

**Arctic Regional Hydrographic Commission (ARHC)
Tromso, Norway, October 9-11, 2012**

Paper for consideration by ARHC

Information Paper on a Canadian Arctic Voyage Planning Guide for mariners.

Submitted by:	Canadian Hydrographic Service
Executive Summary:	Canada is working on an on-line Arctic Voyage Planning Guide (AVPG) concept to provide a single portal for up-to-date voyage planning information. From this on-line version Canada is able to derive a paper version should the ARHC continue its interest in producing a series of paper AVPGs..
Related Documents:	Arctic Mariners Routeing Guide historical discussions in ARHC; IHO S-49 Standardization of Mariners Routeing Guides
Related Projects:	none

Introduction / Background

The first meeting of the ARHC introduced the concept of the Arctic Mariners Routeing Guide (AMRG) due to the complexities of Arctic navigation and to highlight international hydrographic cooperation in assisting safe voyages in circumpolar Arctic waters. ARHC2 demonstrated paper (USA) and digital (Canada) prototype versions of the North-West Passage through the Canadian Arctic. With these prototypes in hand, consultations were undertaken in 2011. With an Extraordinary ARHC meeting in Monaco on April 24, 2012, Canada presented its findings on the prototype paper AMRG proposed by the ARHC Routeing Guide Working Group. Canada expressed its concerns in areas of complicated governance of a multi-national product, complexities to its legal status without a sound updating regime and complete carriage information, and finally, the perceived value to the mariner if the product did not have any official status within Member States. The Chair of the Working Group (Denmark) proposed to issue a questionnaire to determine the way forward. Subsequent to the Ad Hoc ARHC meeting, the United States-Canada Hydrographic Commission (USCHC) held its annual meeting on April 14, 2012 and a decision was taken at that time for Canada to push forward and develop its national concept of an AMRG.

Analysis/Discussion

Working on the USCHC action item Canada proceeded to design and build a national digital version of an Arctic Voyage Planning Guide (AVPG) covering the area of Canadian jurisdiction. The goal was to construct a product that would satisfy the concerns of governance, complexities in legal status, uncertain updating regime and finally to bring value to Mariners.

Governance – Canada's on-line AVPG will be solely constructed and hosted by Canada as an official service.

Legal Status – the on-line version will be recognized as a Government of Canada product. It is intended as a planning tool and will not be a required carriage publication.

Updating Regime – the on-line version uses links to official Federal carriage and regulatory web sites to minimize human interaction requirements for updating. Consideration is being given to link databases and the ArcGIS management tool to dynamically update spatial features to minimize human interaction requirements for updating.

Value to Mariners – Mariners will have the assurance that the on-line AVPG is endorsed by the Government of Canada thereby providing a suitable portal to a range of information across several Canadian Federal Departments. The on-line portal will have flexibility to pick and choose information layers of relevance to the end-user.

In the addition to the above described digital version, a prototype paper version has been designed as a potential Canadian contribution to a series of ARHC AVPGs. This paper version is produced as a sub-set of the on-line AVPG. Unlike the digital version, this paper version would not have official status from the Government of Canada. It would be only maintained up-to-date on an ad hoc schedule to be determined by the ARHC. Canada would propose to provide the paper version contribution in English only. A suitable host organization and distribution scheme would need to be developed by ARHC.

If the ARHC decides to continue its consideration of paper or digital Arctic voyage planning guides then Canada would suggest that a common look-and-feel be used for either a digital or paper series of these products. Annex A is a draft of some of the elements to be considered in the preparation of a minimum standard for a common look-and-feel for a paper version AVPG.

Conclusions

Overall, Canada considers it has addressed the principal limitation of the original paper AVPG prototype through utilization of a digital web-based solution as an official Canadian product.

Recommendations

The ARHC notes this information

Justification and Impacts

Not required as this has been a multi-year agenda item for the ARHC

Action Required of ARHC

The ARHC is invited to:

1. Consider this Canadian Arctic Voyage Planning Guide as a suitable prototype for other ARHC Member States.

Arctic Voyage Planning Guide - Design Standards
Edition 1 - DRAFT

Layout

Page size: ISO A0

Reference Number	Element	Position
1	National hydrographic organization logo	<ul style="list-style-type: none"> • Upper left • Above neatline
2	International Hydrographic Organization logo	<ul style="list-style-type: none"> • Upper right • Above neatline
3	Title	<ul style="list-style-type: none"> • Top (centred) • Above neatline • Arial 62pt
4	Neatline	<ul style="list-style-type: none"> • 0.5 pt • Surrounds all elements except logos and product title
5	Edition date	<ul style="list-style-type: none"> • Arial 9 pt • Centred, below neatline

Production Info

Reference Number	Element	Position
6	Product description	<ul style="list-style-type: none"> • Arial 16pt
7	Production information <ul style="list-style-type: none"> • Scale • Horizontal Datum • Projection • Standard parallels 	<ul style="list-style-type: none"> • Arial 16 pt


Product Coverage

Reference Number	Element	Position
8	Product extent	<ul style="list-style-type: none"> • Orthographic polar projection • Product extent outlined in red • Adjacent product extents outlined in grey

