

MSI Assessment for NAVAREA IV/XII

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

Submitted by United States/NGA

SUMMARY

Executive Summary: Synopsis of activities within NAVAREA IV/XII since WWNWS13

Action to be taken: For the subcommittee to please note the report.

Related documents: None

1. General information:

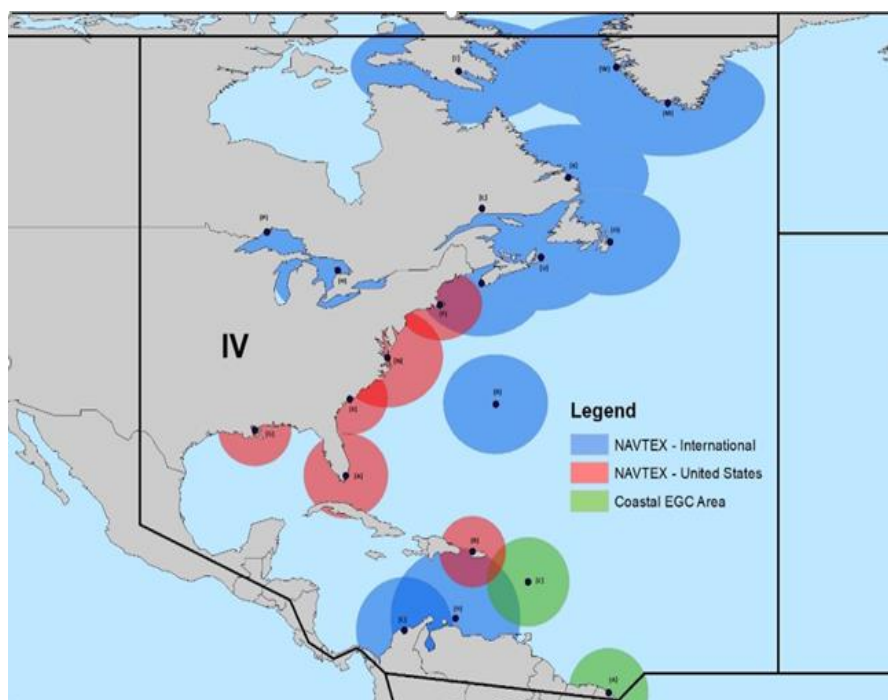
1.1. Geographic Boundaries of the NAVAREA including boundaries for any coastal warning Areas and NAVTEX Stations:

Limits of NAVAREA IV:

From the east coast boundary of French Guiana to 07-00N out to 035-00W, from there to 067-00N and the coastline of Greenland, following 067-00N to the coastline of Canada (Baffin Islands area).

