

UNITED STATES-Canada Hydrographic Commission

Report to the Fifth Meeting of the International Hydrographic Organization's Inter-Regional Coordination Committee Wollongong, Australia June 3-4, 2013

Report from the US-Canada Hydrographic Commission

1. **Co-Chairs:** RDML Gerd F. Glang (USA)
Dr. Savithri Narayanan (Canada)

2. **Membership:**
Full Members: Canada
United States of America

Organizational update:

For the United States

Personnel changes include:

- RDML Gerd F. Glang assumed duties as U.S. National Hydrographer in August 2012;
- RDML Brian B. Brown assumed duties Commander, Naval Meteorology and Oceanography Command in August 2012;
- John Lowell assumed duties as NGA Hydrographer in February 2013;
- Dr. Katherine Sullivan assumed duties as Acting NOAA Administrator succeeding Dr. Jane Lubchenco in February 2013;
- Dr. Holly Bamford succeeded David Kennedy as NOS Assistant Administrator in February 2013; and
- David Kennedy succeeded Mary Glackin as Deputy Under Secretary for Operations of the Department of Commerce within NOAA.

For Canada

- No significant personnel changes within the Canadian Hydrographic Service proper though it is worthy to note Mr. Matthew King is the new Deputy Minister of Fisheries and Oceans Canada and Mr. Kevin Stringer is the new Assistant Deputy Minister of Science which oversees CHS directly

The Canada Hydrographic Service continues to implement a governmental strategic review (2011) which has important implications for hydrography and marine transportation in Canada.

Both U.S. and Canada hydrographic offices note similar organizational trends regarding budgets and increasing governmental focus on the provision of national emergency response services from such maritime events from hazardous spill response to hurricane recovery. In addition, an

increasing group of users are finding the use of hydrographic data helpful and beneficial in non-hydrographic applications, such as coastal management and spatial planning.

3. Activities:

a. Meetings

i. Since IRCC4

- a) USCHC Chart Advisory Committee (CAC) Meeting February 22, 2013
- b) 36th USCHC met in Silver Spring, Maryland (USA)-Ottawa (Canada) by video-conference call April 29, 2013. Of note, the meeting was originally scheduled to be held in conjunction with the U.S. Hydro Meeting in New Orleans, Louisiana on March 25. Due to budget sequestration across the United States federal government, the meeting was postponed and held via conference call on April 29. A notional benefit to this WEBEX video-conference was a modest expansion of participants as travel expenses were no longer a constraint.

ii. Next events

- a) Canadian LIDAR Workshop in Victoria, British Columbia, Canada in June 2013 (this is not a USCHC workshop but noted for general reference)
- b) CAC Meeting (conference call), early 2014
- c) 37th USCHC meeting is tentatively scheduled in spring 2014. Canada is scheduled to host this meeting.

b. Reports

- i. USCHC36 Commission Minutes (May 2013)
- ii. "Eliminating ENC Overlaps: USCHC Case Study 2011-2013" (May 2013)
- iii. CAC Committee Report (March 2013)
- iv. USCHC36 Commission Report to the IRCC-5 (May 2013)

4. Key Areas of Collaboration:

Cooperation Framework

In April 2013, the Office of Coast Survey (NOAA-OCS) and the Canadian Hydrographic Service (CHS) re-signed a Memorandum of Arrangement regarding bilateral cooperation through the USCHC as well as a Level of Service Arrangement for the exchange and maintenance of paper and digital chart products in transboundary areas for the period 2013-2018.

Electronic Charting

On February 22, 2013, the US and Canada completed a two year ENC harmonization project to eliminate 92 ENC overlaps in four transboundary zones. As a culmination of this effort, the Commission has summarized the lessons learned and best practices in Appendix A: "Eliminating ENC Overlaps: USCHC Case Study 2011-2013" for reference and consultation by other Hydrographic Offices. This reference summary supports the IRCC 4-10 Action calling for summaries of best practices to be developed, collected, and distributed to the IHO for membership information. It also demonstrates implementation of the proposed WEND guidelines.

