

MSI Assessment for NAVAREA XVII/XVIII

Reporting period from 1st Jan 2021 to 31st December 2021

Submitted by Canada, Canadian Coast Guard

SUMMARY

Executive Summary: Synopsis of activities within NAVAREA XVII/XVIII since WWNWS13

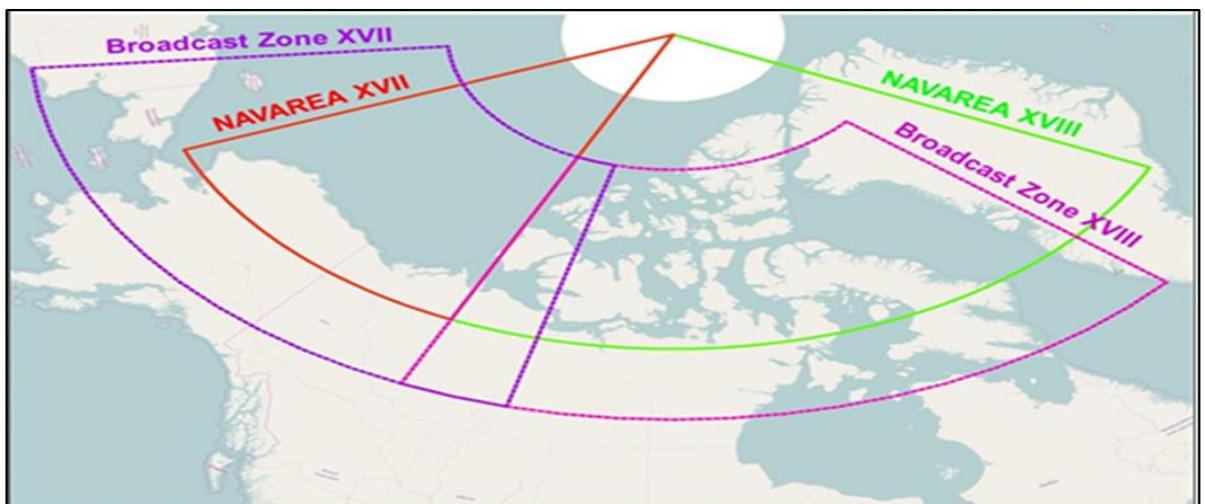
Action to be taken: *Note the report.*

Related documents: Updates to Canada’s NAVARN Issuing System (NIS) PowerPoint

1. General information:

1.1. The limits of NAVAREA XVII/XVIII and, the associated rectangular area broadcast zones for SafetyNET, are depicted below:

NAVAREA XVII	Broadcast Zone (Inmarsat)	NAVAREA XVIII	Broadcast Zone (Inmarsat)
67°00N 168°58W 90°00N 168°58W 90°00N 120°00W Thence, south to the Canadian coastline along the 120°00W meridian.	82°00N 175°00E 82°00N 120°00W 62°00N 120°00W 62°00N 175°00E	A position on the Canadian coastline at the 120°00'.00W meridian to: 90°00N 120°00W 90°00N 035°00W 67°00N 035°00W	82°00N 120°00W 82°00N 035°00W 62°00N 035°00W 62°00N 120°00W



1.2. Operational Points of Contact for National Co-ordinators within the NAVAREA

COUNTRY	INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
Canada	NAVAREA XVII/XVIII Coordinator Canadian National NAVTEX Coordinator	343-548-1868		Valerie.M arquette@ dfo- mpo.gc.ca
Canada	MCTS Iqaluit	867-979-5269	867-979-4264	iqanordreg @innav.gc .ca
Canada	MCTS Prescott	613-925-0666	613-925-4519	navarea17. 18@innav. gc.ca
Greenland	MRCC Groennedal	299-691911	299-691949	mrcc@glk .gl

1.3. GMDSS Master Plan:

The GISIS Module was updated when Canada declared the Iridium SafetyCast Service fully operational on May 1, 2022.

