

# CHAPTER 3

## RADIO NAVIGATIONAL WARNINGS

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## CHAPTER 3

### RADIO NAVIGATIONAL WARNINGS

#### PART I TYPES OF NAVIGATIONAL BROADCASTS

##### 300A. Global Maritime Distress and Safety System (GMDSS)

The GMDSS is a global communications service based upon automated systems, both satellite based and terrestrial, to provide distress alerting and promulgation of Maritime Safety Information (MSI) for mariners. This chapter focuses on MSI broadcasts, for Distress including Search and Rescue see Chapter 4.

**Definitions:**

- Coast Earth Station (CES) - is a fixed station on land to link satellite transmission to users.
- CAMSLANT- Communications Area Master Station Atlantic. Provides rapid, reliable and secure communications support and services to U.S. Coast Guard operational commanders, other government agencies, military and civilian organizations throughout the world.
- CAMPAC- Communications Area Master Station Pacific. Delivers record message traffic and voice communications services to U.S. Coast Guard Units world wide. Provides extensive weather warnings and safety information to commercial and recreational vessels and acts as a distress notification center.
- COGARD NAVCEN- The U.S. Coast Guard Navigation Center. Provides maritime navigation and information services that enhance the safety, security, and efficiency of U.S. waters.
- COMPAS-SARSAT- a satellite-based search and rescue distress alert detection and information distribution system.
- Digital Selective Calling (DSC) - equipment that allows mariners to instantly send or receive automatically formatted distress alerts to vessels and coast stations in the area.
- High Frequency Narrow Band Direct Printing (HF NBDP) - an automated direct printing service using High Frequency.
- INMARSAT - International Maritime Satellites. A company that owns and operates mobile voice and data communication satellites all around the world where terrestrial networks are not operational.
- International Hydrographic Organization (IHO) - Coordinates the activities of national hydrographic offices, promotes standards and provides advice to developing countries in the fields of hydrographic surveying and production of nautical charts and publications.
- International Ice Patrol (IIP)- provides the latest information on iceberg positions and computer prediction of the extent of the iceberg danger zone to mariners in the North Atlantic Ocean. Areas of study include iceberg detection, drift and deterioration, surface object drift and currents in the Grand Banks Region.
- International Maritime Organization (IMO)- is the specialized agency of the United Nations responsible for maritime safety and efficiency of navigation.
- Maritime Mobile Service Identity (MMSI)- is a series of nine digits which are sent in digital form over a radio frequency channel that uniquely identifies the user.
- Maritime Safety Information (MSI)- navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages broadcast to ships.
- Mobile Earth Station (MES)- an antenna that is not in a fixed location that communicates with a satellite, normally located on a vessel.
- NAVTEX- an automated direct printing service using 424, 490 and/or 518 kHz.
- SafetyNET - an international service using satellites to promulgate urgent and safety related messages to vessels.
- World Meteorological Organization (WMO)- is the specialized agency of the United Nations for meteorology (weather and climate), operational hydrology and related geophysical sciences. This is the organization responsible for coordinating weather forecasts and alerts to vessels out to sea.

##### 300B. Local Warnings (Sea Area A1)

Sea Area A1, is mainly for local navigational warnings-inland waters extending out to about 30nm (56km)-40nm (74km) from the coast. Vessels are required to only carry VHF radio equipment with continuous DSC alerting available.

**-To obtain NOAA WEATHER broadcasts for A1 in U.S. waters:**

*VHF Channel: 22A (157.1 MHz)*

**-To obtain USCG NAVIGATIONAL broadcasts for A1 in U.S. waters:**

*VHF Channel: 22A*

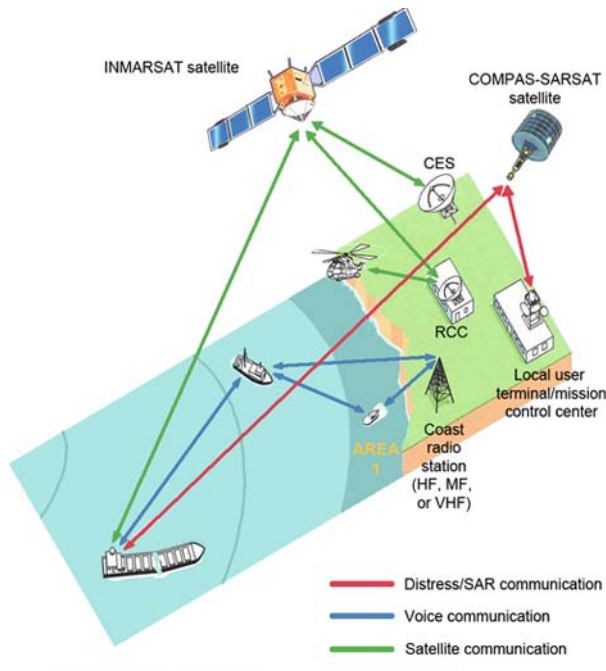
*MF Channel: 2670 kHz (single side band)*

*Website: <https://homeport.uscg.mil>*

NOAA Weather Radio is a service providing specialized weather broadcasts for maritime users along the U.S. coastline, Great Lakes, Puerto Rico, the Virgin Islands, Guam and Saipan. It provides continuous broadcasts of the latest weather information directly from National Weather Service (NWS) offices. Taped weather messages are repeated every four to six minutes and are routinely revised every one to three hours, or more frequently if needed.

## RADIO NAVIGATIONAL WARNINGS

generally designated on marine VHF equipment as WX-1 through WX-7. These broadcasts usually can be received within 25 miles of the antenna site.



### Sea Area 1

During severe weather, NWS forecasters can interrupt the routine weather broadcasts and substitute special warning messages.

NOAA Weather Radio broadcasts are received on one of seven VHF channels listed below. These channels are

### 300C. Coastal Warnings (Sea Area A2)

Sea Area A2 are coastal navigational warnings, such as NAVTEX, extending out to about 200nm from the coast. Vessels are required to carry the same equipment from A1 as well as MF radio communications (with continuous DSC alerting available).

**NAVTEX** is an international automated medium frequency direct-printing service informing mariners of navigational and meteorological warnings and forecasts, as well as urgent marine safety information. NAVTEX is part of the GMDSS system, however not all countries use NAVTEX broadcasts to warn mariners of safety information along the coast. NAVAREA V (Brazil), NAVAREA X (Australia), and NAVAREA XIV (New Zealand) broadcast their coastal warning via the International EGC Service.

**International NAVTEX service** is the coordinated broadcast and reception on 518 kHz of maritime safety information by means of narrow band direct printing telegraphy using the English language.

NOAA Weather Radio VHF Channels	
WX-1	162.550 MHz
WX-2	162.400 MHz
WX-3	162.475 MHz
WX-4	162.425 MHz
WX-5	162.450 MHz
WX-6	162.500 MHz
WX-7	162.525 MHz

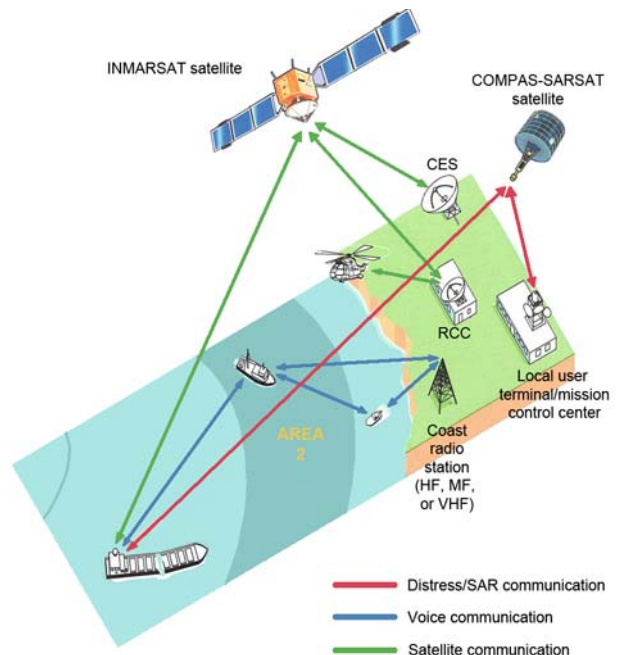
A list of broadcast stations and frequencies may be obtained from the NOAA Weather Radio Website at: <http://www.nws.noaa.gov/nwr/>

or from the NWS at the following address:

NATIONAL WEATHER SERVICE  
ATTN: W/OS21  
NOAA  
1325 EAST WEST HIGHWAY  
SILVER SPRING MD 20910

Marine Product Dissemination Information may be obtained from the NWS Marine Forecasts Homepage at: <http://www.nws.noaa.gov/om/marine/home.htm>

Information available includes forecasts and warnings, up-to-date marine weather charts, including those broadcast by the Coast Guard over HF radiofacsimile, and the NOAA Weather Radio Guide.



## RADIO NAVIGATIONAL WARNINGS

### NAVTEX messages basic format

**SUBJECT INDICATOR CHARACTERS (B<sub>1</sub>):** is a single letter allocated to each NAVTEX shore station transmitter. For example, NAVTEX station Miami's B<sub>1</sub> character is A.

**SUBJECT INDICATOR CHARACTERS (B<sub>2</sub>):** is used by the receiver to identify different classes of messages.

- A: Navigational warnings<sup>1</sup>
- B\*: Meteorological warnings<sup>1</sup>
- C: Ice reports
- D: Search and rescue information, piracy warnings, tsunamis and other natural phenomena<sup>1</sup>
- E: Meteorological forecasts
- F\*: Pilot service messages
- G: AIS
- H: LORAN messages
- I: Spare
- J: GNSS system messages regarding PRN status
- K: Other electronic navaid messages
- L: Navigational warnings (additional to A)<sup>2</sup>
- V to Y: Special services (allocation by NAVTEX Panel)
- Z: No messages on hand

<sup>1</sup> : Cannot be rejected by the receiver

<sup>2</sup> : Should not be rejected by the receiver

\*Normally not used in the United States

**SUBJECT INDICATOR CHARACTERS (B<sub>3</sub>) and (B<sub>4</sub>):** each message within each subject group is allocated a two digit sequential serial number, beginning at 01 and ending at 99. The B<sub>3</sub> & B<sub>4</sub> message numbering characters together are often referred to as the "NAVTEX number". The NAVTEX number is solely allocated as a component of the NAVTEX message identity and should not be confused with (and bears no correlation to), the series identity and consecutive number of the coastal warning contained in the message. Messages broadcast using NAVTEX number B<sub>3</sub>B<sub>4</sub> = 00 cannot be rejected and will automatically override any selection of B<sub>1</sub> transmitter identification characters as well as any B<sub>2</sub> subject indicator characters selected on the NAVTEX receiver.

**To obtain NOAA WEATHER and USCG NAVIGATIONAL broadcasts for A2 in U.S. waters:**

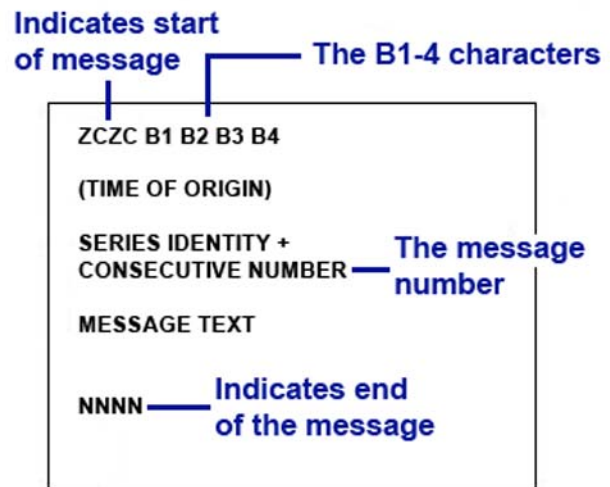
VHF Channel:22A

MF Channel:2670 kHz (single side band)

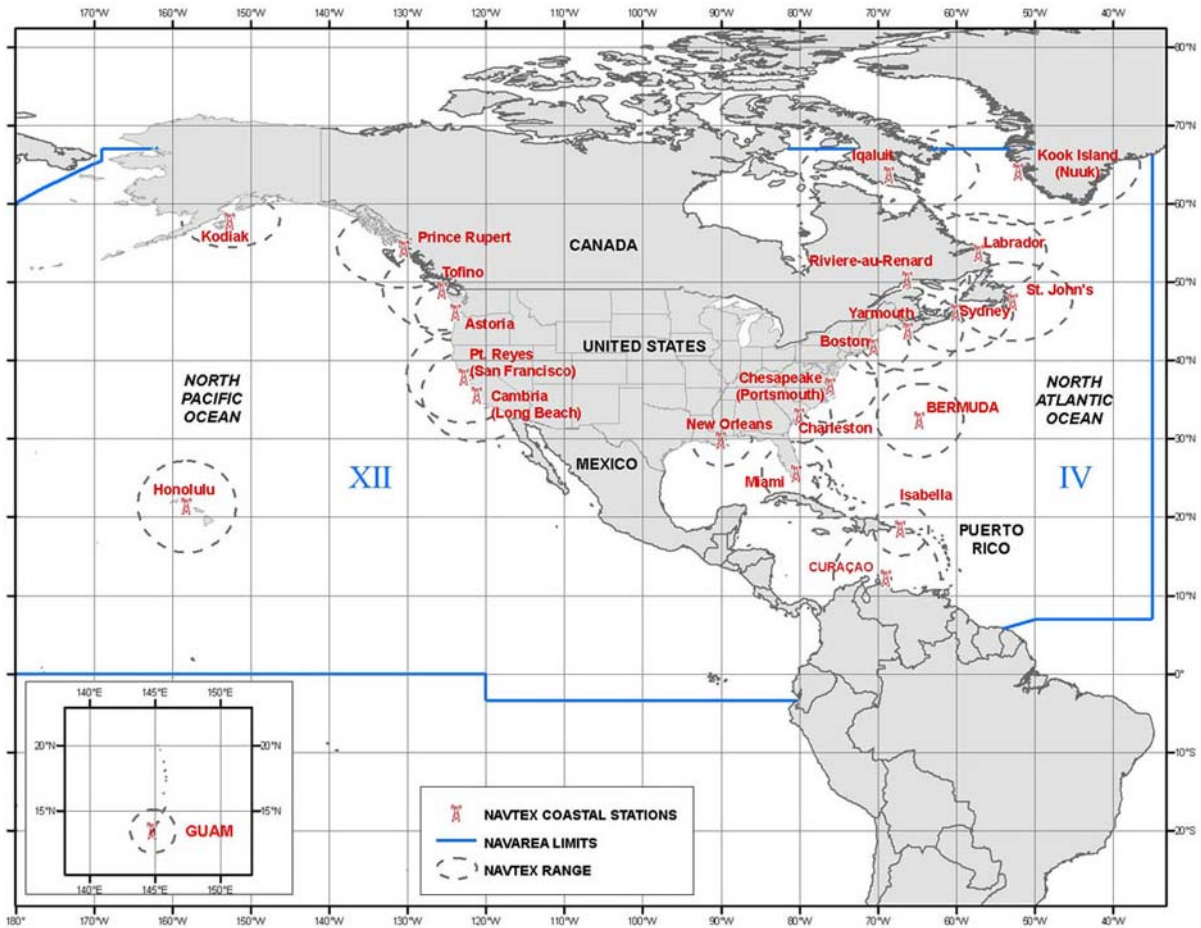
NAVTEX:518 kHz

Web site:<http://www.nws.noaa.gov/om/marine/navtex.htm>

### NAVTEX Message Format



# RADIO NAVIGATIONAL WARNINGS



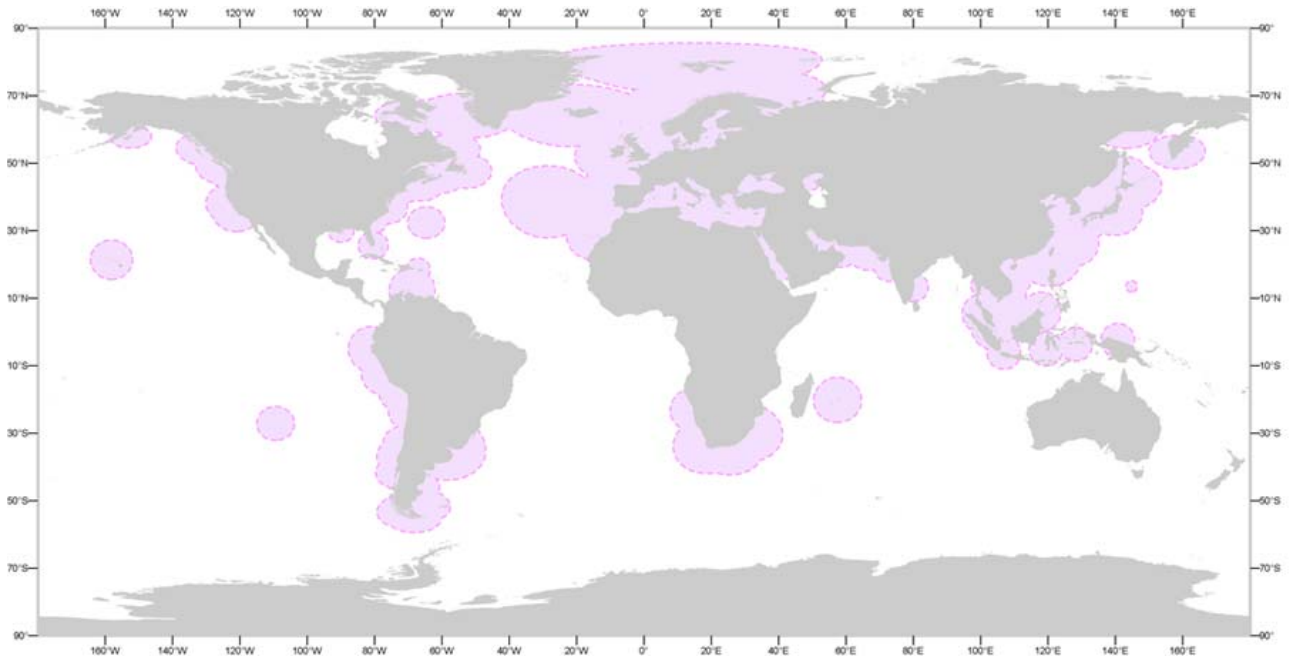
## U.S. NAVTEX Coverage

300C.1 U.S. NAVTEX Stations					
NAVTEX Coast Station (ID)	Position	Range (NM)	kHz	Transmitter Identification (B <sub>1</sub> ) Character	Broadcast Time (UTC)
<b>Boston (NMF)</b>	41-43N 070-30W	200	518	F	00, 04, 08, 12, 16, 2050
<i>NOTE: Nav Warnings include International Ice Patrol Bulletins (Feb-July)</i>					
Remotely controlled from USCG COMMCOMM (NMN) MMSI: 003669991 Phone: +1 757 421 6240					
<b>Portsmouth/CAMSLANT (NMN)</b>	36-43N 076-00W	280	518	N	02, 06, 10, 14, 18, 2210
MMSI: 003669995 Phone: +1 757 421 6240 Fax: +1 757 421 6225					
<b>Charleston (NME)</b>	32-51N 079-59W	200	518	E	00, 04, 08, 12, 16, 2040
<i>NOTE: Right Whale Warnings on receipt</i>					
Remotely controlled from USCG COMMCOMM (NMN) Phone: +1 757 421 6240					
<b>Miami (NMA)</b>	25-37N 080-23W	240	518	A	00, 04, 08, 12, 16, 2000
Remotely controlled from USCG COMMCOMM (NMN) MMSI: 003669997 Phone: +1 757 421 6240					
<b>Isabella (NMR)</b>	18-28N 067-04W	200	518	R	02, 06, 10, 14, 18, 2250

## RADIO NAVIGATIONAL WARNINGS

300C.1 U.S. NAVTEX Stations					
NAVTEX Coast Station (ID)	Position	Range (NM)	kHz	Transmitter Identification (B <sub>1</sub> ) Character	Broadcast Time (UTC)
MMSI: 003669992, Phone: +1 787 289 2041, Fax: +1 787 729 6706					
<b>New Orleans (NMG)</b>	29-53N 089-57W	200	518	G	01, 05, 09, 13, 17, 2100
Remotely controlled from USCG COMMCOMM (NMN) MMSI: 003669998 Phone: +1 757 421 6240					
<b>Cambria (NMQ)</b>	35-31N 121-03W	350	518	Q	02, 06, 10, 14, 18, 2240
Remotely controlled from CAMSPAC (MNC) MMSI: 003669912 Phone: +1 415 669 20 47					
<b>Point Reyes RCF (San Francisco) CAMSPAC (NMC)</b>	37-55N 122-44W	350	518	C	00, 04, 08, 12, 16, 2020
MMSI: 003669990 Phone: +1 415 669 20 47, Fax: +1 415 669 20 96, E-mail: <a href="mailto:rccalameda@uscg.mil">rccalameda@uscg.mil</a>					
<b>Astoria (NMW)</b>	46-10N 123-49W	216	518	W	03, 07, 11, 15, 19, 2340
Remotely controlled from CAMSPAC (NMC) MMSI: 003669910, Phone: +1 415 669 20 47					
<b>Kodiak (NOJ) Areas EAST of Kodiak</b>	57-46N 152-34W	200	518	J	01, 05, 09, 13, 17, 2130
<b>Kodiak (NOX) Areas WEST of Kodiak</b>				X	03, 07, 11, 15, 19, 2350
MMSI: 003669899, Phone: +1 907 487 57 78, Fax: +1 907 487 54 30 E-mail: <a href="mailto:jrccjuneau@uscg.mil">jrccjuneau@uscg.mil</a>					
<b>Honolulu (NMO)</b>	21-25N 158-09W	350	518	O	02, 06, 10, 14, 18, 2220
Remotely controlled from CAMSPAC (NMC) MMSI: 003669993, Phone: + 1 415 669 20 47					

## RADIO NAVIGATIONAL WARNINGS



**Worldwide NAVTEX Coverage**

### 300C.2 Worldwide NAVTEX Stations

Country	NAVTEX Coast Station (ID)	Position	Range (NM)	kHz	Transmitter Identification (B <sub>1</sub> ) Character	Broadcast Time (UTC)	
Algeria	<b>Bordj-el-Kiffan (7TA)</b>	36-44N 003-10E	150	490	V (French)	03, 07, 11, 15, 19, 2230	
				518	B	00, 04, 08, 12, 16, 2010	
Argentina	<b>Bahia Blanca (L2I)</b>	38-43S 062-06W	280	490	D (Spanish)	01, 05, 09, 13, 17, 2120	
				518	P	02, 06, 10, 14, 18, 2230	
	Phone: (54-291) 4573355						
	<b>Buenos Aires (L2B)</b>	34-36S 058-22W	280	490	F (Spanish)	00, 04, 08, 12, 16, 2050	
					518	R	02, 06, 10, 14, 18, 2250
	Phone: (54-11) 457 67657, Fax: (54-11) 45767556, E-mail: <a href="mailto:info@perfecturanaval.gov.ar">info@perfecturanaval.gov.ar</a>						
	<b>Comodoro Rivadavia (L2W)</b>	45-51S 067-25W	280	490	C (Spanish)	00, 04, 08, 12, 16, 2020	
					518	O	02, 06, 10, 14, 18, 2220
	Phone: (54-297) 4462167, Fax: (54-297) 4473863						
	<b>Mar del Plata (L2P)</b>	38-03S 057-32W	280	490	E (Spanish)	00, 04, 08, 12, 16, 2040	
					518	Q	02, 06, 10, 14, 18, 2240
	Phone: (54-223) 4803100, Fax: (54-223) 4803006						
<b>Rio Gallegos (L3D)</b>	51-31S 065-03W	280	490	B (Spanish)	00, 04, 08, 12, 16, 2010		
				518	N	02, 06, 10, 14, 18, 2210	
Phone: (54-2966) 420375							
<b>Ushuaia (L3K)</b>	54-48S 068-18W	280	490	A (Spanish)	00, 04, 08, 12, 16, 2000		
				518	M	02, 06, 10, 14, 18, 2200	
Phone: (54-2901) 422382, Fax: (54-2901) 421425							

### RADIO NAVIGATIONAL WARNINGS

300C.2 Worldwide NAVTEX Stations						
Country	NAVTEX Coast Station (ID)	Position	Range (NM)	kHz	Transmitter Identification (B <sub>1</sub> ) Character	Broadcast Time (UTC)
Azores	<b>Horta (CTH)</b>	38-32N 028-38W	640	490	J (Portuguese)	01, 05, 09, 13, 17, 2130
				518	F	00, 04, 08, 12, 16, 2050
	Phone: +351 292 20 86 20, Fax: +351 292 20 86 69					
Belgium	<b>Oostende (OST)</b>	51-11N 002-48E		55	490	B (Dutch)
				150	518	V (Navigational Warnings only)
				55	518	T
MMSI: 002050480, Phone: +32 59 342 493 Fax:						
Bahrain	<b>Bahrain (A9M)</b>	26-09N 050-28E	300	518	B	00, 04, 08, 12, 16, 2010
Bermuda	<b>Bermuda (ZBR)</b>	32-23N 064-41W	280	518	B	00, 04, 08, 12, 16, 2010
MMSI: 003100001, Telex: 581 431010110 Phone: +441 297 10 10 Fax: +441 297 15 30						
Bulgaria	<b>Varna (LZW)</b>	43-04N 027-46E	350	518	J	01, 05, 09, 13, 17, 2130
Canada	<b>Chebogue (VAR-9)</b>	43-44N 066-07W	300	490	V (French)	03, 07, 11, 15, 19, 2330
				518	U	03, 07, 11, 15, 19, 2320
MMSI: 003160015, Telex: 21 1922510 Phone: +1 902 426 97 50 Fax: +1 506 636 50 00						
	<b>Iqaluit (VFF)</b>	63-43N 068-33W	300	490	S (French)	03, 07, 11, 15, 19, 2300
				518	T	03, 07, 11, 15, 19, 2310
<i>Operates Jun-Dec</i> MMSI: 003160023, Phone: +1 867 979 03 10, Fax: +1 867 979 42 64						
	<b>Cartwright (VOK)</b>	53-42N 057-11W	300	518	X	03, 07, 11, 15, 19, 2350
<i>Ice included in warnings during ice season</i> MMSI: 003160022, Phone: +1 709 986 22 52						
	<b>Prescott (XMJ 329)</b>	44-56N 081-14W	300	518	H	01, 05, 09, 13, 17, 2110
<i>Ice included in warnings during ice season</i> MMSI: 003160023, Phone: +1 418 223 21 94						
	<b>Amphitrite Point (Prince Rupert)</b>	48-55N 125-33W	300	518	H	01, 05, 09, 13, 17, 2110
MMSI: 003160013, Phone: +1250 627 30 74, Email: mctsprincerupert@dfo-mpo-gc.ca						
	<b>Mosie (VCK)</b>	50-12N 066-07W	300	490	D (French)	00, 04, 08, 12, 16, 2035
				518	C	00, 04, 08, 12, 16, 2020
<i>Ice included in warnings during ice season</i>						
	<b>Robin Hood Bay (VON)</b>	47-37N 052-40W	300	518	O	02, 06, 10, 14, 18, 2220
<i>Ice included in warnings during ice season</i> MMSI: 003160020 Phone: +1 709 772 21 82						
	<b>Port Caledonia (VCO)</b>	46-11N 059-54W	300	490	J (French)	01, 05, 09, 13, 17, 2130
				518	Q	02, 06, 10, 14, 18, 2240
<i>Ice included in warnings during ice season</i> MMSI: 003160017 Phone: +1 902 546 7751						
	<b>Thunder Bay (CAN)</b>	48-34N 088-39W	300	518	P	02, 06, 10, 14, 18, 2230
<i>Ice included in warnings during ice season</i>						



