



# Canadian Hydrographic Service

7<sup>th</sup> Arctic Regional Hydrographic Commission (ARHC7) Meeting

# Hydrographic and Charting Activities in the Canadian Arctic

Ilulissat, Greenland

August 23-24, 2017

Tom Rowsell, Acting/Director CHS Burlington Office (Central & Arctic) Office



# Canadian Hydrographic Service

## Presentation will cover:

- Surveys and Production during 2016 fiscal year
- Planned Surveys and Production for 2017 fiscal year



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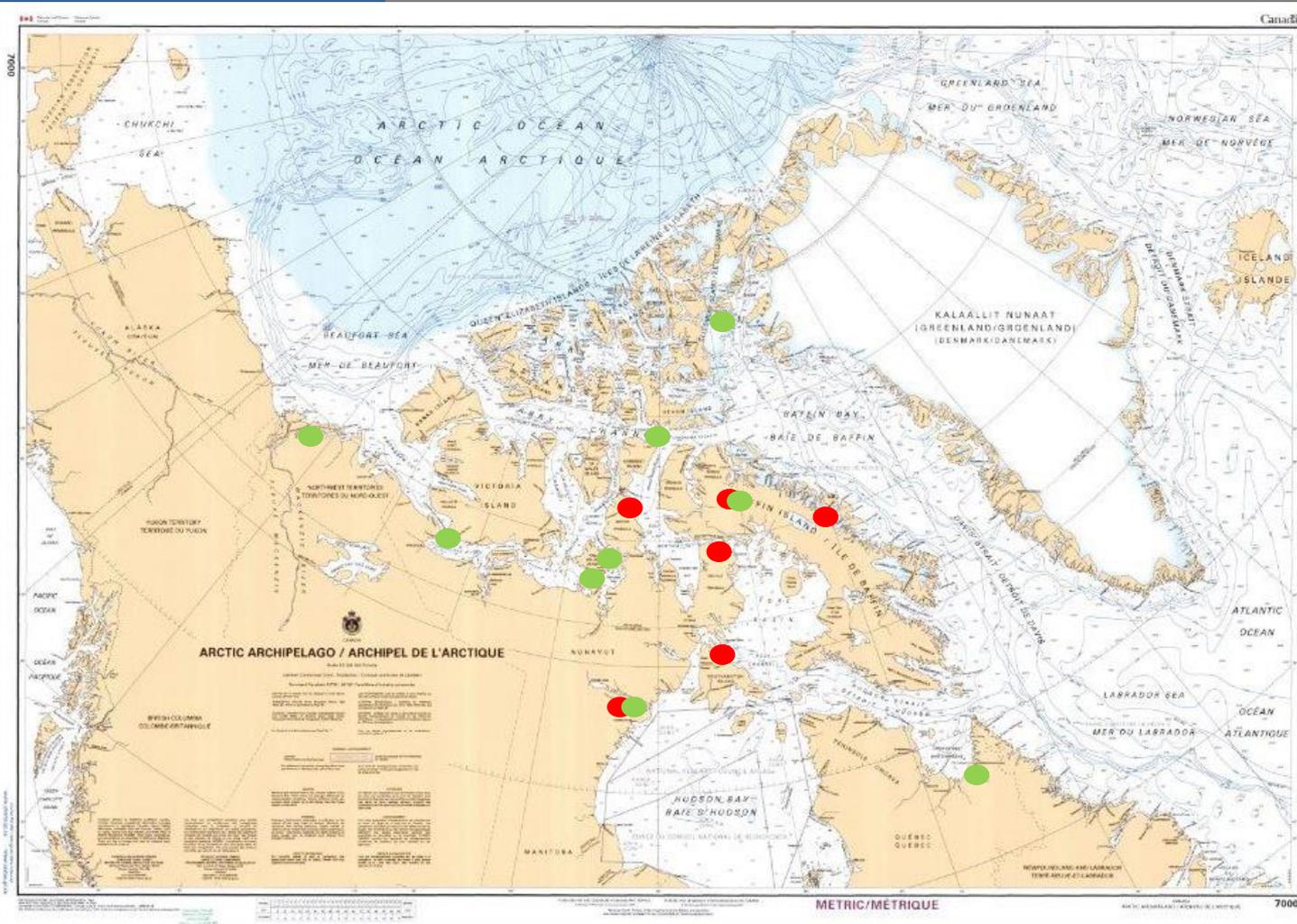
## Surveys and Production during 2016 fiscal year



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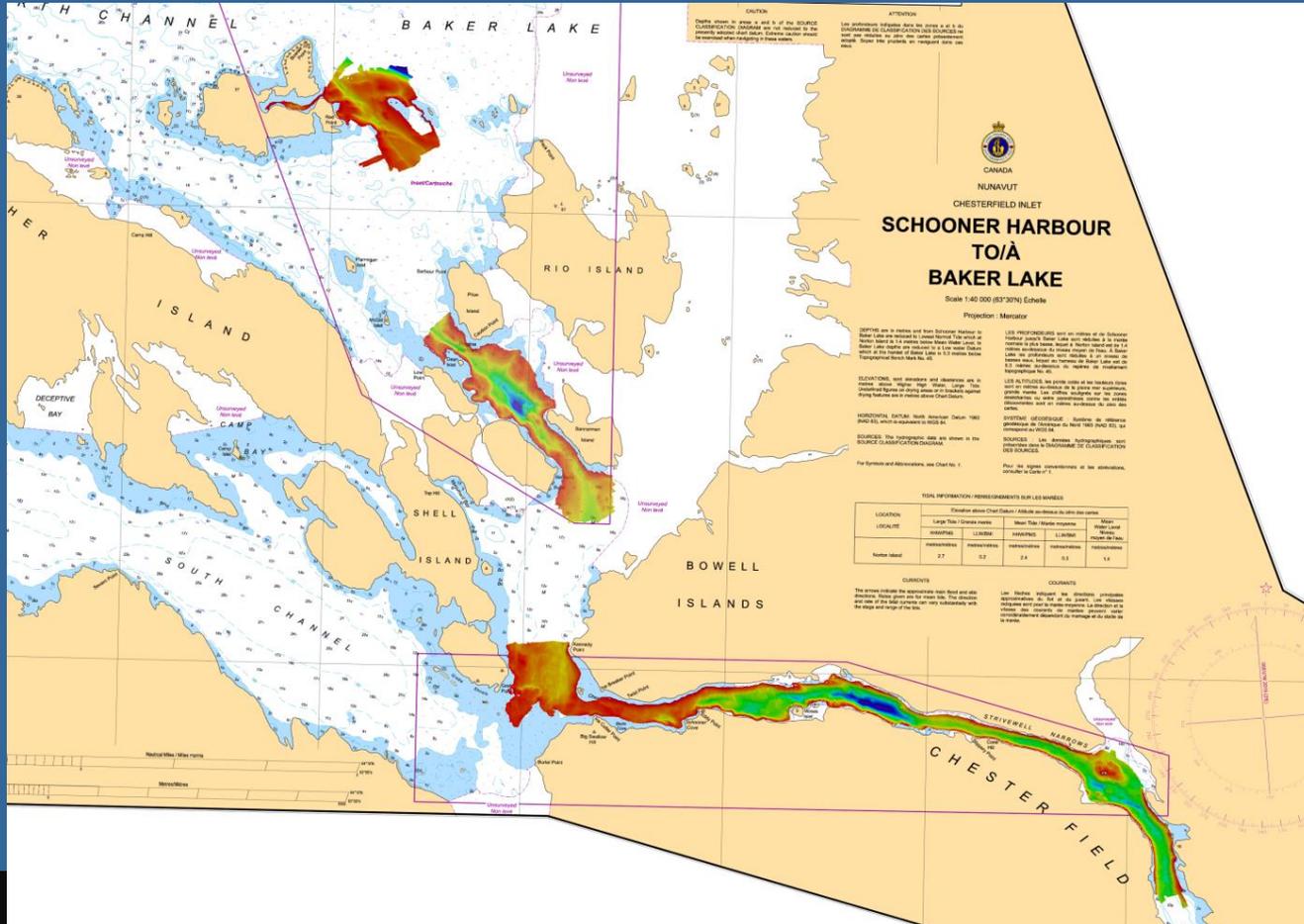
## 2016-17 Surveys and Production

