12th MEETING OF THE IHO INTER-REGIONAL COORDINATING COMMITTEE
IHO-IRCC11
VTC Meeting, 6-8 October 2020

ARCTIC REGIONAL HYDROGRAPHIC COMMISSION
Report to IRCC12

1. Chair: RDML Shepard Smith, USA
Vice-chair: Dr. Geneviève Béchard, Canada

2. Membership

Members: Canada, Denmark, Norway, Russian Federation, United States
Associate Members: Finland, Iceland, Italy

3. Meetings:

2019 SEPTEMBER 17-19 ARHC-9 Murmansk, Russian Federation
2020 APRIL 29 ARHC Intersessional Virtual TeleConference (VTC)-01
2020 JUNE ARHC Statutes Review VTC
2020 AUGUST 11 ARHC Science Forum VTC
2020 AUGUST 13-14 ARHC-10 VTC

10th Meeting of the ARHC—VTC Meeting hosted by the USA (13-14 August 2020) — Note: the 10th meeting of the ARHC had been scheduled to be held in Anchorage and Nome, Alaska, USA, however, due to the coronavirus pandemic, the 10th ARHC was held as a virtual conference via Google Meets.

Of note, due to the current limitations on physical meetings, the ARHC agreed that the USA and CA will retain chair and vice chair for ARHC-10 (as planned) and also ARHC-11 (anticipated Aug/Sept 2020) in order to minimize administrative dislocations.

Of particular note, the ARHC organized a virtual Open Science Forum meeting on August 11, 2020. Please see the IHO ARHC 2020 meeting site for presentations and supporting documents. The online format enabled the ARHC to have many different participants and external speakers from across the globe who, under “normal” conditions, would not have been able to participate in such numbers. More than 100 persons participated the online open forum meeting. This format is something the ARHC is considering further to use in a forward perspective in order to reach out to the broadest possible audiences.

4. Current ARHC Working Groups:
   a) Operations and Technology Working Group (OTWG)
b) Arctic INT Chart Coordination Working Group (AICCWG)
c) Arctic – Marine Spatial Data Infrastructure Working Group (ARMSDIWG)
d) Strategic Plan Working Group (SPWG)

5. Status of IRCC Actions (Relevant to ARHC):

<table>
<thead>
<tr>
<th>N.</th>
<th>Action (Agenda Item)</th>
<th>Responsible</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>to confirm/update the representatives to the IHR Editorial Board</td>
<td>RHC Chairs</td>
<td>In progress</td>
</tr>
<tr>
<td>08</td>
<td>to request MSI National Coordinators to review the contents of the relevant Annexes of the GMDSS Master Plan and of section C (MSI) of IHO Publication C-55 – Status of Hydrographic Surveying and Nautical Charting Worldwide – to ensure consistency for their national entries (7b)</td>
<td>RHC Chairs</td>
<td>In progress</td>
</tr>
<tr>
<td>12</td>
<td>to consider the tasks listed as duties for the Regional Seabed Coordinator/Mechanism (doc. IRCC11-07I3) and to include Seabed 2030 in RHC work plans and reports to IRCC (7i)</td>
<td>RHC Chairs</td>
<td>Ongoing (Designated coordinator Mr. Evert Flier. Also Action # ARHC10-13)</td>
</tr>
<tr>
<td>13</td>
<td>to provide reports to A-2 to the IHO Secretariat in accordance with the Action C2/53 (8a)</td>
<td>RHC Chairs</td>
<td>Completed (this updated report)</td>
</tr>
<tr>
<td>16</td>
<td>to invite Members to make comments and suggestions to the Secretary of the S-100 services roadmap drafting group (Council Chair, RAdm Smith, <a href="mailto:shep.smith@noaa.gov">shep.smith@noaa.gov</a>) (8f)</td>
<td>RHC Chairs</td>
<td>Ongoing</td>
</tr>
<tr>
<td>03</td>
<td>to provide a brief history about their RHCs to be made available in the IHO website (6.1)</td>
<td>ARHC</td>
<td>Action # ARHC10-02</td>
</tr>
</tbody>
</table>


Many of the 36 IRCC Recommendations for RHCs are completed, underway, under review or otherwise being addressed by the ARHC as of September 2020. Highlights of the recommendations being progressed through the ARHC can be noted in the agenda and meeting minutes available on the IHO website (see also section 6).