**RADIO NAVIGATIONAL WARNINGS**

300C.2 Worldwide NAVTEX Stations						
Country	NAVTEX Coast Station (ID)	Position	Range (NM)	kHz	Transmitter Identification (B <sub>1</sub> ) Character	Broadcast Time (UTC)
	<b>Digby Island (Prince Rupert)</b>	54-18N 130-25W	300	518	D	00, 04, 08, 12, 16, 2030
MMSI: 003160013, Phone: +1 250 627 30 74, Email: mctsprincerupert@dfo-mpo-gc.ca						

Canary Islands	<b>Las Palmas (EAL)</b>	28-25N 016-23W	400	490	A (Spanish)	00, 04, 08, 12, 16, 2000
				518	I	01, 05, 09, 13, 17, 2120
MMSI: 2240995, Telex: +52 95003 SALPA, Phone: +34 956 68 47 40, Fax: +34 956 68 06 06						
Cape Verde	<b>Ribeira de Vinha (D4A)</b>	16-51N 025-00W	250	490	P (Portuguese)	02, 06, 10, 14, 18, 2230
				518	U	03, 07, 11, 15, 19, 2320
MMSI: 617000, Phone: +238 23 22 158, Fax: +238 23 22 263, E-mail: <a href="mailto:s.movelmartimo@cvtelcom.cv">s.movelmartimo@cvtelcom.cv</a>						

Chile	<b>Antofagasta (CBA)</b>	23-37S 070-25W	300	518	H (Spanish)	00, 08, 1600
				518	A	04, 12, 2000
	<b>Isla de Pascua (CBY)</b>	27-09S 109-25W	300	518	G	00, 08, 1650
				518	F (Spanish)	04, 12, 2000
	<b>Magallanes (CBM)</b>	53-09S 070-58W	300	518	L (Spanish)	00, 08, 1640
				518	E	04, 12, 2040
	<b>Puerto Montt (CBP)</b>	41-30S 072-58W	300	518	K (Spanish)	00, 08, 1630
				518	D	04, 12, 2030
	<b>Talcahuano (CBT)</b>	36-43S 073-07W	300	518	J (Spanish)	00, 08, 1620
				518	E	04, 12, 2020
	<b>Valparaiso (CBV)</b>	32-48S 071-29W	300	518	I (Spanish)	00, 08, 1610
				518	B	04, 12, 2010
China	<b>Dalian (XSZ)</b>	38-51N 121-31E	250	518	R	02, 06, 10, 14, 18, 2250
	<b>Fuzhou (XSL)</b>	26-02N 119-18E	250	518	O	02, 06, 10, 14, 18, 2220
	<i>in English and Chinese</i>					
	<b>Guangzhou (XSQ)</b>	23-09N 113-29E	250	518	N	02, 06, 10, 14, 18, 2210
	<b>Hong Kong (VRX)</b>	22-13N 114-15E	400	518	L	01, 05, 09, 13, 17, 2150
	<b>Sanya (XSI)</b>	18-15N 109-30E	250	518	M	02, 06, 10, 14, 18, 2200
	<b>Shanghai (XSG)</b>	31-07N 121-33E	250	518	Q	02, 06, 10, 14, 18, 2240

Columbia	<b>Santa Maria</b>	11-03S 074-14W	300	490	K (Spanish)	01, 05, 09, 13, 17, 2140
				518	E	00, 04, 08, 12, 16, 2020
	<b>Buenaventura</b>	03-54N 077-04W	300	518	C (Spanish)	00, 04, 08, 12, 16, 2040
				518	O	02, 06, 10, 14, 18, 2220

Croatia	<b>Split (9AS)</b>	43-11N 016-26E	85	518	Q	02, 06, 10, 14, 18, 2240
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Cyprus	<b>Cyprus (5BA)</b>	35-03N 033-17E	200	518	M	02, 06, 10, 14, 18, 2200
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### RADIO NAVIGATIONAL WARNINGS

300C.2 Worldwide NAVTEX Stations						
Country	NAVTEX Coast Station (ID)	Position	Range (NM)	kHz	Transmitter Identification (B <sub>1</sub> ) Character	Broadcast Time (UTC)
Ecuador	Ayora (HCY)	00-43S 090-19W	400	490	A (Spanish)	00, 04, 08, 12, 16, 2000
				518	L	01, 05, 09, 13, 17, 2150
Egypt	Al Quseir (SUK)	26-06N 034-17E	400	518	V	03, 07, 11, 15, 19, 2330
	Alexandria (SUH)	31-12N 029-52E	350	518	N	02, 06, 10, 14, 18, 2210
	Ismailia (SUZ)	30-28N 032-22E	400	518	X	03, 07, 11, 15, 19, 2350
Estonia	Tallinn (ESA)	59-30N 024-30E	250	518	U	03, 07, 11, 15, 19, 2320
	<i>relayed by MSI Sweden/Stockholm radio</i>					
Faroe Island	Torshavn (OXJ)	62-01N 006-48W		518	D	00, 04, 08, 12, 16, 2030
France	Corsen (FRC)	48-28N 005-03W	300	490	E (French)	00, 04, 08, 12, 16, 2040
				518	W	03, 07, 11, 15, 19, 2340
	MMSI: 2275300, Telex: +42 940086 CROCO, Phone: +33 (0)2 98 89 31 31, Fax: +33 (0)2 98 89 65 75, E-mail: <a href="mailto:corsen.mrcc@equipement.gouv.fr">corsen.mrcc@equipement.gouv.fr</a>					
	La Garde(FRL)	43-06N 005-59E	250	490	S (French)	03, 07, 11, 15, 19, 2300
Germany	Haburg (DDH-49)	53-40N 009-49E	250	490	L (German)	01, 05, 09, 13, 17, 2150
					S	03, 07, 11, 15, 19, 2300
Greece	Kerkyra (SVK)	39-37N 019-55E	280	518	K	01, 05, 09, 13, 17, 2140
	Irakleio(SVH)	35-20N 025-07E	280	518	H	01, 05, 09, 13, 17, 2110
	Limnos (SVL)	34-52N 025-04E	280	518	L	01, 05, 09, 13, 17, 2150
Greenland	Kook Island (OXI)	64-04N 052-01W	300	518	W	03, 07, 11, 15, 19, 2340
	Phone: +229 691911 Fax: +299 691949					
	Simiutaq (OXF)	60-41N 046-36W	300	518	M	02, 06, 10, 14, 18, 2200
Phone: +299 364010 (JRCC Greenland) Fax: +299 691949						
	Upernavik (OYN)	72-47N 056-12W		518	I	01, 05, 09, 13, 17, 2120
Guam	Guam (NRV)	13-29N 144-50E	100	518	V	03, 07, 11, 15, 19, 2330
	<i>NOTE: Broadcasts controlled from U.S. Coast Guard CAMSPAC (Point Reyes)</i>					
Iceland	Grindavik (TFK)	63-47N 022-31W		490	K (Icelandic)	01, 05, 09, 13, 17, 2140
				518	X	03, 07, 11, 15, 19, 2350
	Saudanes (TFA)	66-11N 001-18W		490	E (Icelandic)	00, 04, 08, 12, 16, 2040
				518	R	02, 06, 10, 14, 18, 2250

**RADIO NAVIGATIONAL WARNINGS**

<b>300C.2 Worldwide NAVTEX Stations</b>						
<b>Country</b>	<b>NAVTEX Coast Station (ID)</b>	<b>Position</b>	<b>Range (NM)</b>	<b>kHz</b>	<b>Transmitter Identification (B<sub>1</sub>) Character</b>	<b>Broadcast Time (UTC)</b>
India	<b>Mumbai (Bombay)(VWB)</b>	19-05N 072-50E	250	518	G	01, 05, 09, 13, 17, 2100
	<b>Chennai (Madras)(VWM)</b>	13-05N 080-17E	250	518	P	02, 06, 10, 14, 18, 2230

Indonesia	<b>Ambon (PKE)</b>	03-42S 128-12E	300	518	B	00, 04, 08, 12, 16, 2010
	<b>Jakarta (PKX)</b>	06-06S 106-54E	300	518	E	00, 04, 08, 12, 16, 2040
	<b>Jayapura (PNK)</b>	02-31S 140-43E	300	518	A	00, 04, 08, 12, 16, 2000
	<b>Makassar (PKF)</b>	05-06S 119-26E	300	518	D	00, 04, 08, 12, 16, 2030

Iran (Islamic Republic of)	<b>Busherhr (EQM)</b>	28-59N 050-49E	300	490	D (Farsii)	00, 04, 08, 12, 16, 2030
				518	A	00, 04, 08, 12, 16, 2000
	<b>Abbas Radio (EQI)</b>	27-06N 056-03E	300	490	I (Farsii)	01, 05, 09, 13, 17, 2120
				518	F	00, 04, 08, 12, 16, 2050
	<b>Fereydoonkenar (EQO)</b>	36-42N 052-33E	250	490	J (Farsii)	01, 05, 09, 13, 17, 2130
				518	G	01, 05, 09, 13, 17, 2100

Ireland	<b>Malin Head (EJM)</b>	55-22N 007-21W	400	490	A	00, 04, 08, 12, 16, 2000
				518	Q	02, 06, 10, 14, 18, 2240
	<i>490kHz broadcasts inshore water weather forecasts</i>					
	<b>Valentia (EJK)</b>	51-56N 010-21W	400	518	W	03, 07, 11, 15, 19, 2340

Israel	<b>Haifa (4XO)</b>	32-49N 035-00E	200	518	P (Weather)	00, 04, 08, 12, 16, 2020
					P (MSI)	02, 06, 10, 14, 18, 2230

Italy	<b>Augusta (IQA)</b>	37-14N 015-14E	320	518	V	03, 07, 11, 15, 19, 2230
	<b>Cagliari (IDC)</b>	39-13N 009-14E	320	518	T	03, 07, 11, 15, 19, 2210
	<b>Rome (IAR)</b>	41-37N 012-29E	320	518	R	02, 06, 10, 14, 18, 2250
	<b>Trieste (IQX)</b>	45-41N 013-46E	320	518	U	03, 07, 11, 15, 19, 2320

Japan	<b>Kushiro (JNX)</b>	42-57N 144-36E	400	424	K (Japanese)	01, 05, 09, 13, 17, 2108	
				518	K	01, 05, 09, 13, 17, 2140	
	<i>424 &amp; 518kHz ice broadcasts Jan-Apr: 09, 1330. Tsunami warnings issued when needed.</i>						
	<b>Moji (JNR)</b>	34-01N 130-56E	400	424	H (Japanese)	00, 04, 08, 12, 16, 2017	
				518	H	01, 05, 09, 13, 17, 2110	
<i>Ice and tsunami warnings issued when needed.</i>							

**RADIO NAVIGATIONAL WARNINGS**

<b>300C.2 Worldwide NAVTEX Stations</b>							
<b>Country</b>	<b>NAVTEX Coast Station (ID)</b>	<b>Position</b>	<b>Range (NM)</b>	<b>kHz</b>	<b>Transmitter Identification (B<sub>1</sub>) Character</b>	<b>Broadcast Time (UTC)</b>	
	<b>Naha (JNB)</b>	26-05N 127-40E	400	424	G (Japanese)	00, 04, 08, 12, 16, 2000	
				518	G	01, 05, 09, 13, 17, 2100	
	<i>Ice and tsunami warnings issued when needed.</i>						
	<b>Otaru (JNL)</b>	43-19N 140-27E	400	424	J (Japanese)	00, 04, 08, 12, 16, 2051	
				518	J	01, 05, 09, 13, 17, 2130	
	<i>Ice and tsunami warnings issued when needed.</i>						
	<b>Yokohama (JGC)</b>	35-14N 139-55E	400	424	I (Japanese)	00, 04, 08, 12, 16, 2034	
				518	I	01, 05, 09, 13, 17, 2120	
	<i>Ice and tsunami warnings issued when needed.</i>						
	Madeira	<b>Porto Santo (CTQ)</b>	33-04N 016-21W		490	M (Portuguese)	01, 05, 09, 13, 17, 2100
518					P	02, 06, 10, 14, 18, 2230	
Phone: +351 212 91 98 01 50, Fax: +351 212 91 98 01 69							
Malaysia	<b>Miri (9WR)</b>	04-25N 114-01E	350	518	T	03, 07, 11, 15, 19, 2310	
	<b>Penang (9MG)</b>	05-26N 100-24E	350	518	U	03, 07, 11, 15, 19, 2320	
	<b>Sandakan (9WS)</b>	05-54N 118-00E	350	518	S	03, 07, 11, 15, 19, 2300	
Malta	<b>Malta (9HD)</b>	35-59N 014-32E	350	518	T	03, 07, 11, 15, 19, 2310	
Mauritius	<b>Mauritius (3BM)</b>	20-11S 057-28E	400	518	C	00, 04, 08, 12, 16, 2020	
	Phone: +91 135 2747368, Fax: +91 135 2748373, E-mail: <a href="mailto:incho@dataone.in">incho@dataone.in</a> , <a href="mailto:incho_marinesafety@dataone.in">incho_marinesafety@dataone.in</a>						
Morocco	<b>Casablanca (CNP)</b>	33-36N 007-38W	180	518	M	02, 06, 10, 14, 18, 2200	
Namibia	<b>Walvis Bay (V5W)</b>	23-03S 014-38E	378	518	B	00, 04, 08, 12, 16, 2010	
Netherlands	<b>Den Helder (PBK)</b>	52-57N 004-47E		518	P	02, 06, 10, 14, 18, 2230	
Netherlands Antilles	<b>Curacao (PJC)</b>	12-10N 068-52W	400	518	H	01, 05, 09, 13, 17, 2110	
	MMSI: 003061000 Phone: +559 94637733, Fax: +559 94637950						
Nigeria	<b>Lagos (5OW)</b>	06-26N 003-19E		518	S	03, 07, 11, 15, 19, 2300	
	<b>Port Harcourt (5OZ)</b>	04-23N 007-10E		518	E	00, 04, 08, 12, 16, 2040	
North Korea	<b>Hungnam (HMH)</b>	39-50N 127-41E		490	E (Korean)	00, 04, 08, 12, 16, 2240	
				518	E	00, 04, 08, 12, 18, 2240	
	<b>Pyongyang (HMZ)</b>	39-00N 125-43E		490	D (Korean)	00, 04, 08, 12, 16, 2230	
				518	D	00, 04, 08, 12, 16, 2230	

**RADIO NAVIGATIONAL WARNINGS**

<b>300C.2 Worldwide NAVTEX Stations</b>						
<b>Country</b>	<b>NAVTEX Coast Station (ID)</b>	<b>Position</b>	<b>Range (NM)</b>	<b>kHz</b>	<b>Transmitter Identification (B<sub>1</sub>) Character</b>	<b>Broadcast Time (UTC)</b>
Norway	<b>Bodo (LGP)</b>	67-16N 014-23E	450	518	B	00, 04, 08, 12, 16, 2010
	Phone: +47 75 52 89 25, Fax: +47 75 52 58 96, E-mail: <a href="mailto:bodo.radio@telenor.com">bodo.radio@telenor.com</a>					
	<b>Orlandet (LGD)</b>	63-40N 009-33E	450	518	N	02, 06, 10, 14, 18, 2210
	<b>Rogaland (LGQ)</b>	58-39N 005-36E	450	518	L	01, 05, 09, 13, 17, 2150
	<b>Vardo (LGV)</b>	70-22N 031-06E	450	518	V	03, 07, 11, 15, 19, 2330
	Phone: +47 75 52 89 25, Fax: +47 75 52 58 96, E-mail: <a href="mailto:bodo.radio@telenor.com">bodo.radio@telenor.com</a>					
Oman	<b>Muscat (A4M)</b>	23-36N 058-30E	270	518	M	02, 06, 10, 14, 18, 2200
Pakistan	<b>Karachi (ASK)</b>	24-51N 067-03E	400	518	P	02, 06, 10, 14, 18, 2230
Peru	<b>Callao (OBC-3)</b>	12-02S 077-07W	400	518	U	03, 07, 11, 15, 19, 2320
	Phone: (01) 420-0177/9999-25383					
	<b>Mollendo (OBF-4)</b>	17-01S 072-01W	400	518	W	03, 07, 11, 15, 19, 2340
	Phone: (054) 53-4383/9590-36759					
	<b>Paita (OBY-2)</b>	05-05S 081-07W	400	518	S	03, 07, 11, 15, 19, 2300
Phone: (073) 21-1670/9695-20961						
Philippines	<b>Davao (DWT)</b>	07-04N 125-36E	320	518	K	01, 05, 09, 13, 17, 2140
	<b>Manila (DZS)</b>	14-35N 121-03E	320	518	J	01, 05, 09, 13, 17, 2130
	<b>Puerto Princesa (DVS)</b>	09-44N 118-43E	320	518	I	01, 05, 09, 13, 17, 2120
Portugal	<b>Monsanto (CTV)</b>	38-44N 009-11W	520	490	G (Portuguese)	01, 05, 09, 13, 17, 2100
				518	R	02, 06, 10, 14, 18, 2250
	Phone: +351 217 78 67 56, Fax: +351 217 78 67 56					
Romania	<b>Constanza (YQV)</b>	44-06N 028-37E	400	490	G (Romanian)	01, 05, 09, 13, 17, 2150
Russian Federation	<b>Archangel (UGE)</b>	64-33N 040-32E	300	518	L	00, 04, 08, 12, 16, 2050
	<b>Astrakhan (UJB)</b>	46-18N 047-58E	250	518	W	03, 07, 11, 15, 19, 2340
Russian Federation	<b>Kholmok (UFO)</b>	47-02N 142-03E	300	518	B	00, 04, 08, 12, 16, 2010
	<b>Magadan (UIB)</b>	59-41N 150-09E	120	518	D	00, 04, 08, 12, 16, 2030

## RADIO NAVIGATIONAL WARNINGS



300C.2 Worldwide NAVTEX Stations							
Country	NAVTEX Coast Station (ID)	Position	Range (NM)	kHz	Transmitter Identification (B <sub>1</sub> ) Character	Broadcast Time (UTC)	
	<b>Murmansk (UHY)</b>	68-46N 032-58E	300	518	K	00, 04, 08, 12, 16, 2020	
	<b>Novorossiysk (UDN)</b>	44-36N 037-58E	300	518	A	03, 07, 11, 15, 19, 2300	
	<b>Okhotsk (UCV-2)</b>	59-22N 143-12E	300	518	G	01, 05, 09, 13, 17, 2100	
	<b>Petropavlovsk (UBE-2)</b>	53-15N 158-25E	300	518	C	00, 04, 08, 12, 16, 2020	
	<b>Vladivostok (UIK)</b>	43-23N 131-54E	230	518	A	00, 04, 08, 12, 16, 2000	
Saudi Arabia	<b>Jeddah (HZH)</b>	21-23N 039-10E	390	518	H	07, 13, 1905	
Senegal	<b>Dakar (6VA)</b>	14-46N 017-20W	200	490	M	02, 06, 10, 14, 18, 2200	
				518	C	00, 04, 08, 12, 16, 2020	
Singapore	<b>Singapore (9VG-49)</b>	01-21N 103-59E	400	518	C	00, 04, 08, 12, 16, 2020	
South Africa	<b>Cape Town (ZSC)</b>	33-40S 018-43E	300	518	C	00, 04, 08, 12, 16, 2020	
	<b>Durban (ZSD)</b>	29-48S 030-49E	300	518	O	02, 06, 10, 14, 18, 2220	
	<b>Port Elizabeth (ZSQ)</b>	34-02S 025-33E	300	518	I	01, 05, 09, 13, 17, 2120	
South Korea	<b>Chukpyon (HL)</b>	37-03N 129-26E		490	V	03, 07, 11, 15, 19, 2330	
				518	V	03, 07, 11, 15, 19, 2330	
	<b>Pyonsan (HL)</b>	35-36N 126-29E		490	W	03, 07, 11, 15, 19, 2340	
				518	W	03, 07, 11, 15, 19, 2340	
Spain	<b>Cabo de la Nao (EAV)</b>	38-43N 000-09E	300	490	M (Spanish)	02, 06, 10, 14, 18, 2200	
				518	X	03, 07, 11, 15, 19, 2350	
	<b>Coruna (EAR)</b>	43-22N 008-27W	400	490	W (Spanish)	03, 07, 11, 15, 19, 2340	
				518	D	00, 04, 08, 12, 16, 2030	
	MMSI: 2240992, Phone: +34 981 20 95 48, Fax: +34 981 20 95 18						
	<b>Tarifa (EAC)</b>	36-01N 005-35W	400	490	T (Spanish)	03, 07, 11, 15, 19, 2310	
518				G	01, 05, 09, 13, 17, 2100		
MMSI: 2240994, Telex: +34 926 68 47 40, Phone: +34 926 68 47 40, Fax: +34 956 68 06 06							
Svalbard	<b>Svalbard (LGS)</b>	78-04N 013-37E		518	A	00, 04, 08, 12, 16, 2000	
	Phone: +47 75 52 89 25, Fax: +47 75 52 58 96, E-mail: <a href="mailto:bodo.radio@telenor.com">bodo.radio@telenor.com</a>						
Sweden	<b>Hanosand (SAH)</b>	64-28N 021-36E	300	518	H	01, 05, 09, 13, 17, 2110	

### RADIO NAVIGATIONAL WARNINGS

300C.2 Worldwide NAVTEX Stations							
Country	NAVTEX Coast Station (ID)	Position	Range (NM)	kHz	Transmitter Identification (B <sub>1</sub> ) Character	Broadcast Time (UTC)	
	<b>Stockholm (SDJ)</b>	55-29N 014-19E	300	518	J	01, 05, 09, 13, 17, 2130	
	<b>Varberg (SAS)</b>	57-07N 012-24E	300	518	I	01, 05, 09, 13, 17, 2120	
Taiwan	<b>Chi-Lung (XSX)</b>	25-09N 121-44E		518	P	06, 14, 2230	
	<b>Linyan (XSW)</b>	22-29N 120-25E		518	P	02, 10, 1800	
	<i>Broadcasts are remotely controlled from Chi-Lung.</i>						
Thailand	<b>Bangkok (HAS)</b>	13-01N 100-01E	200	518	F	00, 04, 08, 12, 16, 2050	
Tunisia	<b>Tunis (3VX)</b>	36-53N 010-11E		518	V	03, 07, 11, 15, 19, 2330	
Turkey	<b>Antalya (TAL)</b>	36-09N 032-26E		490	D (Turkish)	00, 04, 08, 12, 16, 2030	
				518	F	00, 04, 08, 12, 16, 2050	
	<b>Istanbul (TAH)</b>	41-04N 028-57E	250-400	490	B (Turkish)	00, 04, 08, 12, 16, 2010	
				518	D	00, 04, 08, 12, 16, 2030	
	<b>Izmir (TAN)</b>	38-16N 026-16E	250-400	490	C (Turkish)	00, 04, 08, 12, 16, 2020	
				518	D	01, 05, 09, 13, 17, 2120	
	<b>Samsun (TAF)</b>	41-23N 036-11E	250-400	490	A (Turkish)	00, 04, 08, 12, 16, 2000	
				518	E	00, 04, 08, 12, 16, 2040	
Ukraine	<b>Kerch (UUO)</b>	45-22N 036-29E	120	490	U	03, 07, 11, 15, 19, 2320	
				518	G	01, 05, 09, 13, 17, 2100	
	<b>Odessa (UUT)</b>	46-29N 030-44E	280	490	X	03, 07, 11, 15, 19, 2350	
				518	C	00, 04, 08, 12, 16, 2020	
United Kingdom	<b>Cullercoats (GCC)</b>	55-02N 001-26W	270	490	U	07, 1920	
				518	G	01, 05, 09, 13, 17, 2100	
	<b>Niton (GNI)</b>	50-35N 001-18W	270	490	I	05, 1720	
					T	03, 07, 11, 15, 19, 2310	
					518	E	00, 04, 08, 12, 16, 2040
					K	01, 05, 09, 13, 17, 2140	
	<b>Portpatrick (GPK)</b>	54-51N 005-07W	270	490	C	04, 08, 2020	
				518	O	02, 06, 10, 14, 18, 2220	
Uruguay	<b>La Paloma (CWM-27)</b>	34-40S 054-09W	280	490	A (Spanish)	00, 04, 08, 12, 16, 2000	
				518	F	00, 04, 08, 12, 16, 2050	
	Phone: (598-2) 309 775/3861, Fax: (598-2) 307 1777						

**RADIO NAVIGATIONAL WARNINGS**

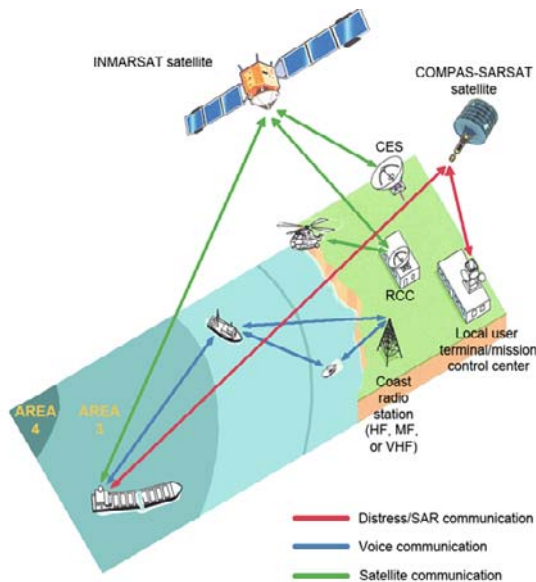
<b>300C.2 Worldwide NAVTEX Stations</b>						
<b>Country</b>	<b>NAVTEX Coast Station (ID)</b>	<b>Position</b>	<b>Range (NM)</b>	<b>kHz</b>	<b>Transmitter Identification (B<sub>1</sub>) Character</b>	<b>Broadcast Time (UTC)</b>
Vietnam	<b>Da Nang (XVT)</b>	16-04N 108-13E	400	518	K	01, 05, 09, 13, 17, 2140
	<b>Hai Phong (XVG)</b>	20-44N 106-44E	400	490	W (Vietnamese)	03, 07, 11, 15, 19, 2340
	<b>Ho Chi Minh Ville (XVS)</b>	10-47N 106-40E	400	518	X	03, 07, 11, 15, 19, 2350

<b>300C.3 INMARSAT-C Coastal Warnings</b>			
<b>Country</b>	<b>Warning Name</b>	<b>Coverage</b>	<b>Satellite and Times (UTC)</b>
Australia	AUSCOAST		IOR, POR: 0700, 1900
	Sea Safety		
Brazil	NAVAREA V N		AOR-E: 0730, 1930
	NAVAREA V E		
	NAVAREA V S		
	NAVAREA V I		
New Zealand	Coastal Navigation Warning (CNW)	New Zealand waters	POR: 0900, 2100
	Maritime New Zealand (MNZ)	New Zealand waters	



## RADIO NAVIGATIONAL WARNINGS

### 300D. NAVAREA/METAREA Warnings (Sea Areas A3 and A4)



Sea Area 3 is the area that lies between latitude 76 North and 76 South outside of Sea Areas 1 and 2 and uses satellite equipment for communications. Sea Area 4 is the area outside of areas 1, 2, & 3. In parts of the Arctic north of 75N warnings are broadcast via High Frequency Narrow Band Direct Printing (HF NBDP). NAVAREA and METAREA broadcasts cover these areas for ocean-going mariners. See Sea Area 2-Coastal, for coastal broadcasts including NAVTEX and coastal warnings issued via INMARSAT SafetyNET.

