MSI Self Assessment NAVAREA XVII_XVIII

Submitted by Canada, Canadian Coast Guard

SUMMARY

Executive Summary: Canada is upgrading its Navigational Warning Issuing System to include a NAVAREA module as well as preparing to test the EGC API for use with this same system. Significant technical issues were experienced with HF-NBDP Supplemental SafetyNET service, which have now been corrected. This is the last meeting for the current NAVAREA Coordinator XVII & XVIII who will be retiring in September.

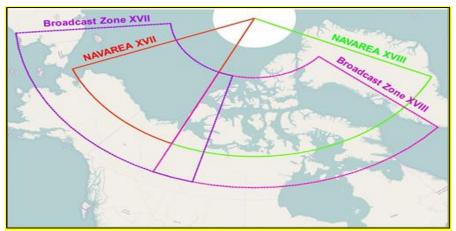
Action to be taken: note the report

Related documents: none

1. Background:

The limits of NAVAREAs XVII and XVIII and their associated rectangular broadcast zones for SafetyNET are as noted/depicted below.

NAVAREA XVII	Broadcast Zone	NAVAREA XVIII	Broadcast Zone
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



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

Canada is using Iridium SafetyCast on a Trial basis, directing navigational warnings into the established limits of the two NAVAREAs.

Scheduled HF-NBDP broadcasts:

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)

The schedule for the EGC broadcasts:

Time (UTC)	NAVAREA	SafetyNET II	SafetyCast
1100	XVIII	AOR-W / AOR-E / POR	NAVAREA XVIII
1130	XVII	AOR-W / AOR-E / POR	NAVAREA XVII
2300	XVIII	AOR-W / AOR-E / POR	NAVAREA XVIII
2330	XVII	AOR-W / AOR-E / POR	NAVAREA XVII

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

COUNTRY	INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
Canada	Iqaluit MCTS	867-979-5724	867-979-4264	iqanordreg@innav.gc.ca
Canada	MRCC Groennedal	299-691911	299-691949	mrcc@glk.gl

2. Comments:

Equipment Type	Software Version	Date of Up-date	
Sailor TT-3026/s maritime mini-c	Build 27	2008-09-16	
HF-NBDP Equipment	Prescom	2017-06-15	
Transmitter SELEX 5kW	ST5000M	2017-06-15	

NAVAREA XVII

2018			2019			2020					
E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text
77	-	-	-	73	-	-	-	69	-	-	-

NAVAREA XVIII

2018			2019			2020					
E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text
101	-	-	-	99	-	-	-	74	-	-	-

NAVAREA XVII (Number of message messages promulgated over 3yr period)

2018		2	2019	2020		
SafetyNET	140	SafetyNET	127	SafetyNET	122	
SafetyCast	n/a	SafetyCast	n/a	SafetyCast ⁺	47	
HF NBDP	28	HF NBDP	43	HF NBDP	95	

*Iqaluit HF NBDP is operational from mid-May to mid-December (navigational season).

⁺ Commenced "Test Phase" October 2020

2018			2019	2020		
SafetyNET	156	SafetyNET	152	SafetyNET	126	
SafetyCast	n/a	SafetyCast	*test	SafetyCast ⁺	43	
HF NBDP	105	HF NBDP	73	HF NBDP	102	

*Iqaluit HF NBDP is operational from mid-May to mid-December (navigational season). + Commenced "Test Phase" October 2020

SafetyNET broadcasts over AOR-W and AOR-E are monitored using a mini-C. An arrangement with RCC Australia was established for the 'monitoring' of NAVAREA XVII warnings given the westward shift of the INMARSAT satellites as a consequence of their I-4 migration.

For clarification, Canada broadcasts NAVAREA warnings during the allocated schedule; we rarely assign the urgency priority.

NAVAREA XVII

2018*			2019*	2020		
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time	
SafetyNET	0 Mins	XX	0 Mins	XX	0 Mins	
SafetyCast	n/a	XX	n/a	XX	0 Mins	

* NAVAREAs XVII and XVIII did not trial the SafetyCast system in 2018 or 2019. and remain in Trial Phase in 2020.

NAVAREA XVIII

2018*			2019*	2020		
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time	
SafetyNET	33 Mins	XX	0 Mins	XX	0 Mins	
SafetyCast	n/a	XX	n/a	XX	0 Mins	

* NAVAREAs XVII and XVIII did not trial the SafetyCast system in 2018 or 2019 and remain in Trial Phase in 2020.

Canada received its EGC certificate of authorization from the IMO EGC Coordinating Panel.

NAVAREAs XVII & XVIII commenced SafetyCast service in a Trial Phase on October 1st, 2020. It should be noted that METAREA XVII & XVIII just commenced Trial Phase on June 1st, 2021. Also, the Canadian SAR service has yet to commence a Trial Phase. As such, Canada will remain in Trial Phase until all three services are ready to simultaneously declare operational capability.

