of Canadian coastal waters using photogrammetry. This project led him to found CARIS in 1979. Dr. Masry left UNB in 1986 to devote himself to the management of the company.



From left: Dr. John McLaughlin, President & Vice-Chancellor, UNB, Dr. Salem Masry, CARIS and Dr. Richard J. Currie, Chancellor, UNB

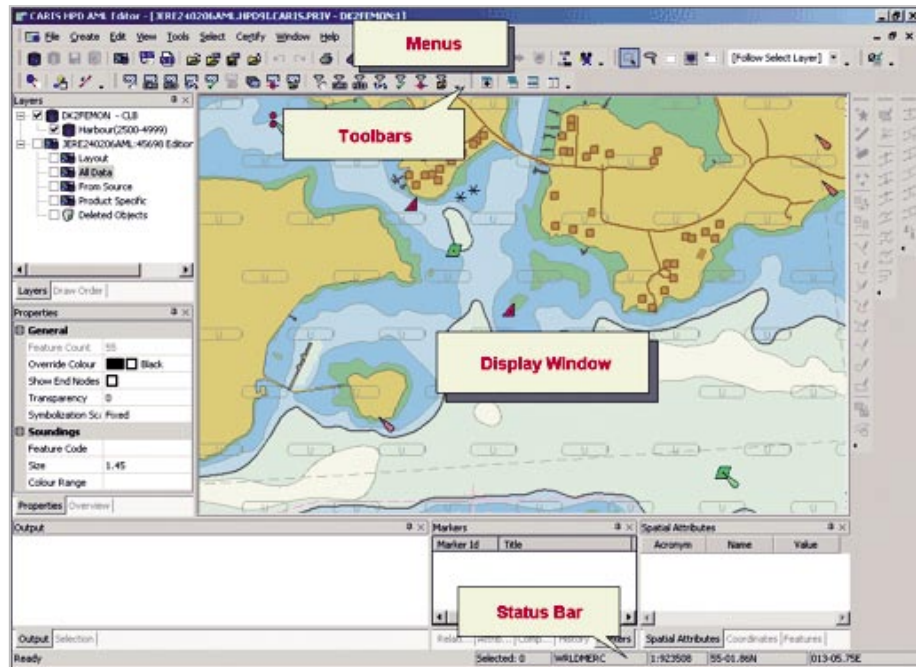
# Database-driven Additional Military Layer Production

Additional Military Layer (AML) Editor has been released as part of the Hydrographic Production Database (HPD) product suite.

The release of AML Editor expands upon the existing HPD product suite, which already includes the HPD Source Editor, S-57 ENC Editor and Paper Chart Editor.

AML Editor is designed to manage and produce S-57 AML's compliant with the six vector NATO AML v2.0 specifications: Contour Line Bathymetry (CLB), Environment, Seabed and Beach (ESB), Maritime Foundation and Facilities (MFF), Routes, Areas and Limits (RAL), Large Bottom Objects (LBO) and Small Bottom Objects (SBO).

Functionality includes the ability to import from many common GIS data formats; to view raster images; and to connect to external databases for importing valuable data, such as mine contact or wreck information.



*Using HPD, data is stored in a common database and shared by products, providing a higher degree of consistency between product types (e.g. ENC and Paper Chart). It removes duplication of work and lowers maintenance costs. Updates to data can be done once and included in the appropriate products.*

## Notices to Mariners Diagrams

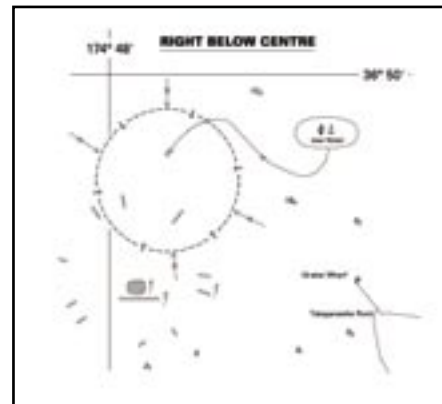
Notices to Mariners (NtM) diagrams are produced to assist mariners in updating their charts. They assist mariners in quickly transferring notices to their charts. When the diagram is used in conjunction with the textual notice, the mariner can easily see what the change is and how to apply it on their chart.

Land Information New Zealand (LINZ) is using CARIS GIS for creating NtM diagrams digitally, which are included with its biweekly Notices to Mariners publications. LINZ purchased the soft-

ware and received training on its use for tracing creation in 2005.

LINZ is New Zealand's national hydrographic authority, and is responsible for providing the country's authoritative land and seabed information and official hydrographic information for navigational purposes.

You can view the latest examples of diagrams, simply by browsing to <http://www.hydro.linz.govt.nz/ntm/notices/index.asp#current> and following the "Current Editor" link.



*Example of a LINZ diagram.*

# GAS Srl Replaces Neptune Licenses

Italian survey contractor, GAS Srl has purchased HIPS software and training.

The purchase has followed an announcement by CARIS and Kongsberg Maritime of a Memorandum of Understanding (MOU) in early 2006. Through the offerings of this MOU, GAS Srl exchanged two of its Neptune licenses for the purchase of two HIPS licenses.

The licenses will be used mainly to process Simrad data. One of the licenses is in use onboard GAS vessel R/V DP1 Odin Finder equipped with an EM300 and EM3000. The other will stay in

the office. Multibeam data is acquired mainly with Merlin and PDS2000.

The main tasks of GAS s.r.l are: Surface and underwater acoustic positioning; High and very high-resolution reflection seismic; marine geomorphology and geotechnic; Oceanography and meteorology; works management, supervision and technical advises; activity of research in geophysical and environment fields; and Assistance in personnel training and formation.

The CARIS and Kongsberg MOU is a cooperative agreement to provide mul-

tibeam processing software to existing and potential Kongsberg customers. The objective is to ensure continued Kongsberg customer satisfaction by providing a quality multibeam processing tool that is well supported and maintained. Contact [sales@caris.com](mailto:sales@caris.com) to learn more.

GAS Srl is currently working on a survey project in Kazakhstan along with survey work in the Mediterranean Sea. To learn more about GAS s.r.l., please visit [www.gas-survey.com](http://www.gas-survey.com).

## IUCN Sponsored African Law of the Sea Workshop



Delegates from many government departments participated in a five-day African Law of the Sea workshop lead by CARIS in Maputo, Mozambique, April 24-28. The customized event was sponsored by the IUCN (The World Conservation Union).