Primary Inmarsat EGC Satellite used for broadcast: AOR-E

Broadcast Times: 1000 UTC and 2200 UTC daily

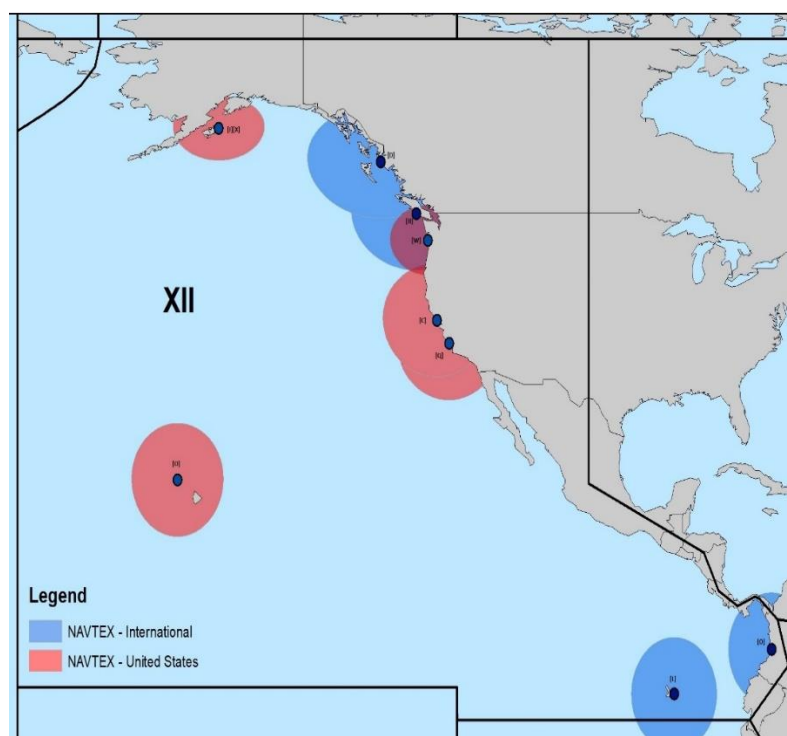


Limits of NAVAREA XII

From the coastline at 03-24S to 120-00W, then to 00-00, then to 180-00, then to 50-00N, and then following the International Date Line to 67-00N.

Primary Inmarsat EGC satellites used for broadcast: AOR-W, POR

Broadcast Times: 1030 UTC and 2230 UTC daily



1.2. Operational Points of Contact for National Co-ordinators within NAVAREA IV/XII

COUNTRY	INSTITUTION/ NAME	TELEPHONE	FACSIMILE	EMAIL
Anguilla	Rawle Hazell	264-497-2651		Rawle.hazell@gov.ai
Antigua & Barbuda	Darion Lake	1 268 462 1273	268 462 2510	dlake@abregistry.ag
Aruba	Dutch Caribbean Coast Guard	5999 463 7738		N.silvacostada@midef.nl
Bahamas				
Barbados	George Fergusson	246 434 6100		kfergusson@barbadosport.com
Belize	Martin McCord	501 223 0717		mmcord@portauthority.bz
Bermuda	Steven Pegg	471 297 1010		sjpegg@gov.bm
Bonaire	Dutch Caribbean Coast Guard			N.silvacostada@midef.nl
British Virgin Islands	BVI Port Authority	284 468 2902		rfrett@gov.vg
Canada	NAVAREA XVII/XVIII Coordinator	343-548-1868		Valerie.marquette@dfo-mpo.ca

Canada	MCTS Iqaluit	867 979 5724	867 979 4264	iqanordreg@innav.gc.ca
Canada	JRCC Halifax	902 427 8200	902 427 2114	Jrcchalifax@sarnet.dnd.ca
Canada	MCTS Prescott	613 925 4471	613 925 4519	navarea17.18@innav.gc.ca
Cayman Islands	Darren Kelly	345 244 6608		Darren.kelly@gov.ky
Colombia	Juan David Ortiz Buitrago	(5) 6694465 ext. 5142-5121		jortizbuitrago@dimar.mil.co
Costa Rica	Carol Villalta Fernandez			Carol.villalta@mopt.go.cr
Cuba	Hydrography and Geodetic National Office of Cuba			hg@unicom.co.cu
Curacao	Dutch Caribbean Coast Guard	599 463 7738		N.silvacostada@midef.nl
Dominica	Marshall Alexander	1 767 225 6995		metoffice@cwdom.dm
Dominican Republic	Primitivo Lopez	809 593 5900		Primitive.lopez@live.com
Ecuador	Instituto Oceanografico y Antartico de la armada			inocar@inocar.mil.ec
El Salvador	Jesus Alfonso Villalta Diaz	503 2593 5497		jesus.villalta@cnr.gob.sv
French Antilles Coastal Area (C)				opsmer.faa@wanadoo.fr
French Guiana Coastal Area (A)		594 (0)5 94 39 56 69	594 (0)5 94 39 55 85	Nauticinfo.guyane@netfag.fr
Greenland	Assiaat Radio	299 130 000/ 299 386 993		oyr@telepost.gl
Greenland	JRCC Greenland	299 364 010/ 299 364 000		jrcc@jrcc.gl
Grenada	Ian Noel/ Franklyn Redhead	1(473) 440-3013 1(473) 440-7678	1(473)440 3418	grenport@spiceisle.com
Guatemala	LTJG Roger Alexander Valenzuela Jaimes	502 4497 5254	502 233 44775	hidrografia@dgam.gob.gt
Guadeloupe	CDR Come Deroide	596 (0)5 96 39 57 20		Emia-antilles.ccmoh24.fct@def.gouv.fr
Guyana	Troy Clarke/Darrell Fraser	592 653 2129 592 226 0860		tclarke@marad.gov.gy surveys@marad.gov.gy
Haiti	Frenold Cheristin	509 2816 1630		frenoldcheristin@gmail.com

