

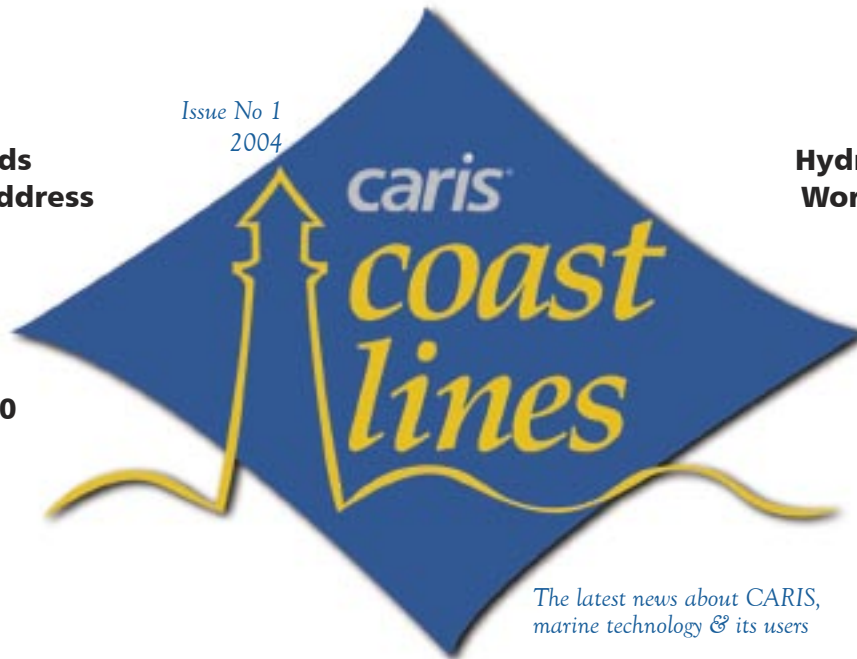
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2004

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*The latest news about CARIS,  
marine technology & its users*

## Malaysia Completes ENC's for the Strait of Malacca

The Hydrographic Department of the Royal Malaysian Navy (RMNHD) has completed all their ENC's for the Strait of Malacca using HOM ENC.

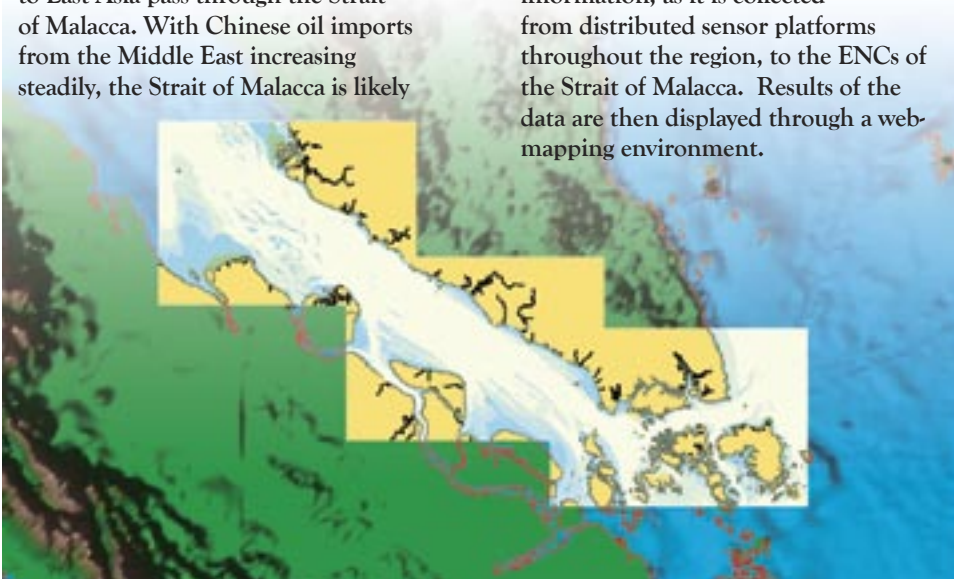
The Strait of Malacca, linking the Indian and Pacific Oceans, is the shortest sea route between three of the world's most populous countries - India, China, and Indonesia - and therefore is considered to be of considerable strategic importance.