- survey
- chart





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## Chesterfield Inlet Surveys (under contract)

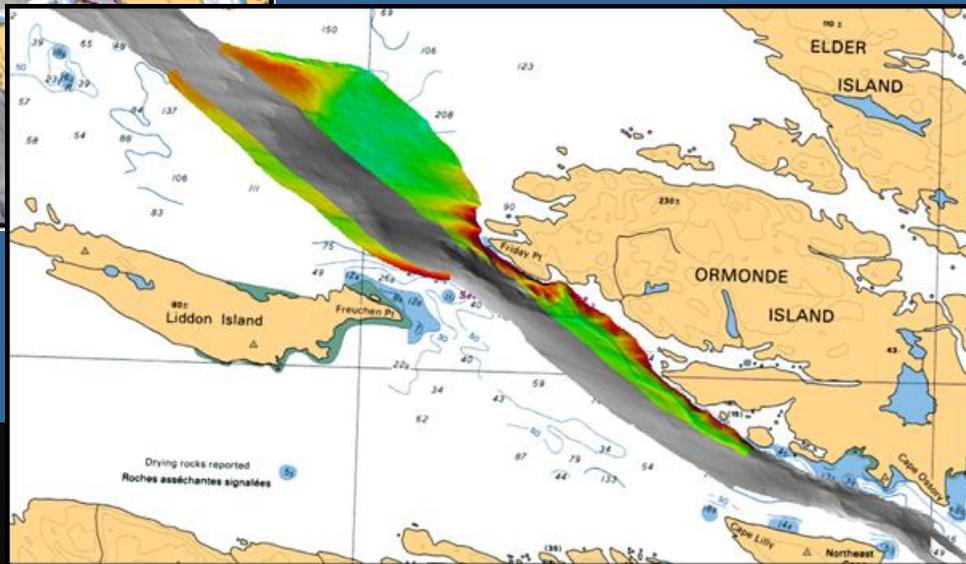
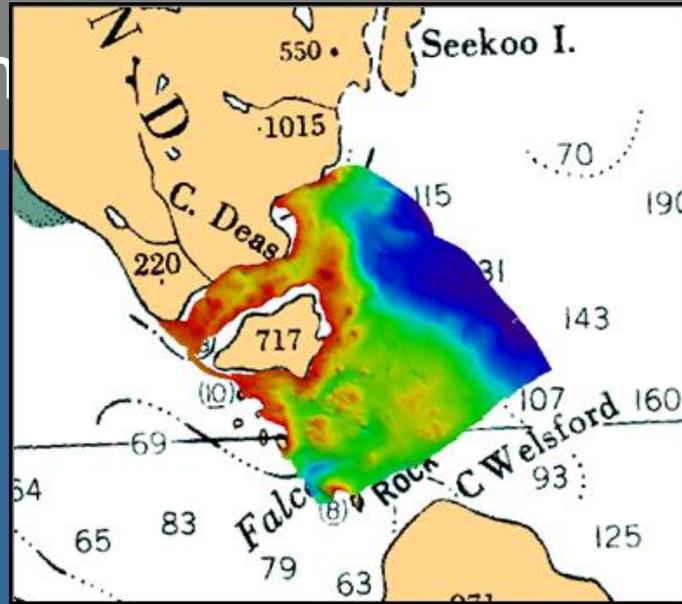
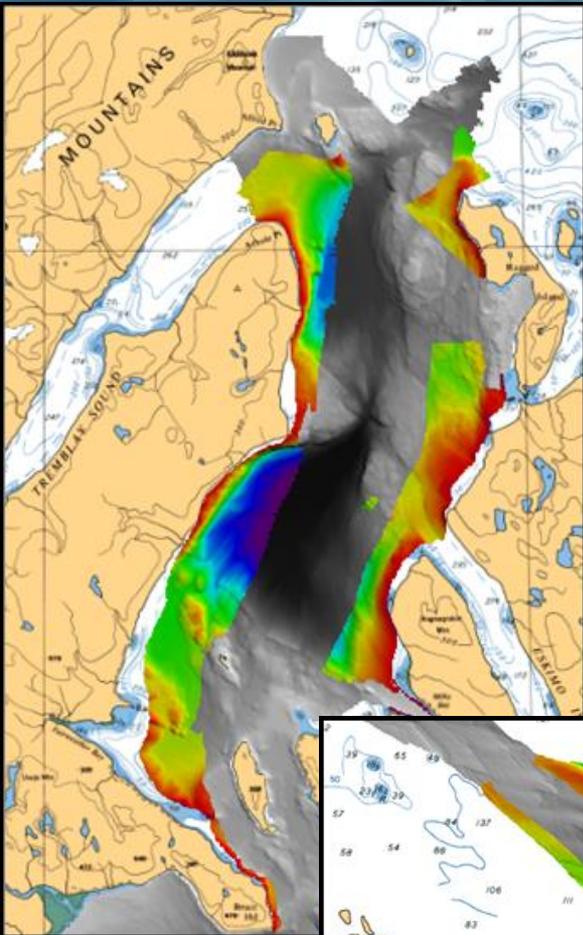


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Royal Canadian Navy – data collection (2 vessels):

- Clyde River
- Bellot Strait
- Cape Felix
- Victoria Strait



Service

CCGS *Henry Larsen* – data collection:

- Milne Inlet (7212)
- Fury and Hecla Strait (7487)
- Falcon Strait (7404)