Honduras	Javier Nectaly Diaz			Javierd_hn@yahoo.com
Jamaica	Henry Tomlinson	876 379 7169	876 922 5765	htomlinson@jamaicaships.com
Martinique	CDR Come Deroide	596 (0)5 96 39 57 20		Emia-antilles.ccmoh24.fct@def.gouv.fr
Mexico	David Jeronimo Guadarrama Mendoza	01 55 56246500 EXT: 7230	01 562 46500	Depot.ayudas.nav@gmail.com
Montserrat				
Nicaragua	Daniel Veliz Valle	505 2222 3738		leinael.0983@gmail.com
Panama	Kiaranis Sanchez	507 6324 2549		Kiaranis.sanchez@amp.gob.pa
Puerto Rico	US Coast Guard Sector San Juan	787 729 6800		ssjcc@uscg.mil
Saint Lucia	Christopher Alexander	758 457 6152		Christopher.alexander@slaspa.com
Saba	Dutch Caribbean Coast Guard	599 463 7738		N.silvacostada@midef.nl
Sint Maarten	Dutch Caribbean Coast Guard	599 463 7738		N.silvacostada@midef.nl
St. Eustatius	Dutch Caribbean Coast Guard	599 463 7738		N.silvacostada@midef.nl
St. Kitts & Nevis				
Saint-Barthelemy	CDR Come Deroide	596 (0)5 96 39 57 20		Emia-antilles.ccmoh24.fct@def.gouv.fr
Saint-Martin	CDR Come Deroide	596 (0)5 96 39 57 20		Emia-antilles.ccmoh24.fct@def.gouv.fr
St. Vincent and the Grenadines	Hyrone Johnson	1 784 465 5451	1 784 451 2245	svgmarad@gmail.com
Suriname				ossed@mas.sr
Turks and Caicos	Trevor Williams			vtwiliams@gov.tv
Trinidad and Tobago	Ralph Boland			solmsd@gov.tt
United States	US Coast Guard Communication Command			Joesph.R.Conroy@uscg.mil
United States	US Coast Guard District 1	617 223 8555	617 223 8117	d01-smb-d1cmdcenter@uscg.mil
United States	US Coast Guard District 5	757 398 6231	757 398 6392	d05-smb-d5cg@uscg.mil
United States	US Coast Guard District 7	305 415 6800	305 415 6809	d07-smbcmdcenter@uscg.mil
United States	US Coast Guard District 8	504 589 6225	504 589 2148	d08-comandcenter@uscg.mil
United States	US Coast Guard District 11	510 437 3701	510 437 3017	rccalameda@uscg.mil
United States	US Coast Guard District 13	206 220 7001	206 220 7009	D13cc@uscg.mil

United States	US Coast Guard District 14	808 535 3333	808 535 3338	jrcchonolulu@uscg.mil
United States	US Coast Guard District 17	907 463 2000	907 463 2023	jrcjuneau@uscg.mil
United States	US Coast Guard Headquarters	+1 202 475 3537		Patrick.J.Gallagher@uscg.mil
United States	International Ice Patrol	860 271 2626	860 271 2773	iipcomms@uscg.mil
Venezuela				

1.3. GMDSS Master Plan:

No new updates to the GMDSS Master Plan in this reporting period regarding EGC or NAVTEX service within NAVAREA IV/XII. There were no changes to NAVAREA IV/XII's operational status regarding the Iridium SafetyCast Service.

