

Maritime Student's Perspective: Virtual Route Planning from Hamburg to Norilsk

Katharina Kaiser

Virtual Route Planning from Hamburg to Norilsk

- The aim was to find out whether the provided “Arctic Shipping Best Practice Information Forum” from the PAME working group can be used for planning a route from a mariner’s side of view.

- Katharina Kaiser
- Student at the Jade University of Applied Sciences in Elsfleth / Germany
 - Course: Nautical Science and Maritime Transport
 - 5th Semester

1. Voyage Preparation
2. Additional Preparation
3. Summary, Findings & Recommendations

1. Receiving the order for the new port

22.11.2018	LadT Hausarbeit WS18		Telex
Dreamshipping		Limassol	23.12.18 10

Voyage Order MS Hanse Porter – HP18/N/37

Dear Captain Kaiser !

Pls proceed most economic speed to Montevideo
Adjust arrival for 24.12.18 /00:01 HRS
Pls have vessel in all respects ready for loading
and tender NOR upon arrival plt. stn..
Bunkering (DO and HFO) is scheduled for arrival load port.
Issue bunker order for total voyage asap.
Order only minimum bunker qty. for total voyage
incl. safety margin 3 days.

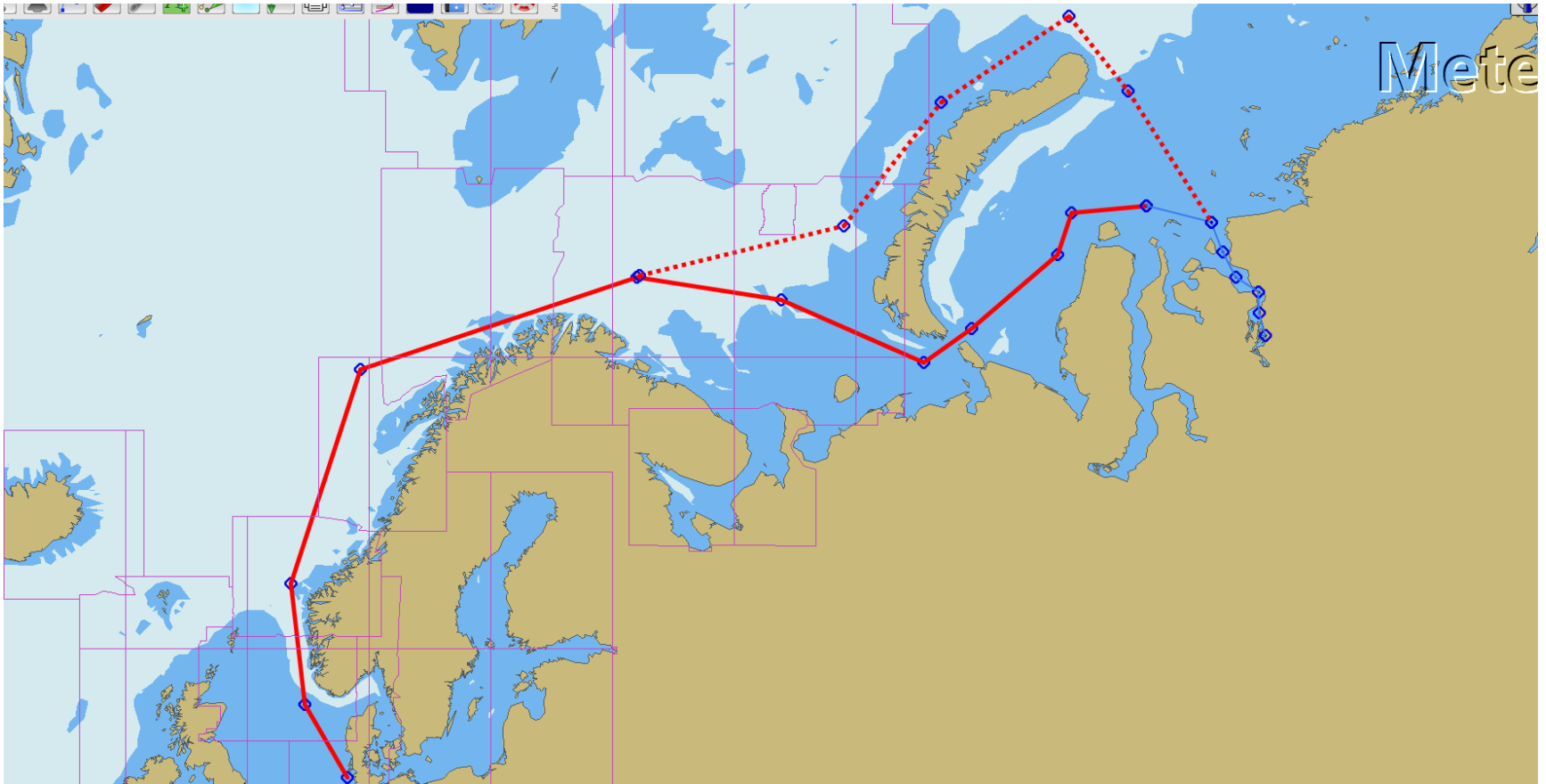
LAYCAN 24.12.18 to 27.12.18

Cargo to be loaded:

1)

- . . .

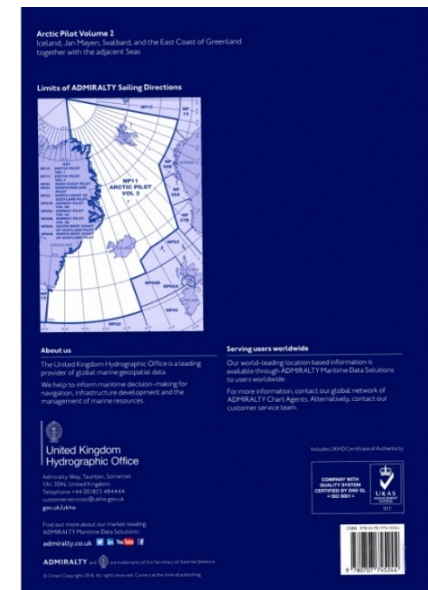
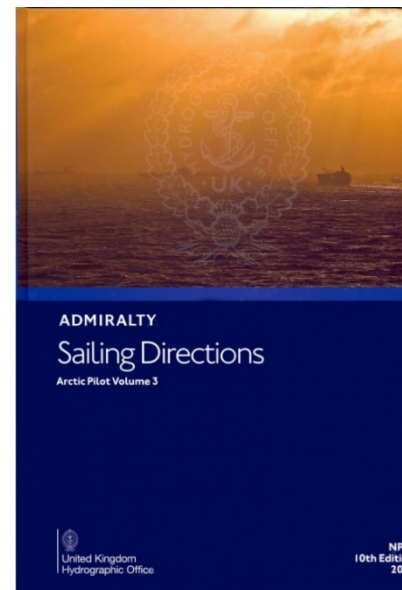
2. Prepare a rough approximation of the route (total distance)



Route was planned with OpenCPN

3. Check expected weather

4. Research in “Sailing Directions”



https://mdnautical.com/37071-thickbox_default/d.jpg https://mdnautical.com/37311-thickbox_default/admiralty-sailing-directions-np11-arctic-pilot-vol-2-10th-edition-2010.jpg

VOYAGE PREPARATION



5. Check the “Notices to Mariners”

Notices
2784-2880/19



ADMIRALTY NOTICES TO MARINERS

Weekly Edition 23

06 June 2019

(Published on the ADMIRALTY website 24 May 2019)

CONTENTS

- I Explanatory Notes, Publications List
- II ADMIRALTY Notices to Mariners, Updates to Standard Nautical Charts
- III Reprints of NAVAREA I Navigational Warnings
- IV Updates to ADMIRALTY Sailing Directions
- V Updates to ADMIRALTY List of Lights and Fog Signals
- VI Updates to ADMIRALTY List of Radio Signals
- VII Updates to Miscellaneous ADMIRALTY Nautical Publications
- VIII Updates to ADMIRALTY Digital Services

For information on how to update your ADMIRALTY products using ADMIRALTY Notices to Mariners, please refer to NP294 How to Keep Your ADMIRALTY Products Up-to-Date.

Mariners are requested to inform the UKHO immediately of the discovery of new or suspected dangers to navigation, observed changes to navigational aids and of shortcomings in both paper and digital ADMIRALTY Charts or Publications.

The H-Note App helps you to send H-Notes to the UKHO, using your device's camera, GPS and email. It is available for free download on Google Play and on the App Store.

The Hydrographic Note Form (H102) should be used to forward this information and to report any ENC display issues.

H102A should be used for reporting changes to Port Information.

H102B should be used for reporting GPS/Chart Datum observations.