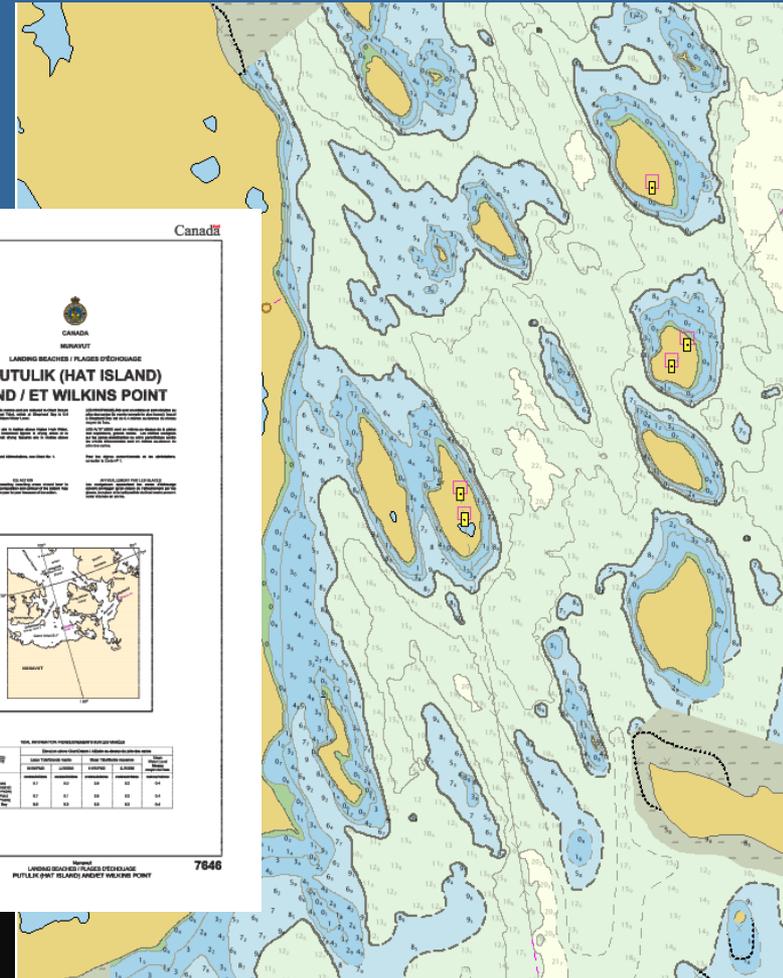
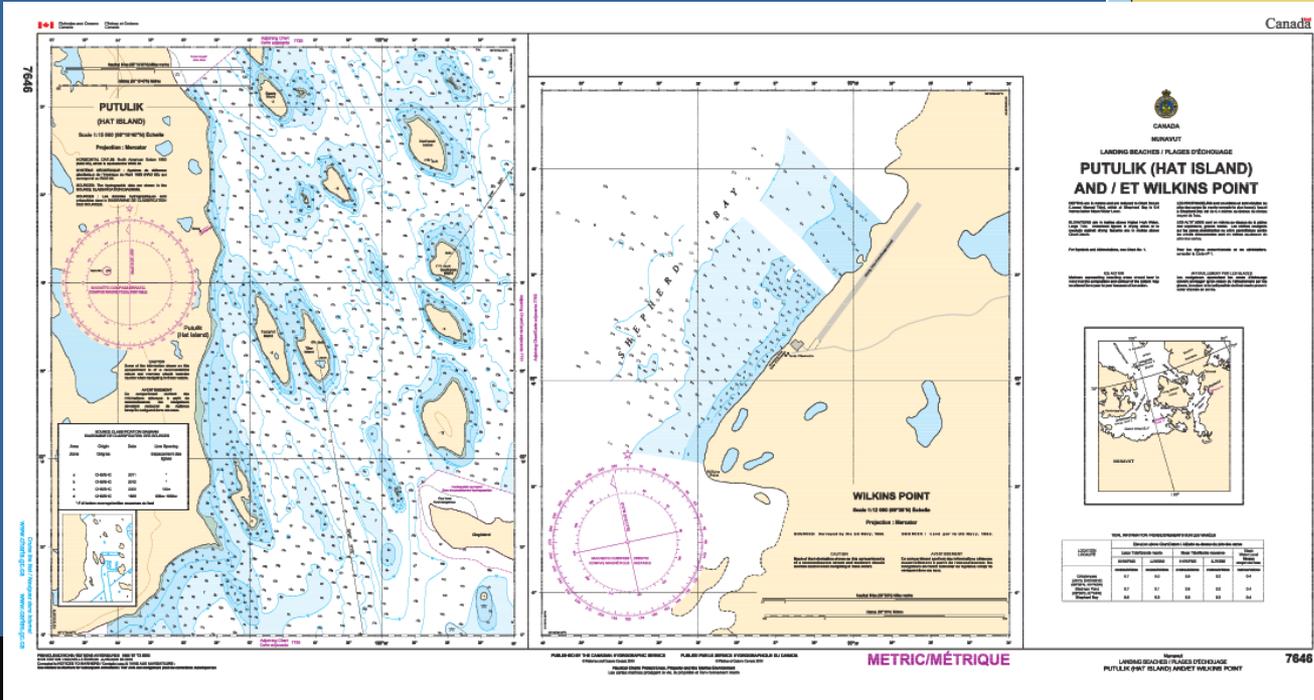
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Arctic Navigational Publications released  
during 2016 fiscal year



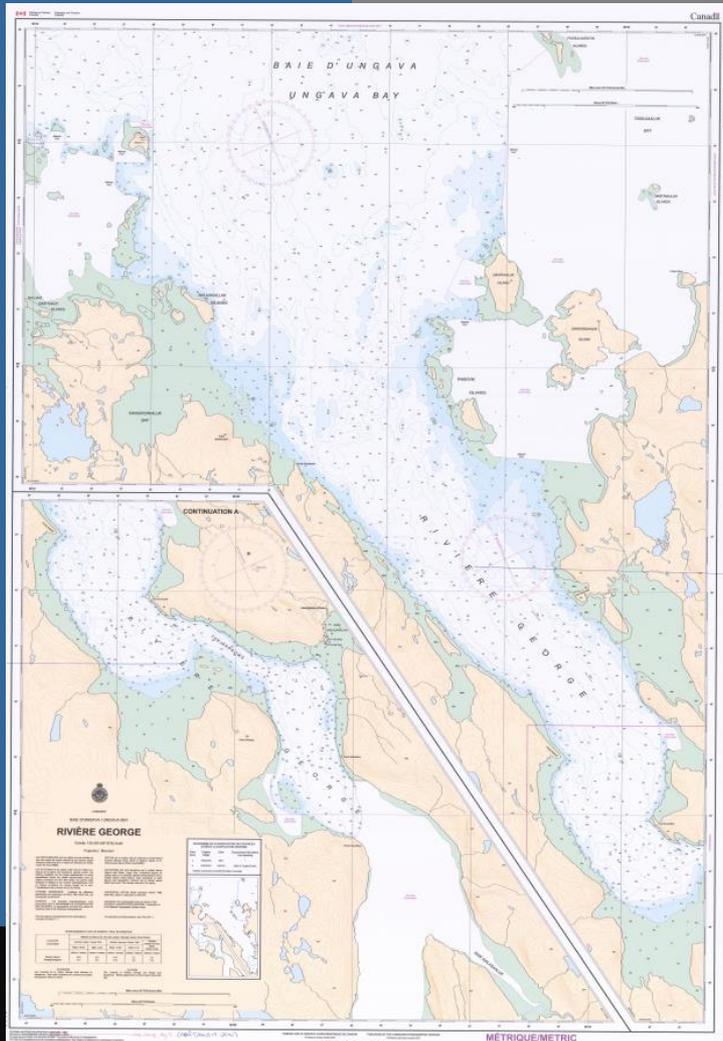
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## New ENC and Paper chart for Hat Island (Putulik)





