WWNWS WWNWS15/#/#-*[NAVAREA XVII/XVIII]*

Meeting 15 *[Sept. 1, 2023]*

Agenda Item #.#

**MSI Assessment for NAVAREA** **XVII/XVIII**

*Reporting period from 1st Jan 2022 to 31st December 2022*

Submitted by Canada, Canadian Coast Guard

**SUMMARY**

Executive Summary: Synopsis of activities within NAVAREA XVII/XVIII since WWNWS14: Canada is advising mariners about the intention to cease rectangular broadcasts in the Arctic NAVAREAs by Jan 1, 2024 and has also commenced the process of updating all NAVTEX stations across the country. NAVAREA warnings have been added to the national navigational warning website so please update bookmarks accordingly.

Action to be taken: Note the report and update bookmarks accordingly for the NAVAREA warnings.

Related documents: None.

Action to be taken: Note the report and update bookmarks for new NAVAREA website located at [Navigational and NAVAREA warnings (ccg-gcc.gc.ca)](https://www.ccg-gcc.gc.ca/MCTS-SCTM/NAVWARN-AVNAV-CA-ENG.HTML).

Related documents: None.

1. General information:
	1. Geographic Boundaries of NAVAREAs XVII/XVIII and the associated rectangular broadcast zones for SafetyNET, are depicted below.



**

* 1. 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.marquette@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. GMDSS Master Plan:

Canada is planning to discontinue the use of NAVTEX stations within the Great Lakes region in Canada, this includes stations located in Ferndale and Pass Lake.

All the remaining NAVTEX stations will receive an upgrade in 2024/2025 as Canada proceeds with a renewal project, currently in the procurement stage.

Canada has begun the process of discontinuing the use of rectangular broadcasts for vessels with older Inmarsat terminals.

1. 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 |

* 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.

* 1. 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.

* 1. 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)*

1. NAVAREA Metrics:
	1. Coastal Warnings issued by International NAVTEX or EGC coastal warning area:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  | *2022* |
| 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 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  | *2023* |
| 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.

* 1. NAVAREA Warnings broadcasts:

**NAVAREA XVII**

|  |  |  |  |
| --- | --- | --- | --- |
|  | *2021* | *2022* | *2023* |
| Provider | 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  | 148 | - | - | 119 | - | 0.195 | 35  | - | - |
| SafetyCast | 148 | - | - | 119 | - | 0.195 | 35 | - | - |

**NAVAREA XVIII**

|  |  |  |  |
| --- | --- | --- | --- |
|  | *2021* | *2022* | *2023* |
| Provider | 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  | 121 | - | - | 155 | - | 0.253 | 35 | - | - |
| SafetyCast | 121 | - | - | 155 | - | 0.253 | 35 | - | - |

Note 1: Procedures for capturing Inmarsat data were updated in 2023 so the data for 2022 is estimated. Billing for Iridium includes both NAVAREAs XVII & XVIII so the totals are approximate, given the difference in total number of messages.

Note 2: 2023 data is valid as of June 29, 2023.

* 1. Urgent EGC Warnings: Nil
	2. VITAL Coastal Warnings: Nil.
	3. In-force warnings.
		1. In-force bulletins issued:

In Force Bulletins are issued every Friday at 1100 UTC 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:

[Navigational and NAVAREA warnings (ccg-gcc.gc.ca)](https://www.ccg-gcc.gc.ca/mcts-sctm/navwarn-avnav-ca-eng.html)

|  |  |  |
| --- | --- | --- |
| **2021** | **2022** | **2023\*** |
| Total | Total | Total |
| 3 | 10 | 5 |

* + 1. Requests for In-force warnings:
	1. Arctic navigational warnings broadcast by HF NBDP.

|  |  |  |
| --- | --- | --- |
| **2021** | **2022** | **2023\*\*** |
| Total | Total | Total |
| 201 | 224 | 41 |

\*Note – valid up to June 29, 2023

\*\*Note – valid up to July 27, 2023

1. Operational Issues:

The following issues with GMDSS infrastructure were reported in 2022/23:

1. Canada is currently 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 manually managed between two MCTS Centres.
2. Still working through the following bugs while testing the Iridium EGC API:
	1. 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
	2. 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.
3. The Supplemental SafetyNET service provided seasonally by Iqaluit MCTS Centre experienced the following outages:

|  |  |  |  |
| --- | --- | --- | --- |
| **HF-NBDP Transmitter** | **Off Air** | **On Air** | **Duration (HH:MM)** |
|  | 2022 |  |  |
|  | 07 161500 UTC | 07 161620 UTC | 01:20 |
|  | 07 310100 UTC | 07 310200 UTC | 01:00 |
|  | 08 311610 UTC | 08 311710 UTC | 01:00 |
|  | 09 101525 UTC | 09 101640 UTC | 01:15 |
|  | 10 061500 UTC | 10 061600 UTC | 01:00 |
|  | 11 101145 UTC | 11 101240 UTC | 00:55 |
|  | 11 182325 UTC | 11 190200 UTC | 02:35 |
|  | 12 071340 UTC | 12 072200 UTC | 08:20 |
| (power outage) | 12 111145 UTC | 12 111645 UTC | 05:00 |
| **Total:** | **19:25** |
|  | 2023 |  |  |
|  | 05 311500 UTC | 05 311610 UTC | 01:10 |
|  | 07 032150 UTC | 07 032250 UTC | 01:00 |
|  | 07 041506 UTC | 07 041510 UTC | 00:04 |
| **Total:** | **02:14** |

Note – 2023 info valid up to July 27, 2023

1. National Co-ordinator Communication:
	1. IRCC Strategic Performance Indicator: Nil.
	2. Procedures.Nil.
2. 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 fully 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.

1. Capacity Building:

Nil.

1. Other Activities:

IHO WWNWS14, in person conference Geneva – Sept 2022

IMO MSC 106, Canadian Delegation, Virtual – Nov 2022

ITU WP5B, Canadian Delegation, Virtual – Nov 2022

IMO EGC Coordinating Panel, Virtual – Nov 2022

IHO DRWG 21 Part 1, virtual – Feb/Mar 2023

IMO NCSR 10, Canadian Delegation, in person London UK – May 2023

IHO DRWG 21 Part 2, in person, London UK – May 2023

ITU CITEL PCC.II, Canadian Delegation, virtual, May 2023

IMO MSC 107, Canadian Delegation, virtual – May/June 2023

1. NAVAREA Website:

Canada has added NAVAREA warnings to its Navigational Warning Issuing System (NIS), so now only one link is needed to find full text warnings and “in-force” bulletins. This provides the user with options to search results and also export the information in various formats (i.e. pdf, csv, or print format). The webpage is updated automatically as information is entered so it can always be considered to be current and accurate.

[Navigational and NAVAREA warnings (ccg-gcc.gc.ca)](https://www.ccg-gcc.gc.ca/mcts-sctm/navwarn-avnav-ca-eng.html)

The complete text of all NAVAREA XVII and XVIII broadcast warning messages, including in-force messages may also be requested by email from the NAVAREA Operations desk at:

[NAVAREA17.18@INNAV.gc.ca](https://gcdocs.gc.ca/dfo-mpodav/nodes/20181837/mailto_navarea17.18%40innav.gc.ca)

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

1. 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

222 Nepean St., Ottawa

Ontario K2P 0B8

Tel: + 1 343-548-1868

E-mail: Valerie.Marquette@dfo-mpo.gc.ca

1. Recommendations:

None

1. Actions requested:

Note the report and update bookmarks accordingly for the NAVAREA warnings.

1. Summary:
Canada is advising mariners about the intention to cease rectangular broadcasts in the Arctic NAVAREAs by Jan 1, 2024 and has also commenced the process of updating all NAVTEX stations across the country. NAVAREA warnings have been added to the national navigational warning issuing service (NIS) website so please update bookmarks accordingly.