### 300E. NAVAREA Messages (Sea Areas A3 and A4)

#### NAVAREA Message Criteria

As per the International Maritime Organization and the International Hydrographic Organization guidance documentation, the following subjects are suitable for broadcast as a NAVAREA warning:

- casualties to lights, fog signals, buoys and other aids to navigation affecting main shipping lanes;
- the presence of dangerous wrecks in or near main shipping lanes and, if relevant, their marking;
- establishment of major new aids to navigation or significant changes to existing ones when such establishment or change, might be misleading to shipping;
- the presence of large unwieldy tows in congested waters;
- drifting hazards (including derelict ships, ice, mines, containers, other large items, etc);
- areas where search and rescue (SAR) and anti pollution operations are being carried out (for avoidance of such areas);
- the presence of newly discovered rocks, shoals, reefs and wrecks likely to constitute a danger to shipping, and, if relevant, their making;
- unexpected alteration or suspension of established routes;
- cable or pipe laying activities, the towing of large submerged objects for research or exploration purposes,
- the employment of manned or unmanned submersibles, or other underwater operations constituting potential dangers in or near shipping lanes;
- the establishment of research or scientific instruments in or near shipping lanes;
- the establishment of offshore structures in or near shipping lanes;
- significant malfunctioning of radio-navigation services and shore-based maritime safety information radio or satellite services;
- information concerning special operations which might affect the safety of shipping, sometimes over wide areas, e.g. naval exercises, missile firings, space missions, nuclear tests, ordnance dumping zones etc.;
- acts of piracy and armed robbery against ships;
- tsunamis and other natural phenomena such as abnormal changes to sea level;
- World Health Organization (WHO) health advisory information; and
- security related requirements.

It is important that where the degree of hazard is known, this information is included in the relevant warning. Whenever possible such warnings should be originated not less than five days in advance of the scheduled event and reference may be made to relevant national publications in the warning.

Links to NAVAREA web sites can be found at:

[http://www.iho-ohi.net/mtg\\_docs/com\\_wg/CPRNW/CPRNW\\_Misc/RNW\\_on\\_the\\_web.htm](http://www.iho-ohi.net/mtg_docs/com_wg/CPRNW/CPRNW_Misc/RNW_on_the_web.htm)

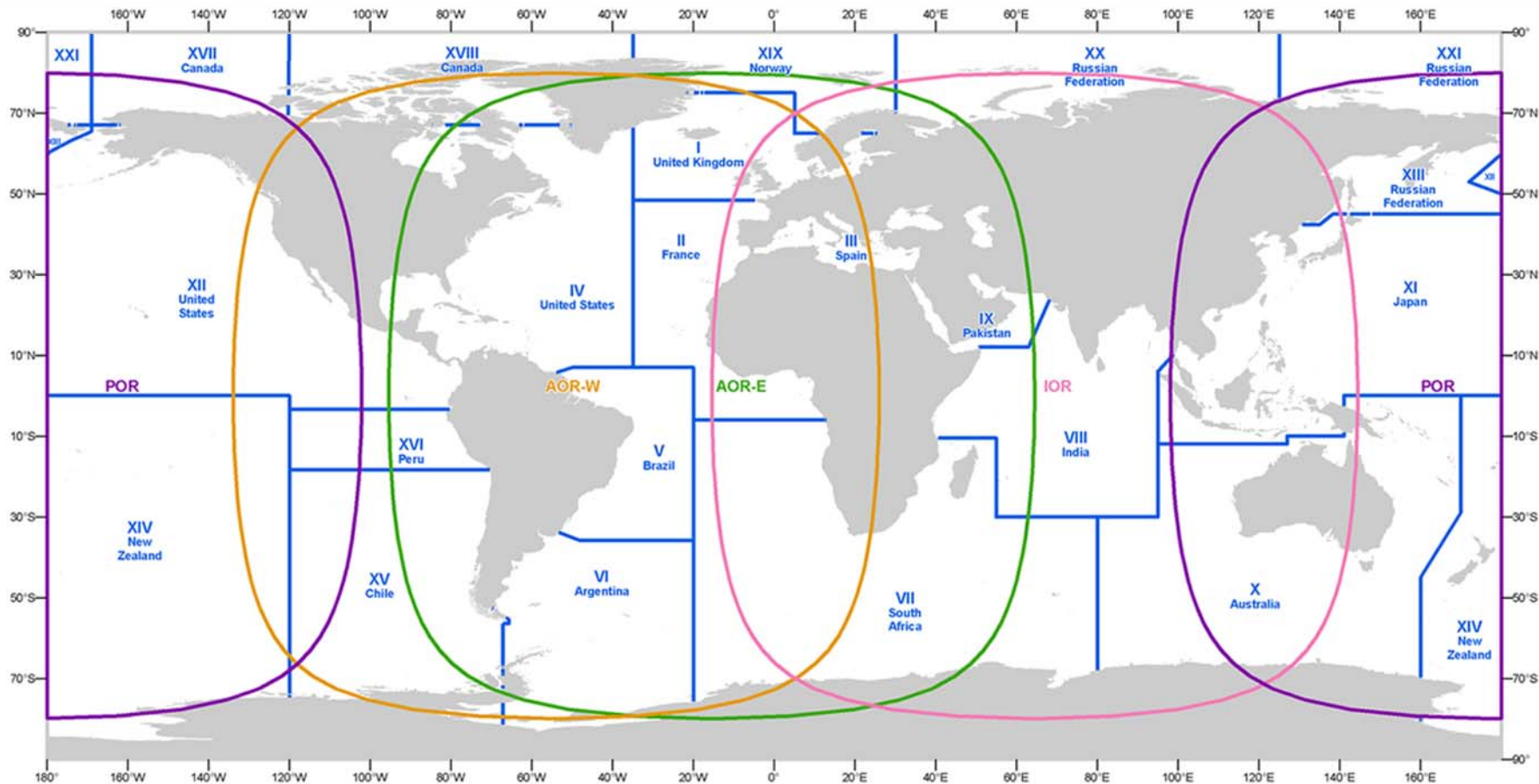
*Note 1: Some NAVAREAs are not available online*

*Note 2: The web site for NAVAREA IV & XII is only updated M-F, excluding weekends and Federal Holidays*

*Note 3: The navigational warnings obtained using websites does not relieve Masters/Captains of the requirement to receive Navigational Warnings via IMO/IHO approved broadcast systems, as websites are not continuously updated and not necessarily monitored for correctness*

## RADIO NAVIGATIONAL WARNINGS

INMARSAT-C LES Stations					
Satellite	SAC	Name of Station	Location	Operator	LES ID
AOR-E	41	Goonhilly	50-02-53N 005-10-55W	Stratos	102
AOR-E	41	Southbury	41-27-04N 073-17-20W	Vizada	101
AOR-E	41	Station 12 (Burum)	53-17-04N 006-12-55E	Stratos	112
AOR-E	41	Thermopylae	38-49-22N 022-41-10E	Otesat	120
AOR-E	41	Aussaguel	43-25-45N 001-29-52E	Vizada	121
AOR-E	41	Fucino	41-58-44N 013-36-07E	Telecom Italia	105
AOR-E	41	Yamagushi	34-13-00N 131-33-00E	KDDI	103
AOR-E	41	Nudol	56-06-00N 036-31-00E	Morsviasputnik	117
AOR-E	41	Eik (Oslo)	58-32-18N 006-28-03E	Vizada	104
AOR-W	41	Goonhilly	50-02-53N 005-10-55W	Stratos	002
AOR-W	41	Southbury	41-27-04N 073-17-20W	Vizada	001
AOR-W	41	Station 12 (Burum)	53-17-04N 006-12-55E	Stratos	012
AOR-W	41	Yamagushi	34-13-00N 131-33-00E	KDDI	003
AOR-W	41	Aussaguel	43-25-45N 001-29-52E	Vizada	021
AOR-W	41	Eik (Oslo)	58-32-18N 006-28-03E	Vizada	004
IOR	41	Yamagushi	34-13-00N 131-33-00E	KDDI	303
IOR	41	Eik (Oslo)	58-32-18N 006-28-03E	Vizada	304
IOR	41	Thermopylae	38-49-22N 022-41-10E	Otesat	305
IOR	41	Pune	19-09-03N 073-57-26E	Tata Communications	306
IOR	1241	Station 12 (formerly Perth)	53-17-04N 006-12-55E	Stratos	312
IOR	41	Aussaguel	43-25-45N 001-29-52E	Vizada	321
IOR	41	Sentosa	01-14-51N 103-50-07E	Singapore Telecom	328
IOR	41	Beijing	40-07-00N 116-13-40E	MCN	311
IOR	41	Fucino	41-58-44N 013-36-07E	Telecom Italia	335
IOR	41	Hai Phong	20-48-03N 106-42-38E	Vishipel	330
IOR	41	Nudol	56-06-00N 036-31-00E	Morsviasputnik	317
IOR	41	Goonhilly	50-02-53N 005-10-55W	Stratos	302
IOR	41	Santa Paula	34-24-06N 119-04-24W	Vizada	301
POR	41	Yamaguchi	34-13-00N 131-33-00E	KDDI	203
POR	41	Santa Paula	34-24-06N 119-04-24W	Vizada	201
POR	41	Sentosa	01-14-51N 103-50-07E	Singapore Telecom	210
POR	1241	Station 12 (formerly Perth)	53-17-04N 006-12-55E	Stratos	212
POR	41	Auckland	36-44-53S 174-41-45E	Stratos	202
POR	41	Beijing	40-07-00N 116-13-40E	MCN	211
POR	41	Nakhodka	42-51-32N 132-47-25E	Morsviasputnik	217
POR	41	Eik (Oslo)	58-32-18N 006-28-03E	Vizada	204
POR	41	Aussaguel	43-25-45N 001-29-52E	Vizada	221



World-Wide Navigational Warning Service NAVAREA Coverage

WWNWS NAVAREA Boundaries and Contact Information				
NAVAREA	Coverage	Co-ordinator	Satellite & Times	Report MSI (Maritime Safety Information)
I	North Atlantic Ocean, Greenland coastline along 035W meridian until 48-27N then east to French coastline. 75N 005W south until 65N east to Norwegian coastline (including the North Sea and Baltic Sea sub-area)	United Kingdom	AOR-E: 0530, 1730	<b>UKHO Radio Navigational Warnings</b> Phone: +44 (0) 1823 353448 Fax: +44 (0) 1823 322352 E-mail: <a href="mailto:navwarnings@btconnect.com">navwarnings@btconnect.com</a>

**WWNWS NAVAREA Boundaries and Contact Information**

NAVAREA	Coverage	Co-ordinator	Satellite & Times	Report MSI (Maritime Safety Information)
II	Atlantic waters east of 35W, from 7N to 48-27N, and east of 20W from 7N to 6S, including the Straits of Gibraltar	France	AOR-E, AOR-W, IOR: 1630	<b>NAVAREA II</b> , Service hydrographique et oceanographique de la marine (SHOM), 13 rue du Chatellier-B.P. 30316, 29603 Brest Cedex Telex: +42 940861 Phone: +33 (0) 2 98 22 16 67 Fax: +33 (0) 2 98 22 14 32 E-mail: <a href="mailto:coord.navarea2@shom.fr">coord.navarea2@shom.fr</a>
III	The Mediterranean and Black Seas, east of the Straits of Gibraltar	Spain	AOR-E: 1200, 2400	<b>Hazard Notice of Navigation (Office of Notices to Mariners)</b> Telex: 76,102- MEDCO-E Phone: +34 956 599 409 Fax: +34 956 599 396 E-mail: <a href="mailto:avisosihm@fn.mde.es">avisosihm@fn.mde.es</a>
IV	Western North Atlantic Ocean eastwards from the North American coast to 35W, from 7N to 67N, including the Gulf of Mexico and Caribbean Sea	USA	AOR-W: 1000, 2200	<b>NGA Navsafety</b> NGA Maritime Safety Office, Attn: WWNWS Mail Stop: N64-SH, 7500 Geoint Dr, Springfield, VA 22150-7500 Phone: 1 571 557 6841, 1 800 362 6289 Fax: 1 571 558 3426 E-mail: <a href="mailto:navsafety@nga.mil">navsafety@nga.mil</a>
V	Atlantic waters west of 20W from 35-50S to 7N, narrowing in the coastal strips at the extremities to Uruguay/Brazil frontier in 33-45S and the French Guyane/Brazil frontier in 4-30N	Brazil	AOR-E: 0030, 1230	<b>NAVAREA V Co-ordinator</b> E-mail: <a href="mailto:cartografia@chm.mar.mil.br">cartografia@chm.mar.mil.br</a>
VI	South Atlantic & Southern Oceans, south of 35-50S, from 20W to the longitude of Cape Horn, 67-16W	Argentina	AOR-W: 0200, 1400	<b>Servicio de Hidrografia Naval</b> Av. Montes de Oca 2124, CP1270ABV Buenos Aires, Rep. Argentina Phone: (54-11) 4301 0061, (54-11) 4301 0067 Fax: (54-11) 4301 2249 E-mail: <a href="mailto:snautica@hidro.gov.ar">snautica@hidro.gov.ar</a>
VII	South Atlantic and Southern Oceans south of 6S from 20W to the coast of Africa, thence south to the Cape of Good Hope; the South Indian and Southern Oceans south of 10-30S from the Cape to 55E, thence south of 30S to 80E	South Africa	AOR-W, IOR: 1940	<b>SA Navy NAVAREA VII Co-ordinator</b> Hydrographer, Private Bag X1, Tokai 7966, South Africa Telex: 95 527946 (Ans back: NAVY SA) Fax: 021 787 2228 E-mail: <a href="mailto:ncom.cape@sanavy.co.za">ncom.cape@sanavy.co.za</a>

\* High Frequency Narrow Band Direct Printing (HF NBDP) is used for areas outside of INMARSAT range

**WWNWS NAVAREA Boundaries and Contact Information**

NAVAREA	Coverage	Co-ordinator	Satellite & Times	Report MSI (Maritime Safety Information)
VIII	The East African coast along 10-30S, thence to 55E, to 30S, to 95E, to 6N, thence NE'wards to the Myanmar/Thailand frontier in 10N 98-30E	India	IOR: 1000	<b>National Hydrographic Office</b> , Maritime Safety Information Service 107-A, Rajpur Road, Dehradun-248001, India Phone: +91 135 2747360 65 Fax: +91 135 2748373 E-mail: <a href="mailto:ncdm-inho-navy@nic.in">ncdm-inho-navy@nic.in</a>
IX	The Red Sea, Gulf of Aden, Arabian Sea and Persian Gulf, north of Area VIII	Pakistan	IOR: 0800	<b>Hydrographic Department, NAVAREA IX</b> , Naval Headquarters 11, Liaquat Barracks, Karachi-75530, Pakistan Phone: 92 021 48506151-4 Fax: 92 021 9201623 or 9203246 E-mail: <a href="mailto:hydrogk@paknavy.gov.pk">hydrogk@paknavy.gov.pk</a>
X	The South Indian and Southern Oceans east of 80E and south of 30S to 95E, to 12S, to 127E; thence the Timor Sea, South Pacific and Southern Oceans south of 10S to 141E to the equator, to 170E, to 29S, thence SW'wards to 45S in 160E, then the 160E meridian	Australia	IOR, POR: 0700, 1900	<b>NAVAREA X</b> AMSA, GPO Box 2181, Canberra City, ACT 2601 Phone: 1800 641 792, +612 6230 6811 E-mail: go to <a href="http://www.amsa.gov.au/contact_us">www.amsa.gov.au/contact_us</a>
XI	North Western Pacific: The Indian Ocean, China Sea and North Pacific Ocean northward of Area X and on the equator to longitude 180, eastward of Area VIII and the Asian continent to the North Korean/Russian Federation frontier in 42-30N 130E, thence to 135E, NE'wards to 45N 138E, to 45N 180	Japan	IOR, POR: 0005, 0805, 1205	<b>NAVAREA XI, Navigational Warnings</b> Phone: 03 5500 7165 E-mail: <a href="mailto:tuho@jodc.go.jp">tuho@jodc.go.jp</a>
XII	Eastern part of Pacific Ocean, west of the North and South American coast and east of 120W, from 3-24S to the equator, thence to 180 to 50N thence NW'wards to 53N 172E, NE'wards following the marine frontier between United States and Russian Federation waters to 67N	USA	AOR-W, POR: 1030, 2230	<b>NGA Navsafety</b> NGA Maritime Safety Office, Attn: WWNWS Mail Stop: N64-SH, 7500 Geoint Dr, Springfield, VA 22150-7500 Phone: 1 571 557 6841, 1 800 362 6289 Fax: 1 571 558 3426 E-mail: <a href="mailto:navsafety@nga.mil">navsafety@nga.mil</a>

\* High Frequency Narrow Band Direct Printing (HF NBDP) is used for areas outside of INMARSAT range

**WWNWS NAVAREA Boundaries and Contact Information**

NAVAREA	Coverage	Co-ordinator	Satellite & Times	Report MSI (Maritime Safety Information)
XIII	Sea areas enclosed north of area XI and west of Area XII; also all Arctic waters from 170W westwards to 20E	Russian Federation	POR: 0930, 2130	<b>NAVAREA XIII</b> , Chief, Notice to Mariners Division Department of Navigation and Oceanography, Ministry of Defense, 8, 11 liniya, B-34, St Petersburg, 199034, Russian Federation Phone/Fax: +7 812 717 59 00 E-mail: <a href="mailto:navarea13@gunio.ru">navarea13@gunio.ru</a>
XIV	The South Pacific and Southern Oceans, along equator to 170E south to 29S, 45S 160E south to Antarctica; The equator south along 120 W meridian to Antarctica	New Zealand	POR: 0900, 2100	<b>NAVAREA XIV Co-ordinator</b> Phone: +64 4 460 0110 Fax: +64 4 460 0161 E-mail: <a href="mailto:NAVAREAXIV@linz.govt.nz">NAVAREAXIV@linz.govt.nz</a>
XV	The South Pacific and Southern Oceans south of 18-21S following the coast of Chile to the longitude of Cape Horn in 67-16W and 120W	Chile	AOR-W: 0210, 1410	<b>NAVAREA XV</b> Servicio Hidrografico y Oceanografico de la Armada de Chile, Casilla 324, Valparaiso, Chile Phone: +56 32 226666, 2266520 Fax: +56 32 2266542 E-mail: <a href="mailto:shoa@shoa.cl">shoa@shoa.cl</a>
XVI	The South Pacific Ocean between 18-21S and 3-24S bounded by the coast of Peru and 120W	Peru	AOR-W: 0519, 1119, 1719, 2319	<b>Chief of NAVAREA Office</b> Phone: (51) 613-6767 Annex 6480 Fax: (51) 613-6759 E-mail: <a href="mailto:rrojas@dhn.mil.pe">rrojas@dhn.mil.pe</a>
XVII	The Arctic Ocean, 67-00N 168-58W east to Alaskan coast and north to 90-00N; 90N, 120W south to Canadian coastline	Canada	POR: 1130, 2330 HF(NBDP)*: 0330, 1530	<b>MCTS Iqaluit (Jun-Nov)</b> PO Box 189, Iqaluit, NV, X0A 0H0 Phone: 867 979 5269 Fax: 867 979 4264 <b>Northern Canada Vessel Traffic Services Zone (NORDREG)</b> Telex: 063 15529 Phone: 867 979 5724 Fax: 867 979 4264 E-mail: <a href="mailto:iqanordreg@innav.gc.ca">iqanordreg@innav.gc.ca</a> <b>MCTS Prescott (off season contact)</b> Phone: 613 925 4519 Fax: 613 925 4519 E-mail: <a href="mailto:iqanordreg@innav.gc.ca">iqanordreg@innav.gc.ca</a>
XVIII	The Arctic Ocean, 67-00N 168-58W east to Alaskan coast and north to 90-00N; 90N, 120W south to Canadian coastline		AOR-W: 1100, 2300 HF(NBDP)*: 0330, 1530	

\* High Frequency Narrow Band Direct Printing (HF NBDP) is used for areas outside of INMARSAT range

**WWNWS NAVAREA Boundaries and Contact Information**

NAVAREA	Coverage	Co-ordinator	Satellite & Times	Report MSI (Maritime Safety Information)
XIX	The Arctic Ocean, borders XVII at 035W; Norwegian coastline 65N west to 65N 005W, north to 75N, west to Greenland coastline; the border between Norway and Russia to 69-47-68N 030-49-16E, 69-58-48N 031-06-24E, 70-22-00N 031-43-00E, 71-00-00N 030-00-00E north to 90N	Norway	AOR-E: 0630, 1830	<b>NAVAREA XIX</b> , Vardoe VTS Center Phone: +47 78 94 30 00 Fax: +47 78 98 98 99 E-mail: <a href="mailto:navarea19@kystverket.no">navarea19@kystverket.no</a>
XX	The Arctic Ocean, from the border between Norway and Russia to 69-47-68N 030-49-16E, 69-58-48N 031-06-24E, 70-22-00N 031-43-00E, 71-00-00N 030-00-00E north to 90N. 90N south to Russian coastline along 125E meridian	Russian Federation	IOR: 0530, 1730 HF(NBDP)*: 0530, 1730	<b>NAVAREA XX and NAVAREA XXI</b> The Russian Federation, Chief of MSI Division, Federal State Unitary Hydrographic Department, Moskovsky pr. 12, St Petersburg, 190031, Russian Phone/Fax: +7 812 570 3466 E-mail: <a href="mailto:ibm@hydrograph.spb.su">ibm@hydrograph.spb.su</a>
XXI	The Arctic Ocean, from Russian coastline north along 125E meridian to 90N, 90N 168-58W south along 168-58W meridian to 67N, west to Russian coastline		POR: 0630, 1830 HF(NBDP)*: 0630, 1830	

\* High Frequency Narrow Band Direct Printing (HF NBDP) is used for areas outside of INMARSAT range

IHO Commission on Promulgation of Radio Navigational Warnings—Chairman contact information:

Address: IHO Commission on Promulgation of Radio Navigational Warnings Chairman, 4 quai Antoine 1er, B.P. 445, MC 98011 MONACO CEDEX, Principality of Monaco

Telex: 479164 MC INHORG

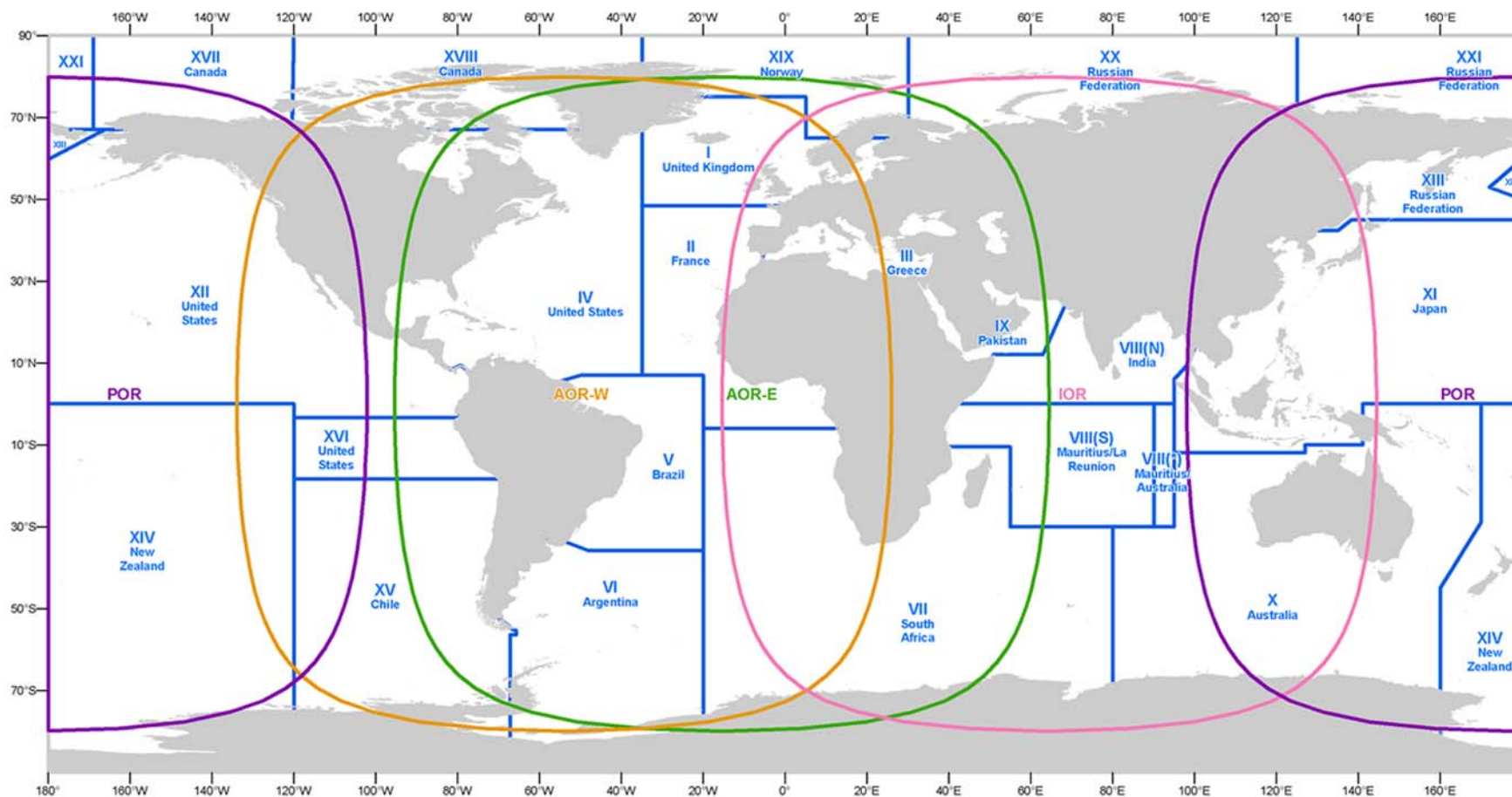
Telephone: 337 93 10 81 00

Facsimile: 337 93 10 81 40

E-mail: [info@ihb.mc](mailto:info@ihb.mc)

Web site: <http://www.iho.shom.fr>

300F. METAREA Messages (Sea Areas A3 and A4)



World-Wide Navigational Warning Service METAREA Coverage

Marine meteorological information is broadcast to ships at sea using the INMARSAT-C SafetyNET service using Enhanced Group Calling (EGC). There are 21 METAREAs and four INMARSAT-C satellites for world-wide coverage.