2. NAVAREA EGC broadcast and monitoring equipment or software:

Broadcast Equipment/Software <i>Examples</i>	Broad cast schedule/Satellite <i>Examples</i>	Manufacturer/Location (LES)/Implementation <i>Examples</i>
TT-3027M (Virginia) EasyMail 2.02 Build 006	1000 and 2200, AOR-E NAVAREA IV	COBHAM SAILOR 6120/ SafetyNET II
TT-3027M (Virginia) EasyMail 2.02 Build 006	1030 and 2230, AOR-W NAVAREA XII	COBHAM SAILOR 6120/ SafetyNET II
TT-3027M (Missouri) EasyMail 2.02 Build 006	1000 and 2200, AOR-E NAVAREA IV	COBHAM SAILOR 6120/ SafetyNET II
TT-3027M (Missouri) EasyMail 2.02 Build 006	1030 and 2230, AOR-W NAVAREA XII	COBHAM SAILOR 6120/ SafetyNET II
TT-3027M (Hawaii) EasyMail 2.02 Build 006	1030 and 2230, POR NAVAREA XII	COBHAM SAILOR 6120/ SafetyNET II
TT-3027M (Hawaii) EasyMail 2.02 Build 006	1030 and 2230, POR NAVAREA XII	COBHAM SAILOR 6120/ SafetyNET II
TT-3027M (Molesworth) EasyMail 2.02 Build 006	1000 and 2200, IOR NAVAREA IV	COBHAM SAILOR 6120/ SafetyNET II
TT-3027M (Molesworth) EasyMail 2.02 Build 006	1000 and 2200, IOR NAVAREA IV	COBHAM SAILOR 6120/ SafetyNET II
Monitoring Equipment/Software		Manufacturer/Software
TT-3027M		Thrane and Thrane / EasyMail 2.02
SafetyNET II		Inmarsat

<i>LT-3100</i>		<i>Lars Thrane</i>
<i>Iridium SafetyCast</i>		<i>Iridium</i>

2.1. Details of EGC services:

NAVAREA IV/XII promulgates all warnings on all IMO Recognized Mobile Satellite Service Providers (RMSS). NAVAREA IV warnings are promulgated through Inmarsat primarily over the AOR-E satellite at 1000 and 2200 UTC daily. NAVAREA XII are promulgated through Inmarsat primarily over the AOR-W and POR satellites at 1030 and 2230 UTC daily. All NAVAREA IV and XII warnings are promulgated on Iridium SafetyCast as soon as possible.

NAVAREA IV and XII are both fully operational within the Iridium SafetyCast service.

2.2. NAVTEX:

NAVAREA IV

B₁ 518 kHz	B₁ 490 kHz	NAVTEX Station	Email	Telephone	Status
<i>F</i>		<i>Boston, Massachusetts*</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 202 475 3537</i>	<i>Operational</i>
<i>N</i>		<i>Portsmouth, Virginia*</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 202 475 3537</i>	<i>Operational</i>
<i>E</i>		<i>Charleston, South Carolina*</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 202 475 3537</i>	<i>Operational</i>
<i>A</i>		<i>Miami, Florida*</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 202 475 3537</i>	<i>Operational</i>
<i>G</i>		<i>New Orleans, Louisiana*</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 202 475 3537</i>	<i>Operational</i>
<i>R</i>		<i>Isabella, Puerto Rico*</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 787 289 2041</i>	<i>Operational</i>
<i>T</i>	<i>S</i>	<i>Iqaluit, Canada</i>	<i>navarea17.18@innav.gc.ca</i>	<i>+1 897 979 0310</i>	<i>Operational</i>
<i>X</i>		<i>Cartwright, Canada*</i>	<i>navarea17.18@innav.gc.ca</i>	<i>+1 709 896 2252</i>	<i>Operational</i>
<i>O</i>		<i>Robin Hood Bay, Canada*</i>	<i>navarea17.18@innav.gc.ca</i>	<i>+1 709 772 2182</i>	<i>Operational</i>
<i>C</i>	<i>D</i>	<i>Moise, Canada*</i>	<i>navarea17.18@innav.gc.ca</i>	<i>+1 418 269 5686</i>	<i>Operational</i>
<i>Q</i>	<i>J</i>	<i>Port Caledonia, Canada*</i>	<i>navarea17.18@innav.gc.ca</i>	<i>+1 902 564 7751</i>	<i>Operational</i>
<i>U</i>	<i>V</i>	<i>Chebogue, Canada*</i>	<i>navarea17.18@innav.gc.ca</i>	<i>+1 902 426 9750</i>	<i>Operational</i>
<i>H</i>		<i>Ferndale, Canada</i>	<i>navarea17.18@innav.gc.ca</i>	<i>+1 613 925 4519</i>	<i>Operational</i>
<i>P</i>		<i>Pass Lake, Canada</i>	<i>navarea17.18@innav.gc.ca</i>	<i>+1 519 337 6221</i>	<i>Operational</i>
<i>W</i>		<i>Kook Islands, Greenland</i>	<i>jrcc@jrcc.gl</i>	<i>299 691 911</i>	<i>Operational</i>
<i>M</i>		<i>Simiutaa, Greenland*</i>	<i>jrcc@jrcc.gl</i>		<i>Operational</i>
<i>C</i>	<i>K</i>	<i>Santa Marta, Colombia</i>	<i>navtex@dimar.mil.co</i>	<i>+5 66 94 465</i>	<i>Under Trial (518) Operational (490)</i>
<i>H</i>		<i>Curacao, Netherlands</i>	<i>N.silvacostada@midef.nl</i>	<i>599 463 7738</i>	<i>Operational</i>
<i>B</i>		<i>Bermuda, United Kingdom</i>	<i>sjpgg@gov.bm</i>	<i>441 29 1010</i>	<i>Operational</i>