Moreover, half the world's oil shipments by sea from the Persian Gulf to East Asia pass through the Strait of Malacca. With Chinese oil imports from the Middle East increasing steadily, the Strait of Malacca is likely

to grow in importance in coming years.

While RMNHD has completed ENC's for other areas of its waters, finalizing this set for the Strait of Malacca is a strategic accomplishment. With movement along the Strait of Malacca expected to grow, and with ENC's becoming of interest to mariners, RMNHD is ready to meet the demand.

Besides using their ENC's for safety of navigation, RMN uses the CARIS Spatial Fusion technology as a way of spatial referencing their MetOcean information, as it is collected from distributed sensor platforms throughout the region, to the ENC's of the Strait of Malacca. Results of the data are then displayed through a web-mapping environment.



## Training in Shanghai for MSA

In late 2003, CARIS hosted three consecutive training sessions for the Chinese Maritime Safety Administration (MSA) Hydrographic Department in Shanghai.

The training included five days of GIS and HOM ENC training, two days of HIPS training and four days of BEAMS training.

A note of thanks to Laurel Industrial Company, a CARIS Strategic Alliance, which provided exceptional support to CARIS and its trainers in the coordination of, and during, this training for MSA.



MSA training group for HOM ENC session.



Issue No 1 2004

Through quarterly 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 news ideas, contact Sheri

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## **HOM 3.3 Sets a New Standard for S-57 ENC Production**

Version 3.3 of CARIS HOM for production of S-57 (ENC) is now available, introducing new advanced features for workflow optimization.

Version 3.3 of HOM will reduce the overall production time. This is accomplished by

introducing methods for reporting quality assurance results, by providing ongoing feedback to users in the correction of errors, and by drastically reducing the amount of time required for data validation and error correction procedures.

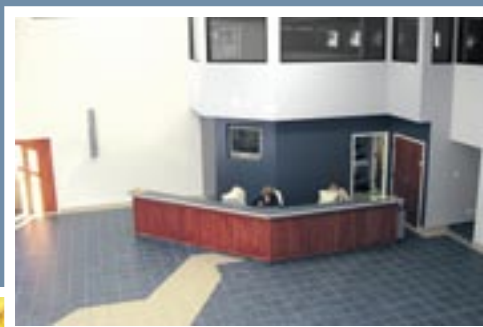
## **CARIS Expands Corporate Headquarters to Accommodate Growth - New Mailing Address**

CARIS celebrates the beginning of its 25th year in business by relocating to new, expanded corporate headquarters to accommodate an increase in new staff with room for further growth.

The new building will serve as central facilities for CARIS while existing offices located nearby, will be used to host the ongoing training and administration services.

Completely renovated, the new facility has been designed to foster a team-oriented work environment, enabling staff to operate more efficiently in the development, support and sale of CARIS products.

“Our new corporate headquarters represents another milestone for CARIS and gives us the space for our future expansion to meet the needs of an increasing market share and the corresponding increase in staff and services to our customers” said Dr. Salem Masry, CARIS President and CEO. “It is very rewarding for CARIS and our staff to have achieved such growth in this highly competitive, and quickly evolving industry.”



#### **New Mailing Address**

115 Waggoners Lane  
Fredericton, New  
Brunswick  
E3B 2L4  
Canada

Telephone and fax numbers have not changed.



# Where It's At

## Customized Asset Location Maps from Remote Knowledge



Remote Knowledge, Inc. ([www.remoteknowledge.com](http://www.remoteknowledge.com)), a Delaware corporation, develops, markets and delivers innovative remote asset management and communication solutions to the marine, recreational vehicle, heavy equipment, oil and gas, and commercial maritime industries.

