

**International Hydrographic
Organization**



**United States - Canada
Hydrographic Commission**



Minutes 27th Meeting of the
International Hydrographic Organization

UNITED STATES - CANADA HYDROGRAPHIC COMMISSION
Ottawa, Ontario Canada
27 May 2004

Co-Chairs

Captain Roger L. Parsons, NOAA
Director, Office of Coast Survey (OCS)
National Oceanic and Atmospheric
Administration (NOAA)

Mr. Denis Hains
Acting Dominion Hydrographer
Canadian Hydrographic Service (CHS)

Introductions/Welcome

Denis Hains welcomed everyone, noted that the Commission was pursuing an aggressive meeting agenda and invited Captain Parsons to address the Commission. Captain Parsons thanked CHS for hosting the 2004 meeting. He noted that there had been a change in OCS senior leadership, but that the new leadership, which includes him, was dedicated. He noted the strong personal and professional bonds between the countries and how it lent to a cooperative spirit between the nations. Captain Parsons noted the goals, milestones and initiatives that will face both countries over the next several years and how collaborative efforts and exchanges will help tackle these goals. Denis Hains thanked Doug Brunt for all of his work in preparing the meeting.

Minutes of 2003 USCHC Meeting

Approved with one minor edit:

ACTION: Revise minutes to show that Denis Hains attended the Biloxi meeting, not Tony O'Connor. Minutes are adopted.

Denis Hains suggested switching agenda items in order to give the IHB and IHO updates greater discussion time. This suggestion is approved.

Organizational Update

Captain Parsons highlights the changes in NOAA management and reiterates that the relationships will continue between US and Canadian offices:

- Dr. Richard Spinrad, formerly of CORE and the Oceanographer of the Navy, is the new Assistant Administrator of the National Ocean Service;
- Captain Jim Gardner is the new chief of the Marine Chart Division;

- Commander Steve Barnum is the new chief of the Navigation Services Division;
- Mike Gibson is the new chief of the Hydrographic Surveys Division;
- Maureen Kenny is acting chief of the Coast Survey Development Laboratory while Bruce Parker is on detail as the acting NOS Technical Director;
- LCDR Guy Noll will be leaving for the NOAA Ship RAINIER and will be replaced as Hydrographic Surveys Division Deputy Chief by LCDR Carl Groeneveld.

Denis Hains referred to the organizational chart in the commission binders:

- Murray and Bouchard are both newcomers
- The Atlantic Region is also in charge of Newfoundland and Quebec;
- Keith Weaver is the Acting Director of Central & Arctic Regions;
- Denis St-Jacques will retire in March;
- Denis D'Amour is the new Pacific Region Oceanographer
- Mike Casey has retired but has not yet been replaced due to budget constraints; Michel Poulin has taken over his responsibilities;
- Dave Monahan is leaving the UNCLOS project
- CCGS is in the same department as the hydrographic office but will become its own Special Operating Agency (SOA) under the government in April 2005 – this will offer more autonomy, budget opportunities, flexibility, etc.
- The Deputy Minister has suggested that CHS also become an SOA; CHS has been served well by being in the science sector; the future decision will take place by the end of the year; the change could be implemented as early as April 2005.

Captain Parsons discussed the U.S. Commission on Ocean Policy draft report and said that none of its 19-plus recommendations will substantially change Coast Survey or NOS or their relationship with CHS. Some changes could take place, including a larger role in ocean mapping.

Charting

Michel Poulin reviewed the Charting Advisors Committee phone conference call: USCHC agenda was agreed upon and time constraints considered. He acknowledged OCS's preparation of the Commission binders; Captain Parsons thanked Meg Danley in particular.

The CAC deliberated mitigating the overlap in ENC coverage: Cooperative agreements could help avoid duplication of efforts, cost; Ensure level of data, service and efficient distribution.

Doug Brunt and Mike Brown reported out that this is an issue they have worked together on for years. A draft paper is included in the commission binder – it outlines a very broad “way ahead” which will eventually include:

- Scope of the problem – rules, criteria for overlap/consistency
- Technical proposal to address these issues – cartographer exchanges, further exchanges when approved by the USCHC.

ACTION: Doug Brunt and Mike Brown would look at issues and produce a final version of the report that scopes the problem and presents a work plan for resolving the issues at the USCHC meeting. [completed and paper delivered by email]

Deleted: ACTION: Doug Brunt and Mike Brown would look at issues and plan to make recommendations at the USCHC meeting.