Future Overlaps

Canada informed the United States of two new Canadian ENC's (CA 376209 and CA 376024) in the Atlantic that will create new overlaps with US ENC in summer 2013. The two hydrographic offices agreed to avoid an overlap by reducing the ENC coverage of US EC10M. As this development was previously unanticipated, both hydrographic offices agreed to share any plans of producing new ENC's in the transboundary areas of the USCHC on a regular basis. The U.S. ENC coverage is complete and there are no plans to add additional ENC's in the USCHC transboundary areas in the future. Canada is assessing its future ENC production schedule in the transboundary waters of the USCHC.

Paper Chart Cooperation

The Hydrographers reviewed their paper chart cooperative framework and agreed to discontinue dual badge chart practices for transboundary waters. As of the USCHC36, the two hydrographic offices have maintained seven dual badge products in the Great Lakes and Atlantic region. The dual badge practice on these seven charts will be discontinued upon publication of the next edition as both countries already recognize through other means, each other's charts as suitable to meet carriage requirements.

Collaborative Hydrographic Surveying

In summer 2012, the USCHC agreement facilitated collaboration with the Woods Hole Oceanographic Institute (WHOI) to undertake a Canadian hydrographic survey aboard a WHOI vessel in the waters of the Scotian Shelf in the Atlantic Ocean.

Research and Development Collaboration

A) LIDAR

The Hydrographic Offices agreed to emphasize the exchange of experiences collecting, processing, and applying shoreline and bathymetric data from LiDAR acquisition systems to hydrographic products and services.

B) V-datum

Both countries are developing vertical reference frames for improving vertical tide and water level model to increase hydrographic survey efficiencies and provision of tide and water level prediction services. An exchange of project and scientific documents started following the Chart Advisors Committee meeting in February 2013. OCS and CHS are pursuing increased scientific and technical collaboration following USCHC36 specifically in the areas of V-datum model comparison and validation, data exchange (including bathymetric and tide gauge data in selected transboundary waters especially Southeast Alaska to the Oregon coast) and calibration of V-datum data sets in transboundary regions.

IHO Resolution 1/2005 as Amended: Hydrographic Office response to natural disasters

In line with IHO Resolution 1/2005 as amended (IHO response to disasters) for the prevention and contingency planning for Hydrographic Response to Maritime Disasters, the NOAA OCS supported recovery from Hurricane Sandy (October 2012). The US Congress and President provided supplemental funding support to OCS in support of the critical recovery services provided in the reopening of impacted ports, harbors, and waterways and other areas.

The Arctic and preparation for ARHC-4

The US and Canada have exchanged proposals to resolve two existing ENC overlaps in the Beaufort Sea (USAK91M and CA273357). The Hydrographic Offices are evaluating options to harmonize this overlap to present to the ARHC-4 in October 2013.

On April 26, Canada publically released an Arctic Voyage Planning Guide (<http://geoportal-geoportail.gc.ca/eng/Gallery/MapProfile/5>) for Canadian territorial waters. The development of this web-based web mapping service as voyage planning product should be of great interest to the Arctic marine community.

5. Recommendations to the IRCC-5

- a. The USCHC supports the Guidelines to Implementing the WEND Principles as presented in CL 23 2013. USCHC also will offer points for discussion concerning the proposed revision of the terms of reference.
- b. USCHC asks the IRCC to note and consider “Eliminating ENC Overlaps: USCHC Case Study 2011-2013” for sharing lessons-learned with other hydrographic offices and regional hydrographic commissions and as a USCHC action in support of IRCC 4/10

6. Conclusions

Organizational challenges affected both organizations in 2012 and 2013. However, the two offices are adjusting to the new climate with creativity while identifying promising new areas of hydrographic science and technology cooperation to leverage common interests and efforts.