

## Haiti Hydrographic Surveying and Nautical Charting Work Shop

On 5 September the Haiti Hydrographic Surveying and Nautical Charting Work Shop began and ran until 16 September 2011. This was a Capacity Building event sponsored and funded by the Pan American Institute of Geography and History (PAIGH) Committee on Institutional Strengthening and Technical Cooperation (ISTC) and the International Hydrographic Organization (IHO) Capacity Building Subcommittee (CBSC) and IHO Meso American Caribbean Regional Hydrographic Commission (MACHC). Additional support to this project was made available by the Republic of Korea to the IHO IHO Capacity Building Program.



### IHO and PAIGH

The Pan American Institute of Geography and History (PAIGH) is a specialized organization of the Organization of American States (OAS). The International Hydrographic Organization (IHO) represents the world's hydrographic offices in matters of safety of navigation, charting and marine commerce.

## **Haiti Hydrographic Surveying and Nautical Charting Work Shop**

This is the first collaborative work between PAIGH and IHO under an MOU signed in February of 2011. Funding for the project comes from both organizations and goes to logistics support for equipment shipments, travel, and personnel support for instructors. The total direct funding contribution for the project is \$16K.

PAIGH and IHO have joined with industry partners CARIS, Kongsberg Maritime, Hemisphere, and HYPACK. CARIS has provided SW and computer hardware for data collection, processing, chart production. Kongsberg Maritime has provided a single beam echo sounder, side scan sonar, and engineering support for installation on board the Haitian Coast Guard platform. Hemisphere has provided DGPS receivers for installation on board the platform. HYPACK has provided the hydrographic data collection software for the survey operations and processing. Technical time, equipment loans and donations, SW contributions, and payment in kind come to approximately \$50K.

In addition, the national hydrographic office of France Service Hydrographique et Oceanographique de la Marine (SHOM) is providing two weeks of training by a professional hydrographer and a nautical cartographer in Haiti to deliver the IHO approved curriculum. SHOM also developed the final training program curriculum in cooperation with IHO, produced and / or adapted most of the training material, and contributed to the coordination and preparatory work between sponsors (CARIS, SHOH, HYPACK and Kongsberg for sensor interfaces).

The partnership that we have formed to do this is very strong, the dedication of the entities involved is evident, and the sum result of this of this project is far greater than what is provided by each partner.

Our Haitian partner agency is Service Maritime et de Navigation d'Haiti (SEMANA) which is providing a boat, fuel, crew, class facilities, ground transportation, customs clearance for equipment, and whatever other local support that is necessary. 12 persons from SEMANA attended the training.

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This training was designed to enable Haitians to be able to conduct a simple survey operation and process single beam hydrographic data sets that they collect. We will be leading them to be able to update or produce a nautical chart which is the ultimate goal for a national hydrographic office. This WS will not get them fully to that point but it is the first step.

What is an issue for us and the continuing success of the after WS follow up is that Haiti does not own hydrographic surveying equipment or software for processing or production of Nautical Charts. We have been fortunate in that companies have been willing to temporarily donate what they have done but this is not a permanent solution. By the end of the year the equipment will be reclaimed by its owners and our trained Haitian colleagues will be out of work.

Haiti has applied for IHO Membership and in April 2012 in Monaco will be welcomed into the organization.

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## The Participants and Donors

### CARIS Marine GIS Experts



CARIS has a long history and reputation as a world-class geomatics solution provider, dominance in niche markets and a network of 23 strategic alliances has resulted in over 4000 CARIS installations in 70 countries. Hydrographic Offices and Navies from over 70 countries are now standardized on CARIS systems for their marine spatial information and chart production systems. Well known clients include: United Kingdom Hydrographic Office, Canadian Hydrographic Service, Royal Netherlands Navy, Royal Malaysian Navy, Port of Hamburg, the Port of LeHavre, the Canadian Coast Guard, and USACoE. CARIS provided SW and HW for the training. [www.caris.com](http://www.caris.com)



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Maritime is able to offer unique and complete solutions for offshore oil & gas installations, specialized purpose-built vessels, subsea construction support, seabed surveying and mapping.

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Hemisphere GPS designs and manufactures innovative, cost-effective GPS and complimentary products for positioning, guidance, and machine control applications.

In the last 20 years, we have established numerous patents and other intellectual property. Hemisphere GPS is a global company with sales in more than 35 countries. [www.hemispheregps.com](http://www.hemispheregps.com)



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Service Hydrographique et Océanographique de la Marine (SHOM)

provides a public service in [hydrography](#) and maritime [cartography](#), including the collection, elaboration, confirmation and spread of nautical information useful to civil or naval

navigators and to all who sail for professional or pleasure, as well as those responsible for care of the coast and to support the navy's hydrographers, [oceanographers](#) and [meteorologists](#). SHOM is made up of oceanographic and hydrographic groups, as well as a school, and employs 500 naval and civil personnel. [www.shom.fr](http://www.shom.fr)



The Pan American Institute of Geography and History was created February 7, 1928, during the VI International American Conference at the Ministerial Level held in Havana, Cuba. The objectives are:

- To encourage, coordinate, and publicize cartographical, geographical, geophysical and historical studies as well as other related scientific studies of interest to the Americas.
- To promote and carry out studies, work and training in the aforementioned fields of activity.

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- To promote cooperation among organizations interested in these fields of activity in the Americas, and with related international organizations.  
[www.ipgh.org](http://www.ipgh.org)

The International Hydrographic Organization is an intergovernmental consultative and technical organization that was established in 1921 to support safety of navigation and the protection of the marine environment.



The object of the Organization is to bring about:

- The coordination of the activities of national hydrographic offices
- The greatest possible uniformity in nautical charts and documents
- The adoption of reliable and efficient methods of carrying out and exploiting hydrographic surveys
- The development of the sciences in the field of hydrography and the techniques employed in descriptive oceanography. [www.iho.org](http://www.iho.org)