Number of requests for a list of in-force navigational warnings:

2018		20)19	2020		
Total	E-mail	Total	E-mail	Total	E-mail	
0		0		1	1	

3. NAVTEX Coverage:

There are no NAVTEX transmitters located in NAVAREAs XVII & XVIII. In 2020, Canada declared Service Areas for all ten NAVTEX transmitters. As such, the Iqaluit transmitter no longer broadcasts any navigational warnings for hazards located above 67°N. The Canadian Coast Guard has no plans to expand NAVTEX coverage into Arctic waters.

4. Operational Issues:

Coastal State/Country	# of MSI messages	# of MSI messages	Topics/Subjects of messages
	XVII	XVIII	
Canada – CCG Ops	6	2	Rocket launches
Conada MCTS Igalvit	11	6	Aids to navigation
Canada – MCTS Iqaluit	44	56	Radio services
	2	7	Scientific moorings, shoals, and construction
Canada – French CNES	1	0	Rocket Launch
Jamstec, Japan	3	0	Scientific moorings
Canada – HQ	3	3	IOC SafetyCast, Covid-19
Weekly	52	52	

No new infrastructure has been established in accordance with the GMDSS Master Plan which was updated in GISIS as of the date of this submission.

The following issues with GMDSS infrastructure were reported in 2021:

HF-NBDP Transmitter	Off Air	On Air	Duration (HH:MM)	
	06 221215UTC	06 221315UTC	01:00	
	07 040601UTC	07 040655UTC	00:55	
	07 060305UTC	07 061200UTC	08:55	
	07 250430UTC	07 271200UTC	55:30	
Iqaluit	08 101245UTC	08 101255UTC	00:10	
	09 161250UTC	09 161330UTC	00:40	
	09 161355UTC	09 161430UTC	00:35	
	09 191210UTC	09 191420UTC	02:10	
	09 230320UTC	09 232300UTC	19:40	

	205:16		
	12 201225UTC	12 201425UTC	02:00
	10 191200UTC	10 191451UTC	02:51
	10 152300UTC	10 152356UTC	00:56
	10 070421UTC	10 111700UTC	108:39
	10 061440UTC	10 061500UTC	00:20
	09 272005UTC	09 272100UTC	00:55

Each NAVAREA issues an "In Force Warning" bulletin once a week. Any In-Force warning messages more than 42 days old are found on the Canadian Coast Guard website or can be requested by email.

The complete text of all NAVAREA XVII and XVIII <u>broadcast warning</u> 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 <u>in-force</u> 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.

5. Quality Management Survey

NAVAREA	ISO 9001 -2008	Promulgate "In-Force" Bulletins	Promulgate "No- Warning" Messages	Monitor Broadcast	24/7 contact information provided	Promulgate two scheduled broadcasts	Certificates for all recognised service providers	IMO Master Plan updated
XVII XVIII	NO	YES	YES	YES*	YES	YES	YES	YES

* Unable to monitor SafetyCast broadcasts

6. Contingency Planning

No contingency exercise was conducted in 2020, however we anticipate coordinating with NAVAREA IV for either the fall of 2021 or the spring of 2022.

7. Capacity Building:

There have been no formal requests for MSI training in Canada.

- 8. Other Activities:
 - a) Liaised with Canada Hydrographic Services (Regional Hydrographic Commission) and provided updates on the Canadian maritime safety information published in C55.
 - b) Virtually attended IMO's NCSR-8 as a member of the Canadian delegation with a focus on the GMDSS Radiocommunications Systems.
 - c) Virtually attended IMO's MSC103 as a member of the Canadian delegation for Agenda Item 14 focusing on those paper related to the increased costs to MSIPS in the multiple RMSS operational environment.
 - d) Virtually attended WWNWS Document Review Working Group, 19th session.
 - e) Vice Chair and participant of the EGC API Correspondence Group, which completed its work earlier this year.
 - f) Participated in the Iridium MSI Operational Planning Correspondence Group.
 - g) Participate in the WWNWS S-124 Working Group.

9. 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).

10. NAVAREA Contact Information:

NAVAREA XVII & XVIII <u>Operational Desk</u> (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 <u>Coordinator</u> (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

11. Recommendations: None

- 12. Actions requested: Note this report.
- 13. Summary:

In the 2020 navigational season, Iqaluit experienced some significant technical issues with their HF-NBDP Supplemental SafetyNET service, which have now been corrected.

Our Navigational Warning Issuing System, which provides the navigational warnings for our domestic broadcast services, is being upgraded to include a NAVAREA module. This poses a few challenges given the regimented format of NAVAREA messages (S-53) while the national navigational warnings are typically for voice broadcast and tend to be more verbose. We are also preparing to test the EGC API for use with this system.

The NAV/METAREAs XVII & XVIII are now in Trial Phase for SafetyCast. Canada will not declare Operational Phase until the Canadian SAR has undergone its Trial Phase.

After 8 years of holding the NAVAREA XVII and XVIII Coordinator position, I am pleased to introduce my successor, Ms. Valerie Marquette, who will be assuming the position effective September 3rd 2021. Ms. Marquette has extensive experience working in various offices of the Canadian Coast Guard, and has been working with me over the past several months to ensure a smooth transition of responsibilities.

As I prepare to embark on my retirement from the public service, I would like to take this opportunity to thank all members of the WWNWS-Sub Committee for their support and encouragement over the years and to wish this Committee and all members continued success in all endeavours.