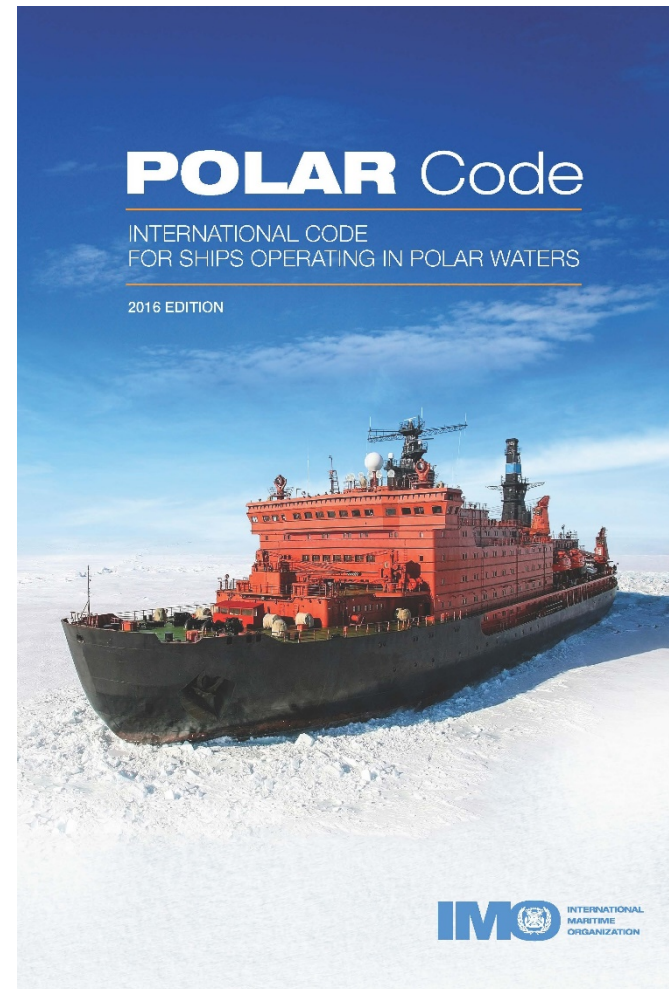
Copies of these forms can be found at the back of this bulletin and on the UKHO website.

The following communication facilities are available:

NMs on ADMIRALTY website:	Web: admiralty.co.uk/msi
Searchable Notices to Mariners:	Web: www.ukho.gov.uk/nmwebsearch
Urgent navigational information:	e-mail: navwarnings@ukho.gov.uk
	Phone: +44(0)1823 353448
	Fax: +44(0)1823 322352
H102 forms (see back pages of this Weekly Edition)	e-mail: adr@ukho.gov.uk
	Post: UKHO, Admiralty Way, Taunton, Somerset, TA1 2DN, UK
All other enquiries/information	e-mail: customerservices@ukho.gov.uk
	Phone: +44(0)1823 484444 (24/7)

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6. Check the “Polar Code”



http://www.imo.org/en/MediaCentre/HotTopics/polar/PublishingImages/Pages/default/Polar%20Code%20front%20cover_2016%20edition%20%282%29.jpg

7. Prepare the radio communication for the route

- SAR Operations
- Reporting Procedure

8. Check for additional information

- Agents
- Company
- Captain
- Vessel in the same trade

Google

1. Wikipedia

2. IMO

- Summary of “Polar Code”
- Two explanatory videos
- Posters

3. PAME 4th result

Polar Code – Wikipedia

https://de.wikipedia.org/wiki/Polar_Code ▼

Der Polar Code (eigentlich International Code for Ships Operating in Polar Waters, englisch für ... Kevin McGwin: Lloyd's guidelines to "complement" Polar Code, The Arctic Journal – Website, 18. März 2014. Abgerufen am 8. Januar 2017.

Inhalte · Zertifizierung von Schiffen · Verhandlungspartner · Bewertung & Kritik

International Code for Ships Operating in Polar Waters - Wikipedia

https://en.wikipedia.org/wiki/International_Code_for_Ships_Operating_in_Polar_Waters ▼ Diese Seite übersetzen

The International Code for Ships Operating in Polar Waters or Polar Code is an international ... The Polar Code is a proposed binding international framework to protect the two polar regions—Arctic (north pole region) and Antarctic (south pole ...

The Polar Code - PAME

<https://www.pame.is/index.php/projects/arctic/the-polar-code> ▼ Diese Seite übersetzen

Only vessels that intend to operate within the Arctic and Antarctic areas as defined in the Polar Code need to comply with the code. The areas are as follows ...

^[PDF] IMO Polar Code Advisory - American Bureau of Shipping

https://www2.eagle.org/assets/abs/Polar_Code_Advisory_15239.pdf ▼ Diese Seite übersetzen

Drivers for the Mandatory Polar Code Section 1 IMO Polar Code Overview Canadian Arctic Ice Regime Shipping System .