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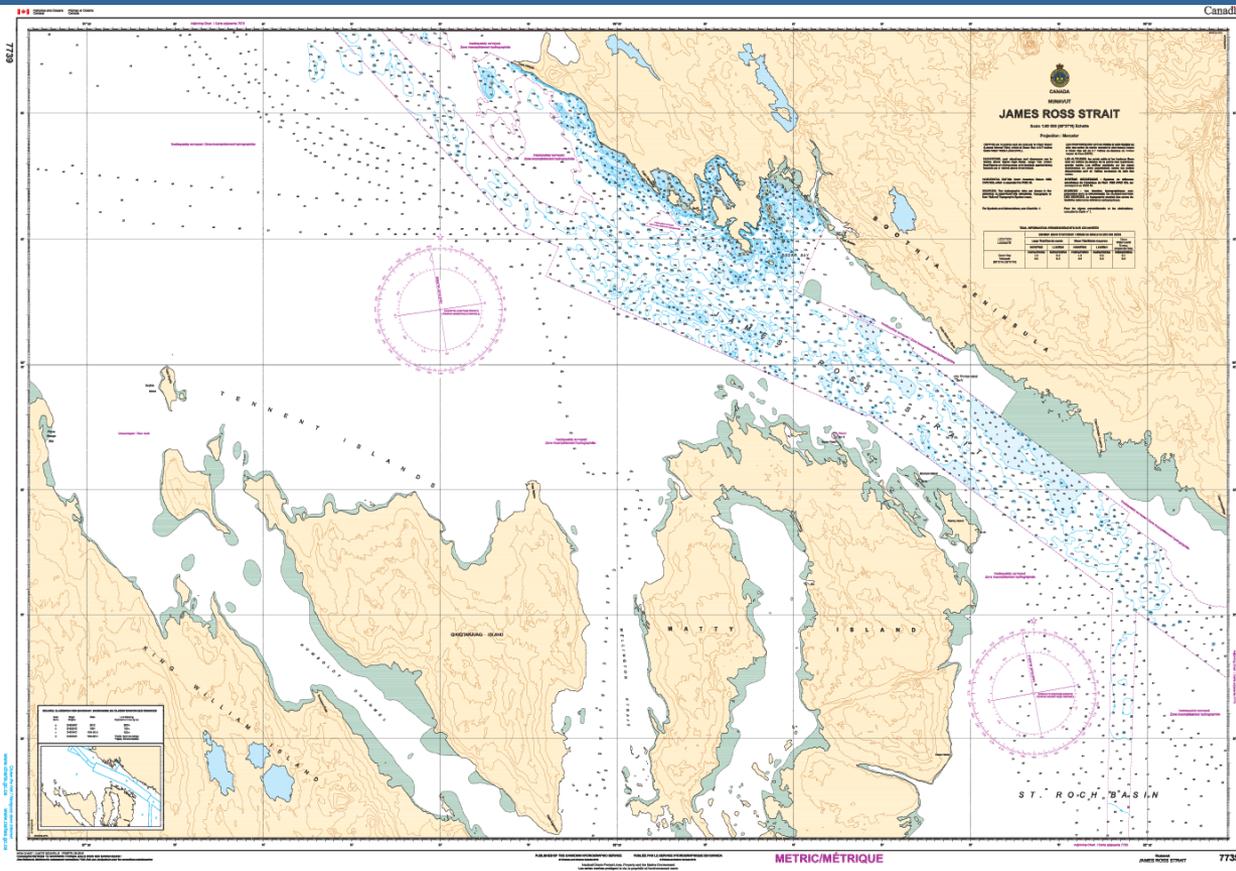
New Edition  
5335: George River  
7371: Alexandra Fiord  
7527: Erebus and Terror  
Bay and Radstock Bay  
7710: Lambert Channel  
and Cache Point  
Channel  
7685: Tuktoyuktuk



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New Paper Chart  
7739: James Ross Strait

New ENC:  
Chesterfield Inlet  
7513: Milne Inlet  
Southern Portion



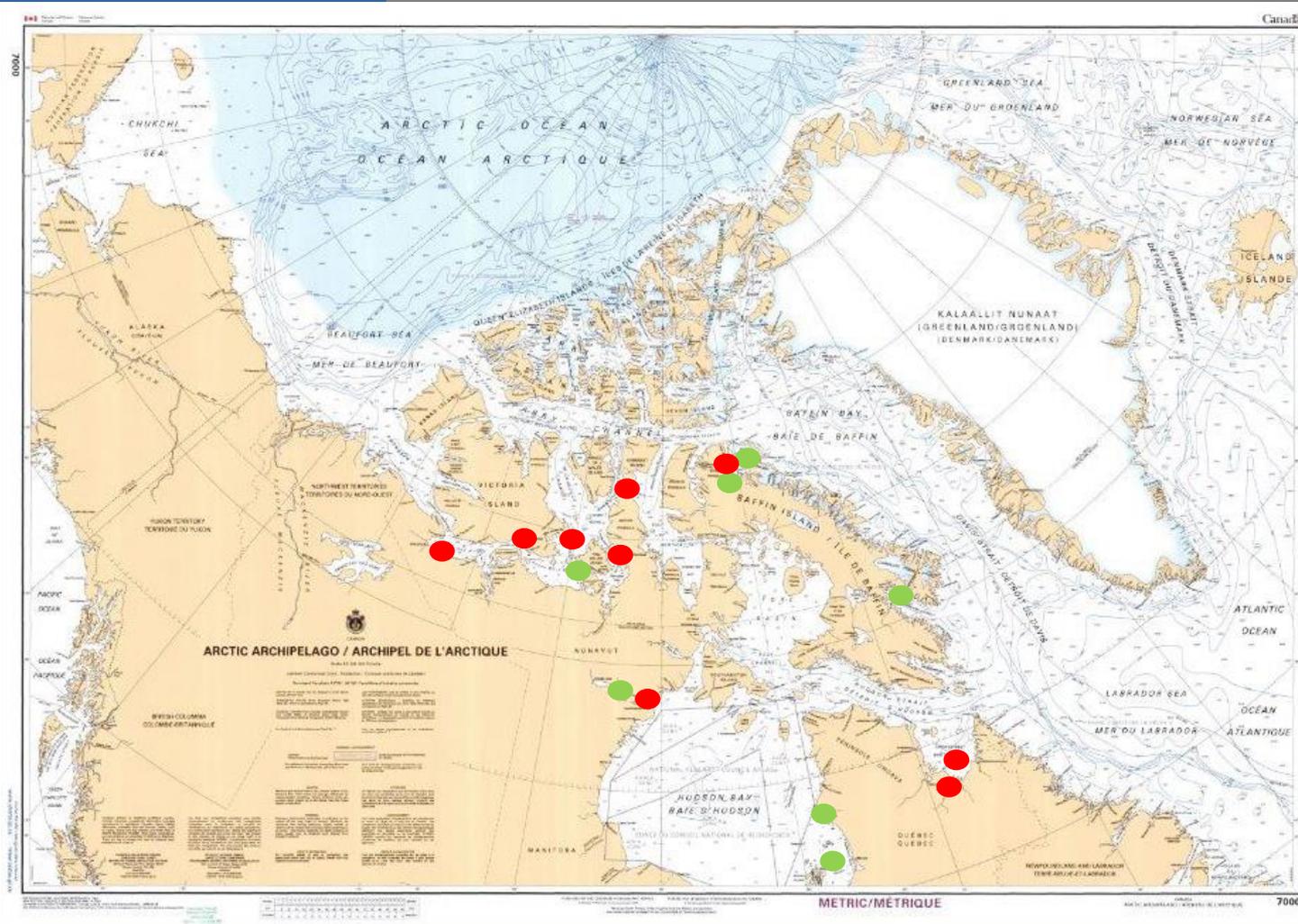


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Arctic Surveys and Publications planned for  
2017 fiscal year



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## 2017-18 planned Surveys and Production

- survey
- chart



# Canadian Hydrographic Service

## Means of collecting Hydrography in 2017:

- CHS regular acquisition program (Western Arctic)
- Partnering with other branches in Government (South Ungava Bay, portion of Leg 3 (Oceanography) in Western Arctic)
- Contracting with the Private sector (Ungava Bay corridors)
- Opportunistic Hydrography (Royal Canadian Navy HMCS *Kingston* for transit through Northwest Passage)
- Targeted Crowd-Sourcing (RSS *Shackleton* for transit through Northwest Passage)
- Controlled Crowd-Sourcing (Foreign Vessel Permitting: Germany: MS *Maria S Marian*, Korea: RV *Araon*)



