



BARBADOS NATIONAL REPORT

TO THE

10TH MEETING OF THE

MESO-AMERICA AND CARIBBEAN
HYDROGRAPHIC COMMISSION

BRIDGETOWN, BARBADOS

3RD – 6TH NOVEMBER 2009

HYDROGRAPHIC OFFICE:

• Establishment

Barbados is an associate member of Meso-America and Caribbean Hydrographic Commission (MACHC). A National Hydrographic Committee (NHC) was established 2008, constituted of members from key governmental agencies, including the International Transport Department, Ministry of Foreign Affairs and Foreign Trade, Coastal Zone Management Unit (CZMU), Environmental Protection Department (EPD), Lands and Surveys Department, Town and Country Planning Office, Fisheries Department, Telecommunication, Barbados Coast Guards and the Barbados Port Inc.(BPI)

Terms of reference for the National Hydrographic Committee (NHC) were developed based on the framework provided by the IHB.

The CZMU has *defacto* responsibility for hydrographic surveying in Barbados, given the mandate of this department. However, until a mandate or directive is issued to relinquish this responsibility to an alternative department, CZMU will remain the focal point.

2. SURVEYS:

• Coverage of new surveys.

No large scale surveys were conducted in Barbados over the past year. However, several small surveys carried out include:

- a. A Pre-feasibility study survey for the proposed marina at Port Ferdinand, Six Mens St. Peter.
- b. Routine investigative surveys in the main boating channel in marina at Port St. Charles,

New technologies and /or equipment

The Coastal Zone Management Unit (CZMU) has improved its hydrographic survey capacity with the acquisition of the latest edition of Hypack Suite Software.

The CZMU has also acquired two Trimble R6 RTK DGPS receivers and software to assist with hydrographic data acquisition.

New ships

Currently Barbados has no vessels dedicated to carrying out hydrographic survey work. Given the potential for an increase in hydrographic activities around Barbados, it is necessary that serious consideration be given to the acquisition of a multipurpose research vessel that is stable enough for nearshore operations as well as open water conditions.

3. CHARTS AND PUBLICATIONS:

a. Charts

Charts for Barbados are produced by the UKHO. The Barbados Port Authority provides new data as it becomes available for chart updating. Paper charts for Barbados were recently updated. Chart Numbers 502, 2845 and INT1043

b. Publications

New publications

- No update on new publications is available at this time.

Updated publications

- Information for updating of hydrographic publications is routinely dispatched to the UKHO.

4. MSI

Existing infrastructure for transmission

Barbados Port Inc. (BPI) issue Notices to Mariners and broadcast marine weather reports via marine VHF channel 12 and Barbados Coast Guard via channel 16. NAVAREA 4 promulgates via WWNWS through their safety nets.

New infrastructure in accordance with GMDSS Master Plan

Barbados is now GMDSS Sea Area A1 and A2 Compliant in accordance with the Policy on Global Maritime Distress and Safety System (GMDSS) as set out in the master plan for Barbados. The Government of Barbados has recently established a Shore-based facility at the HMBS PELICAN Barbados Coast Guard Base 8PO/8PZ at Spring Garden, St. Michael, with recent upgrades to become fully GMDSS compliant for Sea Area A1 and A2. The Barbados Coast Guard has

been mandated to operate this Coast Station and is responsible for all the SAR, MSI, and GMDSS functions.

Information on the Barbados Master Plan and policy with regards to the GMDSS can be found at the following website;

www.telecoms.gov.bb/Documents/Policies/PDF/Gmdsspolicyaugust.pdf

5. CAPACITY BUILDING

Offer of and/or demand for Capacity Building

CZMU continues to experience some degree of difficulty in programming hydrographic survey activities due to the lack of a dedicated survey vessel. A member of the CZMU staff received introductory training in the use of Hypack software during the current reporting period. It is expected that this training will be continued in the upcoming year. Capacity building in hydrographic surveying is an urgent requirement in the office of CZMU

Training received, needed, offered

Barbados had one participant attend the Basic Hydrography Course in Suriname in November 2008. This course was organized by the IHO – CBC and the Maritime Authority of Suriname.

Barbados continues to benefit from various training courses in maritime boundary related issues offered by International Boundary Research Unit (IBRU) University of Durham, UK.

Representatives from the CZMU attend the annual Hydrographic Conference offered by Canada and the USA on a rotational basis.

Barbados has benefited from engagement and advice from Geosciences Australia in the area of the extended continental shelf delimitation, in Canberra Australia, in 2008.

During the upcoming year, Barbados will appreciate offers to attend courses in the area of cartography and Electronic Charting (ENC).

Status of national, bilateral, multilateral or regional development projects with hydrographic component. (In progress, planned, under evaluation or study)

Barbados has signed a Maritime Treaty with France with respect to the French Antilles territories of Martinique and Guadeloupe within the Exclusive Economic Zone (EEZ) and any potential areas beyond the EEZ.

6. S-55 LATEST UPDATE

Barbados provides the information to UKHO for the updating of the S-55 database. These data are current.

7. OCEANOGRAPHIC ACTIVITIES

GEBCO/IBC's Activities - Nil

Tide Gauge Installation

- The CZMU installed a new automated TGR-1050 Submersible Tide gauge at the Barbados Coast Guard Headquarters on Spring Garden St. Michael, two and a half years ago. Plans are in place to make the data available online in real-time, during the coming 2010 financial year. In addition, sites are already identified to establish a tide gauge network to include our south, east and north coast. However, this will be implemented on a phased basis sometime in late 2010 - 2011.
- Recently (2009) the CZMU has acquired a licensed copy of GEOMATIX Tidal prediction software to aid in the tidal analysis in the island's waters.

Current Meters

- At present CZMU has a network of eight (8) S4DW wave recorder/current meters deployed along our south-east, south, and west coast of Barbados. Data are available on request directly from the CZMU.
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- Two additional NORTEK AWAC Acoustic Doppler Current Profilers were purchased within the reporting period, and will most likely be deployed on the north and south-east coast in the coming months.

Reef Temperature Monitoring

- Currently CZMU monitors water temperature at four (4) bank reefs and four (4) fringe reefs along the south and west coast of Barbados, using HOBO H8 Temperature Loggers.
- The CZMU continues to monitor the water quality over the bank and fringe reefs using the HYDROLAB Water Quality Multipurpose Probe on a quarterly basis.

Maritime Boundary Delimitation

- In November 2007, the CZMU purchased Caris Law of the Sea software (CarisLots 4.0) to assist with the preparation of Barbados' Extended Continental Shelf (ECS) submission before the Commission on the Limits of the Continental Shelf (CLCS). This software has proven invaluable in the Unit's applied research of the island's ECS. Two persons from CZMU received formal training with the software.
- Barbados has also acquired a licensed copy of GEOCAP 2D/3D hydrographic mapping and modeling Software for use in UNCLOS Article 76 work. This software has proven invaluable in the Unit's applied research of the island's ECS.

8. CONCLUSIONS

The coordination of activities relating to hydrographic work and MSI in Barbados are now being facilitated much better with the oversight by the NHC which conducts regular meetings with the key stakeholders in Barbados.

The need for a dedicated vessel so that critical nearshore survey work can be carried out more efficiently will continue to be articulated by the CZMU.