**To obtain METAREA messages other than automatically via GMDSS:**

Website: <http://weather.gmdss.org>

*Note 1: some METAREAs are not available online*

*Note 2: The meteorological warnings obtained using websites does not relieve Masters/Captains of the requirement to receive Navigational Warnings via IMO/IHO approved broadcast systems, as websites are not continuously updated and not necessarily monitored for correctness*



**WWNWS METAREA Boundaries and Contact Information**

<b>METAREA</b>	<b>Coverage</b>	<b>Co-ordinator</b>	<b>Satellite &amp; Times (UTC)</b>	<b>Contact</b>
I	North Atlantic Ocean, Greenland coastline along 035W meridian until 48-27N then east to French coastline. 75N 005W south until 65N east to Norwegian coastline (including the North Sea and Baltic Sea sub-area)	United Kingdom & Northern Ireland	AOR(E): 0930, 2130	<b>Mr Nick Ashton</b> Address: Met Office, 127 Clerkenwell Rd, London EC1R 5LP, United Kingdom Phone: +44 1392 885402 Fax: +44-20 720 7479 E-mail: <a href="mailto:nick.ashton@metoffice.gov.uk">nick.ashton@metoffice.gov.uk</a>
II	Atlantic waters east of 35W, from 7N to 48-27N, and east of 20W from 7N to 6S, including the Straits of Gibraltar	France	AOR(E/W): 0900, 2100	<b>Mr Henri Savina</b> Address: Meteo-France Direction de la Prevision Division Marine et Oceanographie, 42 avenue Gaspard Coriolis, 31057 Toulouse, Cedex 1, France Phone: +33-5 61 07 82 91 Fax: +33-5 61 07 82 09 E-mail: <a href="mailto:henri.saving@metro.fr">henri.saving@metro.fr</a>
III	The Mediterranean and Black Seas, east of the Straits of Gibraltar	Greece	AOR(E): 1000, 2200	<b>Mr Michael Myrsilidis</b> Head, Marine Meteorology Section, Hellenic National Meteorological Service, El. Venizelou 14, 16777 Athens, Greece Phone: +30 210 9699013 Fax: +30 210 9628952 E-mail: <a href="mailto:mmirsi@hnms.gr">mmirsi@hnms.gr</a>
IV	Western North Atlantic Ocean eastwards from the North American coast to 35W, from 7N to 67N, including the Gulf of Mexico and Caribbean Sea	USA	AOR(W) <sup>1</sup> : 0430, 1030, 1630, 2230	<b>Mr Timothy Rulon</b> Marine & Coastal Weather Services, National Weather Service/NOAA, 1325 East-West Hwy, Silver Spring, MD 20910, USA Phone: +1 301 713 1677 (ext 128) Fax: +1 301 713 1520 E-mail: <a href="mailto:timothy.rulon@noaa.gov">timothy.rulon@noaa.gov</a>
V	Atlantic waters west of 20W from 35-50S to 7N, narrowing in the coastal strips at the extremities to Uruguay/Brazil frontier in 33-45S and the French Guyane/Brazil frontier in 4-30N	Brazil	AOR(E): 0730, 1930	<b>Lieutenant Commander Marcelo Fricks Cavalcante</b> Centro de Hidrografia da Marinha, Divisao de Informacoes Oceanograficas, Rua Barao de Jaceguai S/N, Ponta d'Areia, Niteroi-RJ, CEP 24048-900, Rio de Janeiro, Brazil Phone: (55)(21) 2189 3025 Fax: (55)(21) 2189 3226 E-mail: <a href="mailto:marcelo@chm.mar.mil.br">marcelo@chm.mar.mil.br</a>

<sup>1</sup> High Seas forecasts containing tropical storm warnings also broadcast over AOR-E. Hurricane & Tropical Storm advisories are sent as required, up to 4 times daily per active tropical storm. Tsunami warnings are sent as required on AOR-W and AOR-E.

**WWNWS METAREA Boundaries and Contact Information**

METAREA	Coverage	Co-ordinator	Satellite & Times (UTC)	Contact
VI	South Atlantic & Southern Oceans, south of 35-50S, from 20W to the longitude of Cape Horn, 67-16W	Argentina	AOR(W): 0230, 1730	<b>Mr Claudio David Castro</b> Servicio Meteorologico Nacional, 25 de Mayo 658, 1002 BUENOS AIRES, Argentina Phone: +54 11 5167 6711/09 Fax: +54 11 4555 3808 E-mail: <a href="mailto:aliciagcejas@hotmail.com">aliciagcejas@hotmail.com</a> , <a href="mailto:susyb@smm.gov.ar">susyb@smm.gov.ar</a>
VII	South Atlantic and Southern Oceans south of 6S from 20W to the coast of Africa, thence south to the Cape of Good Hope; the South Indian and Southern Oceans south of 10-30S from the Cape to 55E, thence south of 30S to 80E	South Africa	AOR(E) (west of 20E): 0940, 1940 IOR <sup>2</sup> (east of 20E): 0940, 1940	<b>Mr Johan Stander</b> Regional Manager, South African Weather Service, Head Office, Weather Office, PO Box 21, Cape Town International Airport, Cape Town 7525 South Africa Phone: + 27 (21) 934 0450 (office), + 27 (83) 281 0993 (mobile) Fax: + 27 (21) 934 4590 E-mail: <a href="mailto:johan.stander@weathersa.co.za">johan.stander@weathersa.co.za</a>
VIII(N)	<u>North of the Equator:</u> The area of the Indian Ocean enclosed by lines from the Indo-Pakistan frontier in 23-45N 68E to 12N 63E, thence to Cape Gardafui; the east African coast south to the Equator, thence to 95E, to 6N, thence NE'wards to the Myanmar/Thailand frontier in 10N 98-30E	India	IOR: 0900, 1800	<b>Mr M.C. Rastogi</b> India Meteorological Department, Mausam Bhavan, Lodi Road, NEW DELHI 110 003, India Phone: +91-11 246 2 4486 Fax: +91-11 246 9 9216, +91-11 246 2 3220 E-mail: <a href="mailto:rastogi@indmail.gov.in">rastogi@indmail.gov.in</a>
VIII(S)	<u>South of the Equator:</u> The East African coast from the equator south to 10-30S, thence to 55E, to 30S, to 90E, to the Equator, to the east African coast	Mauritius/ La Reunion (via France)	IOR: 0130, 1330	<b>Mr Mohamudally Beebeejaun</b> , Divisional Meteorologist Mauritius Meteorological Services, Saint Paul Rd, VACOAS, Mauritius Phone: +230 686 1031 Fax: +230 686 1033 E-mail: <a href="mailto:mbeebeejaun@mail.gov.mu">mbeebeejaun@mail.gov.mu</a>
VIII(*)	<u>Tropical Cyclone warnings:</u> East of 90E	La Reunion (via France)	IOR (as needed): 0000, 0600, 1200, 1800	<b>Mr Paul Remois</b> Meteo France, Paris BP 4, 97491 STE. CLOTILDE, France Phone: +33-2 62 92 11 00 Fax: +33-2 62 93 11 47 E-mail: <a href="mailto:paul.remois@meteo.fr">paul.remois@meteo.fr</a>

<sup>2</sup> Forecast for area 30S 50E and 50S 80E and tropical cyclone warnings are prepared by La Reunion.

**WWNWS METAREA Boundaries and Contact Information**

METAREA	Coverage	Co-ordinator	Satellite & Times (UTC)	Contact
IX	The Red Sea, Gulf of Aden, Arabian Sea and Persian Gulf, north of Area VIII	Pakistan	IOR: 0700	<p><b>Mr Sarfaraz Kahn</b>, Director General Pakistan Meteorological Department, University Road, Karachi-75270, Pakistan Phone: 8 499 252 45 11 Fax: 8 499 795 20 90 E-mail: <a href="mailto:arifmehmood1984@hotmail.com">arifmehmood1984@hotmail.com</a>, <a href="mailto:sarfarazmet@hotmail.com">sarfarazmet@hotmail.com</a></p>
X	The South Indian and Southern Oceans east of 80E and south of 30S to 95E, to 12S, to 127E; thence the Timor Sea, South Pacific and Southern Oceans south of 10S to 141E to the equator, to 170E, to 29S, thence SW'wards to 45S in 160E, then the 160E meridian	Australia	IOR: 1030, 2330 POR: 1100, 2300	<p><b>Mr Neal Moodie</b>, National Manager Marine Weather Service, Australian Bureau of Meteorology, 700 Collins St, Docklands, GPO Box 1289, Melbourne, VIC 3001, Australia Phone: +61-3 9 669 4768 Fax: +61-3 9 669 4695 E-mail: <a href="mailto:N.Moodie@bom.gov.au">N.Moodie@bom.gov.au</a></p>
XI	North Western Pacific: The Indian Ocean, China Sea and North Pacific Ocean northward of Area X and on the equator to longitude 180, eastward of Area VIII and the Asian continent to the North Korean/Russian Federation frontier in 42-30N 130E, thence to 135E, NE'wards to 45N 138E, to 45N 180	China	IOR: 0330, 1015, 1530, 2215	<p><b>Mr Bi Baogui</b> China Meteorological Administration, Baishiqiaolu No. 46, 100081 Haidian District, Beijing, China Phone: +86-10 6840 7205 Fax: +86-10 6217 2962 E-mail: <a href="mailto:bibg@cma.gov.cn">bibg@cma.gov.cn</a></p>
		Japan	POR: 0230, 0830, 1430, 2030	<p><b>Mr Naoyuki Hasegawa</b> Head, Office of International Affairs, Japan Meteorological Agency, Tokyo, 1-3-4 Otemachi Chiyoda-ku, 100-8122, Tokyo, Japan Phone: +81-3 3211 4966 Fax: +81-3 3211 2032 E-mail: <a href="mailto:jao-jma@met.kishou.go.jp">jao-jma@met.kishou.go.jp</a></p>
		Australia (south of equator)	POR: 0815, 2015	<p><b>Mr Neal Moodie</b>, National Manager Marine Weather Service, Australian Bureau of Meteorology, 700 Collins St, Docklands, GPO Box 1289, Melbourne, VIC 3001, Australia Phone: +61-3 9 669 4768 Fax: +61-3 9 669 4695 E-mail: <a href="mailto:N.Moodie@bom.gov.au">N.Moodie@bom.gov.au</a></p>

**WWNWS METAREA Boundaries and Contact Information**

<b>METAREA</b>	<b>Coverage</b>	<b>Co-ordinator</b>	<b>Satellite &amp; Times (UTC)</b>	<b>Contact</b>
XII	Eastern part of Pacific Ocean, west of the North and South American coast and east of 120W, from 3-24S to the equator, thence to 180 to 50N thence NW'wards to 53N 172E, NE'wards following the marine frontier between United States and Russian Federation waters to 67N	USA	AOR-W, POR <sup>1</sup> : 0545, 1145, 1745, 2345	<b>Mr Timothy Rulon</b> Marine & Coastal Weather Services, National Weather Service/NOAA, 1325 East-West Hwy, Silver Spring, MD 20910, USA Phone: +1 301 713 1677 (ext 128) Fax: +1 301 713 1520 E-mail: <a href="mailto:timothy.rulon@noaa.gov">timothy.rulon@noaa.gov</a>
XIII	Sea areas enclosed north of NAVAREA XI and west of NAVAREA XII; also all Arctic waters from 170W westwards to 20E	Russian Federation	POR: 0930, 2130	<b>Mr Valeriy Martyschenko</b> , Deputy Director Federal Service for Hydrometeorology and Environmental Monitoring, Moscow, Novovagankovsky Per., 12 Moscow, Russian Federation 123995 Phone: 8 499 252 45 11 Fax: 8 499 795 20 90 E-mail: <a href="mailto:martyschenko@mcc.mecom.ru">martyschenko@mcc.mecom.ru</a>
XIV	The South Pacific and Southern Oceans, along equator 170E south to 29S, 45S 160E south to Antarctica; The equator south along 120 W meridian to Antarctica	New Zealand	POR: 0130 <sup>3</sup> , 0330 <sup>4</sup> , 0930, 1330 <sup>3</sup> , 1530 <sup>4</sup> , 2130	<b>Mr Steve Ready</b> Meteorological Service of New Zealand, 30 Salamanca Rd, Kelburn, Wellington 6012, New Zealand Phone: +64 4 470 0737 Fax: +64 4 473 5231 E-mail: <a href="mailto:steve.ready@metSERVICE.com">steve.ready@metSERVICE.com</a>
XV	The South Pacific and Southern Oceans south of 18-21S following the coast of Chile to the longitude of Cape Horn in 67-16W and 120W	Chile	AOR-W:1845	<b>Captain de Fragata</b> , Gonzalo Espinosa Doggenweiler Jefe Servicio, Meteorologico de la Armada, Subida Cementerio 300, Playa Ancha, Valparaiso, Chile Phone: +56 32 220 8620 Fax: +56 32 814019
XVI	The South Pacific Ocean between 18-21S and 3-24S bounded by the coast of Peru and 120W	USA	AOR-W: 0515, 1115, 1715, 2315	<b>Mr Timothy Rulon</b> Marine and Coastal Weather Services, National Weather Service/National Oceanic and Atmospheric Administration, 1325 East-West Hwy, Silver Spring, MD 20910, USA Phone: +1 301 713 1677 (ext 128) Fax: +1 301 713 1520 E-mail: <a href="mailto:timothy.rulon@noaa.gov">timothy.rulon@noaa.gov</a>

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RADIO NAVIGATIONAL WARNINGS

<sup>1</sup> High Seas forecasts containing tropical storm warnings also broadcast over AOR-E. Hurricane & Tropical Storm advisories are sent as required, up to 4 times daily per active tropical storm. Tsunami warnings are sent as required on AOR-W and AOR-E.

<sup>3</sup> In local time & NZ coast only. The Bass Strait bulletins are Coastal Warnings and Forecasts transmitted on to SafetyNET Coastal Area D in Navarea X.

<sup>4</sup> Storm warnings only.

**WWNWS METAREA Boundaries and Contact Information**

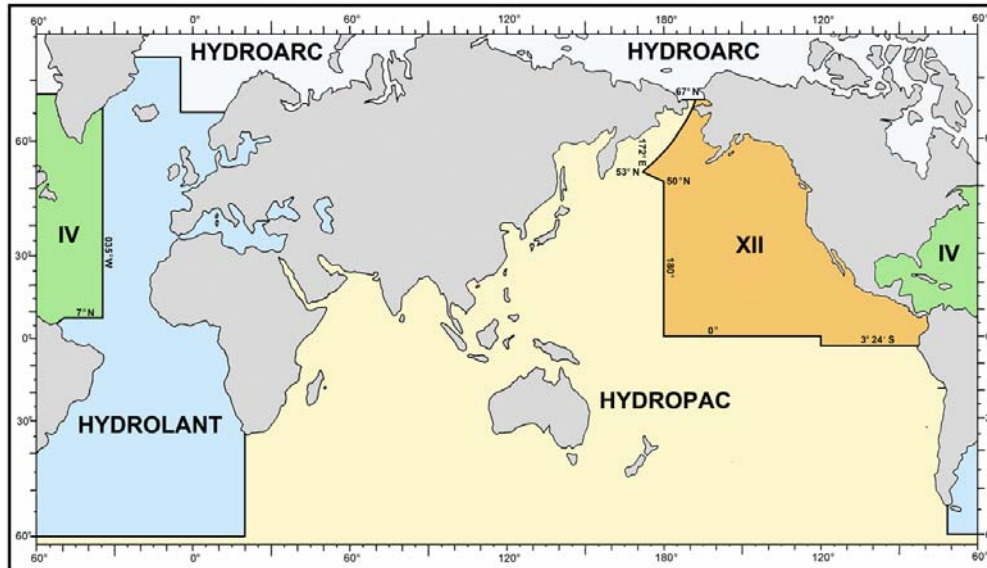
<b>METAREA</b>	<b>Coverage</b>	<b>Co-ordinator</b>	<b>Satellite &amp; Times (UTC)</b>	<b>Contact</b>
XVII	The Arctic Ocean, 67-00N 168-58W east to Alaskan coast and north to 90-00N; 90N, 120W south to Canadian coastline	Canada <sup>5</sup>	POR: 0300, 1500 <b>8416.5 kHz</b> <sup>6</sup> : 0330, 1530	<b>Mr John Parker</b> , Canadian METAREAs Coordinator Meteorological Service of Canada Environment Canada, 45 Alderney Dr, Dartmouth (Nova Scotia) B2Y 2N6, Canada Phone: +1 902 426 3836 Fax: +1 902 490 0259 E-mail: <a href="mailto:john.k.parker@ec.gc.ca">john.k.parker@ec.gc.ca</a>
XVIII	The Arctic Ocean, 90-00N 120-00W south to Canadian coastline; 90N 035-00W, northern boarder of IV is along 67N	Canada	AOR-W: 0300, 1500 <b>8416.5 kHz</b> <sup>7</sup> : 0330, 1530	
XIX	The Arctic Ocean, borders XVII at 035W; Norwegian coastline 65N west to 65N 005W, north to 75N, west to Greenland coastline; the border between Norway and Russia to 69-47-68N 030-49-16E, 69-58-48N 031-06-24E, 70-22-00N 031-43-00E, 71-00-00N 030-00-00E north to 90N	Norway	AOR-E: 1100, 2300	<b>Mr Helge Tangen</b> Norwegian Meteorological Institute, Forecasting Division of Northern Norway, (Vervarslinga for Nord-Norge) P.box 6314, N-9293 Tromso, Norway Phone: +47 77 62 13 00 Fax: +47 77 62 13 01 E-mail: <a href="mailto:helge.tangen@met.no">helge.tangen@met.no</a>
XX	The Arctic Ocean, from the border between Norway and Russia to 69-47-68N 030-49-16E, 69-58-48N 031-06-24E, 70-22-00N 031-43-00E, 71-00-00N 030-00-00E north to 90N. 90N south to Russian coastline along 125E meridian	Russian Federation	IOR, POR: 0600, 1800	<b>Mr Valeriy Martyschenko</b> , Deputy Director Federal Service for Hydrometeorology and Environmental Monitoring, Moscow, Novovagankovsky Per., 12 Moscow, Russian Federation 123995 Phone: 8 499 252 45 11 Fax: 8 499 795 20 90 E-mail: <a href="mailto:martyschenko@mcc.mecom.ru">martyschenko@mcc.mecom.ru</a>
XXI	The Arctic Ocean, from Russian coastline north along 125E meridian to 90N, 90N 168-58W south along 168-58W meridian to 67N, west to Russian coastline			

<sup>5</sup>The USA issues marine forecasts for its jurisdictional coast and offshore waters north of Alaska.

<sup>6</sup>North of 75N and east of 141W (Sea Area A4) are broadcast by Canadian Coast Guard from Iqaluit via High Frequency Narrow Band Direct Printing (HF NBDP) during the operational season.

<sup>7</sup>North of 75N (Sea Area A4) are broadcast by Canadian Coast Guard from Iqaluit via High Frequency Narrow Band Direct Printing (HF NBDP) during the operational season.

300G. Navigational Warnings for the Military



Navigational Warnings for Military Coverage

In support of the Global Maritime Distress and Safety System (GMDSS), Broadcast Warnings are promulgated by the Worldwide Navigational Warning Service (WWNWS) to provide information critical to navigation and safety of life at sea. NGA NAVSAFETY disseminates this information via various message types through the Automated Message Handling System (AMHS) using a Plain Language Address (PLA) to afloat and shore units. There are no specific broadcast times; however, within 30 minutes of receipt of a source message and analysis, it may be broadcast as a NAVAREA IV, HYDROLANT, NAVAREA XII, HYDROPAC and/or HYDROARC warning. Coastal NAVTEX messages and weather forecasts and warnings are not retransmitted via AMHS.

RADIO NAVIGATIONAL WARNINGS

Message Type	Description	To start receiving these messages send (not an email service). Please include the PLA that needs to be added.	
		E-mail to NGA NAVSAFETY at <a href="mailto:navsafety@nga.mil">navsafety@nga.mil</a> requesting to be added to	Message to our PLA "NGA NAVSAFETY (UC)" requesting to be added to
HYDROLANT	For vessels traveling in area shown on graphic above. Distress messages within NAVAREA IV are sent as HYDROLANT messages.	AL 4501 or AIG 4501	AL 4501 or AIG 4501
NAVAREA IV	These are the messages broadcasted on the GMDSS, this doesn't include local and coastal warnings from the U.S. Coast Guard and distress messages.		
HYDROPAC	For vessels traveling in area shown on graphic above, including all of Antarctica. Distress messages within NAVAREA XII are sent as HYDROPAC messages.	AL 4557 or AIG 4557	AL 4557 or AIG 4557
NAVAREA XII	These are the messages broadcasted on the GMDSS, this doesn't include local and coastal warnings from the U.S. Coast Guard and distress messages.		
HYDROARC	For vessels traveling in the Arctic.	HYDROARC distribution	HYDROARC distribution

## RADIO NAVIGATIONAL WARNINGS

### 300H. U.S. Maritime Advisory System

The Maritime Security Inter-agency Policy Committee agreed to an examination of the processes by which the U.S. Government notifies the U.S. maritime industry, including U.S. mariners, of identified threats. A multi-agency examination of the current notification process highlighted the need for an updated, expeditious, inter-agency coordinated U.S. government process for notifying threats to U.S. mariners and other stake holders. The examination which included a review of the now-superseded 1976 Memorandum of Understanding (MOU) between the Departments of State, Defense, Commerce, and the Central Intelligence Agency, culminated in the development of the Maritime Operational Threat Response (MOTR) Plan.

To facilitate prompt and accurate notification to the U.S. maritime industry of identified threats, the Department of State's "SPECIAL WARNINGS TO MARINER," the Department of Transportation's "U.S. MARITIME ALERTS AND ADVISORIES," and the Department of Homeland Security's global "MARINE SAFETY INFORMATION BULLETINS" have been combined to form a single *U.S. Maritime Advisory System*. This new *U.S. Maritime Advisory System* consists of two distinct notifications: a U.S. Maritime Alert and a U.S. Maritime Advisory. Coordination under this plan will occur in accordance with the Maritime Operational Threat Response (MOTR) Plan and its protocols.

It is in the interest of national security for the U.S. Government to inform the U.S. Maritime industry expeditiously when a threat to its interest is identified. Such incidents may include but are not limited to:

- Threats by foreign military forces;
- Threats by other military, insurgent, terrorist, or criminal agents;
- A declaration of hostilities affecting U.S.-flagged vessels and/or persons;
- A failure to recognize the sovereign immunity of the U.S. Government vessels, including training ships and U.S. Government-chartered vessels;
- Threats to seize U.S.-flagged vessels for contraband, sanctions, or other allegations;

-Excessive maritime claims, e.g. unlawful territorial sea claims;

-Temporary closures of internationally recognized sea lanes;

-Other unusual circumstances inconsistent with international law or standard international maritime practice; or -Other immediate and significant maritime security threats or events.

**U.S. Maritime Alert:** A "U.S. Maritime Alert" provides basic information on maritime threats to the U.S. maritime industry and is limited to information on who, what, when and where of a maritime security incident. In some situations, it may be necessary to issue such a message to refute unsubstantiated claims. A Maritime Alert is silent on policy statements and devoid of recommendations for specific course of action. A Maritime Alert may be followed by a U.S. Maritime Advisory that elaborates of specific threat information as it becomes available. The goal is to release a Maritime Alert within two hours of a threat notification, or a soon as possible thereafter. A Maritime Alert will expire in seven days unless re-issued, and may be followed by a subsequent Maritime Alert or Advisory.