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## Eastern Arctic Surveys- CCGS *Henry Larsen*:

- Koksoak River Narrows
- Chesterfield Inlet





# Canadian Hydrographic Service

## Western Arctic Bathymetry- CCGS *Sir Wilfrid Laurier*:

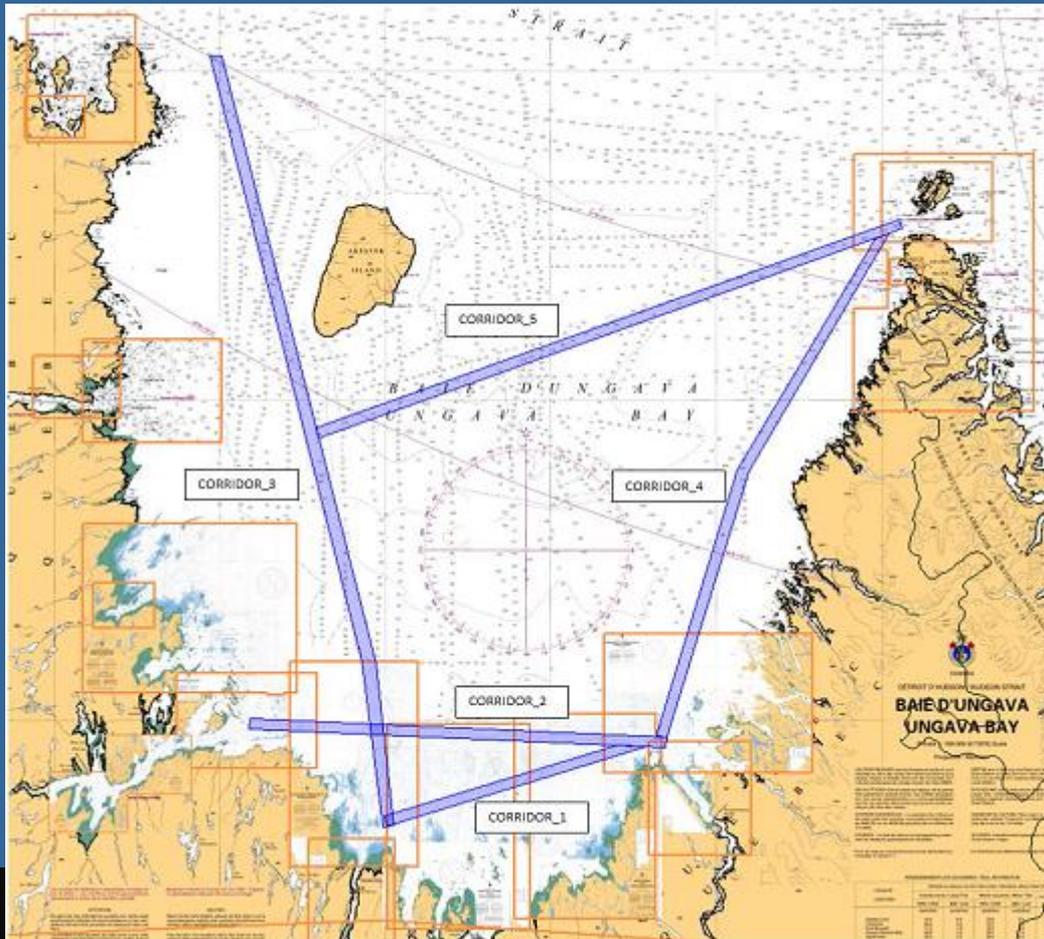


- Collect data during transit from Beaufort Sea to Bellot Strait



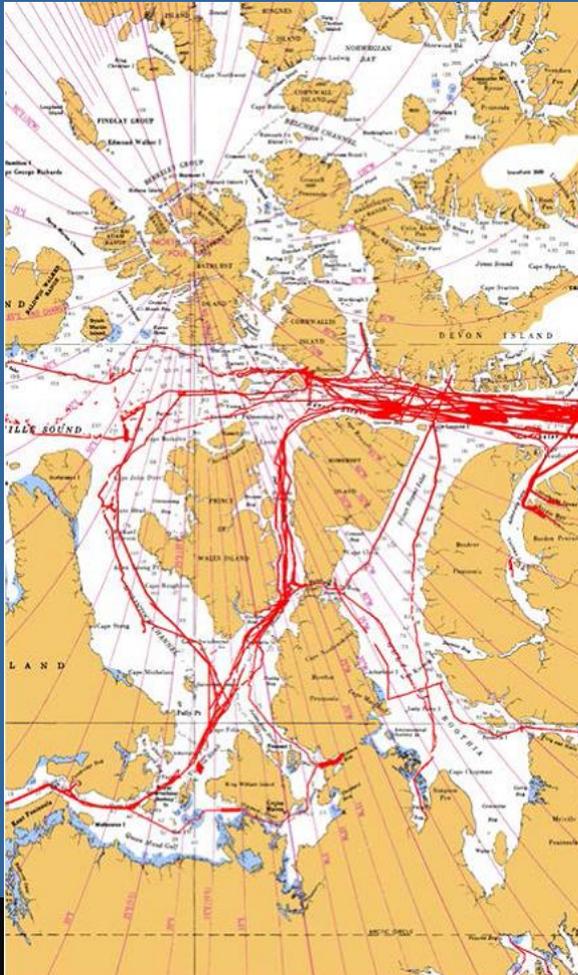
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## Ungava Bay Corridors - Contract with Private Sector for hydrographic services





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## Pond Inlet to Cambridge Bay- *HMCS Kingston*:

- Expansion of Low Impact Shipping Corridors





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## Targeted crowd sourced bathymetry:

- **Portable multi-beam echo-sounding system**  
*(4 procured in 2016-17)*





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*In an effort to accelerate the acquisition of modern hydrography in the Arctic, the Canadian Hydrographic Service is collaborating with the Canadian Coast Guard to install multi-beam sonars in icebreakers. Two icebreakers are equipped to collect modern hydrography during the 2017 Arctic navigation season, **CCGS Sir Wilfrid Laurier** and **CCGS Amundsen**. By the 2019 season and thereafter, plans are underway for six icebreakers to be fully equipped to collect modern hydrography in the Arctic.*