*The following NAVTEX Stations are operated remotely:

-United States Stations [F,N,E,A,G,R] are controlled by USCG COMMCOM.

- Cartwright [X] is controlled by Labrador MCTS.
- Robin Hood Bay [O] is controlled by Placentia MCTS.
- Moisie [C, D] is controlled by Les Escoumins MCTS.
- Port Caledonia [Q, J] is controlled by Sydney MCTS.
- Chebogue [U, V] is controlled by Halifax MCTS.
- Ferndale [H] is controlled by Prescott MCTS
- Pass Lake [P] is controlled by Sarnia MCTS
- Simiutag [M] is controlled by JRCC Greenland.

NAVAREA XII

B₁ 518 kHz	B₁ 490 kHz	NAVTEX Station	Email	Telephone	Status
<i>J</i>		<i>Kodiak, Alaska*</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 202 475 3537</i>	<i>Operational</i>
<i>W</i>		<i>Astoria, Oregon*</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 202 475 3537</i>	<i>Operational</i>
<i>C</i>		<i>Point Reyes, California</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 202 475 3537</i>	<i>Operational</i>
<i>Q</i>		<i>Cambria, California</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 202 475 3537</i>	<i>Operational</i>
<i>O</i>		<i>Honolulu, Hawaii*</i>	<i>Patrick.J.Gallagher@uscg.mil</i>	<i>+1 202 475 3537</i>	<i>Operational</i>
<i>D</i>		<i>Digby Island, Canada*</i>	<i>navarea17.18@innav.gc.ca</i>	<i>+1 250 627 3070</i>	<i>Operational</i>
<i>H</i>		<i>Amphritrite Point, Canada*</i>	<i>navarea17.18@innav.gc.ca</i>	<i>+1 250 627 3070</i>	<i>Operational</i>
<i>O</i>	<i>C</i>	<i>Buenaventura, Colombia</i>	<i>navtex@dimar.mil.co</i>	<i>+1 709 772 2182</i>	<i>Under Trial</i>
<i>L</i>	<i>A</i>	<i>Ayora, Ecuador</i>			<i>Temporarily Suspended</i>

*The following NAVTEX Stations are operated remotely:

- United States Stations [J, W, Q, O] are controlled by USCG COMMCOM.
- Canadian Stations [D, H] are controlled by Prince Rupert MCTS

2.3. Other methods of promulgation:

The Guam NAVTEX station, located within NAVAREA XI, is out of service until further notice. During this outage Guam has been promulgating warnings over 4209.55 kHz.

Additionally, there are two coastal EGC warning areas located in NAVAREA IV which are operated by France. Coastal Area A covers the area around French Guyana and area C covers the area in the vicinity of the French Antilles.

In addition to HF NBDP in Iqaluit, Canada also provides local and coastal warnings over VHF, MF and HF radiotelephony from all coastal MCTS Centres.