**U.S. Maritime Advisory:** A "U.S. Maritime Advisory" provides detailed information on maritime threats to the U.S. Maritime industry. A Maritime Advisory describes the nature of the maritime security incident, including specific U.S. Government guidance on specific recommended courses of action. The goal is to release a U.S. Maritime Advisory as soon as possible following threat notification. The Advisory should normally be limited to one page or less, with hyper links to any amplifying information. U.S. Maritime Advisories are in effect for six months from the date of issuance, unless revoked or extended by the C2G, and may precede or follow the issuance of a U.S. Maritime Alert.

MSCI Portal: MARAD hosts a public-facing website where current and archived U.S. Maritime Alerts and Advisories are posted upon release by NGA. This website contains a description of the U.S. Maritime Alerts and Advisory System and additional instructions for reporting identified threats to the U.S. maritime industry.

<b>To obtain U.S. Maritime Alerts/Advisories:</b>	
E-mail to	NGA NAVSAFETY at <a href="mailto:navsafety@nga.mil">navsafety@nga.mil</a> requesting to be added to the U.S. Maritime Advisory distribution. Please include the PLA that needs to be added.
Message to	PLA "NGA NAVSAFETY (UC)" requesting to be added to the U.S. Maritime Advisory distribution. Please include the PLA that needs to be added.
World-Wide Web	<a href="https://msi.nga.mil/NavWarnings">https://msi.nga.mil/NavWarnings</a> and select "U.S. Maritime Advisory System"

## RADIO NAVIGATIONAL WARNINGS

### 300I. North American Ice Service Iceberg Information and Services



The North American Ice Service (NAIS), a partnership comprised of the International Ice Patrol (IIP), the Canadian Ice Service (CIS), and the U.S. National Ice Center (USNIC), with support from the Danish Meteorological Institute (DMI) and the National Weather Service - Alaska Region, provides year-round maritime safety information on iceberg and sea ice conditions in the vicinity of the Grand Banks of Newfoundland and the east coast of Labrador, Canada. The daily NAIS Iceberg Limit, valid for 0000 UTC day, is distributed as a NAVAREA IV (see section 300E) warning in the format of a text Iceberg Bulletin. A Graphic Iceberg Chart is also published daily in accordance with Table 1 below.

The purpose of the NAIS Iceberg Bulletin and Chart is to advise mariners of the estimated iceberg extent within the region. On the Chart, numbers within each grid 1° latitude x 1° longitude grid sector inside the Iceberg Limit are intended to provide mariners an awareness of the relative density of icebergs. For more information on the Iceberg Bulletin and Iceberg Chart visit <https://www.navcen.uscg.gov/iipCharts>. NAIS reconnaissance is focused near the Grand Banks of Newfoundland and the east coast of Labrador, ice conditions south of Greenland are monitored by (NANWARN) (For iceberg conditions south of Greenland visit <http://www.dmi.dk/dmi/en/gronland/iskort.htm>). While NAIS strives to be as accurate as possible in reporting the presence of icebergs to mariners, it is not possible to ensure that all icebergs are detected and reported. There is no substitute for due vigilance and prudent seamanship, especially when operating near sea ice and icebergs.

Reports of icebergs in the North Atlantic originate from various sources, including passing ships, reconnaissance flights, and spaceborne reconnaissance. Once position, time, size, and shape of icebergs sighted are received, the data is entered into a computer model that predicts iceberg drift and deterioration. As the time after sighting increases, so does the uncertainty in estimated positions. This uncertainty is taken into account when the Iceberg Limit is determined.

If an iceberg or radar target is detected and reported

outside the published NAIS Iceberg Limit, a Navigational Warning (NAVWARM) will be sent by the Canadian Coast Guard Marine Communications and Traffic Service (MCTS) and an urgent NAVAREA IV message will be distributed on SafetyNET via the U.S. National Geospatial-Intelligence Agency (NGA) as the NAVAREA IV Coordinator. These warnings will remain in effect for 24 hours. Iceberg products will be revised shortly after notification between 1200Z and 0000Z or by 1400Z if reported between 0000Z and 1200Z.

Ships are encouraged to immediately report sightings of icebergs or stationary radar targets that may likely be icebergs to the nearest Canadian Coast Guard MCTS Station or through INMARSAT using Service Code 42, as there is no charge when using this code. See Table 2 below for MCTS contact information. Vessels participating in a Voluntary Observing Ship (VOS) program should continue to report weather and sea surface temperature (SST) to their respective programs. Vessels interested in providing weather and SST reports to U.S. National Oceanic and Atmospheric Administration's VOS program can contact [vos@noaa.gov](mailto:vos@noaa.gov) or visit <http://www.vos.noaa.gov> for guidance.

When making iceberg reports, please include **SHIP NAME** and **CALL SIGN**, **ZULU TIME**, **SHIP POSITION** (latitude, longitude), **COURSE**, **SPEED**, **VISIBILITY**, **ICEBERG/RADAR TARGETS POSITION** (Specify either the geographic coordinates or range/bearing from ship's position), **ZULU TIME OF SIGHTING**, **METHOD OF DETECTION** (Visual, Radar, or Both), **LENGTH** (in meters) (see Table 4 below), **SHAPE OF ICEBERG** (see Table 3 below), and **VESSEL CONTACT INFORMATION**.

#### International Ice Patrol in New London, CT



Phone: 860 271 2626  
Fax: 860 271 2773  
E-mail: [iipcomms@uscg.mil](mailto:iipcomms@uscg.mil)  
Web: <https://www.navcen.uscg.gov/IIP>  
Office Hours: 1200Z-0000Z

#### Canadian Ice Service in Ottawa, ON



Phone: 613 971-2090  
E-mail: [cis-scg.client@ec.gc.ca](mailto:cis-scg.client@ec.gc.ca)  
Web: <http://www.ice-glaces.ec.gc.ca>  
Office Hours: 0730-1730 EST











**RADIO NAVIGATIONAL WARNINGS**

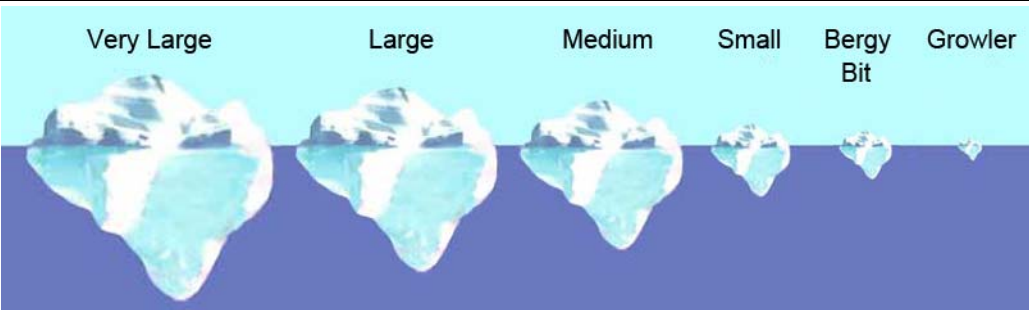
<b>Table 1: NAIS Broadcasts</b>			
<b>Transmission Means</b>	<b>Broadcast Station</b>	<b>Broadcast Times (UTC)</b>	<b>Additional Information</b>
<b>NAIS NAVAREA IV ICEBERG BULLETIN</b>			
SafetyNET Broadcasts as NAVAREA IV messages	AOR-W Satellite	1000, 2200	SafetyNET
		Urgent Broadcasts of targets outside limits sent upon receipt	
NAVTEX Broadcast	Canadian CG Marine Communications and Traffic Service St. John's/VON	1820 (Winter), 2220 (Summer) *Changes with DST	518 Khz F1B
		Urgent Broadcasts of targets outside limits sent upon receipt	
SITO/NBDP Broadcast	USCG Communication Station Boston/NMF	0140-0230	6314, 8416.5, 12579 Khz F1B
		1630-1720	08416.5, 12579, 16806.5 Khz F1B
Internet	International Ice Patrol Website	Updated daily by 2200	<a href="http://www.navcen.uscg.gov/iip">http://www.navcen.uscg.gov/iip</a>
	Automated e-mail		<a href="https://radioaid.rdc.uscg.gov/mailman/listinfo/iceberg_bulletin">https://radioaid.rdc.uscg.gov/mailman/listinfo/iceberg_bulletin</a>
	National Geospatial-Intelligence Agency Website		<a href="https://msi.nga.mil">https://msi.nga.mil</a>
<b>NAIS ICEBERG CHART</b>			
Radio Facsimile Broadcast	USCG Communication Station Boston/ NMF	0438, 1039	4235, 6340.5, 9110 Khz F3C
		1600, 2239	6340.5, 9110, 12750 Khz F3C
	Offenbach, Germany via Pinneberg/DDK	0930, 2100	3855, 7880, 13882.5 Khz F1C
	Canadian CG Marine Communications and Traffic Service Sydney/VCO	1741	6915.10 Khz J3C
Internet	International Ice Patrol Website	Updated daily by 2200	<a href="http://www.navcen.uscg.gov/iip">http://www.navcen.uscg.gov/iip</a>
	Automated e-mail		<a href="https://radioaid.rdc.uscg.gov/mailman/listinfo/iceberg_bulletin">https://radioaid.rdc.uscg.gov/mailman/listinfo/iceberg_bulletin</a>
	National Weather Service Website		<a href="http://www.weather.noaa.gov/pub/fax/PIEA88.gif">http://www.weather.noaa.gov/pub/fax/PIEA88.gif</a>
	E-mail on demand*		<a href="mailto:ftpmail@ftpmail.nws.noaa.gov">ftpmail@ftpmail.nws.noaa.gov</a>
	*To prompt e-mail on demand:	Subject line- anything	Body (case sensitive)- open cd fax "get piea88.gif" ----or---- "get piea88.tif" quit
<b>FICN10</b>			
Radio Telephone	Canadian CG Marine Communications and Traffic Service St. Anthony/VCM	0107, 0907, 1907 and as required	2589 Khz J3E
		Continuous	VHF Channel 21B and 83B

## RADIO NAVIGATIONAL WARNINGS

Table 2: Report Receiving Stations	
The following Canadian Coast Guard Marine Communications & Traffic Service (MCTS) Centers (Receiving Station) monitor and transmit on VHF 16 & HF 2182 J3E: <i><b>Bold indicates the Coast Guard Radio call name</b></i>	
<b>St. Johns</b> NL (VON) Phone: 709 772 2106 E-mail: <a href="mailto:ecaregsnf@innav.gc.ca">ecaregsnf@innav.gc.ca</a>	<b>St. Anthony</b> NL (VCM) Phone: 709 454 3852 E-mail: <a href="mailto:ecasnny@innav.gc.ca">ecasnny@innav.gc.ca</a>
<b>Labrador</b> NL (VOK) Phone: 709 896 2252 E-mail: <a href="mailto:ecagoy@innav.gc.ca">ecagoy@innav.gc.ca</a>	<b>Placentia</b> NL (VCP) Phone: 709 227 2181 E-mail: <a href="mailto:ecapla@innav.gc.ca">ecapla@innav.gc.ca</a>
<b>Port aux Basques</b> NL (VOJ) Phone: 709 695 2167 E-mail: <a href="mailto:paxtfc@innav.gc.ca">paxtfc@innav.gc.ca</a>	<b>Sydney</b> NS (VCO) Phone: 902 564 7751 E-mail: <a href="mailto:ccgops@elsmail.net">ccgops@elsmail.net</a>
Dartmouth/ <b>Halifax</b> NS (VCS) Phone: 902 426 9750 E-mail: <a href="mailto:ccgops@elsmail.net">ccgops@elsmail.net</a>	Saint John/ <b>Fundy</b> NB (VAR) Phone: 506 636 4696 E-mail: <a href="mailto:ccgops@elsmail.net">ccgops@elsmail.net</a>
Visit <a href="http://www.noaa.gov/vos_resource.shtml">http://www.noaa.gov/vos_resource.shtml</a> for instructions on sending INMARSAT 2-digit access code reports. For all iceberg reports use access code 42.	

Table 3: Iceberg Shapes					
Shape	Example	Description	Shape	Example	Description
<b>Tabular</b>		Flat topped iceberg with length-height ratio greater than 5:1	<b>Non-Tabular</b>		Does not meet any of the below characteristics
<b>Domed</b>		Rounded top	<b>Pinnacled</b>		At least 1 spiral or pyramid on it
<b>Wedged</b>		Steep vertical side on 1 end and sloping on the other	<b>Dry-dock</b>		Eroded with U-shaped slot or channel
<b>Blocky</b>		Flat top with vertical sides	<b>Ice Island</b>		Very large ice flows

## RADIO NAVIGATIONAL WARNINGS

<b>Table 4: Iceberg Size</b>					
Very Large	Large	Medium	Small	Bergy Bit	Growler
					
Description	Height	Length			
Growler	< 1m	< 5m			
Bergy Bit	1 to < 5m	5 to < 15m			
Small Iceberg	5 to 15m	15 to 60m			
Medium Iceberg	16 to 45m	61 to 120m			
Large Iceberg	46 to 75m	121 to 200m			
Very Large Iceberg	> 75m	> 200m			

**RADIO NAVIGATIONAL WARNINGS**

**300J. International Ice Warnings**

<b>Information About Ice Conditions (Outside of Northwest Atlantic Region)</b>		
<b>Country</b>	<b>Authority</b>	<b>Contact information</b>
Denmark	Danish Ice Service	Phone: +45 89433412/89433099 Fax: +45 89433427 E-mail: <a href="mailto:opsstaff@sok.dk">opsstaff@sok.dk</a> Web: <a href="http://www.forsvaret.dk/SOK">http://www.forsvaret.dk/SOK</a>
Estonia	Estonian Meteorological & Hydrological Institute (EMHI)	Phone: +372 6660914 Fax: +372 6660911 E-mail: <a href="mailto:mere@emhi.ee">mere@emhi.ee</a> Web: <a href="http://www.emhi.ee">http://www.emhi.ee</a>
Finland	Ice Service of The Finnish Meteorological Institute	Phone: +358 919293464 Fax: +358 919293413 E-mail: <a href="mailto:ice@fmi.fi">ice@fmi.fi</a> Web: <a href="http://www.iceservice.fi">http://www.iceservice.fi</a>
Germany	The Eisdienst (Ice Service) of Bundesamt für Seeschifffahrt and Hydrographie (BSH)	Phone: +49 3814563780 Fax: +49 3814563949 E-mail: <a href="mailto:ice@bsh.de">ice@bsh.de</a> Web: <a href="http://www.bsh.de/en/Marine_data/Observations/Ice/index.jsp">http://www.bsh.de/en/Marine_data/Observations/Ice/index.jsp</a>
Latvia	Harbor Master Riga	Phone: +371 67082000/67082035 Fax: +371 67323117 E-mail: <a href="mailto:captain@rok.bkc.lv">captain@rok.bkc.lv</a>
	Icebreaker VARMA	Phone: +371 29341982 Fax: +371 29344270
Lithuania	Harbor Master Klaipeda State Seaport	Phone: +370 46499688 Fax: +370 46499666 E-mail: <a href="mailto:ukt@port.lt">ukt@port.lt</a>
Netherlands	Inland Water Information Center	Phone: +31 (0)320298888 Fax: +31 (0)320298580 E-mail: <a href="mailto:infocentrum@rws.nl">infocentrum@rws.nl</a> Web: <a href="http://www.infocentrum-binnenwateren.nl">http://www.infocentrum-binnenwateren.nl</a>
Norway	Norwegian Ice Service	Phone: +47 37019759/37019725 Cell: +47 91741522/90077605 Fax: +47 37019701 E-mail: <a href="mailto:ismelding@kystverket.no">ismelding@kystverket.no</a> Web: <a href="http://www.kystverket.no">http://www.kystverket.no</a>
Poland	Institute of Meteorology & Water Management (IMGW)	Phone: +48 586201641/586288146 Fax: +48 586201641 E-mail: <a href="mailto:hydrologia_gdynia@imgw.pl">hydrologia_gdynia@imgw.pl</a> Web: <a href="http://www.imgw.pl/www.baltyk.pogodynka.pl">http://www.imgw.pl/www.baltyk.pogodynka.pl</a>
Russia	Port Authority St. Petersburg, Headquarters of Ice Operations	Phone: +7 8123213018/8123213019 Fax: +7 8123236048 E-mail: <a href="mailto:meteo@meteo.nw.ru">meteo@meteo.nw.ru</a> Web: <a href="http://www.meteo.nw.ru">http://www.meteo.nw.ru</a>
Sweden	Swedish Ice Service	Phone: +46 114958533 Fax: +46 114958053 E-mail: <a href="mailto:ice@smhi.se">ice@smhi.se</a> Web: <a href="http://www.smhi.se">http://www.smhi.se</a>

## RADIO NAVIGATIONAL WARNINGS

### 300K. Baltic Sea Ice Codes

This code is used by the following countries: Denmark, Finland, Germany, Netherlands, Norway, Poland, Sweden, Russia, Estonia, Lithuania, and Latvia.

The general form of the message code is:

ICE: AA1ABSBTBKB            2ABSBTBKB ...            AA1ABSBTBKB

Table V	Table I	Table II	Table III	Table IV
AA	1	AB	SB	TB
BB	1	AB	SB	TB
CC etc.	1	AB	SB	TB

Notes:

- When a section is free of ice, the corresponding group may be omitted from the report. It should, however, always be coded as n0//KB the first 2 days after it has become ice-free and only omitted the third day if the ice-free conditions continue.
- When all sections within a district are ice-free, the whole district shall be omitted from the report.
- The districts for which ice information is issued by countries using this code are indicated for each country in the following pages.

**Table I**

AB - Amount and arrangement of sea ice	
0	Ice-free
1	Open water - concentration less than 1/10
2	Very open ice - concentration 1/10 to less than 4/10
3	Open ice - concentration 4/10 to 6/10
4	Close ice - concentration 7/10 to 8/10
5	Very close ice - concentration 9/10 to 9+/10*
6	Compact ice, including consolidated ice - concentration 10/10
7	Fast ice with drift ice outside
8	Fast ice
9	Lead in very close or compact drift ice or along the ice edge
/	Unable to report
*	9+/10 means 10/10 ice concentration with openings
<i>Note: The higher code figure has greater priority in reporting.</i>	

**Table II**

SB - Stage of ice development	
0	New ice or dark nilas (less than 5 cm thick)
1	Light nilas (5 to 10 cm thick) or ice rind
2	Grey ice (10 to 15 cm thick)
3	Grey-white ice (15 to 30 cm thick)
4	White ice, first stage (30 to 50 cm thick)
5	White ice, second stage (50 to 70 cm thick)
6	Medium first-year ice (70 to 120 cm thick)
7	Ice predominantly thinner than 15 cm with some thicker ice
8	Ice predominantly 15 to 30 cm with some ice thicker than 30 cm
9	Ice predominantly thicker than 30 cm with some thinner ice
/	No information or unable to report
<i>Note: If AB = 0, SB should be reported as /.</i>	

## RADIO NAVIGATIONAL WARNINGS

**Table III**

TB - Topography or form of ice	
0	Pancake ice, ice cakes, brash ice—less than 20 m across
1	Small ice floes - 20 to 100 m across
2	Medium ice floes - 100 to 500 m across
3	Big ice floes - 500 to 2000 m across
4	Vast or giant ice floes - more than 2000 m across, or level ice
5	Rafted ice
6	Compacted slush or shuga, or compacted brash ice
7	Hummocked or ridged ice
8	Thaw holes or many puddles on the ice
9	Rotten ice
/	No information or unable to report
<p>Notes: Figures 0 to 4 only to be used if ice concentration is less than 7/10 with no compacted ice present (TB = 4: vast floes). 4 to 9 to be used if ice concentration is greater 7/10 (TB = 4: level ice). If AB = 0, TB should be reported as /.</p>	

**Table IV**

KB - Navigation conditions in ice	
0	Navigation unobstructed
1	Navigation difficult or dangerous for wooden vessels without ice sheathing
2	Navigation difficult for unstrengthened or low-powered vessels built of iron or steel; navigation for wooden vessels even with ice sheathing not advisable
3	Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice
4	Navigation proceeds in lead or a broken ice-channel without the assistance of icebreaker
5	Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size
6	Icebreaker assistance can only be given to vessels of special ice class and of special size
7	Icebreaker assistance can only be given to vessels after special permission size
8	Navigation temporarily closed
9	Navigation has ceased
/	Unknown

**Table V**

**Denmark**

AA	1	Sea area N of Hammaren	BB	1	Sea area W of Ven	CC	1	Sea area off Møn lighthouse	DD	1	Agersø Sund—Stignæs
	2	Fairway to Rønne		2	Sea area E of Ven		2	Sea area S of Gedser		2	Storebælt channel, western part
	3	Sea area between Rønne and Falsterbo		3	Sea area off Helsingør		3	Sea area S of Rødby, harbor		3	Storebælt channel, eastern part
	4	Sea area off Falsterbo		4	Sea area off Nakkehoved		4	Sea area SE of Keldsør		4	Sea area E of Romsø
	5	Fairway through Drogden		5	Sea area S of Hesselø		5	Sea area off Sprodsbjerg		5	Fairway to Kalundborg oil harbor
	6	Fairway to København		6	Fairway to Isefjorden-Kyndbyværket		6	Sea area W of Omø		6	Sea area W of Røsnæs

EE	1	Sea area W of Sjællands rev	FF	1	Southern entrance to Lillebælt, Skjoldnæs	GG	1	Fairway at Fredericia to the bridges	HH	1	Sea area off Fornæs
	2	Sea area W of Hesselø		2	Sea area off Helnæs		2	Sea area N of Æbelø		2	Fairway to Randers
	3	Sea area E of Anholt		3	Fairway to Åbenrå—Enstedværket		3	Fairway to Odense		3	Entrance at Hals Barre
	4	Sea area W of Fladen Lighthouse		4	Sea area off Assens		4	Sea area at Vesborg lighthouse		4	Fairway to Ålborg
	5	Sea area NW of Kummelbank		5	Kolding Yderfjord to the bridges		5	Sea area S of Sletterhage		5	Sea area NW of Læsø
	6	Sea area N of Skagen		6	Fairway to Esbjerg		6	Fairway to Århus		6	Sea area off Hirsholmene

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RADIO NAVIGATIONAL WARNINGS

**Estonia**

AA	1	Narva-Joesuu - Kunda	BB	1	Pärnu, harbor and bay	CC	1	Muhuväin (Moonsund)
	2	Kunda, harbor and bay		2	Pärnu - Irben Strait			
	3	Kunda, harbor - Tallinn		3	Irben Strait			
	4	Muuga, harbor and bay						
	5	Tallinn, harbor and bay						
	6	Tallinn, harbor - Osmussaar						
	7	Osmussaar - Ristna						
	8	Ristna - Irben Strait						

**Table V****Finland**

AA	1	Röyttä - Etukari	BB	1	Oulu harbors - Kattilankalla	CC	1	Raahe harbor - Heikinkari	DD	1	Rahja harbor - Välimatala
	2	Etukari - Ristinmatala		2	Kattilankalla - Oulu 1		2	Heikinkari—Raahe lighthouse		2	Sea area from Välimatala to the line Ulkokalla - Ykskivi
	3	Ajos—Ristinmatala		3	Sea area SW of Oulu 1		3	Raahe lighthouse—Nahkiainen		3	The high sea between latitudes of Ulkokalla and Pietarsaari
	4	Ristinmatala—Kemi 2		4	The high sea N of latitude of Marjaniemi		4	The high sea between latitudes of Marjaniemi and Ulkokalla			
	5	Kemi 2 - Kemi 1									
	6	Sea area SW of Kemi 1									
	7	Kemi 2 - Ulkokrunni - Virpiniemi									
EE	1	Ykspihlaja - Repskär	FF	1	Sea area NE of Nordvalen	GG	1	Kaskinen - Sälgrund	HH	1	From Pori harbors to the line Pori lighthouse - Säppi
	2	Repskär—Kokkola lighthouse		2	Sea area from Nordvalen to W of Norrskär		2	Sea area off Sälgrund		2	Sea area W of the line Pori lighthouse - Säppi
	3	Sea area off Kokkola lighthouse		3	Vaskiluoto - Ensten		3	The high sea N of latitude of Yttergrund		3	The high sea between the latitudes of Yttergrund and Rauma
	4	Pietarsaari - Kallan		4	Ensten - Vaasa lighthouse						
	5	Sea area off Kallan		5	Vaasa lighthouse - Norrskär						
	6	The high sea between latitude of Pietarsaari to ENE of Nordvalen		6	Sea area SW of Norrskär						
II	1	Rauma harbor - Kylmäpihlaja	JJ	1	Uusikaupunki harbor - Kirsta	KK	1	Sea area N of Sälskär	LL	1	Maarianhamina - Marhällan
	2	Kylmäpihlaja - Rauma lighthouse		2	Kirsta - Isokari		2	Sea area N of Märket		2	Sea area off Nyhamn and Marhällan
	3	Sea area W of Rauma lighthouse		3	Isokari - Sandbäck		3	Sea area W of Märket		3	The middle Åland Sea
	4	The high sea S of latitude of Rauma		4	Sea area off Sandbäck		4	Sea area S of Märket		4	Sea area off Lågsjär



**Table V**

**Finland (con't)**

MM	1	Naantali and Turku - Rajakari	NN	1	Lövskär - Korra	OO	1	Lövskär - Grisselborg	PP	1	Hanko harbor - Hanko 1
	2	Rajakari—Lövskär		2	Korra - Isokari		2	Grisselborg—Norparskär		2	Sea area S of Hanko 1
				3	Lövskär - Berghamn		3	Sea area at Vidskär		3	Hanko - Vitgrund
				4	Berghamn - Stora Sottunga		4	Utö - Suomen Leijona		4	Vitgrund - Utö
				5	Stora Sottunga - Ledsär		5	Sea area S of Suomen Leijona			
				6	Sea area off Rödhamn						

QQ	1	Koverhar - Hästö Busö	RR	1	Inkoo and Kantvik harbor - Sea area at Porkkala	SS	1	Helsinki harbor - Harmaja	TT	1	Porvoo harbor - Varlax
	2	Hästö Busö - Ajax		2	Sea area at Porkkala		2	Harmaja—Helsinki lighthouse		2	Varlax - Porvoo lighthouse
	3	Sea area S of Ajax		3	Sea area S of Porkkala lighthouse		3	Helsinki lighthouse - sea area S of Porkkala lighthouse		3	Porvoo lighthouse - Kalbådagrund
		4	Archipelago fairway Helsinki - Porkkala - Rönnskär	4	Sea area Kalbådagrund - Helsinki lighthouse						
		5	Helinski, Vuosaarir - Eestilioto	5	Valkom harbor - Täktam						
		6	Eestilioto - Helinski lighthouse	6	Archipelago fairway Boistö - Glosholm						
				7	Archipelago fairway Glosholm - Helsinki						