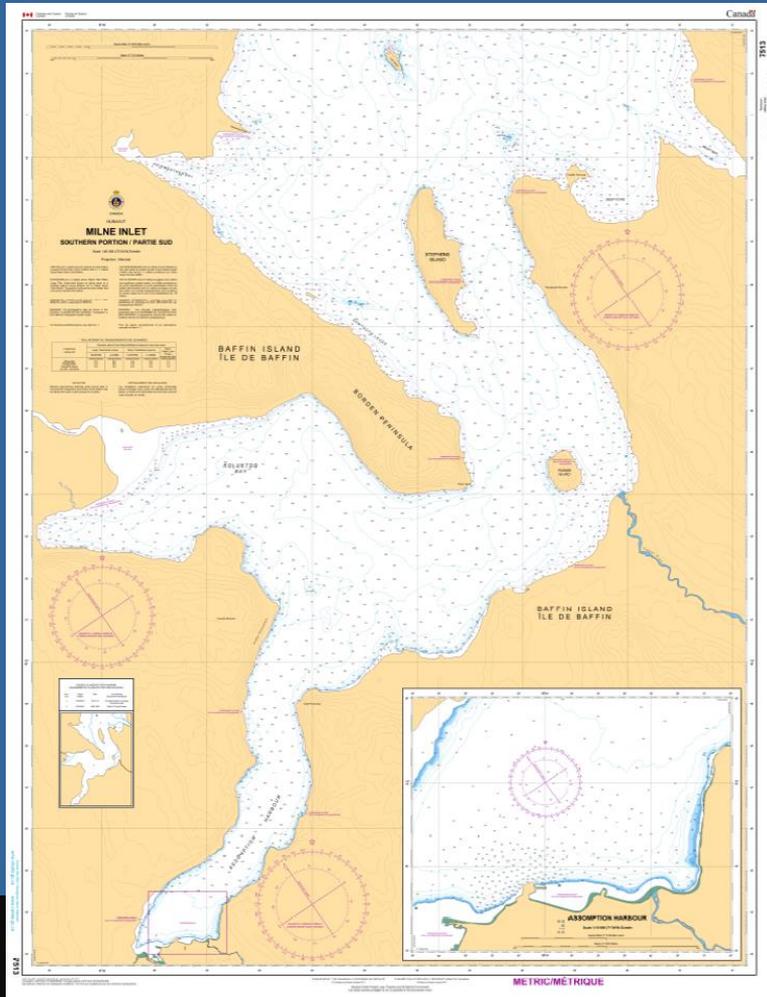


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Arctic Navigational Publications planned for the  
2017 fiscal year



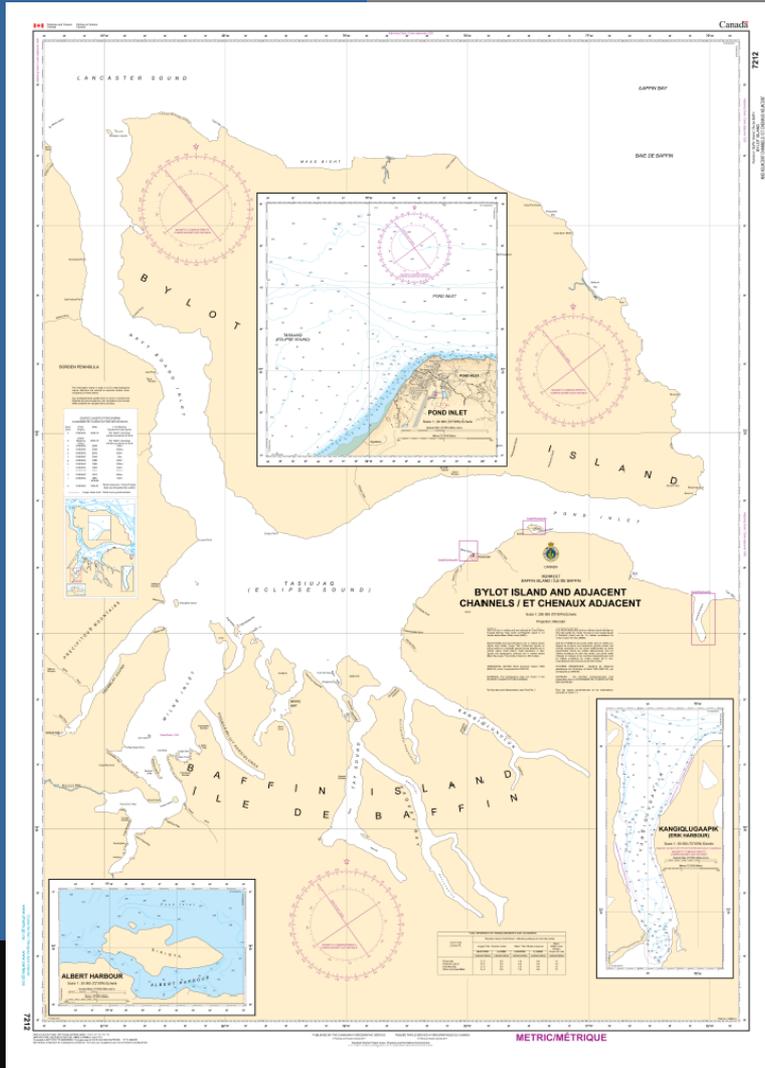
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## New Paper Chart 7513: Milne Inlet Southern Portion



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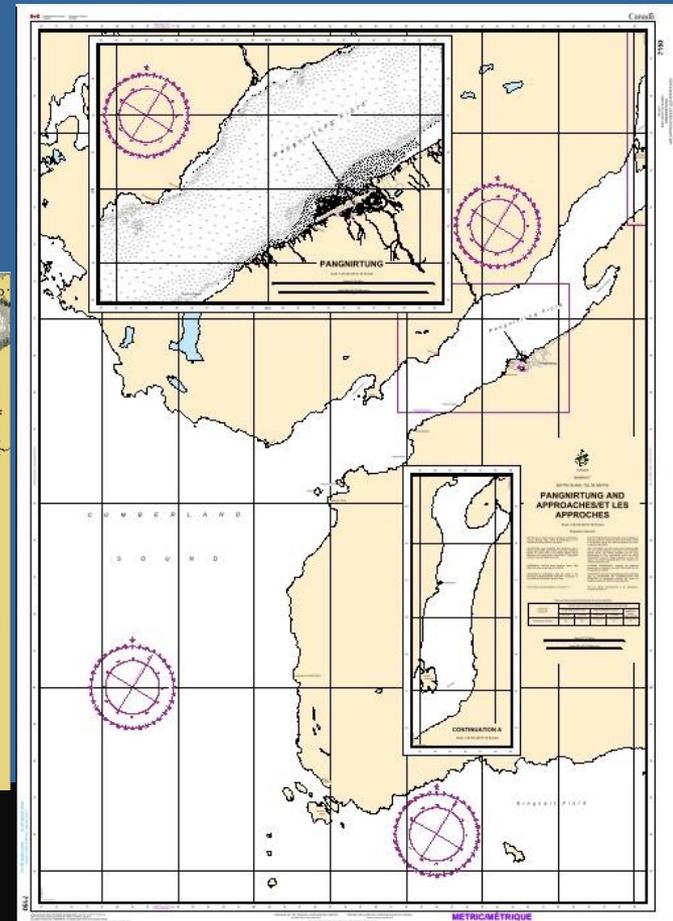
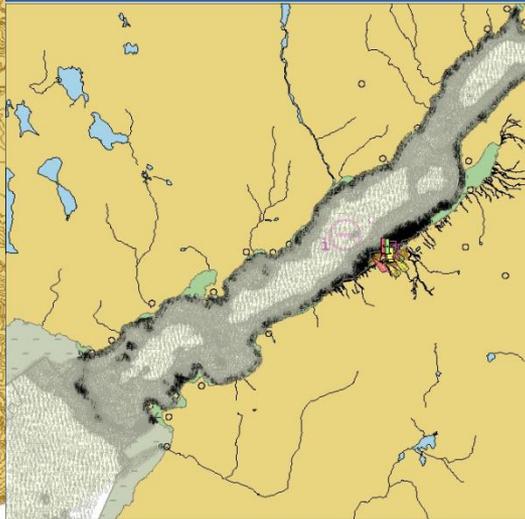
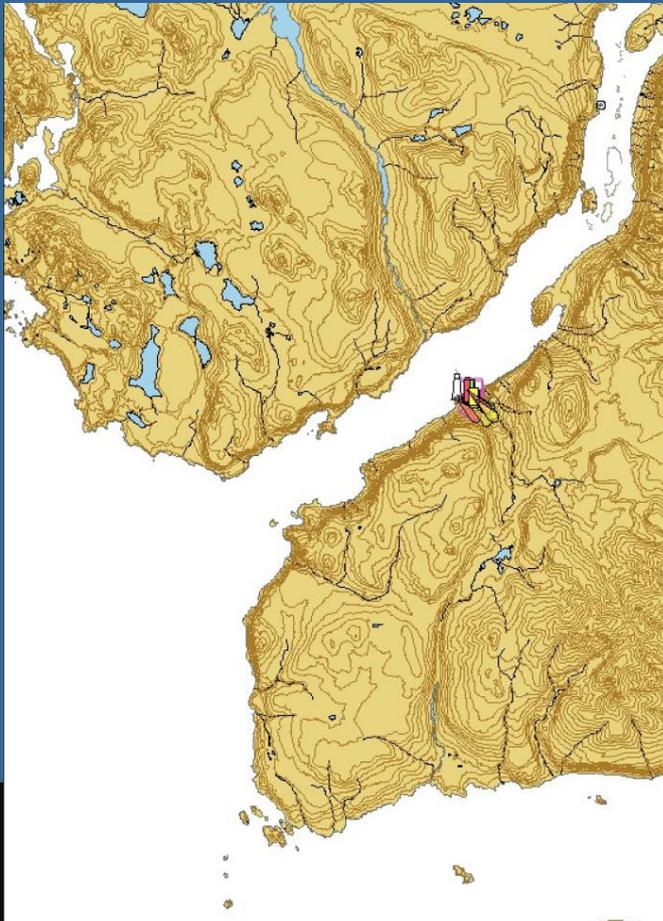