6. Agenda Items:

The ARHC operates a standing agenda with modifications for new issues of regional importance as they arise. Principal and newly added agenda items are:

National Reports
Members and associate members submit a National Report annually. An ARHC ‘Year in Review’ two-page formatted product will be created annually to showcase the hydrographic activities from the ARHC National Reports, for both internal and external audiences.

Working Group Reports
OTWG, AICCWG and ARMSDIWG have all progressed on action items and are active contributors to ARHC goals and objectives. The SPWG, which has been dormant for some time, will explore drafting an implementation plan covering the period 2021-2030, including an indigenous and local communities element.

Topics
Topics vary each ARHC meeting – ARHC-10 topics included: Arctic Council, Regional Coordination Considerations in Alaska, Italian Navy in the Arctic, CSB/Seabed 2030, and Options for a pan-Arctic ENC schema.

‘Seabed 2030 and CSB’ was notable – ARHC has designated a Seabed 2030 and Crowdsourced Bathymetry Coordinator (Evert Flier, NO), will adopt the IBCAO as a basis for assessing progress, continue supporting to the Seabed 2030 project in the Arctic, and encourage ARHC Hydrographic Offices to consider national positions in regard to IHO CL/21 “IHO Crowdsourced Bathymetry Data for Public Domain.”

There were three notable additions to the ARHC-10 agenda:

1) ‘Maintaining Momentum during COVID-19’ – discussed the disruptions to the IHO schedule, the way meetings are conducted in the time of the coronavirus pandemic, and how IHO bodies and Member States were dealing with the changes;
2) ‘Reflections and Actions from the ARHC Virtual Science Forum’ – the ARHC Science Forum was hosted virtually by the USA and welcomed 13 speakers and 120 participants, while contributing valuable reference information to the ARHC work/agenda. The online format allowed ARHC to host a broad range of participants and speakers, that under “normal” conditions may not be able to participate due to logistical limitations. ARHC will consider using this format moving forward in order to reach these broader audiences; and
3) ‘Relevant Ocean Initiatives’ - helped strengthen ARHC collaboration with several initiatives (see section 7).

Other
ARHC is in the process of consideration of updating Commission Statutes reflecting on experiences of the past decade working together as a Commission as well as with a view of the proposed IHO Strategic Plan (2021-2026), and the upcoming decade of high profile initiatives (such as Seabed 2030 Project, potential UN Decade, Crowd Sourced Bathymetry, and progression of the S-100 Roadmap). Options for a pan-Arctic ENC schema are also being investigated.

7. ARHC Cooperation with Stakeholders (organizations, industry, etc.):

There are several partnerships being leveraged to advance the goals of the ARHC. Next steps were pursued regarding a recently signed ARHC-PAME MOU (April 2020) to explore further the shared goals of protecting the Arctic marine environment. ARHC is exploring a potential multilateral proposal to the 3rd Arctic Science Ministerial (Tokyo, Japan, May 2021). A draft statement of joint intent was achieved with the Arctic Spatial Data Initiative. ARHC will monitor and take appropriate actions regarding the UN Decade of Ocean Science, including participation in the Regional Arctic Ocean Decade Action Plan development (virtual, October and November 2020), contributions to Seabed 2030, and potential submission of proposals/actions as appropriate.

8. Conclusions:

Key achievements (see Section 6 and 7 above).

Challenges Faced/Lessons Learned:

1) Travel restrictions imposed by the coronavirus pandemic has postponed a number of meetings and other opportunities. VTC meetings have been an effective substitute for in person meetings, mainly because technique worked well and participants all knew each other well beforehand.

Initially, the VTC meetings convened in 2020 have been an effective initial contingency substitute for in person meetings, mainly because technology worked well and participants all knew each other well beforehand.
2) The role of the IHO and its RHCs in Seabed 2030, as well as the contribution of Seabed 2030 to the UN Decade of Ocean Science Societal Goals are becoming better envisioned and articulated. Concerted outreach efforts at the regional and international level are needed to ensure those linkages continue to expand impacts to chart the oceans and protected the marine environment.

9. Actions required of IRCC:
The IRCC is invited to:
a. Endorse this report;
b. Note ARHC’s commitment in carrying forward hydrographic activities in close alignment with IHO objectives and goals; and
c. Take any action considered appropriate

Name and Signature of the RHC Chair

[RDML Shepard Smith
Chair, Arctic Regional Hydrographic Commission]