UU	1	Kotka - Viikari
	2	Viikari - Orrengrund
	3	Orrengrund - Tiiskeri
	4	Tiiskeri - Kalbådagrund
	5	Hamina - Suurmusta
	6	Suurmusta - Merikari
	7	Merikari—Kaunissaari

**Table V****Germany**

AA	1	Stralsund - Palmer Ort	BB	1	Wolgast - Peenemünde	CC	1	Rostock -Warnemünde	DD	1	Wismar - Walfisch
	2	Palmer Ort - Freesendorfer Haken		2	Peenemünde - Ruden		2	Rostock, overseas harbors		2	Walfisch -Timmendorf
	3	Osttief					3	Warnemünde, sea channel		3	Timmendorf - approach bouy "Wismar"
	4	Landtiefrinne					4	Warnemünde, sea area		4	Lübeck - Travemünde
	5	Fährhafen Sassnitz, harbor and vicinity					5	Approach buoy "Rostock", sea N		5	Travemünde, harbor
	6	Fährhafen Sassnitz, sea area					6			6	Travemünde, sea area

EE	1	Holtenau - Laboe	FF	1	Flensburg - Holnis	GG	1	Holtenau, canal apporach	HH	1	Hamburg - Landungsbrücken, Elbe
	2	Bülk, sea area		2	Holnis - Neukirchen		2	Kiel canal, Holtenau - Rendsburg		2	Stadersand, Elbe
	3	Lighthouse "Kiel", sea area NE		3	Neukirchen - Kalkgrund		3	Kiel canal, Brunsbüttel - Rendsberg		3	Brunsbüttel, Elbe
	4	Westermarkeldorf, sea area		4	Falshöft , sea area		4	Brunsbüttel, canal approach		4	Cuxhaven - Neuwerk
	5	Marienleuchte, sea area								5	Approach bouy "Elbe"
	6	Fehmarnbelt, entrance E									

II	1	Bremen, Weser	KK	1	Wilhelmshaven, harbor entrance	LL	1	Emden, Ems and outer harbor
	2	Brake, Weser		2	Wilhelmshaven, oil jetty(Jade)		2	Emden - Randzelgat
	3	Bremerhaven, Weser		3	Schillig, Jade		3	Borkum, Randzelgat
	4	Lighthouse "Hohe Weg", channel		4	Wangerooge channel		4	Borkum, Westerems
	5	Alte Weser, channel						
	6	Neue Weser, channel						

**Table V****Latvia**

AA	1	Port of Riga	BB	1	Port of Ventspils	CC	1	Port of Liepaja
	2	Shipping route from the port of Riga to the Cape of Mersrags		2	Shipping route from the Irben Strait to the port of Ventspils		2	Shipping route from Ventspils to the port of Liepaja
	3	Shipping route from the Cape of Mersrags to the Irben Strait			3		Shipping route from the port of Liepaja to the sea border of Lithuania	
	4	Shipping route in the Irben Strait						

**Lithuania**

AA	1	Port of Klaipeda
	2	Shipping route from the port of Klaipeda to the sea border of Latvia
	3	Shipping route from the port of Klaipeda to the sea border of Russia

**Netherlands**

AA	1	Delfzijl harbor	BB	1	Harlingen harbor	CC	1	Den Helder harbor	DD	1	Branch canal G and Zaandam harbors
	2	Eemshaven		2	Along Pollendam		2	Texelstroom and Marsdiep		2	Amsterdam East harbors
	3	Eems: Oterdum - Eemshaven		3	Blauwe Slenk		3	Schulpengat		3	Amsterdam West harbors
	4	Eems: Eemshaven - Hubertgat		4	Vliestroom and Stortemelk			4		Branch canal A (Beverwijk)	
								5		North Sea Canal	
								6		Ijmuiden locks - fairway buoy	

**Table V****Netherlands (con't)**

EE	1	Nieuwe Maas and harbors	FF	1	Moerdijk harbor	GG	1	Antwerp harbors
	2	Botlek harbors		2	Moerdijk - Dordrecht		2	Schelde: Antwerpen - Hansweert
	3	Europoort		3	Dordrecht harbor		3	Schelde: Hansweert - Flushing roads
	4	New Waterway		4	Oude Maas		4	Sloe harbor
	5	Hoek of Holland - fairway buoy		5	Noord		5	Oostgat
				6	Wielingen			
				7	Canal Terneuzen - Gent			

**Norway**

3 - 45	AA	1	Sekken (Halden)	BB	1	Østerelv (Fredrikstad)	CC	1	Oslo - Steilene - Spro beacon	DD	1	Langgrunn (Horten)
		2	Singlefjorden (Halden)		2	Leira (Fredrikstad)		2	Spro beacon - Fagerstrand - Drøbak		2	Gullholmen lighthouse - Mefjordbåen
		3	Svinesund - Halden		3	Vesterelva (Fredrikstad)		3	Drøbak—Filtvet lighthouse		3	Mefjordbåen - Fulehuk lighthouse
		4	Torbjørnskaer lighthouse		4	Rauøyfjorden		4	Filtvet - Gullholmen lighthouse		4	Fulehuk - Ferder lighthouse
		5	Struten lighthouse		5	Verlebukta - Moss		5	Dramsfjorden		5	West of Færder
		6	Løperen (Fredrikstad)		6	Mossesundet		6	Breiangen (north of Horten)		6	South of Færder
EE	1	Torgersøygapet (Tønsberg)	FF	1	Tjömekjæla	GG	1	Brevikfjorden	HH	1	Kragerofjorden	
	2	Husøysund - Tønsberg channel		2	Sandefjord (Sandefjord)		2	Frierfjorden (Porsgrunn, Skien)		2	Grønholmgapet (Risør)	
	3	Tønsberg inner harbor		3	Inside Svenner lighthouse		3	Jomfrulandsrenna		3	Stangholmgapet (Risør)	
	4	Vestfjord (Tønsberg)		4	Off Svenner lighthouse		4	Off Jomfruland		4	Lyngørfjorden	
	5	Leistensløpet		5	Larviksfjorden (Stavern - Larvik)		5	Skåtøysundet (Kragerø)		5	Off Lyngør	
	6	Vrengen		6	Langesundbukta		6	Langårsund (Kragerø)		6	Tvedestrandsfjord	

**Table V****Norway (con't)**

II	1	Tromsøysundet (Arendal)	JJ	1	Off Homborsund light
	2	Galtesund (Arendal)		2	Lillesand
	3	Inside Torungen light (Arendal)		3	Kristiansandsfjorden
	4	Off Torungen light (Arendal)		4	Off Oksøy light (Kristiansand)
	5	Grimstad			
	6	Inside Homborsund light			

**Poland**

AA	1	Krynica Morska, sea	BB	1	Rozewie lighthouse, sea	CC	1	Zalew Szczecinski
	2	Gdansk, maritime harbor		2	Ustka, harbor		2	Szczecin, harbor
	3	Gdansk, Port Polnocny		3	Ustka, sea		3	Passahe Swinoujscie - Szczecin
	4	Gdansk, sea		4	Darlowo, harbor		4	Swinoujscie, harbor
	5	Gdynia, harbor		5	Darlowo , sea		5	Swinoujscie, sea
	6	Gdynia, sea		6	Kolobrzeg, harbor			
	7	Hel lighthouse, sea to south		7	Kolobrzeg, sea			
	8	Hel lighthouse, sea to east						
	9	Hel lighthouse, sea to north						

**Table V****Russia (Baltic Coast and Gulf of Finland Coast)**

AA	1	Sankt Petersburg harbor	BB	1	Vyborg, harborand bay	CC	1	Luga bay	DD	1	Kaliningrad harbor
	2	St. Petersburg - Kotlin (eastern point)		2	Vichrevoj - Sommers		2	Approaches to Luga bay, line Mošënyj - Sepelevskij		2	Kaliningrad to Lithuanian sea border
	3	Kotlin (eastern point) Tolbukhin lighthouse		3	Berkezund	3	Kaliningrad to Polish sea border				
	4	Tolbukhin lighthouse-Sepelevskij lighthouse		4	Bol'šoj Berezovyj (eastern point) - Sepelevskij						
	5	Sepelevskij lighthouse-Seskar									
	6	Seskar - Sommers									
	7	Sommers - Gogland (southern point)									
	8	Gogland (southern point) longitude of Kunda									

**Sweden**

AA	1	Karlsborg - Malören	BB	1	Haraholmen - Nygrån	CC	1	NE of Nordvalen	DD	1	Fairway to Husum
	2	Sea area off Malören		2	Sea area off Nygrån		2	SW of Nordvalen		2	Örnsköldsvik - Hörnskatan
	3	Luleå - Björnklack		3	Skelleftehamn - Gåsören		3	Western Quark (W of Holmöarne)		3	Hörnskatan - Skagsudde
	4	Björnklack - Farstugrunden		4	Sea area off Gåsören		4	Umeå - Väktaren		4	Sea area off Skagsudde
	5	E and SE of Farstugrunden		5	Sea area off Bjuröklubb		5	SE of Väktaren		5	Fairway W of Ulvöarna
	6	Sandgrönn fairway			6		NE and SE of Sydostbrotten	6		Sea area E of Ulvöarna	
	7	Rödkallen - Norströmsgrund									

**Table V****Sweden (con't)**

EE	1	Ångermanälven north Sandö bridge	FF	1	Hudiksvallsfjärden	GG	1	Gävle - Eggegrund	HH	1	Passage at Understen
	2	Ångermanälven south Sandö bridge		2	Iggesund - Agö		2	Sea area off Eggegrund		2	Sea area off Svartklubben
	3	Härnösand - Härnön		3	Sea area off Agö		3	Sea area off Örskär		3	Hallstavig - Svartklubben
	4	Sea area off Härnön		4	Sandarne—Hällgrund		4	Öregrundsgrepen		4	Sea area off Söderarm and Tjärven
	5	Sundsvall - Draghällan		5	Sea area off Hällgrund		5	Passage at Grundkallen		5	Sea area off Svenska Högarna
	6	Draghällan - Åstholmsudde		6	Ljusnefjärden - Storzjungfrun						
	7	Off Åstholmsudde and Brämön		7	Sea area off Storzjungfrun						

II	1	Trälhavet - Furusund - Kapellskär	KK	1	Köping - Kvicksund	LL	1	Norrköping - Hargökalv	MM	1	Sea area W of Gotska Sandön
	2	Kappelskär - Söderarm		2	Västerås - Grönsö		2	Hargökalv - Vinterklasen - N Kränkan		2	Sea area off Visby
	3	Stockholm - Trälhavet - Krövholmen		3	Grönsö - Södertälje		3	Oxelösund harbor		3	W of Stora Karlsö
	4	Sea area off Sandhamn		4	Stockholm - Sodertälje		4	Järnverket - Lillhammaren - N Kränkan		4	Sea area off Hoburgen
	5	Trollharan - Långgarn		5	Sodertälje - Fifong		5	Sea area off Gustaf Dalen		5	Sea area off Magö (Slite)
	6	Mysingen		6	Fifong - Landsort					6	Sea area off Fårö
	7	Nynäshamn - Landsort									
	8	Sea area S of Landsort									

NN	1	Västervik - Marshalmen - Idö	OO	1	Blå Jungfrun - Kalmar	PP	1	Karlskrona - Aspö	RR	1	Sea area N of Falsterbo Rev
	2	Sea area off Idö		2	Kalmar - Utgrunden		2	Sea area off Aspö		2	Drogden passage
	3	Oskarshamn - Furön		3	Utgrunden - Ölands Södra Udde		3	Fairway to Karlshamn		3	Flintrännan
	4	Furön - Ölands Norra Udde		4	SE of Ölands Södra Udde		4	Fairway to Åhus		4	Fairway to Malmö
	5	Off Ölands Norra Udde					5	Sea area off Sandhammaren		5	The Sound, Malmö - Ven
				6	Fairway to Trelleborg	6	The Sound, E of Ven				
				7	Sea area SE of Falsterbo Rev	7	The Sound, off Halsingborg				
						8	W and S of Kullen				

**Table V****Sweden (con't)**

SS	1	Fairway to Halmstad	TT	1	Uddevalla - Stenungsund	UU	1	Göta river
	2	Fairway to Valberg		2	Stenungsund - Hätteberget		2	Trollhatte canal - Dalbo bridge
	3	Sea area W of Nidingen		3	Sea area off Hätteberget		3	Vänernsviken
	4	Knippelholmen - Böttö (Göteborg)		4	Sea area off Måseskär		4	Fairway through Lurö archipelago
	5	Vinga Sand and Danafjord		5	Brofjorden - Dynabrott		5	Fairway to Gruvön
	6	Buskär - Trubaduren - Vinga		6	Off Dynabrott and Gäven		6	Fairway to Karlstad
	7	Off Trubaduren and Vinga		7	Kosterfjorden		7	Fairway to Kristinehamn
		8		Sea area off Nordkoster	8		Fairway to Otterbäcken	
				9	Fairway to Lidköping			



## PART II BROADCAST STATION LIST

### 300L. Summary

The stations in the following list broadcast navigational, weather and ice warnings including stations listed in Part I above. Broadcasts are in English unless otherwise indicated. For information and schedules of marine weather broadcasts made primarily in English, refer to the Selected Worldwide Marine Weather Broadcasts (WWMARWETHRBC), a joint publication of the National Weather Service (NWS) and Naval Oceanography Command.

Station Name (Call Sign(s))				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational, weather, ice, tsunami warnings	Frequency, channel or satellite to tune into	Time broadcast starts	includes language if not in English and any other specific details the mariner should know about the broadcast.
RT (MF)				
RT (HF)				
Radio-Telex				
Radio-Facsimile				
NAVTEX				
METAREA				
NAVAREA				

**300M. Albania**

<b>Aulona-Vlore (ZAV3)</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Navigational warnings and weather	Ch. 18, 85	0600, 1800	in Albanian, English, Italian and Greek

**300N. Algeria**

<b>Alger (7TA)</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Local navigational warnings and weather	Ch. 84	0730, 2330	in French and English
RT (MF)	Local navigational warnings and weather	1792 kHz	0903, 1703	in French and English

<b>Annaba (7TB)</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Local navigational warnings and weather	Ch. 24	0703, 2303	in French and English
RT (MF)	Local navigational warnings and weather	1911 kHz	0850, 1850	in French and English

<b>Bejaia (7TG)</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Local navigational warnings and weather	Ch. 26	0733, 2333	in French and English

**Bordj-el-Kiffan (7TA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: V Range: 150nm	490 kHz	0330, 0730, 1130, 1530, 1930, 2330	in French
	B1 Character: B Range: 150nm	518 kHz	0010, 0410, 0810, 1210, 1610, 2010	

**Oran (7TO)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 24	0703, 2303	in French and English
RT (MF)	Local navigational warnings and weather	2719 kHz	0835, 1835	in French and English

**Skikda (7TS)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 26	0703, 2303	in French and English

**Tenes (7TN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 26	0733, 2333	in French and English

**Oran (7TO)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 24	0703, 2303	in French and English
RT (MF)	Local navigational warnings and weather	2719 kHz	0835, 1835	in French and English

300O. Angola

Luanda (D3E)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 24	0233, 0633, 1033, 1433, 1833, 2233	in Portuguese

300P. Antarctica (Argentina)

Centro Meteorologico Base Marambio (LLU)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Weather	4807, 10870 kHz	0020, 0320, 0620	
	Weather	10870, 16209.5 kHz	0920, 1220, 1820, 2120	
	Weather	10870, 20732 kHz	1520	
	Ice	10870, 16209.5 kHz	2120 (Tue., Thu.)	

300Q. Antarctica (Chile)

Centro Meteorologico Antartico Presidente Eduardo Frei Montalva (CAN6D)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Weather for Antarctic	5302.5, 11662.5, 15470.5 kHz	0030, 0330, 0630, 0930, 1230, 1530, 1830, 2130	
	Weather for Drake Passage and Bellingshausen Sea	5302.5, 11662.5, 15470.5 kHz	1530, 2130	

Bahia Fildes, King George Island-South Shetland Islands (CBZ22)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Antarctic weather for the Bahia Fildes	Ch. 14	0155, 1355	in Spanish. After prior announcement on 2182 kHz and VHF Ch 16.
RT (MF)	Antarctic weather for the Bahia Fildes	2738 kHz	0150, 1350	in Spanish. After prior announcement on 2182 kHz and VHF Ch 16.

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RADIO NAVIGATIONAL WARNINGS

300R. Argentina

Bahia Blanca (L2N)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 15	0010, 0410, 0810, 1210, 1610, 2010	in Spanish
	Water level reports	Ch. 15	Every hour +05m	in Spanish
NAVTEX	B1 Character: D Range: 280nm	490 kHz	0030, 0430, 0830, 1230, 1630, 2030	in Spanish
	B1 Character: P Range: 280nm	518 kHz	0230, 0630, 1030, 1430, 1830, 2230	in Spanish

Buenos Aires (L2C)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 15	0010, 0410, 0810, 1210, 1610, 2010	in Spanish
	Local navigational warnings and weather	Ch. 21	Every hour +00m, +15m, +30m, +45m	in Spanish
	Water level reports	Ch. 15	Every hour +05m	in Spanish
Radio-Telex	Navigational warnings	4210, 8416.5, 12579, 16806.5 kHz	0030, 1530, 2100	in Spanish and English
	Local and coastal navigational warnings	4210, 8416.5, 12579 kHz	1000	in Spanish and English
	Local and coastal navigational warnings including numbers of warnings in force	4210, 8416.5, 12579, 16806.5 kHz	1900	in Spanish and English
	Weather bulletins and wave prognosis	4210, 8416.5, 12579 kHz	0300	in Spanish and English
	Weather bulletins and wave prognosis	4210, 8416.5, 12579, 16806.5 kHz	1400	in Spanish and English

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RADIO NAVIGATIONAL WARNINGS

**Buenos Aires (L2C)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: F Range: 280nm	490 kHz	0050, 0450, 0850, 1250, 1650, 2050	in Spanish
	B1 Character: R Range: 280nm	518 kHz	0250, 0650, 1050, 1450, 1850, 2250	

**Comodoro Rivadavia (L2W)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 15	0350, 0750, 1050, 1650, 2250	in Spanish
RT (MF)	Local and coastal navigational warnings	2065 kHz	0440*, 0740	in Spanish. *Weather only.
RT (HF)	Local navigational warnings and weather	4149 kHz	0440*, 0740, 1740*, 2040**	in Spanish. *Weather only. **Includes in force message.
	Local and coastal navigational warnings	8294 kHz	1740*, 2040**	in Spanish. *Weather only.**Includes in force message.
Radio-Telex	Local and coastal navigational warnings. *Weather bulletins and wave prognosis	4210, 8416.5, 12579 kHz	0530*, 2300	in Spanish and English
	Local and coastal navigational warnings including numbers of warnings in force. *Weather bulletins and wave prognosis	8416.5, 12579, 19680.5 kHz	1300, 1830*	in Spanish and English
NAVTEX	B1 Character: C Range: 280nm	490 kHz	0020, 0420, 0820, 1220, 1620, 2020	in Spanish
	B1 Character: O Range: 280nm	518 kHz	0220, 0620, 1020, 1420, 1820, 2220	

## Mar del Plata (L2T, L2U)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 15	0230, 0530, 1130, 1730, 2330	in Spanish
RT (MF)	Weather	2065 kHz	0310	in Spanish
	Local navigational warnings and weather	2065 kHz	0010	in Spanish
RT (HF)	Weather	4149kHz	0310, 1610	in Spanish
	Weather	8294 kHz	1610	in Spanish
	Local and coastal navigational warnings	4149 kHz	0010	in Spanish
	Local and coastal navigational warnings including in force warnings	4149, 8294 kHz	1210	in Spanish
NAVTEX	B1 Character: E Range: 280nm	490 kHz	0040, 0440, 0840, 1240, 1640, 2040	in Spanish
	B1 Character: Q Range: 280nm	518 kHz	0240, 0640, 1040, 1440, 1840, 2240	

## Puerto Madryn (L4S)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather and water level reports	Ch. 15	0010, 0410, 0810, 1210, 1610, 2010	in Spanish

## Quequen (L5B)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 15	0010, 0410, 0810, 1210, 1610, 2010	in Spanish

**Rawson**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 15	0010, 0410, 0810, 1210, 1610, 2010	in Spanish

**Recalada Rio de la Plata (L3Z)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 15	0040, 0440, 0840, 1240, 1640, 2040	in Spanish
	Water level reports	Ch. 15	Every hour +05m	in Spanish

**Rio Gallegos (L3I-VHF, L3D-NAVTEX)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 15	0010, 0410, 0810, 1210, 1610, 2010	in Spanish
NAVTEX	B1 Character: B Range: 280nm	490 kHz	0010, 0410, 0810, 1210, 1610, 2010	in Spanish
	B1 Character: N Range: 280nm	518 kHz	0210, 0610, 1010, 1410, 1810, 2210	

**San Antonio Oeste**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 15	0010, 0410, 0810, 1210, 1610, 2010	in Spanish

**Ushuaia-MRCC (L3P-VHF, L3K-NAVTEX)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 15	0010, 0410, 0810, 1210, 1610, 2010	in Spanish



**Ushuaia-MRCC (L3P-VHF, L3K-NAVTEX)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: A Range: 280nm	490 kHz	0000, 0400, 0800, 1200, 1600, 2000	in Spanish
	B1 Character: M Range: 280nm	518 kHz	0200, 0600, 1000, 1400, 1800, 2200	

**METAREA VI**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-W	0230, 1730	

**NAVAREA VI**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-W	0200, 1400	

**300S. Australia**

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**Adelaide**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Navigational warnings	8176 kHz	on receipt, 0357, 0757	for auscoast sea areas D, E, and F

**Broome**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local and coastal weather, warnings	Ch. 72	0415, 0815, 2215	After prior announcement on VHF Ch 16.

**Cairns**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal weather	Ch. 81	0145, 0545, 2145, 2345	Warnings after prior announcement on VHF Ch 16. For Australia sea area 2.
RT (HF)	Navigational warnings	8176 kHz	on receipt, 1257, 2357	for auscoast sea areas H, A and B

**Carbarvon**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local coastal weather	Ch. 73	0405, 0805, 2205	After prior announcement on VHF Ch 16.

**Charleville (VMC)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather warnings for coastal waters of Queensland, New South Wales, Victoria, Tasmania and South Australia. Weather warnings for High Seas Areas Northern, North Eastern and South Eastern Australia	2201 kHz (0800-2100UTC), 4426 kHz (2100-0800UTC), 6507 kHz (0800-2100UTC), 8176 kHz, 12365 kHz, 16546 kHz (2100-0800UTC)	Every hour +00m	
	Special announcements	2201 kHz (0800-2100UTC), 4426 kHz (2100-0800UTC), 6507 kHz (0800-2100UTC), 8176 kHz, 12365 kHz, 16546 kHz (2100-0800UTC)	Every hour +55m	
	Weather forecasts for coastal waters of South Australia and Tasmania	2201 kHz (0800-2100UTC), 4426 kHz (2100-0800UTC), 6507 kHz (0800-2100UTC), 8176 kHz, 12365 kHz, 16546 kHz (2100-0800UTC)	0030, 0430, 0830, 1230, 1630, 2030	
	Weather forecasts for coastal waters of Queensland and Northern Territory east of Cape Don	2201 kHz (0800-2100UTC), 4426 kHz (2100-0800UTC), 6507 kHz (0800-2100UTC), 8176 kHz, 12365 kHz, 16546 kHz (2100-0800UTC)	0130, 0530, 0930, 1330, 1730, 2130	
	Weather forecasts for High Seas Areas Northern, North Eastern and South Eastern Australia	2201 kHz (0800-2100UTC), 4426 kHz (2100-0800UTC), 6507 kHz (0800-2100UTC), 8176 kHz, 12365 kHz, 16546 kHz (2100-0800UTC)	0230, 0630, 1030, 1430, 1830, 2230	
	Weather forecasts for coastal waters of New South Wales and Victoria	2201 kHz (0800-2100UTC), 4426 kHz (2100-0800UTC), 6507 kHz (0800-2100UTC), 8176 kHz, 12365 kHz, 16546 kHz (2100-0800UTC)	0330, 0730, 1130, 1530, 1930, 2330	

**Cooktown**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal weather	Ch. 11	0633, 2033	

**Darwin**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather for Darwin Harbor and coastal waters between Daly River and Cape Don	Ch. 67	0833, 2233	
	Local weather	Ch. 28	0903, 2233	Remote site: Gove
RT (HF)	Navigational warnings	8176 kHz	on receipt, 0157, 0957	for auscoast sea areas G, H, A

**Esperance**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local coastal weather	Ch. 72	0415, 0815, 2215	After prior announcement on VHF Ch 16.

**Geraldton**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local coastal weather	Ch. 73	0415, 0815, 2215	After prior announcement on VHF Ch 16.

**Gladstone**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Navigational warnings	8176 kHz	on receipt, 1157, 2257	for auscoast sea areas A, B, and C

## Hobart (VMT-232)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather forecasts	Ch. 67, 68, 69	0345, 0633, 0903, 2145	After prior announcement on VHF Ch 16. Warnings sent on receipt.
	Weather forecasts	Ch. 82	0803, 2233	After prior announcement on VHF Ch 16. Warnings sent on receipt.
	Navigational warnings	Ch. 69	2303	After prior announcement on VHF Ch 16.
RT (MF)	Weather forecasts	2524 kHz	0345, 0633, 0903, 2145, 2303*	After prior announcement on RT (MF) 2182 kHz. *Navigational warnings only.
	Weather warnings	2524 kHz	On receipt (2115-0945)	After prior announcement on RT (MF) 2182 kHz.
RT (HF)	Weather forecasts	4146, 6227 kHz	0345, 0903, 2145	After prior announcement on RT (HF) 4125, 6215 kHz.
	Weather forecasts	4535, 4620 kHz	0633	After prior announcement on RT (HF) 4125, 6215 kHz.
	Weather warnings	4146, 6227 kHz	On receipt (2115-0945)	After prior announcement on RT (HF) 4125, 6215 kHz.
	Navigational warnings	4146, 6227 kHz	2303	After prior announcement on RT (HF) 4125, 6215 kHz.