New edition ENC and Paper  
Chart for 7212 Bylot Island,  
5505 Bélanger Island to Cotter  
Island



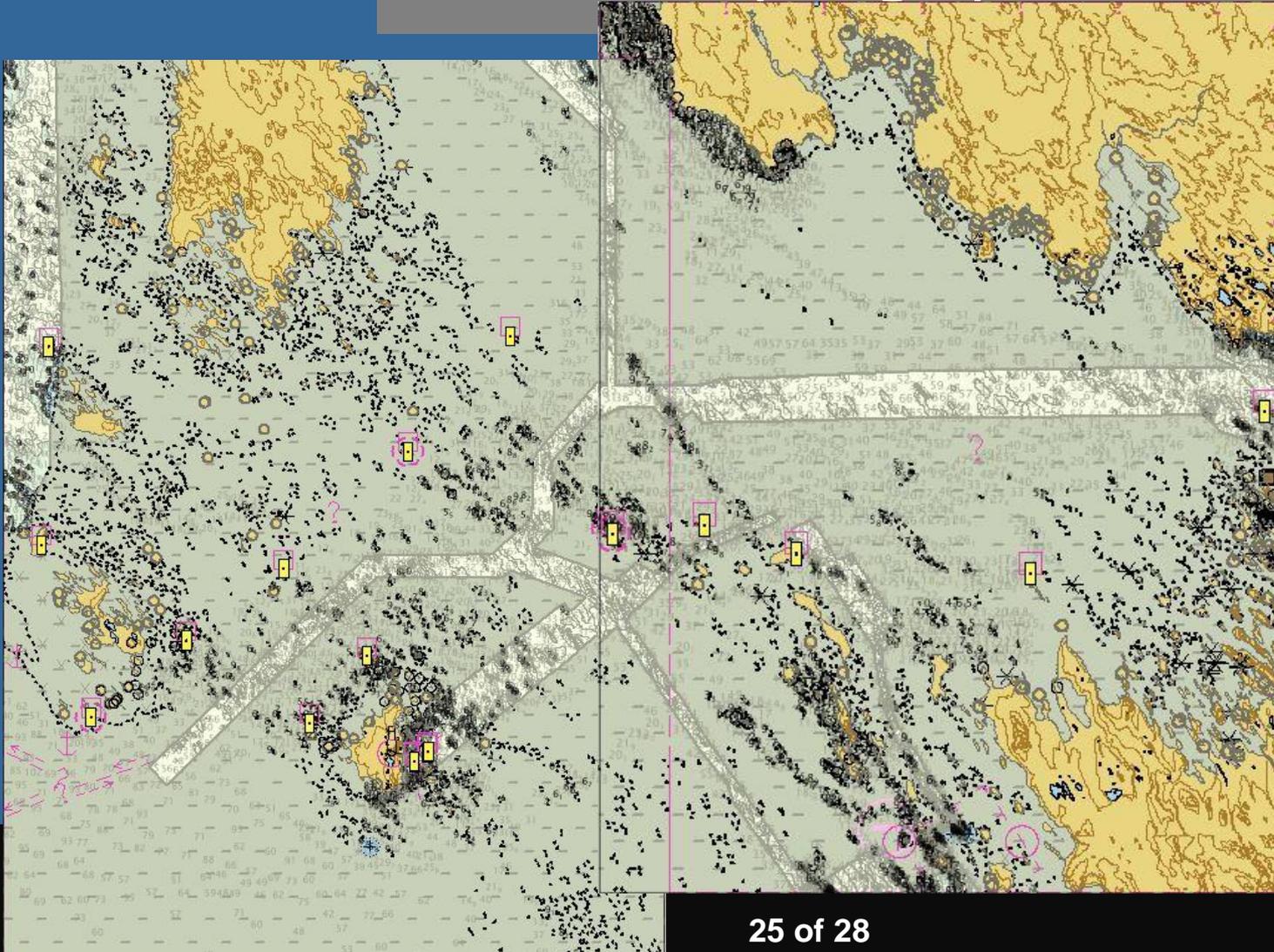
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## New ENC's and NE Paper Chart for 7150: Pangnirtung