3. NAVAREA Metrics

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

Country	NAVTEX station name	B1 Character or Coastal Warning Area	Broadcast schedule times UTC (only for EGC)	2021			
				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
United States	Boston	F	-			16,425	
United States	Portsmouth	N				43,435	
United States	Charleston	E				19,710	
United States	Miami	A				19,170	
United States	New Orleans	G				12,410	
United States	Isabella	R				UNK	
United States	Kodiak	J				26,695	
United States	Astoria	W				23,725	
United States	Point Reyes	C				12,410	
United States	Cambria	Q				32,485	
United States	Honolulu	O				10,950	
Canada	Iqaluit	T					
Canada	Cartwright	X					
Canada	Robin Hood Bay	O					
Canada	Moise	C					
Canada	Port Caledonia	Q					
Canada	Chebogue	U					
Canada	Ferndale	H					
Canada	Pass Lake	P					
Canada	Digby Island	T					
Canada	Amphritrite Point	X					
Colombia	Santa Marta	C					
Colombia	Buenaventura	O					
Netherlands	Curacao	H		~60	0	~6500	
Ecuador	Ayora	L					
Greenland	Kook Islands	W					
Greenland	Simiutaq	M					
United Kingdom	Bermuda	B		24	0	UNK	UNK
France		A					
France		C					

3.2. NAVAREA Warnings broadcasts:

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
<i>SafetyNet-IV</i>	1255	~1,351,635	~1689	1186	~1,277,322	~1596	647	~696,819	~871
<i>SafetyCast – IV*</i>	46	46	-	427/759	1186	-	647	647	
<i>SafetyNet – XII</i>	585	~861,120	~1074	733	~1,078,976	~1349	444	~653,568	~817
<i>SafetyCast -XII*</i>	15	15		129/604	733		444	444	

*NAVAREA IV/XII transitioned to operational status in the Iridium SafetyCast Service on the 24th of March 2021.

3.3. Urgent EGC Warnings:

NAVAREA IV has promulgated two urgent warnings in 2022. Both warnings concerned icebergs outside the known limit of ice. These urgent warnings self-cancelled in 72 hours in consultation with the North American Ice Service and the International Ice Patrol.

NAVAREA XII promulgated one urgent warning in 2022. This warning was promulgated in error.

3.4. VITAL Coastal Warnings:

Not Applicable.

3.5. In-force warnings.

3.5.1. In-force bulletins issued:

In Force Bulletins are issued every Friday at 1000 UTC for NAVAREA IV and 1030 UTC for NAVAREA XII. The text of In Force warnings that are more than 42 days old can be found on the NAVAREA IV/XII webpage <https://msi.nga.mil/NavWarnings>.

3.5.2. Requests for In-force warnings

2020	2021	2022
Total	Total	Total
1454	917	322

All the above requests were conducted via email. NAVAREA IV/XII started a questionnaire on June 1st, 2022, which came attached to all in-force warning emails. The questionnaire asked two questions:

1. Why did you request in-force NAVAREA IV/XII warnings via email?
 - a. I do not have GMDSS requirements.
 - b. I am currently having issues with my GMDSS equipment.
 - c. Time savings.
 - d. Ease of tracking in-force warnings.
 - e. Other (please specify).
2. What is your GMDSS Service Provider?
 - a. Inmarsat
 - b. Iridium

There have been 36 questionnaires sent to customers and 18 have been returned as of July 7th, 2022. Of the 18 responses 83% stated they requested in-force warnings due to the ease of tracking in-force warnings in this manner. 39% of respondents stated that time savings was the primary factor for in-force requests. 27% of respondents selected other as their response. Of these responses there was a theme of cross checking their GMDSS terminal with the email supplied warnings. Customers found this method was an effective way of receiving the text of old warnings which are no longer broadcast on the Inmarsat system. Lastly one vessel stated it was company policy to receive their warnings via email from the NAVAREA in addition to their GMDSS terminal. It is noted that all respondents are using Inmarsat for their GMDSS service.

NAVAREA IV/XII would like to note that providing a consolidated list of in force warnings directly to requesting vessels is not a burden due to automated internal processes. However, the questionnaire made it apparent that these requests will continue to be received, and it is clear how this service would become a burden on NAVAREA coordinators if this work had to be compiled manually.