## Mackay

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local coastal weather	Ch. 21, 80	0215, 0645, 2015	After prior announcement on VHF Ch 16.

## Melbourne

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 67	0448, 2248	Warnings preceded by an announcement on VHF Ch 16. Remote sites at Port Philip and Western Port Bays.
RT (HF)	Navigational warnings	8176 kHz	on receipt, 0257, 2157	for auscoast sea areas C, D and E

**Newcastle**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 67	0733, 2133	Warnings sent on receipt.

**Perth**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 67	1118, 2318	Remote site: Water Police
	Severe weather warnings	Ch. 67	Every 2 hours	Remote site: Water Police
RT (HF)	Navigational warnings	8176 kHz	on receipt, 0657, 1057	for auscoast sea areas E, F and G

**Port Hedland**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Navigational warnings	8176 kHz	on receipt, 0457, 0857	

**Port Kembla**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 67	0733, 2133	
	Local severe weather warnings	Ch. 67	On receipt and then every hour	

**Rockhampton**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal weather	Ch. 21	0210, 0705, 2120	
	Weather for Keppel Bay	Ch. 82	0140, 0640, 2040	

**Sydney**

<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Local navigational warnings and weather	Ch. 67	0733, 2133	
	Local severe weather warnings	Ch. 67	On receipt and then every hour	
RT (HF)	Navigational warnings	8176 kHz	on receipt, 0057, 1357	for auscoast sea areas B, C and D

**Townsville**

<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Coastal weather	Ch. 72, 80	0215, 0715, 2215	After prior announcement on VHF Ch 16.

**Wiluna (VMW)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather warnings for coastal waters of Queensland (Gulf of Carpentaria), Northern Territory, Western Australia and South Australia. Weather warnings for High Seas Areas Northern, Western and South Eastern Australia	2056 kHz (1000-2300UTC), 4149 kHz (2300-1000UTC), 6230 kHz (1000-2300UTC), 8113 kHz, 12362 kHz, 16528 kHz (2300-1000)	Every hour +00m	
	Special announcements	2056 kHz (1000-2300UTC), 4149 kHz (2300-1000UTC), 6230 kHz (1000-2300UTC), 8113 kHz, 12362 kHz, 16528 kHz (2300-1000)	Every hour +55m	
	Weather forecasts for coastal waters of Western Australia	2056 kHz (1000-2300UTC), 4149 kHz (2300-1000UTC), 6230 kHz (1000-2300UTC), 8113 kHz, 12362 kHz, 16528 kHz (2300-1000)	0030, 0430, 0830, 1230, 1630, 2030	
	Weather forecasts for coastal waters of South Australia and Northern Territory	2056 kHz (1000-2300UTC), 4149 kHz (2300-1000UTC), 6230 kHz (1000-2300UTC), 8113 kHz, 12362 kHz, 16528 kHz (2300-1000)	0130, 0530, 0930, 1330, 1730, 2130	
	Weather forecasts for High Seas Areas Northern and Western Australia, coastal waters of Queensland (Gulf of Carpentaria)	2056 kHz (1000-2300UTC), 4149 kHz (2300-1000UTC), 6230 kHz (1000-2300UTC), 8113 kHz, 12362 kHz, 16528 kHz (2300-1000)	0230, 0630, 1030, 1430, 1830, 2230	
	Weather forecasts for High Seas Areas South Eastern Australia	2056 kHz (1000-2300UTC), 4149 kHz (2300-1000UTC), 6230 kHz (1000-2300UTC), 8113 kHz, 12362 kHz, 16528 kHz (2300-1000)	0330, 0730, 1130, 1530, 1930, 2330	



**METAREA X**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	IOR	1030, 2330	
		POR	1100, 2300	

**METAREA XI**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather via China	IOR	0330, 1015, 1530, 2215	
	Weather via Japan	POR	0230, 0830, 1430, 2030	
	Weather via Australia (south of equator)	POR	0815, 2015	

**NAVAREA X**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	IOR, POR	0700, 1900	

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**300T. Azores****Ponta Delgada**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 11	0830, 2000 local time	in Portuguese and English

**Horta (CTH)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 11	0900, 1000, 1900, 2100 local time	in Portuguese and English
RT (MF)	Coastal navigational warnings and weather	2657 kHz	0935, 2135	in Portuguese and English

**Horta (CTH)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: J Range: 640nm	490 kHz	0130, 0530, 0930, 1330, 1730, 2130	in Portuguese
	B1 Character: F Range: 640nm	518 kHz	0050, 0450, 0850, 1250, 1650, 2050	

**300U. Bahrain**

**Bahrain (A9M)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: B Range: 300nm	518 kHz	0010, 0410**, 0810, 1210, 1610**, 2010	** nav & weather (when all are not selected)

**300V. Barbados**

**Barbados Coast Guard-MRSC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Storm warnings for Caribbean Sea, Antilles and adjacent Atlantic waters	Ch. 16, 26	on receipt, 0050, 1250, 1650, 2050	

**300W. Belgium**

**Antwerpen (OSA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 24	Every hour +48m, +55m	in Dutch and English. After prior announcement on VHF Ch 16.

Oostende (OSU)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 27	0233, 0633, 1033, 1433, 1833, 2233 after the first hour +03m and +33m	in Dutch and English. After prior announcement on frequencies VHF Ch 16, DSC VHF Ch 70.
	Weather	Ch. 27	0820, 1720 (0720 local time), warnings on receipt	After prior announcement on frequencies VHF Ch 16, DSC VHF Ch 70.
	Ice	Ch. 27	0103, 0503, 0903, 1303, 1703, 2103	After prior announcement on frequencies VHF Ch 16, DSC VHF Ch 70.
RT (MF)	Navigational warnings	2761 kHz	0233, 0633, 1033, 1433, 1833, 2233 after the first hour +03m and +33m	in Dutch and English. After prior announcement on frequencies RT (MF) 2182 and 2484(Dutch) kHz.
	Weather	2761 kHz	0820, 1720 (0720 local time), warnings on receipt	After prior announcement on frequencies RT (MF) 2182 and 2484(Dutch) kHz.
	Ice	2761 kHz	0103, 0503, 0903, 1303, 1703, 2103	After prior announcement on frequencies RT (MF) 2182 and 2484(Dutch) kHz.
NAVTEX	B1 Character: B Range: 55nm	490 kHz	0010, 0410, 0810, 1210, 1610, 2010	in Dutch.
	B1 Character: M Range: 150nm	518 kHz	0200, 0600, 1000, 1400, 1800, 2200	no weather bulletins.
	B1 Character: T Range: 55nm	518 kHz	0310, 0710**, 1110, 1510, 1910**, 2310	** nav & weather (when all are not selected)

### 300X. Bermuda

Bermuda Radio (ZBM)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather. Tropical weather advisories for 18N to 42N and 50W to 80 W from 01 Jun to 30 Nov	Ch 27	0035, 0435, 0835, 1235, 1635, 2035	After prior announcement on frequencies VHF Ch 16. Latest US National Weather Service High Seas forecast for METAREA IV on request.
	Local navigational warnings and weather. Tropical weather advisories for 18N to 42N and 50W to 80 W from 01 Jun to 30 Nov	162.4 MHz (WX2)	Continuous	Broadcasts are repeated every 4-6 min and recordings are updated at 0000, 0600, 1200, 1800 local time as required.

**Bermuda Radio (ZBM)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Local weather. Tropical weather advisories (01 Jun to 30 Nov) and US National Hurricane Center tropical weather outlook	2582 kHz	0035, 0435, 0835, 1235, 1635, 2035	After prior announcement on frequencies RT (MF) 2182 kHz. Latest US National Weather Service High Seas forecast for METAREA IV on request.
NAVTEX	B1 Character: B Range: 280nm	518 kHz	0010, 0410, 0810, 1210, 1610, 2010	Tropical weather advisories 01 Jun thru 30 Nov.

**300Y. Brazil**

**Rio de Janeiro Naval (PWZ-33)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Navigational/Coastal warnings and SAR information	4266*, 6448, 8580, 12709, 16974 kHz	0400, 1430, 2130	in Portuguese and English. Local warnings in Portuguese. *4266 kHz on request
	Weather	4266*, 6448, 8580, 12709, 16974 kHz	0230, 0600, 1845	in Portuguese and English. *4266 kHz on request

**METAREA V**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-E	0730, 1930	

**NAVAREA V**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-E	0030, 1230	

**300Z. Bulgaria**

<b>Bulgaria</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Local navigational warnings and weather	Ch. 26	on receipt, 0733, 1333*, 1933	in Bulgarian and English. *Weather only.
RT (MF)	Local navigational warnings and weather	3740 kHz	on receipt, 0733, 1333*, 1933	in Bulgarian and English. *Weather only.
NAVTEX	B1 Character: J Range: 350nm	518 kHz	0130, 0530**, 0930**, 1330, 1730**, 2130**	** nav & weather (when all are not selected)

<b>Myeik</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Local navigational warnings and weather	Ch. 12, 16	on receipt, 0915, 1715	

<b>Yangon (XYR)</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Local navigational warnings and weather	Ch. 12, 16	on receipt, 0915, 1715	

**300AA. Canada**

<b>Comox, B.C (VAC)</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Local navigational warnings and weather	WX1 (162.55 MHz), WX3 (162.475 MHz), Ch. 21B	Continuous (interrupted during live broadcasts at 0420, 1520, 2120)	Continuous marine broadcast information available, Phone: +1 250 3390748, +1 250 9745305. Remote stations: AlertBay, Port Hardy, Cape Lazo, Discovery Mountain, Texada Island.

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RADIO NAVIGATIONAL WARNINGS

## Fundy (VFF)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: V Range: 300nm	490 kHz	0335, 0735, 1135, 1535, 1935, 2335	
	B1 Character: U Range: 300nm	518 kHz	0320, 0720*, 1120*, 1520, 1920*, 2320*	*Weather only

## Halifax, N.S (VCS)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 21B, 83B	0240, 1110, 1540	Remote stations: Ecum Secum, Fox Island, Sambro.
	Weather	Ch. 21B, 83B	Continuous except during live broadcasts 0240, 1540	Remote stations: Ecum Secum, Fox Island, Sambro.
RT (MF)	Navigational warnings and weather	2749 kHz	0240, 0810*, 1540, 2010*	* Weather only. Remote station: Sambro.

## Inuvik, N.W.T. (VFA)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather and navigational warnings	Ch. 26	0235, 1435	Inuvik and remote station Parson's Lake open during navigation season only, May - Oct. Remote station Cambridge Bay open July - Oct.
	Weather and navigational warnings for NORDREG waters east of 106W and along the Labrador Coast southward to 58N	Ch. 26	0205*, 1240, 1410, 1705*, 2235, 2310	in English and French. Canadian Coast Guard. Station open during navigation season only, Jun. - Dec. Remote stations Coral Harbor and Resolute operational mid Jul to late Oct (approximately). *Ice only.
	Ice reports	Ch. 26	On request	Inuvik and remote station Parson's Lake open during navigation season only, May - Oct. Remote station Cambridge Bay open July - Oct.

**Inuvik, N.W.T. (VFA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Weather and navigational warnings for NORDREG waters east of 106W and along the Labrador Coast southward to 58N	2514 kHz	0110, 0205*, 1320, 1410, 1705*, 2235	in English and French. Canadian Coast Guard. Station open during navigation season only, Jun. - Dec. Remote stations Coral Harbor and Resolute operational mid Jul to late Oct (approximately). *Ice only.
	Weather and navigational warnings for NORDREG waters east of 106W and along the Labrador Coast southward to 58N	2582 kHz	0205*, 1240, 1410, 1705*, 2235, 2310	in English and French. Canadian Coast Guard. Station open during navigation season only, Jun. - Dec. Remote stations Coral Harbor and Resolute operational mid Jul to late Oct (approximately). *Ice only.
RT (HF)	Weather and navigational warnings for NORDREG waters east of 106W and along the Labrador Coast southward to 58N	4363 kHz	0205*, 1240, 1410, 1705*, 2235, 2310	in English and French. Canadian Coast Guard. Station open during navigation season only, Jun. - Dec. Remote stations Coral Harbor and Resolute operational mid Jul to late Oct (approximately). *Ice only.
	Weather and navigational warnings for NORDREG waters east of 106W and along the Labrador Coast southward to 58N	6507 kHz	0110, 0205*, 1320, 1410, 1705*, 2235	in English and French. Canadian Coast Guard. Station open during navigation season only, Jun. - Dec. Remote stations Coral Harbor and Resolute operational mid Jul to late Oct (approximately). *Ice only.
	Weather and navigational warnings	4363, 6218.6 kHz	0235, 1435	Inuvik and remote station Parson's Lake open during navigation season only, May - Oct. Remote station Cambridge Bay open July - Oct.
	Ice reports	4363, 6218.6 kHz	On request	Inuvik and remote station Parson's Lake open during navigation season only, May - Oct. Remote station Cambridge Bay open July - Oct.
Radio-Telex	METAREA and NAVAREA XVII and XVIII weather forecasts for arctic waters that are not covered by the INMARSAT SafetyNet service	8416.5 kHz	0330, 1530	Canadian Coast Guard. Station open during navigation season only, Jun - Dec.

## Inuvik, N.W.T. (VFA)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: S Range: 300nm	490 kHz	0300*, 0700*, 1100, 1500*, 1900*, 2300	Operational Jun - Dec. *Weather only.
	B1 Character: T Range: 300nm	518 kHz	0310*, 0710*, 1110, 1510*, 1910*, 2310	Operational Jun - Dec. *Weather only.

## Labrador, Labr. (VOK)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather and ice	Ch. 21B, 83B	Continuous	Remote stations: Cartwright, Goose Bay, Hopedale, and Nain
RT (MF)	Local weather & Ice	2598 kHz	0137, 1007, 1437*, 2037*	Remote stations: Cartwright and Hopedale. * Ice only
	Local navigational warnings	2598 kHz	1107, 2307	Remote stations: Cartwright and Hopedale.
NAVTEX	B1 Character: X Range: 300nm	518 kHz	0350*, 0750*, 1150, 1550*, 1950*, 2350	Operational Jul - Oct. *Weather only.
	B1 Character: X Range: 300nm. Weather only.	518 kHz	0910, 2110	Arctic. Operational Jul - Oct.

## Les Escoumins, Que. (VCF)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather and ice	Ch. 21B, 83B	Continuous	in English and French. Remote stations: Cap a l'Est, Grosses-Roches, Lac Daigle, Mont-Joli, Mont-Louis, Sacre Coeur. Hourly weather observations for specific locations, weather synopsis and MAFOR in English and French.



**Montreal, Que. (VFN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather and ice	Ch. 21B, 25B, 83B	Continuous	in English and French. Remote station L'Acadie (Ch. 83B) operational May - Oct. Remote station Mont Rigaud operational Mar - Dec. Other remote stations: Mont St. Bruno and Sorel. Hourly weather observations for specific locations, weather synopsis and MAFOR in English and French.

**Placentia, Nfld. (VCP)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 21B, 23B, 28B, 83B	Continuous	Placentia and Approches, Ferryland Head to Cape St. Mary's on VHF Ch. 23B only.
RT (HF)	Local navigational warnings and weather	2598 kHz	0048, 0737, 1137*, 1607, 1807*, 2137	*Local navigational warnings only. Placentia and Approches, Ferryland Head to Cape St. Mary's on VHF Ch. 23B only.

**Port aux Basques, Nfld. (VOJ)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather and ice	Ch. 21B, 28B, 83B	Continuous	Remote stations: Bonne Bay, Mount Moriah, Pine Tree, Pointe Riche, Ramea Island, Table Mountain.
RT (MF)	Local navigational warnings and weather	2598 kHz	0207, 0807, 1207*, 1507, 1837*, 2107	*Local navigational warnings only. Remote station: Stephenville.
	Ice	2598 kHz	0807, 1837	

**Prescott, Ont. (VBR)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather, water levels and ice	Ch. 21B, 83B	Continuous	in English. Remote stations: Cardinal (operational Mar - Dec), Kingston, Cobourg, Fonthill, Orillia.
	Local navigational warnings, weather, water levels and ice	Ch. 23B	Continuous	in French. Remote stations: Cardinal (operational Mar - Dec), Kingston.
NAVTEX	B1 Character: H Range: 300nm	518 kHz	0110, 0510*, 0910*, 1310, 1710*, 2110*	Ice included in navigational warnings during ice season. *Weather only.

**Prince Rupert, B.C. (VAJ)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	WX1 (162.55 MHz), WX2 (162.40 MHz), WX3 (162.475 MHz), Ch. 21B	Continuous (interrupted during live broadcasts at 0115, 0715, 1315, 1915)	Continuous marine broadcast information available, Phone: +1 250 6249009. Remote stations: Barry Inlet, Calvert Island, Cumsheewa, Dundas Island, Kitimat, Klemtu, Mount Dent, Mount Gil, Mount Hays, Naden Harbour, Rose Inlet, Van Inlet.
RT (MF)	Local navigational warnings and weather	2054 kHz	0115, 0715, 1315, 1915	Continuous marine broadcast information available, Phone: +1 250 6249009. Remote stations: Hunter Point, Prince Rupert.
NAVTEX	B1 Character: D Range: 300nm	518 kHz	0030*, 0430, 0830*, 1230*, 1630, 2030*	*Weather only.

**Quebec, Que. (VCC)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather and ice	Ch. 21B, 83B	Continuous	in English and French. Hourly weather observations for specific locations, weather synopsis and MAFOR in English and French on request. Remote stations: Lauzon, Montmagny, Riviere-du-Loup, Trios-Rivieres.

## Riviere-au-Renard, Que. (VCG)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather and ice	Ch. 21B, 25B, 83B	Continuous	in English and French.* Weather only. Remote stations: Cap-aux-Meules, Carleton, Forillon, Harrington Hr, Havre St-Pierre, Heath Point, La Romaine, Natashquan, Newport. Hourly weather observations for specific locations, weather synopsis and MAFOR in English and French.
RT (MF)	Local navigational warnings and ice	2598, 2749 kHz	0437*, 0847*, 0937, 1407*, 1737, 2317*	in English and French.* Weather only. Remote stations: Cap-aux-Meules, Carleton, Forillon, Harrington Hr, Havre St-Pierre, Heath Point, La Romaine, Natashquan, Newport. Hourly weather observations for specific locations, weather synopsis and MAFOR in English and French.
NAVTEX	B1 Character: D Range: 300nm	490 kHz	0035**, 0435, 0835*, 1235*, 1635, 2035*	*Weather only. **Ice included in weather messages during ice season.
	B1 Character: C Range: 300nm	518 kHz	0020**, 0420, 0820*, 1220*, 1620, 2020*	*Weather only. **Ice included in weather messages during ice season.

## Saint John, N.B. (VAR)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 21B, 83B	0140, 1240, 1640	in English and French. Remote stations: Cape Blomidon, Lockeport, Yarmouth.
	Weather	Ch. 21B, 83B	Continuous except during live broadcasts 0140, 1640	in English and French. Remote stations: Cape Blomidon, Lockeport, Yarmouth.
RT (MF)	Navigational warnings and weather	2749 kHz	0140, 1040*, 1640, 2040*	in English and French. * Weather only. Remote station: Yarmouth.

**Sarnia, Ont. (VBE)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather, water levels and ice	Ch. 21B, 83B	Continuous	Remote stations: Kincardine, Sarnia, Leamington, Port Burwell.

**St. Anthony, Nfld. (VCM)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local weather and ice	Ch. 21B, 83B	Continuous	
RT (MF)	Local navigational warnings and weather	2598 kHz	0107, 0907, 1237*, 1337, 1907*, 1937	*Local navigational warnings only. Remote station: St. Anthony

**St. John's, Nfld. (VON)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather and ice	Ch. 21B, 28B, 83B	Continuous	Remote stations: Cape Bonavista, Lumsden, Victoria.
RT (MF)	Local navigational warnings, weather and ice	2598 kHz	0007, 0837, 1307*, 1637, 2007, 2207*	*Local navigational warnings only.
NAVTEX	B1 Character: O Range: 300nm	518 kHz	summer: 0220*, 0620*, 1020, 1420*, 1820*, 2220, winter: 0220*, 0620, 1020*, 1420*, 2220*	*Weather only.

**Sydney, N.S. (VCO)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 21B, 83B	0040, 1010, 1440	in English and French. Remote stations: Cape Egmont, Cape North, Montague, Point Escuminac, Port Caledonia.
	Weather	Ch. 21B, 83B	Continuous except live broadcasts at 0040, 1440	in English and French. Remote stations: Cape Egmont, Cape North, Montague, Point Escuminac, Port Caledonia.
RT (MF)	Navigational warnings and weather	2749 kHz	0040, 0740*, 1440, 2010*	in English and French. *Weather only. Remote station: Port Caledonia.

**Sydney, N.S. (VCO)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: J Range: 300nm	490 kHz	0255, 0655*, 1055*, 1455, 1855*, 2255*	*Weather only. Ice included during ice season.
	B1 Character: Q Range: 300nm	518 kHz	summer: 0240, 0640*, 1040*, 1440, 1840*, 2240* winter: 2240	*Weather only. Ice included during ice season.

**Thunder Bay, Ont. (VBA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings, weather, water levels and ice.	Ch. 21B, 83B	Continuous	Remote stations: Bald Head, Horn, Sault Ste. Marie, Thunder Bay, Killarney, Meaford, Pointe au Brail, Silver Water, Tobermory.
NAVTEX	B1 Character: P Range: 300nm	518 kHz	0230*, 0630, 1030*, 1430*, 1830, 2230*	Ice included during ice season. *Weather only.

**Tofino, B.C. (VAE)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	WX1 (162.55 MHz), WX2 (162.40 MHz), WX3 (162.475 MHz), Ch. 21B	Continuous (interrupted during live broadcasts at 0050, 0650, 1250, 1850)	Continuous marine broadcast information available, Phone: +1 250 7263415. Remote stations: Eliza Dome, Esperanza, Estevan Point, Holberg, Mount Ozzard, Nottka, Port Alberni.
RT (MF)	Local navigational warnings and weather	2054 KHz	0050, 0650, 1250, 1850	Continuous marine broadcast information available, Phone: +1 250 7263415. Remote station: Amphitrite Point.
NAVTEX	B1 Character: H Range: 300nm	518 kHz	0110*, 0510*, 0910, 1310*, 1710*, 2110	*Weather only.

**Vancouver**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	WX1 (162.550 MHz), Ch. 83B	Continuous (except during live broadcasts 0530, 1530, 2130)	Continuous marine broadcast information available, Phone: +1 604 6663655. Remote station: Watts Point.

**Victoria, B.C (VAK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	WX3 (162.475 MHz), Ch. 21B	Continuous (interrupted during live broadcasts)	Continuous marine broadcast information available, Phone: +1 250 36365880, +1 250 3636492. Remote stations: Bowen Island, Mounete Parke, Mount Helmcken

**METAREA XVII**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	POR	0300, 1500	The USA issues marine forecasts for its jurisdictional coast and offshore waters north of Alaska.

**METAREA XVIII**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-W	0300, 1500	

**NAVAREA XVII**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	POR	1130, 2330	

**NAVAREA XVIII**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-W	1100, 2300	

300AB. Canary Islands

Las Palmas				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Local navigational warnings	1644, 1689 kHz	0803, 1903	After weather bulletin. Remote station: Arrecife.
	Weather	1644, 1689 kHz	0803, 1233, 1903	in Spanish. Remote station: Arrecife.

Las Palmas (EAL)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: A Range: 400nm	490 kHz	0000, 0400, 0800**, 1200**, 1600**, 2000	in Spanish. MMSI: 2240995. ** Navigational warnings & weather (when all are not selected).
	B1 Character: I Range: 400nm	518 kHz	0120, 0520, 0920**, 1320**, 1720**, 2120	MMSI: 2240995. ** Navigational warnings & weather (when all are not selected).

Tenerife				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 20, 22, 23, 24, 25, 26, 27	0833, 1333*, 2033	in Spanish. *Weather only. Remote stations: Arrecife, Fuerteventura, Gomera, Hierro, La Palma, Las Palmas.

MRCC Tenerife				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 74	On receipt	in Spanish and English.
	Weather	Ch. 74	0015, 0415, 0815, 1215, 1615, 2015	in Spanish and English.

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RADIO NAVIGATIONAL WARNINGS

### 300AC. Cape Verde

Ribeira de Vinha (D4A)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: P Range: 250nm	490 kHz	0230, 0630, 1030, 1430, 1830, 2230	in Portuguese.
	B1 Character: U Range: 250nm	518 kHz	0320, 0720, 1120, 1520, 1920, 2320	

### 300AD. Channel Islands (UK)

Jersey Coast Guard MRCC (GUD)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 82	0433, 0833, 1633, 2033	Broadcasts are made 1 hour later when daylight savings time is observed during broadcasts 0645, 0745, 0845 local time. Warnings after prior announcement on VHF Ch 16.
	Weather	Ch. 82	0307, 0907, 1245, 1507, 1845, 2107, 2245, on request and receipt	Broadcasts are made 1 hour later when daylight savings time is observed during broadcasts 0645, 0745, 0845 local time. Warnings after prior announcement on VHF Ch 16.