Remote Knowledge has clients working across various industries and segments, each with specific requirements for the mapping and asset location data supplied to them by Remote Knowledge.



In 2003, the company integrated CARIS Spatial Fusion as the solution of choice to spatially enable its current operations. Further credit was given to the flexibility of the software to accommodate the expansion of Remote Knowledge's spatial service offerings in the future.

The data independence of Spatial Fusion provides Remote Knowledge the ability to produce a single map from multiple data sources. NOAA, TIGER, and current and historical asset location data are combined as layers into one map without the need for translation.

Further, customization options within Spatial Fusion are employed to tailor the maps to a look and feel that best meets the individual needs of each client.

Remote Knowledge intends to expand upon this service, explains Mr. Zane Russell, Remote Knowledge, Executive VP and COO. "In our next generation product, we plan on using Spatial Fusion to help us provide navigational support to our customers via a handheld device or computer."

"We believe that by customizing the maps for navigation, we can reduce the need for our customers to have multiple products. The nice thing is, as information changes, the maps change. No longer will our customers have to order a new CD to get the updated maps."

# ChartServer 2.0 Released

ChartServer 2.0 was released in late 2003 offering new highlights and features to users for Internet distribution of charts and chart data.

### Here are a few of the Highlights of 2.0:

- Configurable to make pre-built zip files available.
- Clients can register themselves for ENC updates.
- Supports multiple language presentations of web pages. Includes a world ports dataset, based on NIMA's World Ports Database of 4500+ ports. The port name display is a useful addition to the starter geotiff basemap coverage.
- Improved support for non-free product sales and delivery.

### Some web sites showcasing ChartServer:

- NOAA Chart Download server  
[www.ocsdata.ncd.noaa.gov/ChartServerV2.0/jsp/index.jsp](http://www.ocsdata.ncd.noaa.gov/ChartServerV2.0/jsp/index.jsp)  
Catalogue of 350+ NOAA ENCs for free download.
- USACE Inland ENC server  
[www.chart.tec.army.mil/ChartServerV2.0/jsp/index.jsp](http://www.chart.tec.army.mil/ChartServerV2.0/jsp/index.jsp)  
Catalogue of USACE's Inland ENC initiative for electronic navigation of US inland waterways.

**Note:** these servers are officially test sites.

*The conference is intended for the marine community in general with specific sessions for marine historians, marine science and geomatic interest groups.*



## CANADIAN HYDROGRAPHIC CONFERENCE

May 25<sup>TH</sup> - 27<sup>TH</sup>, 2004  
OTTAWA - CANADA



[www.chc2004.com](http://www.chc2004.com)

328-615 Booth Street / rue Booth  
Ottawa, ON K2C 3N1 CANADA

**Early Bird Registration Closes  
March 31<sup>ST</sup>, 2004**

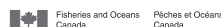
**La pré-inscription prendra  
fin le 31 mars 2004**

## CONFÉRENCE HYDROGRAPHIQUE DU CANADA

25 - 27 mai 2004  
OTTAWA - CANADA



*La conférence s'adresse à la communauté maritime, de manière générale, avec des sessions spécifiquement destinées à des historiens maritimes, des scientifiques maritimes et des groupes oeuvrant dans le domaine de la géomatique.*



Proud Hosts:  
Canadian Hydrographic Service,  
Canadian Nautical Research Society,  
Canadian Hydrographic Association



# Hamburg University of Applied Sciences selects CARIS for Training in Hydrographic Data Processing

The Geomatics Department at Hamburg University of Applied Sciences (HAW) has joined the CARIS Academic Partnering Program.

Through the program, CARIS will provide the Department with multiple licenses of its HIPS/SIPS and GIS software for training in hydrographic data processing as part of its Master of Science course in Hydrography.