Charlets

3pt data frame border
65 pt gap between border and frame


Reference Number	Element	Position
9	Routeing	<ul style="list-style-type: none"> Communities Protected areas Marine traffic patterns Marine toponymy Limiting depths at important choke points
10	Legislation and Regulations	<ul style="list-style-type: none"> Transportation regulations
11	Charts, Publications and Carriage Requirements	<ul style="list-style-type: none"> National carriage requirements including charts, publications, List of Lights, Notice to Mariners etc.
12	Marine Communications	<ul style="list-style-type: none"> Navtex sites Navarea Metarea National marine communications services
13	Ice Services	<ul style="list-style-type: none"> National ice services
14	Weather Services	<ul style="list-style-type: none"> Climate normals Marine weather services

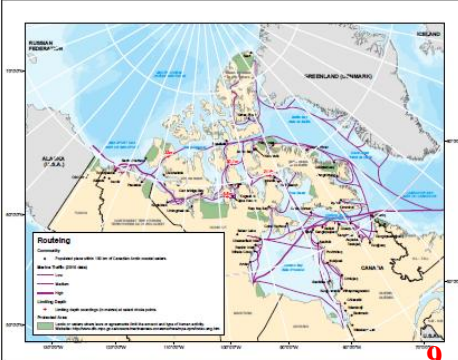

1

Arctic Mariners' Routing Guide 3

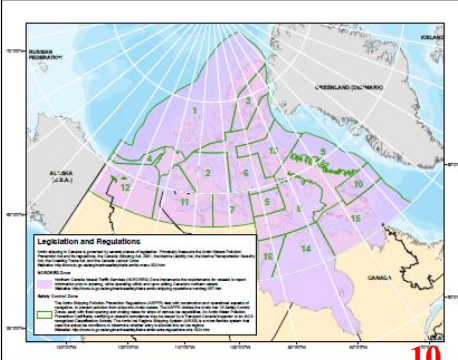
Voyage Planner

DRAFT

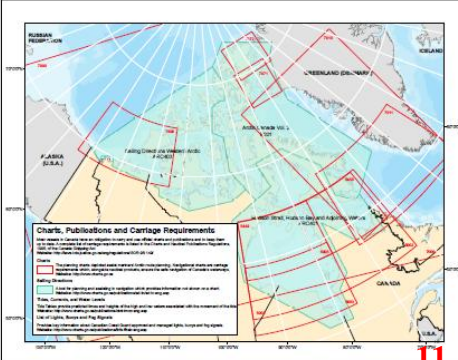

2



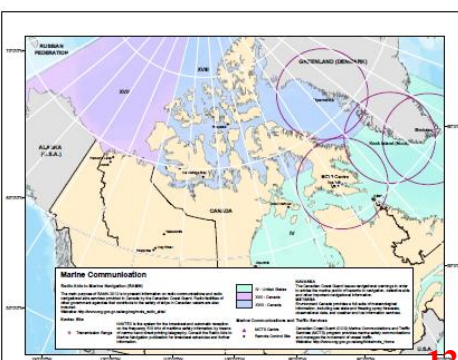
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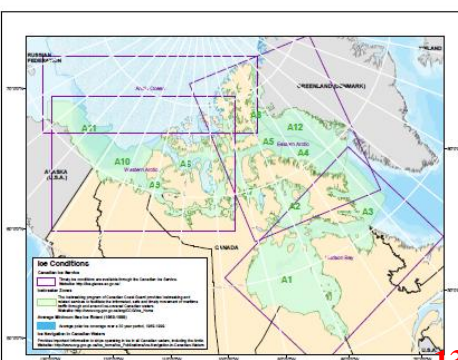
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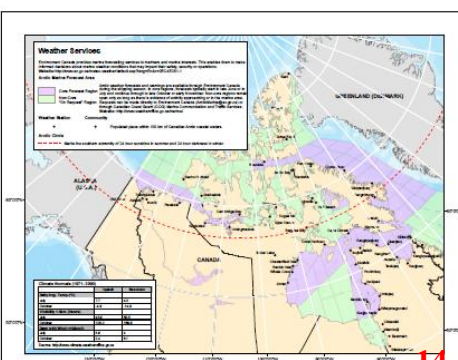
11



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The Arctic Mariners' Routing Guide is intended as a high-level tool to assist in Arctic voyage planning, and is not to be used for navigation. It is to be used in addition to nautical charts and publications.

The paper or digital Arctic routing guides are strategic planning tools and are not a requirement of the Charts and Nautical Publications Regulations, 1995, made pursuant to the Canada Shipping Act, 2001. Information on official carriage and regulatory requirements can be accessed in the on-line portal. In case of disparity, the information contained in the official nautical publications and the Regulations will prevail.

The digital on-line version is the official product and maintained up-to-date. It can be found at www.dfo-mpo.gc.ca/ArcticMariners/Planning/portal.go.ca

This hardcopy version of the Arctic Mariners' Routing Guide is a sub-set of the on-line version and may not be updated with the latest information. This hardcopy version complements the work of the Arctic Regional Hydrographic Commission to establish a circumpolar series of Arctic voyage planning tools to draw international awareness to the unique requirements of navigation in Arctic waters.

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Scale: 1:15,000,000
Horizontal Datum: North American Datum 1983
Projection: Lambert Conformal Conic
Standard parallels: 82°00'00"N, 73°00'00"N

CHG acknowledges the valuable contribution of information and data from the Canadian Coast Guard (CCG), Transport Canada (TC), Environment Canada (EC) and Geomatics & Geomatics © Department of Natural Resources Canada.

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NOT TO BE USED FOR NAVIGATION


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