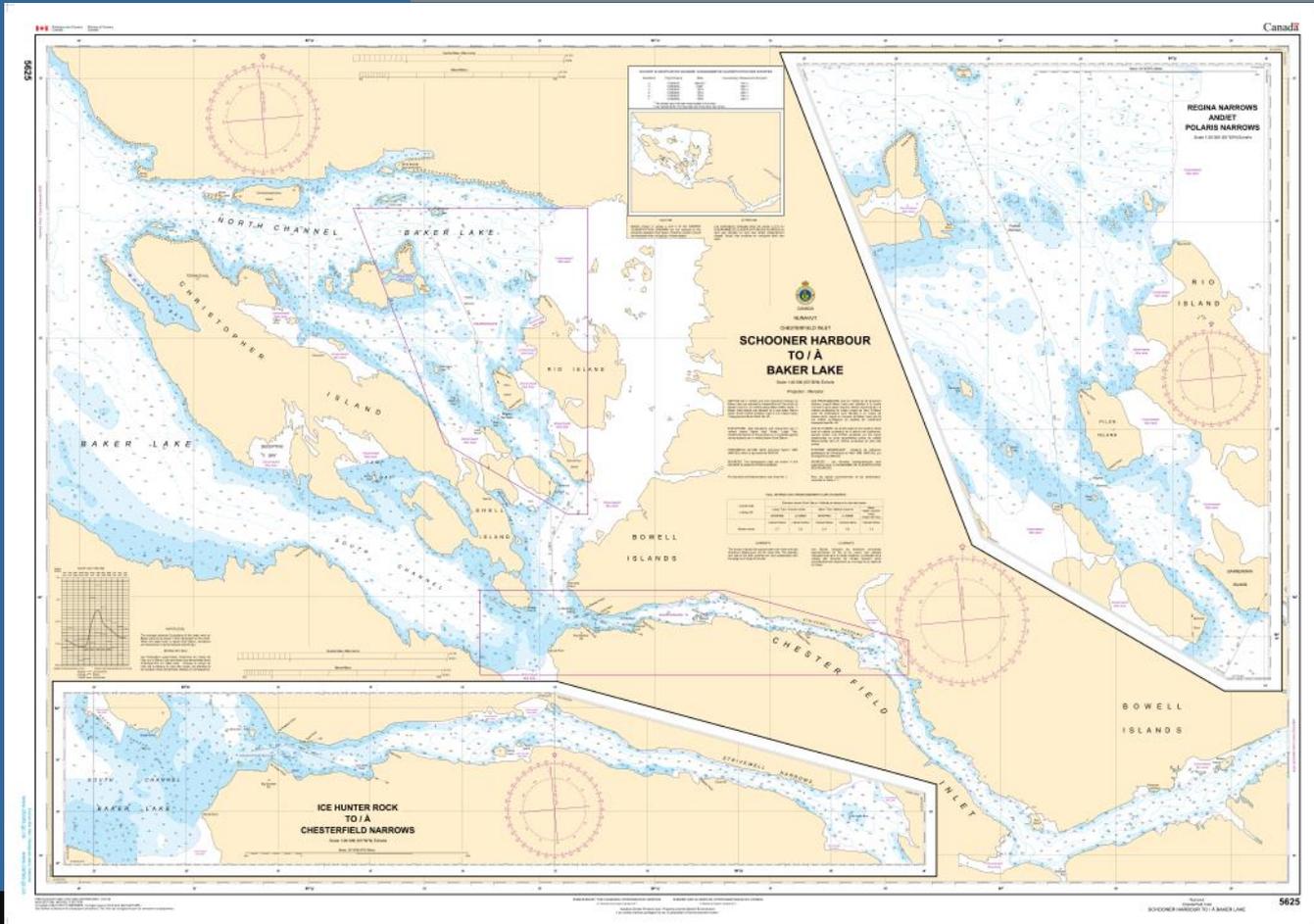
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New ENCs  
for  
Requisite  
Channel  
and Storis  
Passage



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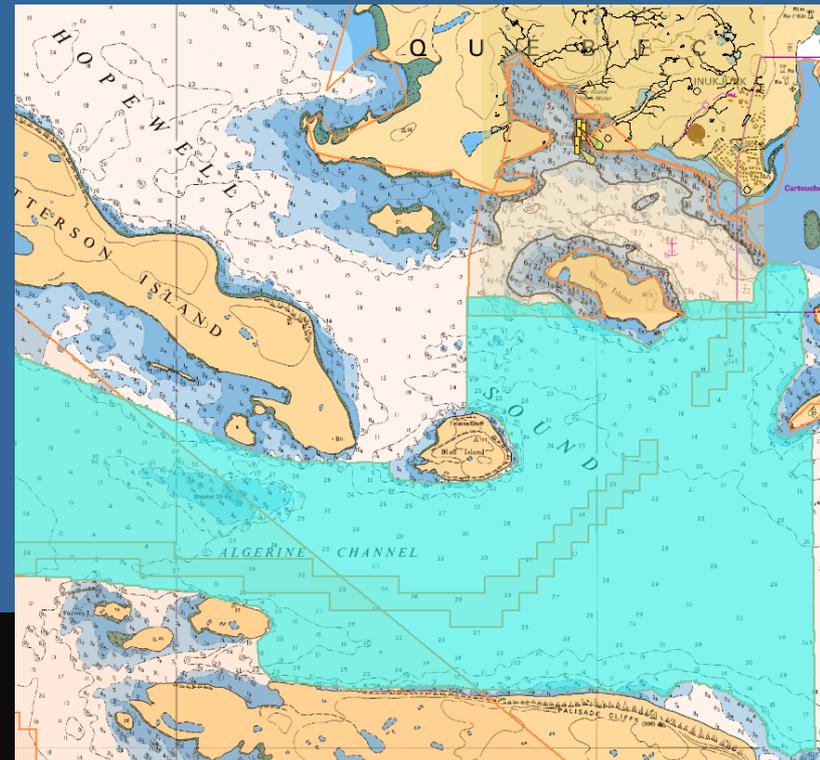
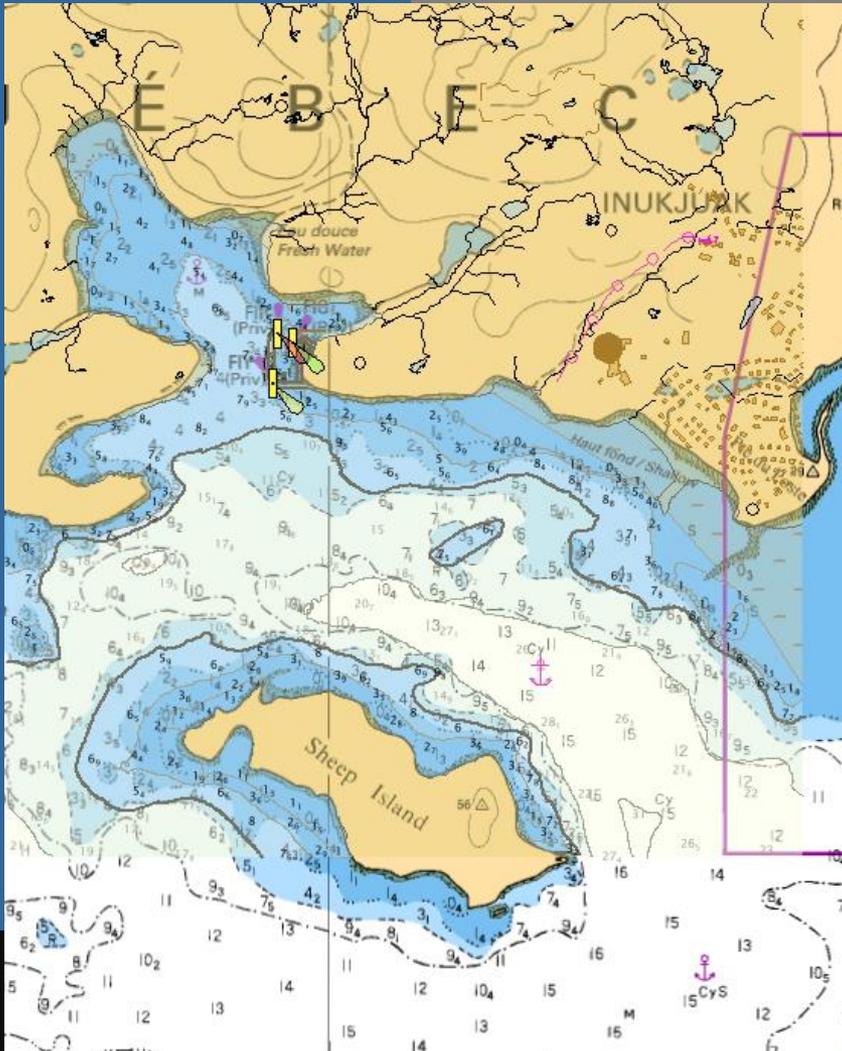


New Edition  
Paper Charts  
for all of  
Chesterfield  
Inlet



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## Inukjuak – 5471 New ENC for main chart





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Thank you,  
any questions?

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