Discussion ensued with the following outcomes and questions:

- 28 charts are of concern to the U.S., where the boundaries make it unsafe to split ENC cells at the boundaries.
- It is incumbent upon our hydrographic services to provide unambiguous products.
- Solutions must include input from both U.S. and Canadian users and not be a purely technical document
- Is a single coverage program possible?
ACTION: A working group should be convened to address the issues and set a timeline for their resolution

- External validation: this is an issue that can be put before both the existing U.S. Hydrographic Services Review Panel and the planned Canadian advisory panel.
- Internal validation: NOAA Navigation Managers and Canadian Products/Services Branch
- Advantageous for data exchange for paper/raster editions
- Canada-U.S. have a mechanism for data exchange in new chart production areas
- Source data exchanges: there is concern that personnel changes within both organizations have led to a failure in source data exchanges, as CHS and NOAA have traditionally exchanged charts, not data
- NOAA prefers to receive source data, but current CRADA prohibits exchange of source data. CHS has constraints as well, but feels that a government-government exchange ought to be possible.
ACTION: NOAA will get CN charts from POD and look at an equivalent?
ACTION: Marine Chart Division will refresh contacts for source data.
- The mechanism to ensure data exchanges must be more lasting than one person's career – NOAA/CHS should look at a long-term agreement
ACTION: the CAC will look into this.

International Chart Production

INT Scheme is currently maintained by NGA (formerly NIMA) for the Americas.

NGA will shortly be getting out of paper charts altogether –

ACTION: NOAA/CHS should look at boundary chart maintenance

Admiral Andreasen from NGA thanked the USCHC for inviting NGA to be part of the Commission discussions. In the future, all NGA branch chiefs will be urged to attend Commission meetings.

Admiral Andreasen informed USCHC that U.S. Navy will be moving to strictly digital charts by September 2004 – they are not happy running 2 production lines but will continue for a while, switching to POD as they still need to provide for public distribution; Navy will no longer produce charts of foreign waters either where there are domestic charts available – the sale of such INT charts will become a private sector endeavor. Navy is not planning to switch to the S-57 format and will likely continue to produce DNCs in the future.

Admiral Barbor of IHB is concerned about small-scale ENC INT charts.

International boundary issue

Canada and U.S. recognize different boundaries in some areas. Canada sent the U.S. a letter (March 23, 2004) asking that the USCHC discuss options where Canada's logo is present on a U.S.-produced chart, but Canada does not recognize the borders drawn on the charts.

The U.S. has published a Federal Register notice that says the boundaries are not agreed upon. The State Department is apprehensive about putting a note on the chart listing the boundary dispute.

ACTION: NOAA will check with State Department about republishing the Federal Register notice in Coast Pilot.

ACTION: Canada has requested that the U.S. reply to the letter.

Traffic Separation Schemes in Puget Sound

2 years ago, there was an overhaul of the Traffic Separation Scheme. NOAA's Pacific Hydrographic Branch and CHS's Dave Prince have been working to exchange data, quality control, updates, source data, etc.

NOAA has worked very closely with CHS for chart distribution schedules for customer benefit. NOAA expects to continue this working relationship when the next update is ready in a few months.

International Hydrographic Bureau/International Hydrographic Organization Updates

Admiral Barbor reported out on IHB/IHO issues:

- SPWG has been a consuming issue - one stage has been concluded; recommendations have been drafted and sent to member states for comments, changes, etc.
 - Huge resources were spent on these recommendations
 - The 3rd Extraordinary Conference will be held April 11-15, 2005
 - There must be approval from 2/3 of the Member States' governments; tacit agreement will not be sufficient. Hydrographers are urged to push it through their governments.
- IHO Capacity Building Committee – There has been a change of focus since the last Committee became dormant
 - 1st meeting of new committee is 08 Nov in Fiji, co-located with Regional Hydrographic Commission meeting as the South Pacific is one area in need of capacity-building.
 - Mediterranean –Black Sea training
 - Gulf of Honduras – moving ahead with fundraising; getting hydrography recognized as a component in environmental protection.
 - Marine Electronic Highway – Straits of Malacca
 - SE Atlantic RHC – active with non-member states, assessing abilities & steps to move forward
- WEND – Over a decade of work has resulted in movements forward: additional principles and ideas added; user friendliness; work outside of National Boundaries
 - WEND focus has changed – no longer focused on how to make ENC's, rather on how to make ECDIS work; healthy change in focus

- A Work Group was formed in Lima in '03 on how to expedite production, make ECDIS work, and actually get it onto the bridge of ships
- Expedited production of small-scale ENC's needed to use ECDIS for voyage planning
- Working group will assist with systems programs to aid nations having problems with ENC production, distribution, technical, etc.
- S-55 is of concern; Mike Barritt is the lead on this effort.
- S-23 consumed IHB time; no comment for the record; valuable, should be signature publication but has fallen on political times
- UN acknowledge more work of IHO, encourage Member States to make use of their membership in IHO
- Strong presence in IMO Question of raster charts and carriage requirements has been moved from Maritime Safety Committee to IMO Navigation Subcommittee
- RCDS – there has been large agreement among Member States with Norway's view that ECDIS should be mandated where ENCS are available
ACTION: Please respond to circular letters.
- Copies of the WEND report are available
- There may be a commercial exhibit but not a chart exhibit at the 2005 EIHC.

