

## **Note on the status of Hydrography in Nicaragua**

In 2006, Nicaragua received funding from the International Hydrographic Organization (IHO) for a Basic Course in Practical Hydrography, in order to reinforce and update knowledge on hydrographic standards required by IHO for hydrographic surveys.

The course was organized by the Nicaraguan Institute of Territorial Studies (INETER), for the duration of three weeks. Participants of the course included 15 technicians, 12 from Nicaragua, one from Guatemala, one from Honduras, and one from El Salvador.

With the success of this course and INETER authorityø interested to develop nautical cartography in Nicaragua for the purpose of providing safety navigation, the current government approved INETERø project: **Strengthening Technical Directorate of Hydrography and Nautical Charts Update** in 2008. This project has to be completed over a period of 4 years, 2009-2012.

The project involves two components: the first refers to the acquisition of hardware, software and training. The acquisition of equipment includes systems that allow to perform hydrographic surveys under standards established by the IHO and the acquisition of two softwareø; one for data collection during hydrographic surveys, and another program to produce paper charts (CARIS), plus the acquisition of three tide gauges.

The second component of the project is an implementation of the first component in which there will be five updated nautical charts for the same number of ports, three located in the Pacific Ocean and two located in the Caribbean Sea

In 2009, the first equipments were acquired. In 2010, hydrographic surveys were conducted, starting with Puerto Corinto, the largest in the Pacific coast. In 2011 we continued hydrographic surveys in Puerto Sandino and San Juan del Sur, also located in the Pacific Ocean. The same year CARIS GIS was purchased to produce paper charts; it also provided training on how to use the software.

It is expected that in the first quarter of 2012, to produce the nautical charts for three ports on the Pacific and will be able to perform two hydrographic surveys on the ports of the Caribbean Sea.

Hydrographic surveys were advised and supervised by a surveyor class B. The same surveyor who also delivered the training course in 2006. In the process of chart production we are supported by CARIS.

INETER believes that the success of this project is the support for request more resources to continue to develop the hydrography in Nicaragua.