This membership has evolved as part of the Department's overall initiative to develop a new Master

of Science course in Hydrography. The curriculum has been certified Category A by the International Advisory Board of the International Federation of Surveyors (FIG) and the International Hydrographic Organization (IHO) according to their "Standards of Competence for Hydrographic Surveyors".

The restructured two-year course is offered completely in English language and was introduced for the first time in the Winter Semester 2003/2004. It is modularized according to the European Credit Transfer System



(ECTS). The course modules cover subjects such as Hydrography, Higher Geodesy, Navigation, Geographical Information Systems in Hydrography, Marine Geology and Geophysics, Oceanography, Marine Environment, Data Processing, and Software Technology.

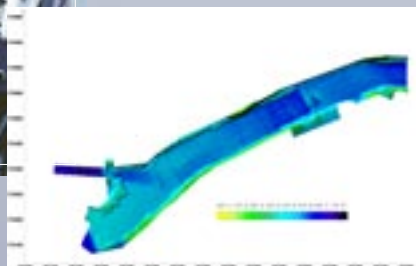
## Fathoms Adopts CARIS for all Surveys



Elliann - Fathom's small inshore survey catamaran

Fathoms Ltd. ([www.fathoms.co.uk](http://www.fathoms.co.uk)) has purchased CARIS HIPS/SIPS Professional. They intend to use the suite for both multibeam and singlebeam editing and also for sidescan and backscatter imaging of all their hydrographic survey data.

An integrated subsea service company, Fathoms offers a one-stop-shop for all coastal hydrographic, shallow seismic, diving, ROV work, and boat



Surface generated image of Bristol City Dock

## LOTS in China

A five-day LOTS (Law of the Sea) training course was hosted in January 2004 in Beijing, China for the State Oceanic Administration (SOA), Department of Marine Remote Sensing & Geographic Information

The training was subsequent to SOA's purchase of three individual CARIS LOTS Article 76 licenses, one for each of the organization's regional offices.

Lead by CARIS LOTS Product Manager, there were fifteen delegates in attendance.



SOA training group during LOTS course

# Understanding HPD: A Combined Production Environment

By Hugh Astle and  
StéphaneThériault, CARIS

Each Hydrographic Office has its own way of combining production streams: produce and maintain ENC's from paper charts, produce and maintain paper charts from ENC's, produce and maintain both from a common source, etc.

With HPD you can use any of these by choosing which data to load in as the source data and how to populate the usages and make the products. It is logical to populate the source with the

best data available, be it paper, ENC or a combination.

Using a file-based solution, file copies of chart duplicates are often scattered around the organization. As such, it is difficult to determine whether the work involved to apply an update is being applied to all of these duplicates. With HPD, everything is in one place and all operations are tracked.

HPD can handle and propagate features with multiple representations, but that doesn't mean you have to conflate (e.g.

link features across scale bands) your data in order to use HPD in production. HPD can be used to maintain existing holdings and, over time, replace this data with new source.

New source data, such as data from recent surveys, can be loaded in as source. As this source is propagated through the various usages (e.g. scale generalization), HPD will track the multiple representations of features and the generalization relations automatically. Something file-based systems do not do.

## Hydrographic Database Workshop at CHC 2004

### A hands-on workshop in managing production from bathymetric surfaces to hydrographic objects and products

An exclusive workshop is being hosted by CARIS as part of the Canadian Hydrographic Conference (CHC) 2004 on Monday, May 24, 2004, 9:00 a.m. to 4:00 p.m.

This hands-on workshop will introduce participants to an integrated approach of data management and production from bathymetric surfaces to hydrographic objects and products.

This workshop will walk participants through the procedures of generating bathymetric surfaces from new survey

data, managing and generating new objects from the surfaces, then integrating these new objects into a seamless hydrographic object database. The seamless database resides in an Oracle spatial environment, from which multiple products (Paper Chart and ENC's) can be built and updated.