- Plenty of practical information

POLAR CODE CHAPTERS: EXPLANATION AND SUBMISSIONS

Part IA - Safety Measures

Chapter 1: General

Chapter 2: Polar Water Operation Manual

Chapter 3: Ship structure

Chapter 4: Subdivision and stability

Chapter 5: Watertight and weathertight integrity

Chapter 6: Machinery installations

Chapter 7: Fire safety/Protection

Chapter 8: Life saving appliances and arrangements

Chapter 9: Safety of navigation

Chapter 10: Communication

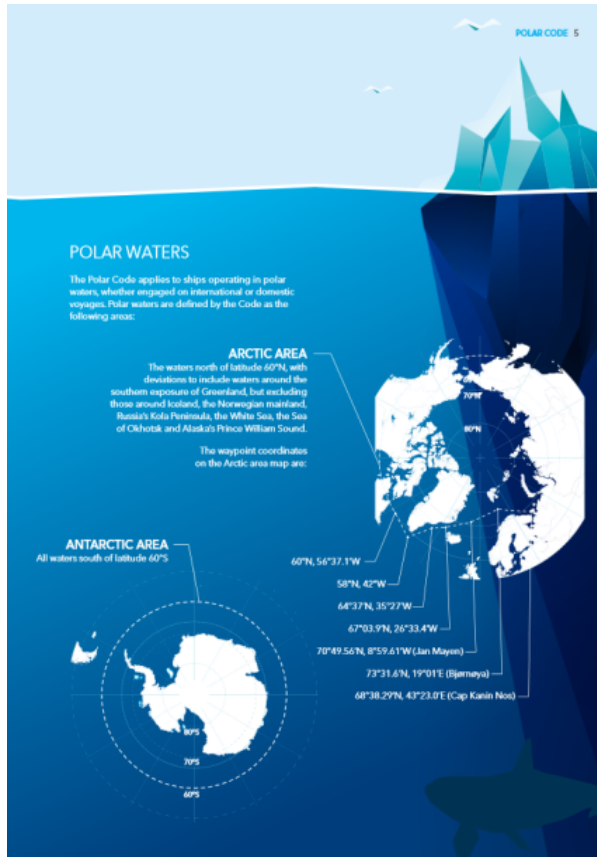
Chapter 11: Voyage planning

Chapter 12: Manning and training

Polar Code Part IB

Polar Code Part IIA: Pollution Prevention Measures

Polar Code Part II B



Polar View

More information

This page offers a simplified presentation of results designed for low bandwidth connections. If you prefer more sophisticated query options and result presentation, please follow [this link](#) to the standard interface.

Available datasets:

- SAR_High-res_imagery
- Sea_ice_concentration_data (AMSR2 from University of Bremen)
- Ice_chart (provided by U.S. National Ice Center)
- CMEMS_sea_ice_edge

Ice chart issue date: 2019-01-16

Area	Preview	Get data..	
		Format	Size
Antarctica		JPG (5km pixel size)	312kB
		GeoTIFF (5km pixel size)	0kB
		ESRI Shape (Lat/Lon)	1472kB
Antarctic Peninsula		JPG (2km pixel size)	250kB
		GeoTIFF (2km pixel size)	0kB
		Google Earth KML/KMZ	1891kB
Weddell Sea		JPG (2km pixel size)	232kB
		GeoTIFF (2km pixel size)	0kB
		Google Earth KML/KMZ	1891kB
South Atlantic		JPG (2km pixel size)	202kB
		GeoTIFF (2km pixel size)	0kB
		Google Earth KML/KMZ	1891kB

<https://www.polarview.aq/tablelisting/nic>

Polar Code. Understand the code's requirements to take the right steps for smooth compliance. (Page 5)

- The Arctic Best Practise Shipping Forum is really useful as it contains practical advice as well as further navigational information for instance
- The layout of the forum is perfectly divided, like the polar code, so it is easy to search precisely for the relevant information

At sea internet access is limited
+
Time pressure



Mariners are dependent on reliable, offline, fast, correct and available information.

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- Arctic Best Practise Shipping Forum is only available online
 - ➔ Offline
 - ➔ Alternatively a new and easily accessible website (low bandwidth)
 - ➔ Sometimes data cannot be accessed or used by Mariners
- Planning Chart like Port Approach Guide
- Inform nautical universities and shipping companies about the work of PAME and the Arctic Council
 - ➔ Information brochures
 - ➔ Presentations
 - ➔ Videos

Thank you for your attention