ENC Consistency Issues

- S-57 standards implemented differently in different offices; discrepancies where cells meet, ENC's are inconsistent
- CHRIS asked Colours & Symbols working group to make recommendations for implementation; this will come up at tomorrow's CHRIS meeting Deleted: Codes
- Some recommendations will be difficult for some nations; example: standardized metric depth curve is a problem for the U.S. and will require recompiling bathymetry Deleted: rescheming
- Recommendations would go out as CHRIS circular letter/IHO site when/if adopted Deleted: in some places
- There will be no "must" (i.e., mandatory changes) included in recommendations because of cost/workload; good recommendations were lost in the process but too much right now for places with too little resources Deleted: W
- Standard ENC scale bands were proposed in 2002 but were initially thrown out – now they are back in; Implemented in NGA; Japan/Korea couldn't junction their data because of compilation differences; type approval authorities want ENC data compatible with a system that displays radar as an overlay and uses standard radar range scales for display –; NGA feels that this is bad and is prototyping 'scaleless' vector data and looking at it with contractors Deleted: S
Deleted: standards
Deleted: put in place
Deleted: Germans
Deleted: displayed in on
Deleted: this is bad
- CHRIS is looking for recommendations Deleted: this
- US-Canadian Commission has satisfied the CHRIS request to review/comment
- There is no impact on management right now – importance of "must/should" due to resources Deleted: [NOTE – WHAT IS "THIS"? RADAR?]

S-55 Brief (ref: CL23/2003) [ATTACH PRESENTATION]

- 1st version was done mostly by North American; 2nd version (mid-1990's) not as well received

- Circular 23/2003 – looking to clarify S-55 – Strategic data for national/international policy/resources; assist developing countries & reconfigure S-55 book for republication.
- Have gotten more data than before; Far East, Black Sea S. America – few responses. **ACTION:** Can this commission help with this?
- Need feedback from mariners. **ACTION:** Can this commission help with this?
- Small countries must get their information out; national awareness of S-55 is poor; regional deficiencies have not changed; Example: Nigeria has a hydrographic office, a ship and officers but does nothing – what are we doing for capacity building?
- Cruise line movements are testing old surveys in many developing countries and polar regions
- Encourage data input; publications will happen on website next month; ideally nations will update their info regularly/frequently
- Tie-in to commission: Input requested on draft strategy paper – analysis tools under development, funding processes being explored. Action plan will be in place soon; advocate a balanced scorecard approach.
- RHC chiefs have received lists of nations who have not replied. USCHC have a few gaps to fill – Hawaii as separate from the US, for example; Guadeloupe/Martinique as separate from France – this is done to cover regional areas as opposed to political boundaries
- ADM Andreasen asked about WGS84 charts coverage map of the world and ADM Barbor agreed this was a great idea and that everything possible should be gotten.
- The Questionnaire is available in English, French and Spanish on the website.

Update on Activities of the MACHC ECWG

- Change in order approved for better tie-in with previous topic.
- The MACHC may be a good way to reach countries if the IHB can make the next meeting; good way to encourage response. This meeting will be 30 Aug in Cartagena.
- ECWG has a goal of facilitating ENC production; Capacity-building groups offers opportunities to access funding from donor groups where hydrography can help their main mission.
- Gulf of Honduras – to reduce pollution; a hydrographic component to be a key component through advocacy in proposal program; US\$800,000 potentially available for hydrographic portion; detailed implementation plan to be done this year in hopes of funding a 5-year project; work on the 5-year plan as well as long term stability.
- INT Chart schemes in MACHC region to be taken by specific nations; desire to make the small scale charts available for free; copyright problems not likely.
- ENC schemes to help with shipping, cruise lines
- Proposal: Canada has not traditionally participated in MACHC for obvious geographic reasons but there are Canadian interests there – the US would like to collaborate to marshal resources for our interests there – US would like to invite Canada to the next MACHC meeting so we can brief everyone on the SPWG work.
- Michel Poulin recognized Katie Ries' efforts on behalf of this Commission at SPWG and agreed that Canada should be there, if travel budget permitted.