3.6. Arctic navigational warnings broadcast by HF NBDP.

Not Applicable.

4. Operational Issues:

4.1. NAVTEX Service

NAVAREA IV and XII continues to promulgate navigational warnings due to aging NAVTEX and radio communications equipment. U.S Coast Guard Communications Command (USCOMMCOM) provided 180 MSI reports regarding changes to the status of U.S. NAVTEX and Remote Communication Facilities. These include both scheduled outages, unscheduled outages and notices to cancel outages. During this reporting period NAVAREA IV and XII was able to subscribe to the Canadian NAVWARN Subscription service. This service has allowed NAVAREA IV/XII to promulgate 26 NAVAREA warnings regarding Canadian NAVTEX stations as soon as that information becomes available.

4.2 Space Operations

The exponential rise in the amount of commercial space activity continues to be of particular concern to NAVAREA IV/XII. NAVAREA IV/XII has received 220 sources in 2022 from 5 authorities concerning all aspects of space operations. Each launch is subject to multiple scrubs, which led to multiple cancellations and warning re-issues of the same operation. In addition to the launch process being cumbersome, the re-entry process can be even more troublesome to the mariner. Often times commercial companies will close six to seven areas for re-entry and, due to atmospheric conditions, the NAVAREA is not informed of the active area until an hour before a splash down. Operating in this fashion leads to excessively large navigational warnings being broadcast over both the International EGC Service and the NAVTEX service which goes against the guidance in the MSI manual for a short and concise navigational warning. This may be the reason why the *M/V Harmony of the Seas* entered the exclusion zone, forcing SpaceX to scrub a Falcon 9 launch in January 2022. Lastly, with multiple new space companies operating on a global basis there is a clear need to educate space operators on the worldwide coordination of navigational warnings. NAVAREA IV/XII is averaging 5 launches per month that have hazardous areas within its own NAVAREA and extend into other NAVAREAs. NAVAREA IV/XII would like to thank NAVAREAs VI, VII, VIII, X, XIV, XV, and XVI which promulgated navigational warnings for space debris in their areas resulting from launches within NAVAREA IV/XII. NAVAREA IV/XII would like to invite all NAVAREA coordinators to maintain contacts with their aviation counterparts to ensure proper coordination of MSI.

4.3 Coastal Areas A and C, NAVAREA IV – Iridium Service

NAVAREA IV continues to monitor the Inmarsat broadcasts from France for coastal areas 04A and 04C. NAVAREA IV duplicates these broadcast over Iridium SafetyCast to the entire NAVAREA to ensure that vessels using SafetyCast have access to all EGC broadcasts.

4.4 Transition to a Data Centric Production Environment

NAVAREA IV/XII migrated operations to a cloud-based database and web application in May of this year called the Source Maritime Automated Processing System (SMAPS). SMAPS is a data driven approach to the creation of navigational warnings with the goal to provide a foundation on which NAVAREA IV/XII can produce S-124 datasets. SMAPS uses machine learning and natural language processing to parse MSI into specific attributes which can eventually be mapped to the S-124 standard. This transition to a databased environment has not been without challenges. There is a significant culture shift required to address data integrity in addition to the proper formatting of the traditional S-53 navigational warnings. Training consisted of formal and informal sessions prior to transitioning to SMAPS. Since then bi-monthly technical exchanges have assisted in keeping personnel engaged in a rapidly changing work environment. The transition to SMAPS led, initially, to a slight increase in the time required to produce a navigational warnings due training and network connectivity problems. NAVAREA IV/XII believes that

learning how to operate in datacentric environments will pay dividends as the WWNWS starts to create S-124 datasets in the years to come.

5. National Co-ordinator Communication:

5.1. IRCC Strategic Performance Indicator:

NAVAREA IV/XII did not receive any MSI in 2020 or 2021 from the following Coastal States and was unable to successfully communicate with them:

Anguilla
Bahamas
British Virgin Islands
Costa Rica
Nicaragua

NAVAREA IV/XII did receive successful communications or MSI from 86% (43/50) national coordinators.