Due to the highly specialized nature of this workshop, hardware and space limitation, participation is on an invitation-only basis. For more information contact sheri.flanagan@caris.com.

## Delineating Ireland's Continental Shelf

The Petroleum Affairs Division (PAD) of the Department of Communications, Marine & Natural Resources in Ireland have selected CARIS LOTS Article 76

PAD is responsible for the delineation of the outer limit of Ireland's Continental Shelf in accordance with Article 76 of UNCLOS. Significant gains in sovereignty over their continental shelf will enlarge the area of exploration for potential hydrocarbon and mineral resources. The LOTS software is being used to assist in this task.

Ireland is the 27th Nation to adopt LOTS software. Almost every industrialized coastal nation and a growing number of coastal developing nations have copies.

To learn more about PAD, please visit [www.pad.ie](http://www.pad.ie).

# Web-Enabling USACE Marine Spatial Information

The US Army Corps of Engineers (USACE), Galveston District has implemented CARIS BEAMS and CARIS BEAMS Web, combining desktop marine spatial information management tools with web-mapping technology.

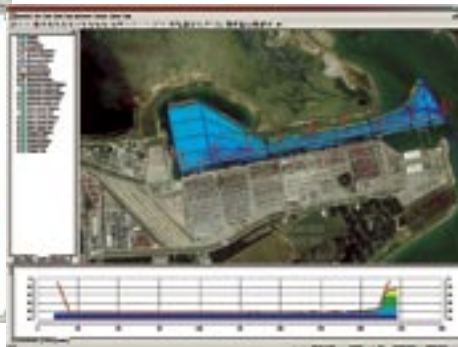
BEAMS provides the District a desktop solution with tools such as nav aids, bathymetric data storage



BEAMS Web image of hydrographic survey and channel framework information for Freeport Harbour (south of Galveston Island, TX) using a NOAA ENC as background

and management, survey planning, channel condition reports, volumetric calculations, contouring and data visualization.

Web-enabling the system with BEAMS Web allows more internal users to access the data without the overhead of maintaining a GIS environment for each and grants access to external clients and stakeholders such as contractors.



BEAMS image of hydrographic survey and channel framework for Barbour's Cut Terminal (Port of Houston) using aerial photography as background.

*Images courtesy of USACE South West Galveston.*

## Port of Hamburg

A large contract with the Survey Department of the Port Authority of the Port of Hamburg was signed in early 2004.

Running until the end of 2005, the deliverables of the contract include CARIS off-the-shelf software and the integration of these tools into the Port of Hamburg workflow.

The final solution will enable the Department to:

- Perform survey data processing and cleaning both on-board of survey vessels and in their offices.
- Perform QC/QA on the bathymetry and store information for the whole Port of Hamburg area.
- Manage, visualize and analyze the bathymetric information.
- Perform dredge analysis and dredge volume calculations
- Create charts and survey sheets for other departments.
- Create and maintain S-57 Inland ENCs using the information stored in the bathymetric databases as well as using other sources.

## CARIS 2004 Call for Papers

CARIS 2004 - Where Waterways Meet, the 9th International CARIS User Group Conference and Educational Sessions will be hosted November 22 - 25, 2004 in Hamburg Germany at the Hotel Hafen Hamburg.

We are looking for abstract submissions which address day-to-day applications of CARIS software across our user communities for presentation at CARIS 2004.

Authors are requested to send their abstracts, keeping in view these themes:

- Additional Military Layers
- DNC®
- Implementing Enterprise Database Solutions
- Inland/river Electronic Navigational Charting
- Survey Data Processing
- Academic applications of CARIS technologies
- Port and Harbour Management
- Coastal Mapping
- Others...

The abstract submission deadline is August 27, 2004. Abstracts (not more than 500 words) should be submitted via E-mail: [caris2004@caris.nl](mailto:caris2004@caris.nl) or by Fax: +31 413 296012.

[www.caris.com/caris2004](http://www.caris.com/caris2004)