- Denis Hains agreed that travel budgets have lessened international participation and will continue to do so, but there are strong interests. He thanked Katie for representing the USCHC.
- There are proposals from SPWG offering fundamental changes to IHO, including organizational changes: Assemblies every 3 years, councils annually.
- U.S. has learned a hard lesson: State Dept had a different agenda and political concerns about IHO; Foreign Ministries will be involved eventually so get them involved now.
- Sept 15 is deadline for SPWG recommendation comments

ACTION: Canada will look at participating in the MACHC

For RHCs to work, the right people from member or associate states must be involved;

ACTION: USCHC please help identify the “right people” to target regarding SPWG recommendations.

CL 76/03. IHO Hydrographic Committee

- U.S. position is that we don’t believe at this time that a RHC is needed; IBCAO working group instead?
- Canada wants a RHC for the Arctic; the International Polar Year is in 2007; Ocean Action Plan is a possible funding area. Want to be proactive in the Arctic; Canada is not yet focused enough on hydrography/navigation there
- The IHO responses are an overwhelming “NO” for Antarctic RHC handling Arctic issues; reasonably split response on whether a new RHC should handle it or existing organizations
- The U.S wants to stay involved in Arctic issues; Canada is not a member of the Antarctic RHC and therefore would not be at the table if that commission began handling Arctic issues; there are plenty of Arctic-interested nations that don’t belong to RHCs that might otherwise handle these issues.

Hydrography

UNCLOS

- Funding questions: how much to ask for and how much could we get? \$70M over the next 10 years in Canada; all Treasury board items are currently on hold except for emergencies.
- Canada Status: East Coast – 5 multibeam passes and much more seismic data is needed, but relatively straightforward needs.
- Arctic – worst area of ice, very difficult; want to work with neighbors – US, Danes, Canada on hydrography and geology – can only accomplish it working together.
 1. How neighbors get on
 2. Go to CLCS collectively
- U.S. potential submission – NE, Gulf of Mexico, Gulf of Alaska, Bering Sea (done), 2 small surveys in Arctic, 2 Pacific islands; East Coast hopefully done this year, surveys maybe to be started this year in Gulf of Mexico
- Establish junction without prejudicing the claim
- Plan available on JHC website
- Narrow surveys for 2500m contour and Foot of the Slope
- 12kh multibeam & collect backscatter

- USGS will do geologic surveys
- 180 days of survey work, plus the Arctic
- HEALY collected some good 2500m contour data later in the season this year;
ACTION: Invite CHS representative onboard HEALY cruise
- We need to take advantage of collaboration
- Sri Lanka/Bay of Bengal Clause – if it applies everywhere, it might work; if not universally applied, then unlikely

GEBCO Bathymetric Training

GEBCO – deepwater mapping of oceans; capacity building theme; obtained funding from Japan – training, direct training, research fellowships, jobs
Students will spend time at sea – there’s funding to get students to ships but reliance on US-Canadian fleet to provide berth space – both government and UNCLOS ships

Cooperative Activities

US-Canada face huge challenges – enormous needs/requirements coupled with limited or shrinking resources; important to maintain expertise; exchanges will help, capacity sharing as well, will help meet our performance measures

Opportunities:

- PHB/CHS on S-57
- RAINIER - Bowie Seamount Survey
- CHS Puget Sound surveys
- CHS hydrographer visited;
ACTION: cartographers should as well
- Possibility: FAIRWEATHER to stop in Sidney and host a CUBE/NAV Surface meeting Can U.S. help on the Queen Charlotte Islands surveys?
- RAINIER to conduct transboundary survey in Juan de Fuca – exchange for Puget Sound?
- Standing invitation to visit RAINIER or FAIRWEATHER for CUBE/NAV Surface
ACTION: US will look at Navigation Response Team exchange possibilities

Programmatic Updates

Note: Navigation Surface Overview and Status moved to CHRIS meeting due to time constraints.

Representative from Technopole Maritime will work with UNH/JHC on St. Lawrence River project for next generation of ENC’s

Navigation Managers/Navigation Response Teams

There will be 6 NRTs by the end of FY04. Great Lakes will be the best option for an exchange next year; also possibilities on the West Coast

Personal friendships on a working level are good –

ACTION: Canada will invite US to come visit East Coast work areas

Data Certification Status

Certification of ENC data: Maintain S-57 format and change to internal format. Private entity to test their claim and NOAA holds right to withdraw certification; Distribution and Value-added Distribution process to be implemented by December 2004

ACTION: US to provide Canada with Federal Register notice. This certification process may be possible with raster charts as well.

Next Meeting/Closing

Next meeting will be at the US Hydro Conference 29-31 March in San Diego, California USA. Exact date and location to be determined.

Captain Parsons hopes to be able to provide hospitality equal to that provided by our Canadian hosts. He thanked Denis Hains, Doug Brunt, Katie Ries and Meg Danley for their hard work and presented Coast Survey Coasters to Michel Poulin, Denis Hains, Doug Brunt and Ken Barbor as a token of our appreciation.