5.2. Procedures.

NAVAREA IV/XII strives to reach out to its national coordinators on a bi-annual basis. The first attempt to contact coordinators occurs in late-June or early-July of each year prior to the meeting of the IHO WWNWS-SC. The second attempt occurs in late-October prior to the Meso American and Caribbean Sea Hydrographic Commission (MACHC) meeting in early December. National coordinators are invited via email to confirm their contact information. If that is unsuccessful, the NAVAREA will reach out to the national coordinator via phone.

6. Contingency Planning:

NAVAREA IV and XII have fully redundant and site-separated NAVAREA operational systems to include: satellite transceivers, telecommunications, internet and desktop PC's. Operations are tested daily at both locations to ensure full continuity of NAVAREA operations. Additionally, since the transition to the SMAPS application the NAVAREA IV/XII watch could be stood remotely in case of emergency.

7. Capacity Building:

Prioritized list of Coastal states that need MSI training (Year of last training)

1. Bahamas (N/A)
2. Nicaragua (2017)
3. St. Kitts & Nevis (2016)
4. St. Vincent & Grenadines (2013)
5. Costa Rica (2019)
6. Anguilla (2019)

Compared to the NAVAREA IV/XII self-assessment from the last reporting cycle there is a much smaller list of coastal states that require MSI training. This is due to the

cooperation between NAVAREA IV/XII and the Chief of Operations – Fort de France, Martinique who provided contact information for Guadeloupe, Martinique, Saint-Martin, and Saint-Barthelemy. NAVAREA IV/XII would like also like to thank the Dutch Caribbean Coast Guard which provided contact information for Aruba, Bonaire, Curacao, Saba, Sint Maarten, and Sint Eustatius.

8. Other Activities:

NAVAREA IV/XII has done the preparation work for an MSI Capacity Building Course to be taught in Cartagena, Colombia from September 26th to the 30th, 2022. In addition to the resumption of in-person MSI courses, NAVAREA IV and XII plan to be active in the IMO Correspondence Group on the revision of IMO resolution A.1001 and the IMO Correspondence Group on Dissemination of MSI and SAR-related information.

Conferences supported by the NAVAREA IV and XII Coordinator this past year:

WWNWS13, Virtual Teleconference – Aug 2021

MACHC22, Virtual Teleconference – Dec 2021

IMO NCSR 9, IHO Representative, US Delegation, Virtual Teleconference – June 2022

IMO MSC 104, IHO Rep, Virtual Teleconference – October 2021

IMO MSC 105, IHO Rep, Virtual Teleconference – April 2022

IHO IRCC 14, Bali, Indonesia – June 2022

IHO WWNWS Document Review Working Group-Virtual Teleconference – March 2022

International Ice Patrol Annual Meeting – Virtual Teleconference – November 2021

Radio Technical Commission for Maritime Standards – Tampa, FL – May 2022

IALA Digital@Sea North America – Tampa, FL – May 2022

IMO MSI Correspondence Group – Virtual Meetings – 2021-2022

9. NAVAREA Website:

<https://msi.nga.mil/NavWarnings>

How often is the information on your web site updated? Daily, Monday through Friday.
Do you display the date and time of the last update on your web site? Yes.

10. NAVAREA Contact Information:

U.S.A. (NAVAREA IV & XII)

Mr. Christopher Janus

ATTN: N65-SH

7500 GEOINT Drive

Springfield, Virginia 22150-7500

Tel: +1 571 557 5455 (24x7)

Fax: +1 571 558 3426

E-mail: Christopher.G.Janus@nga.mil

E-mail (MSI for NAVAREA IV or XII): navsafety@nga.mil

11. Recommendations:

None

12. Actions requested:

Note the information provided.

13. Summary:

The NAVAREA IV and XII Coordinator introduced the Self-Assessment report covering the reporting period since WWNWS13. He noted the support from NAVAREA XVII/XVIII regarding NAVTEX service, NAVAREAS VI, VII, VIII, X, XIV, XV, and XVI for supporting Space Operations, and Fort de France and the Dutch Caribbean Coast Guard for providing national coordinator contact information.

Annex(es):

- A. Self-Assessment Spreadsheet – NAVAREA IV
- B. Self-Assessment Spreadsheet – NAVAREA XII