2. NAVAREA EGC broadcast and monitoring equipment or software:

NAVARE XVII:

Broadcast Equipment/Software	Broad cast schedule/Satellite	Manufacturer/Location (LES)/Implementation
SafetyNET II web app	1130 and 2330; I-4 F3 (AOR-W) I-3 F5 (AOR-E) I-4 F1 (POR)	
Iridium SafetyCast web app	1130 and 2330; Appropriate Iridium satellites	
Monitoring Equipment/Software		Manufacturer/Software
SafetyNET II		Sailor TT-3026/s mini-c
Iridium SafetyCast web app		Iridium web app

NAVAREA XVIII:

Broadcast Equipment/Software	Broad cast schedule/Satellite	Manufacturer/Location (LES)/Implementation
SafetyNET II web app	1100 and 2300; I-4 F3 (AOR-W) I-3 F5 (AOR-E)	
Iridium SafetyCast web app	1100 and 2300; Appropriate Iridium satellites	
Monitoring Equipment/Software		Manufacturer/Software
SafetyNET II		Sailor TT-3026/s mini-c
Iridium SafetyCast web app		Iridium web app

2.1. Details of EGC services:

NAVAREA XVII/XVIII promulgates all warnings on all IMO Recognized Mobile Satellite Service Providers (RMSS) as per the scheduled broadcast times noted in the table above. Additional, as warranted by the necessity, navigational warnings may also be promulgated as soon as possible.

2.2. NAVTEX:

There are no NAVTEX transmitters located in NAVAREAs XVII & XVIII. The Canadian Coast Guard has no plans to expand NAVTEX coverage into Arctic waters.

2.3. Other methods of promulgation:

Canada provides an HF-NBDP supplemental SafetyNET Service from Iqaluit on a seasonal basis.

Time (UTC)	System	Frequency
0330	HF-NBDP	8416.5 kHz*
1530	HF-NBDP	8416.5 kHz*

**HF NBDP available from mid-May to mid-December (navigational season)*

3. NAVAREA Metrics

3.1. Coastal Warnings issued by International NAVTEX or EGC coastal warning area:

				2021			
Country	NAVTEX station name	B1 Character or Coastal Warning Area	Broadcast schedule times UTC (only for EGC)	Total number of warnings broadcast	Number of warnings broadcast with urgent priority (EGC) or vital (NAVTEX)	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes
Canada				0**	0	0	0

				2022			
Country	NAVTEX station name	B1 Character or Coastal Warning Area	Broadcast schedule times (UTC)	Total number of warnings broadcast	Number of warnings broadcast with urgent priority (EGC) or vital (NAVTEX)	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes
Canada				0**	0	0	0

** Canada's NAVAREA XVII/XVIII does not normally use the urgency priority for navigational warnings.

3.2. NAVAREA Warnings broadcasts:

NAVAREA XVII

Provider	2020			2021			2022		
	Total number of warnings issued	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes	Total number of warnings broadcast	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes	Total number of warnings broadcast	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes
SafetyNet	126	-	-	-	148	-	-	-	-
SafetyCast	43	-	-	-	148	-	-	-	-

NAVAREA XVIII

Provider	2020			2021			2022		
	Total number of warnings issued	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes	Total number of warnings broadcast	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes	Total number of warnings broadcast	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes
SafetyNet	122	-	-	-	121	-	-	-	-
SafetyCast	47	-	-	-	121	-	-	-	-

Note 1:

Although Canada declared Iridium SafetyCast operational on May 1, 2022, while under trial status (since Oct. 1, 2020), all warnings were promulgated successfully.

Note 2:

Unable to calculate repetitions as the NAVAREA desk had not previously been required to track this information. Procedures will be updated and data will be available in 2023.

Note 3:

Unable to report broadcast data in megabytes as procedures to track message size have not yet been implemented.

3.3. Urgent EGC Warnings:

Nil.

3.4. VITAL Coastal Warnings:

Nil.

3.5. In-force warnings.

3.5.1. In-force bulletins issued:

In Force Bulletins are issued every Friday at 1100 UCT for NAVAREA XVIII and 1130 UTC for NAVAREA XVII. The text of In Force warning that are more than 42 days old can be found on the Canadian Coast Guard website:

[Search - Canadian Coast Guard \(ccg-gcc.gc.ca\)](http://www.ccg-gcc.gc.ca)

3.5.2. Requests for In-force warnings: [as of August 21, 2022]

2020	2021	2022
Total	Total	Total
3	3	4

3.6. Arctic navigational warnings broadcast by HF NBDP: [as of August 24, 2022]

2020	2021	2022
Total	Total	Total
102	201	99

4. Operational Issues:

The following issues with GMDSS infrastructure were reported in 2021/22:

- a. Canada declared the Iridium SafetyCast Service fully operational on May 1, 2022.
- b. Some advances have been made in incorporating our NAVAREA warnings into our domestic Navigational Warning Issuing System (NIS) platform which will greatly facilitate the ease of issuance of Arctic area navigational warnings between the domestic and international systems which are currently manually managed between two MCTS Centres.
- c. Still working through the following bugs while testing the Iridium EGC API:

- i. Broadcasts submitted to the API with the repetition code “11” (once with echo) are returned with repetition code replaced by “01” (once without echo); and
 - ii. Broadcasts submitted to the API with a given start date value are returned with a start date value 1-2 minutes ahead of the submitted value.
- d. The Supplemental SafetyNET service provided seasonally by Iqaluit MCTS Centre experienced the following two outages:

HF-NBDP Transmitter	Off Air	On Air	Duration (HH:MM)
Iqaluit	09 212300 UTC	09 220015 UTC	01:15
	11 091036 UTC	11 091700 UTC	06:24
Total:			07:39

National Co-ordinator Communication:

4.1. IRCC Strategic Performance Indicator: Nil

4.2. Procedures. Nil

5. Contingency Planning:

Nothing is currently planned between Canada’s NAV/METAREAs nor between the US IV/XII NAVAREAs at this time. However, given the complexities of unique APIs in the context of this multiple RMSS environment, WWNWS may need to assist NAVAREA coordinators in how we can meet this obligation.

The NAVAREA XVII/XVIII operational desk is located at Prescott MCTS Centre and falls under their business continuity plan regarding onsite emergencies.

Once the NAVAREA warning module is incorporated into the Navigational Warning Issuing System (NIS), there will be additional capacity for a designated MCTS Centre to issue Arctic area navigational warnings over both domestic and international systems for Prescott should the need arise. The new NAVAREA module is being tested and we anticipate training operational staff this fall.

6. Capacity Building:

Nil.

7. Other Activities:

- WWNWS13, Virtual Teleconference – Aug 2021
- IMO MSC 104, Canadian Delegation, Virtual Teleconference – October 2021
- IMO MSC 105, Canadian Delegation, Virtual Teleconference – April 2022
- IHO WWNWS Document Review Working Group-Virtual Teleconference – March 2022

IMO NCSR 9, Canadian Delegation, Virtual Teleconference – June 2022
IMO MSI Correspondence Group – Virtual Meetings – 2021-2022
IMO EGC Coordinating Panel – Virtual Meetings- 2021-2022
ITU Working Party 5B, Canadian Delegation – Virtual Meetings – 2021-2022
S-124 Project Team – Virtual Meetings – 2021-2022

8. NAVAREA Website:

The NAVAREA website provides two unique links, one for the full text warnings and one for the ‘in-force’ bulletins. There is currently no capacity to provide either statistics or a download option and we do not indicate the date/time of the latest update. The statistics and download options will become available once the NAVAREA module is fully integrated into our national Navigational Warning Issuing System (NIS).

The complete text of all NAVAREA XVII and XVIII broadcast warning messages can be found on the Canadian Coast Guard website:

<http://inter-w02.ccg-gcc.gc.ca/e0004476?todo=warning>

The List of NAVAREA XVII and XVIII in-force messages can be found on the Canadian Coast Guard website:

<http://inter-w02.ccg-gcc.gc.ca/e0004476?todo=warning-list>

These may also be requested by email from the NAVAREA Operations desk at:

NAVAREA17.18@INNAV.gc.ca

The information on how to find these warnings is promulgated as part of the text of the “In Force” bulletin.

9. NAVAREA Contact Information:

NAVAREA XVII & XVIII **Operational Desk** (available 24/7)
Prescott MCTS Centre
Telephone: +1 613 925-0666
Facsimile: + 1 613 925-4519
E-mail: navarea17.18@innav.gc.ca

NAVAREA XVII & XVIII **Coordinator** (business hours)
Valerie Marquette
Marine Navigation Programs
Canadian Coast Guard
200 Kent St., Ottawa
Ontario K1A 0E6
Tel: + 1 343-548-1868
E-mail: Valerie.Marquette@dfo-mpo.gc.ca

10. Recommendations: None.

11. Actions requested: Note the report.

12. Summary:

Highlights this year: Canada declared Iridium SafetyCast operational on May 1, 2022. One technical issue with NAVAREA warning website was corrected once we dealt with website security issues. We are looking forward to testing the NAVAREA module in our Navigational Warning Issuing System (NIS) and providing training this fall, working towards operational status early next year.

Annex:

A. Updates to Canada's NAVWARN Issuing System (NIS) PowerPoint.