Guernsey Coast Guard				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather for Guernsey	Ch. 20	On request	

### 300AE. Chile

Achao (CBP25)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0120, 1320	in Spanish



**Antofagasta (CBA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 10	0055, 1305	in Spanish
RT (MF)	Weather	2738 kHz	0045, 1250	in Spanish
NAVTEX	B1 Character: H Range: 300nm	518 kHz	0000, 0800, 1600	in Spanish
	B1 Character: A Range: 300nm	518 kHz	0400, 1200, 2000	

**MRSC Arica**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0050, 1255	in Spanish
RT (MF)	Weather	2738 kHz	0045, 1245	in Spanish

**Bahia Felix (CBX)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0135, 1335	in Spanish
RT (MF)	Weather	2738 kHz	0215, 1415	in Spanish

**Cabo Carranza, Faro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0150, 1350	in Spanish
RT (MF)	Weather	2738 kHz	0145, 1345	in Spanish

**MRSC Caldera**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0045, 0645, 1245, 1845	in Spanish
RT (MF)	Weather	2738 kHz	0040, 0640, 1240, 1840	in Spanish

**MRSC Castro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0105, 1305	in Spanish
RT (MF)	Weather	2738 kHz	0050, 1250	in Spanish
RT (HF)	Weather	4146 kHz	0050, 1250	in Spanish

**Chanarlal**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0055, 1255	in Spanish
RT (MF)	Weather	2738 kHz	0045, 1245	in Spanish

**Constitucion**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0255, 1455	in Spanish
RT (MF)	Weather	2738 kHz	0250, 1450	in Spanish

**MRSC Coquimbo**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0050, 1255	in Spanish
RT (MF)	Weather	2738 kHz	0045, 1245	in Spanish

**Diego Ramirez**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather for Drake Passage	Ch. 14	0110, 1310	in Spanish
RT (MF)	Weather for Drake Passage	2738 kHz	0120, 1320	in Spanish

**Huasco**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0055, 1255	in Spanish
RT (MF)	Weather	2738 kHz	0045, 1245	in Spanish

**MRCC Iquique**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0055, 1305	in Spanish
RT (MF)	Weather	2738 kHz	0050, 1255	in Spanish

**Isla Guafo, Faro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather for Isla Guafo	Ch. 14	0350, 0950, 1550, 2150	in Spanish
RT (MF)	Weather for Isla Guafo	2738 kHz	0340, 0940, 1540, 2140	in Spanish

**Isla Mocha, Faro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather for Isla Mocha	Ch. 14	0210, 1410	in Spanish
RT (MF)	Weather for Isla Mocha	2738 kHz	0205, 1405	in Spanish

**Isla de Pascua-Easter Island (CBY)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 10, 14	0215, 1415, 1940	in Spanish
RT (MF)	Weather	2738 kHz	0225, 1425, 1950	in Spanish
NAVTEX	B1 Character: G Range: 300nm	518 kHz	0050, 0850, 1650	in Spanish
	B1 Character: F Range: 300nm	518 kHz	0450, 1250, 2050	

**Isla Quiriquina, Faro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0155, 1355	in Spanish

**Isla San Pedro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0120, 1320	in Spanish
RT (MF)	Weather	2738 kHz	0105, 1305	in Spanish

**Islote Fairway, Faro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0155, 1355	in Spanish
RT (MF)	Weather	2738 kHz	0150, 1350	in Spanish

**Islotes Evangelistas, Faro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0215, 1415	in Spanish
RT (MF)	Weather	2738 kHz	0205, 1405	in Spanish

**Juan Fernandez**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0205, 1405	in Spanish
RT (MF)	Weather	2738 kHz	0220, 1420	in Spanish

**Magallanes (CBM)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 10	0010, 1210	in Spanish
RT (MF)	Weather	2738 kHz	0035, 1235	in Spanish
RT (HF)	Weather	4146 kHz	0035, 1235	in Spanish
NAVTEX	B1 Character: L Range: 300nm	518 kHz	0040, 0840, 1640	in Spanish
	B1 Character: E Range: 300nm	518 kHz	0440, 1240, 2040	

**MRSC Puerto Aysen**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0205, 1405	in Spanish
RT (MF)	Weather	2738 kHz	0150, 1350	in Spanish

**Puerto Montt (CBP)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 10	1150, 2345	in Spanish.
RT (MF)	Weather	2738 kHz	1130, 2325	in Spanish.
RT (HF)	Weather	4146 kHz	1130, 2325	in Spanish.
NAVTEX	B1 Character: K Range: 300nm	518 kHz	0030, 0830, 1630	in Spanish.
	B1 Character: D Range: 300nm	518 kHz	0430, 1230, 2030	

**Punta Corona, Faro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0050, 0650, 1250, 1850	in Spanish
RT (MF)	Weather	2738 kHz	0045, 0645, 1245, 1845	in Spanish

**Punta Delgada**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0155, 1355	in Spanish
RT (MF)	Weather	2738 kHz	0150, 1350	in Spanish

**Punta Dungeness, Faro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0210, 1410	in Spanish
RT (MF)	Weather	2738 kHz	0205, 1405	in Spanish

**Quellon (CBP28)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0130, 1330	in Spanish
RT (MF)	Weather	2738 kHz	0115, 1315	in Spanish

**MRSC San Antonio**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0055, 1255	in Spanish
RT (MF)	Weather	2738 kHz	0045, 1245	in Spanish

**Talcahuano (CBT)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 10	0055, 1255	in Spanish
RT (MF)	Weather	2738 kHz	0045, 1245	in Spanish
NAVTEX	B1 Character: J Range: 300nm	518 kHz	0020, 0820, 1620	in Spanish
	B1 Character: C Range: 300nm	518 kHz	0420, 1220, 2020	

**Tongoy**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0150, 1350	in Spanish

**Valparaiso Playa Ancha (CBV)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 10	1215, 2315	in Spanish.
RT (MF)	Weather	2738 kHz	1235, 2335	in Spanish.
RT (HF)	Weather	4357, 12583.5 kHz	1235, 2335	in Spanish.
NAVTEX	B1 Character: Range: 300nm	B1 Character: I Range: 300nm	0010, 0810, 1610	in Spanish.
	B1 Character: Range: 300nm	B1 Character: B Range: 300nm	0410, 1210, 2010	

**Wollaston**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	0210, 1410	in Spanish
RT (MF)	Weather	2738 kHz	0205, 1405	in Spanish

**METAREA XV**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-W	1845	

**NAVAREA XV**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-W	0210, 1410	

## 300AF. China

## Dalian (XSZ)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: R Range: 250nm	518 kHz	0250*, 0650, 1050*, 1450, 1850, 2250	*Weather only.

## Fuzhou (XSL)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: O Range: 250nm	518 kHz	0220, 0620, 1020, 1420, 1820, 2220	In English and Chinese. No weather bulletins.

## Guangzhou (XSQ)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Weather	4219, 8431, 12622.5, 16854 kHz	1320	
	Weather	6329, 8431, 12622.5, 16854 kHz	0120	
	Local navigational warnings	6329, 8431, 12622.5, 16854 kHz	0720	
NAVTEX	B1 Character: N Range: 250nm	518 kHz	0210*, 0610, 1010, 1410*, 1810, 2210	*Weather only.

## Hong Kong (VRX)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: L Range: 400nm	518 kHz	0150, 0550, 0950, 1350, 1750, 2150	



**Tianjin (XSV)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Ice	4212.5, 8417.5, 12581.5 kHz	0500, 1200, 2300	in Chinese and English
	Local navigational warnings	4212.5, 8417.5, 12581.5 kHz	0500, 1200, 2300	in Chinese.
	Weather	4212.5, 8417.5, 12581.5 kHz	0500, 0700, 1200, 1600, 2000, 2300	
	Local navigational warnings	4212.5, 8417.5, 12581.5 kHz	0700	

**Sanya (XSI)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: M Range: 250nm	518 kHz	0200, 0600, 1000, 1400, 1800, 2200	no weather bulletins.

**Shanghai (XSG)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Local navigational warnings	4215, 6326, 8425.5, 12637.5, 16898.5 kHz	0250, 0650, 1350, 2350	in Chinese.
	Local navigational warnings	4215, 6326, 8425.5, 12637.5, 16898.5 kHz	0250, 0850, 1350, 2350	in English.
NAVTEX	B1 Character: Q Range: 250nm	518 kHz	0240*, 0640, 1040*, 1440, 1840, 2240	*Weather only.

**300AG. Congo (Brazzaville)****Pointe Noire (TNA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Local navigational warnings of Congo	2705 kHz	0610, 0810, 1010, 1410, 1610	in French.

**300AH. Cook Islands (New Zealand)**

Rarotonga				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Coastal weather for Cook Islands	2207 kHz	0015, 0615, 1815	

**300AI. Cote D'Ivoire (Ivory Coast)**

Abidjan (TUA)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Local navigational warnings	2586 kHz	0848, 1248, 1948	in French.

**300AJ. Croatia**

Split (9AS)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 07, 21, 23, 28, 81	0545, 1245, 1945	in Croatian and English. Remote stations: Celavac, Hum, Labistica, Sveti Mihovil, Vidova Gora.
NAVTEX	B1 Character: Q Range: 85nm	518 kHz	0240, 0640, 1040, 1440, 1840, 2240	

Dubrovnik (9AD)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 04, 07, 28, 85	0545, 1245, 1945	in Croatian and English. Remote stations: Gorica Sv. Vlaha, Hum, Ilijino Brdo, Uljenje.

Rijeka (9AR)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 04, 20, 24, 81	0545, 1245, 1945	in Croatian and English. Remote stations: Kamenjak, Savudrija, Susak, Ucka.

**300AK. Cuba**

Habana (CLT)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Local navigational & military exercise warnings	2760 kHz	0205, 0605*, 1405, 1805*	in Spanish. *Military exercise warnings only.

**300AL. Curacao**

JRCC Curacao				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16, 26, 27	On request	
RT (MF)	Weather	2182 kHz	On request	

**300AM. Cyprus**

Cyprus (5BA)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 16	On receipt	
	Weather	Ch. 16	On request on VHF Ch. 16	
RT (MF)	Local navigational warnings and weather	2700 kHz	On receipt	
	Weather	2700 kHz	On request on RT (MF) 2182 kHz	
NAVTEX	B1 Character: M Range: 200nm	518 kHz	0200, 0600, 1000, 1400, 1800, 2200	

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RADIO NAVIGATIONAL WARNINGS

## 300AN. Denmark

Lyngby (OXZ)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 01-05, 07, 23, 61, 64-66, 83, 85	Forecasts on request, warnings on receipt	in Danish and English. Remote stations: Als, Anholt, Arsballe, Blavand, Bovbjerg, Fornaes, Frejlev, Hanstholm, Hirtshals, Karleby, Kobenhavn/Lynetten, Laeso, Mern, Rosnaes, Skagen, Svendborg, Vejby, Vejle.
	Navigational warnings	Ch. 01-05, 07, 23, 61, 64-66, 83, 85	0133, 0533, 0933, 1333, 1733, 2133	in Danish and English. Remote stations: Als, Anholt, Arsballe, Blavand, Bovbjerg, Fornaes, Frejlev, Hanstholm, Hirtshals, Karleby, Kobenhavn/Lynetten, Laeso, Mern, Rosnaes, Skagen, Svendborg, Vejby, Vejle.
	Ice	Ch. 01-05, 07, 23, 61, 64-66, 83, 85	Every hour +05m while in force, 1305 (Report)	in Danish and English. Remote stations: Als, Anholt, Arsballe, Blavand, Bovbjerg, Fornaes, Frejlev, Hanstholm, Hirtshals, Karleby, Kobenhavn/Lynetten, Laeso, Mern, Rosnaes, Skagen, Svendborg, Vejby, Vejle.
DSC MF	Navigational warnings, ice and weather	2187.5 kHz	On receipt	in Danish and English. Remote stations: Blavand, Skagen.
RT (MF)	Weather	1704, 1734, 1758, 2586 kHz	Forecasts on request, warnings on receipt	in Danish and English. Remote stations: Blavand, Ronne, Skagen, Skamlebaek.
	Navigational warnings	1704, 1734, 1758, 2586 kHz	0133, 0533, 0933, 1333, 1733, 2133	in Danish and English. Remote stations: Blavand, Ronne, Skagen, Skamlebaek.
	Ice	1704, 1734, 1758, 2586 kHz	Every hour +05m while in force, 1305 (Report)	in Danish and English. Remote stations: Blavand, Ronne, Skagen, Skamlebaek.

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RADIO NAVIGATIONAL WARNINGS

## 300AO. Ecuador

Ayora (HCY)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 26	1350	

**Ayora (HCY)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: A Range: 400nm	490 kHz	0000, 0400, 0800, 1200, 1600, 2000	Navigational warnings only.
	B1 Character: L Range: 400nm	518 kHz	0150, 0550, 0950, 1350, 1750, 2150	Navigational warnings only.

**Guayaquil (HCG)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 26	0100, 1300, on request	
NAVTEX	B1 Character: M	518 kHz	0200, 0600, 1000, 1400, 1800, 2200	

**300AP. Egypt****Al Quseir**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: V Range: 400nm	518 kHz	0330**, 0730, 1130, 1530**, 1930, 2330	**Navigational warnings & weather (when all are not selected)

**Alexandria**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: N Range: 350nm	518 kHz	0210, 0610, 1010**, 1410, 1810, 2210**	**Navigational warnings & weather (when all are not selected)

**Ismailia**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: X Range: 400nm	518 kHz	0350, 0750, 1150, 1550, 1950, 2350	Navigational warnings only.

**300AQ. Estonia**

Tallinn (ESA)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 69	on receipt, 0233, 0433, 0633, 1033, 1333, 1433, 1833, 2233	After prior announcement on VHF Ch 16. Remote stations: Aabla, Dirhami, Eisma, Kopu, Merivalja, Orissaare, Ruhnu, Suurupi, Toila, Torgu, Tostamaa, Undva.
RT (MF)	Weather	1650 kHz	0433, 1333	in English and Estonian. After prior announcement on RT (MF) 2182 kHz.
	Weather	3310 kHz	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	in English and Estonian. After prior announcement on RT (MF) 2182 kHz.
NAVTEX	B1 Character: U Range: 250nm	518 kHz	0320, 0720**, 1120, 1520, 1920**, 2320	Broadcasts are relayed by MSI Sweden/Stockholm radio ** Navigational warnings & weather (when all are not selected).

**300AR. Falkland Islands**

Falkland Islands Fisheries Department				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Local navigational warnings and weather	4066.1 kHz	0830 local time	

**300AS. Faroe Islands**

Torshavn (OXJ)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 23-26, 60-63	on receipt, every even hour +35m. Forecasts on request	in Faeroese and English. Remote stations: Eioiskollur, Fugloy, Halsurin, Kalsoy, Mykines, Sornfelli, Stoolafjall.
RT (MF)	Local navigational warnings and weather	1641 kHz	on receipt, every even hour +35m. Forecasts on request	in Faeroese and English.
NAVTEX	B1 Character: D	518 kHz	0030, 0430, 0830, 1230, 1630, 2030	

300AT. Fiji

Suva (3DP)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Coastal navigational warnings and weather	4372, 8746 kHz	0803, 1203, 1603, 2003 local time	
	Storm warnings	4372, 8746 kHz	Every hour +03m	

300AU. Finland

Turku (OFK)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 01, 03-05, 07, 23-26, 28, 84	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	Local navigational warnings in Finnish and Swedish. Remote stations: Espoo, Eurajoki, Geta, Hammarland, Hanko, Jarso, Kotka, Kristiinankaupunki, Kruunupyy, Kuivaniemi, Mustasaari, Nauvo, Raahe, Uto, Uusikaupunki, Virolahti.
	Ice	Ch. 01, 03-05, 07, 23-26, 28, 84	0803*, 1033, 1833	*Icebreaker locations only. Remote stations: Espoo, Eurajoki, Geta, Hammarland, Hanko, Jarso, Kotka, Kristiinankaupunki, Kruunupyy, Kuivaniemi, Mustasaari, Nauvo, Raahe, Uto, Uusikaupunki, Virolahti.

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RADIO NAVIGATIONAL WARNINGS

## 300AV. France

## MRCC Corsen: CROSS

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 79	on receipt, 0445, 0503, 0515, 0533, 0545, 0703, 0715, 0733, 0745, 0803, 1103*, 1115*, 1133*, 1145*, 1203*, 1533, 1545, 1603, 1615, 1633, 1903, 1915, 1933, 1945, 2003 local time, every hour +03m	in French. *01 May - 30 Sep. After prior announcement on frequencies VHF Ch 16. Remote stations: Bodic, Cap Frehel, Batz, Stiff, Le Raz.
	Bulletins for Ouessant VTS	Ch. 79	Occasional. Every hour +10m, +40m	in French and English. Fog visibility when poor. After prior announcement on frequencies VHF Ch 16. Remotes stations: Bodic, Cap Frehel, Batz, Stiff, Le Raz.
	Local navigational warnings	Ch. 10	0830, 0845, 0900, 0915, 0930, 1630, 1645, 1700, 1715, 1730 local time	in French.
RT (MF)	Local navigational warnings	1650, 2677 kHz	0735, 1935 local time	in French. After prior announcement on frequencies RT (MF) 2182 kHz.
RT (MF)	Weather	1650, 2677 kHz	on receipt, 0815, 2015 local time, every hour +03m	in French. After prior announcement on frequencies RT (MF) 2182 kHz.
NAVTEX	B1 Character: E Range: 300nm	490 kHz	0040, 0440, 0840, 1240, 1640, 2040	In French.
NAVTEX	B1 Character: A Range: 300nm	518 kHz	0000, 0400, 0800, 1200, 1600, 2000	



**MRCC Etel: CROSS**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 10	on receipt, 0830, 0845, 0900, 0915, 1630, 1645, 1700, 1715 local time	in French. After prior announcement on frequencies VHF Ch 16. Remote stations: Beg Meil, Cap Ferret, Les Baleines, Piriac, Beg Melen, Chassiron, Chemoulin, Messanges, Grave, Saint-Julien, Saint-Sauveur, Socoa, Le Talut.
	Weather	Ch. 79	on receipt, every hour +03m, 0703, 0715, 0733, 0745, 0803, 1533, 1545, 1603, 1615, 1633, 1903*, 1915, 1933*, 1945, 2003 local time	in French. After prior announcement on frequencies VHF Ch 16. *Firing practice warnings. Remote stations: Chassiron, Soulac, Cap Ferret, Contis, Biarritz.
	Local navigational warnings and weather	Ch. 80	on receipt, every hour +03m, 0703, 0715, 0733, 0745, 0803, 0815, 1533, 1545, 1603, 1615, 1633, 1645, 1903, 1915, 1933, 1945, 2003, 2015 local time	in French. After prior announcement on frequencies VHF Ch 16. Remote stations: Penmarc'h, Groix, Belle-Ile, Saint-Nazaire, Yeu, Les Sables-d'Olonne.

**MRCC Gris-Nez: CROSS**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 79	on receipt, every hour +03m, 0703, 0710, 0720, 1533, 1545, 1603, 1903, 1910, 1920	in French. After prior announcement on frequencies VHF Ch 16. Remote stations: Dunkerque, L'Ailly, Saint-Frieux, St-Valery-en-Caux.
	Special bulletins when visibility falls below 2nm	Ch. 79	Every hour +25m	in French and English. After prior announcement on frequencies VHF Ch 16. Remote stations: Dunkerque, L'Ailly, Saint-Frieux, St-Valery-en-Caux.
	Bulletins for Dover Strait	Ch. 79	Every hour +10m	After prior announcement on frequencies VHF Ch 16. Remote stations: Dunkerque, L'Ailly, Saint-Frieux, St-Valery-en-Caux.
RT (MF)	Local navigational warnings and weather	1650, 2677 kHz	on receipt, every hour +03m, 0833, 2033 local time	in French. After prior announcement on frequencies RT (MF) 2182 kHz.

**MRCC Jobourg: CROSS**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 80	on receipt, every hour +20m, +50m, on request	in French and English. After prior announcement on VHF Ch 16. Remote stations: Antifer, Granville, Port-en-Bessin.
	Weather	Ch. 80	on receipt, 0703, 0715, 0733, 0745, 0803, 1533, 1545, 1603, 1615, 1633, 1903, 1915, 1933, 1945, 2003 local time, every hour +03m	in French. After prior announcement on VHF Ch 16. Remote stations: Antifer, Granville, Port-en-Bessin.
RT (MF)	Local navigational warnings	1650 kHz	0915, 2115 local time	in French. After prior announcement on RT (MF) 2182 kHz.

**MRCC La Garde: CROSS**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 79	on receipt, 0703, 0715, 1518, 1530, 1903, 1915 local time, every hour +03m	in French. After prior announcement on VHF Ch 16. Remote stations: Neoulos/Port Vendres, Agde.
	Weather	Ch. 80	on receipt, 0733, 0745, 0746, 0803, 1548, 1600, 1601, 1618, 1933, 1945, 1946, 2003 local time, every hour +10m	in French. After prior announcement on VHF Ch 16. Remote stations: Planier, Coudon/Toulon, Pic de l'Ours/Cannes.
	Weather	Ch. 16	0733, 0745, 0803, 0815, 0833, 0845, 1518, 1530, 1548, 1600, 1618, 1630, 1933, 1945, 2003, 2015, 2033, 2045 local time.	in French. Remote stations: Bear, Cap Corse, Cepet, Pertusato, Leucate, Porquerolles, Sagro, Alistro, Camarat, Sete, Chiappa, Dramont, Espiguette, Couronne, La Garoupe, Parata, Bec de l'Aigle, Farrat, Ile Rousse.
	Local navigational warnings	Ch. 16	0915, 0930, 0945, 1000, 1015, 1030, 1400, 1415, 1430, 1445, 1500, 1515 local time.	in French. Remote stations: Bear, Cap Corse, Cepet, Pertusato, Leucate, Porquerolles, Sagro, Alistro, Camarat, Sete, Chiappa, Dramont, Espiguette, Couronne, La Garoupe, Parata, Bec de l'Aigle, Farrat, Ile Rousse.

**MRCC La Garde: CROSS**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Weather	1696, 2677 kHz	1000, 1600, 2200	in French and English. After prior announcement on RT (MF) 2182 kHz.
	Weather	1696, 2677 kHz	on receipt, 0103, 0503, 0903, 1303, 1703, 2103 local time	in French and English. After prior announcement on RT (MF) 2182 kHz.
	Local navigational warnings	1696, 2677 kHz	0833, 1603 local time	in French and English. After prior announcement on RT (MF) 2182 kHz.
NAVTEX	B1 Character: S Range: 250nm	490 kHz	0300, 0700, 1100, 1500, 1900, 2300	
	B1 Character: W Range: 250nm	518 kHz	0300, 0700, 1100, 1500, 1900, 2340	

**METAREA II**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-E, AOR-W	0900, 2100	

**NAVAREA II**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-E, AOR-W, IOR	1630	

300AW. French Antilles

Cross Antilles- Guyane, MRCC Fort de France				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 64	0900, 1230, 2000, 2200 local time	in French. Remote station: Pic Paradis.
VHF	Weather	Ch. 64	0820, 1150, 1920, 2120 local time	in French. Remote station: Marie-Galante.
VHF	Coastal navigational warnings after weather and Guadeloupe Firing Practice Area warnings	Ch. 64	1150, 1920 local time	in French. Warnings after prior announcement on VHF Ch. 16. Scheduled broadcasts may be suspended whilst SAR action is in progress. Remote station: Marie-Galante.
VHF	Coastal navigational warnings after weather	Ch. 64	1230, 2000 local time	in French. Warnings after prior announcement on VHF Ch. 16. Scheduled broadcasts may be suspended whilst SAR action is in progress. Remote station: Pic Paradis.
VHF	Weather	Ch. 79	0720, 1050, 1820, 2020 local time	in French. Remote station: Le Marin.
VHF	Weather	Ch. 79	0740, 1110, 1840, 2040 local time	in French. Remote station: Grande Riviere.
VHF	Weather	Ch. 79	0800, 1130, 1900, 2100 local time	in French. Remote station: Basse-Terre.
VHF	Coastal navigational warnings after weather	Ch. 79	1050, 2020 local time	in French. Warnings after prior announcement on VHF Ch. 16. Scheduled broadcasts may be suspended whilst SAR action is in progress. Remote station: Le Marin.
VHF	Coastal navigational warnings after weather	Ch. 79	1110, 2040 local time	in French. Warnings after prior announcement on VHF Ch. 16. Scheduled broadcasts may be suspended whilst SAR action is in progress. Remote station: Grande Riviere.

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RADIO NAVIGATIONAL WARNINGS

**Cross Antilles- Guyane, MRCC Fort de France**

<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Coastal navigational warnings after weather and Guadeloupe Firing Practice Area warnings	Ch. 79	1130, 1900 local time	in French. Warnings after prior announcement on VHF Ch. 16. Scheduled broadcasts may be suspended whilst SAR action is in progress. Remote station: Basse-Terre.
VHF	Weather	Ch. 80	0730, 1100, 1830, 2030 local time	in French. Remote station: Bellefontaine.
VHF	Weather	Ch. 80	0750, 1120, 1850, 2050 local time	in French. Remote station: La Caravelle.
VHF	Weather	Ch. 80	0810, 1140, 1910, 2110 local time	in French. Remote station: Basse-Terre.
VHF	Weather	Ch. 80	0830, 1200, 1930, 2130 local time	in French. Remote station: Basse-Terre.
VHF	Coastal navigational warnings after weather	Ch. 80	1100, 2030 local time	in French. Warnings after prior announcement on VHF Ch. 16. Scheduled broadcasts may be suspended whilst SAR action is in progress. Remote station: Bellefontaine.
VHF	Coastal navigational warnings after weather	Ch. 80	1120, 2050 local time	in French. Warnings after prior announcement on VHF Ch. 16. Scheduled broadcasts may be suspended whilst SAR action is in progress. Remote station: La Caravelle.
VHF	Coastal navigational warnings after weather and Guadeloupe Firing Practice Area warnings	Ch. 80	1140, 1910 local time	in French. Warnings after prior announcement on VHF Ch. 16. Scheduled broadcasts may be suspended whilst SAR action is in progress. Remote station: Basse-Terre.
VHF	Coastal navigational warnings after weather and Guadeloupe Firing Practice Area warnings	Ch. 80	1200, 1930 local time	in French. Warnings after prior announcement on VHF Ch. 16. Scheduled broadcasts may be suspended whilst SAR action is in progress. Remote station: Basse-Terre.
VHF	Tropical storm wanings	Ch. 64, 79, 80	Every hour +30m	in French and English.Remote stations: Le Marin, Bellefontaine, Grande Riviere, La Caravelle, Marie-Galante, Pic Paradis.

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RADIO NAVIGATIONAL WARNINGS

**Cross Antilles- Guyane, MRCC Fort de France**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
MF (RT)	Tropical storm warnings	2545 kHz	Every hour +00m	in French and English. Warnings after prior announcement on 2182 kHz. Remote station: Martinique.
	Storm warnings	2545 kHz	0933, 1815 local time	in French and English. Warnings after prior announcement on 2182 kHz. Remote station: Martinique

**300AX. French Polynesia**

**MRCC Papeete**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 26, 27	0630, 1200, 1600, 2000 local time	in French. Warnings after prior announcement on VHF Ch. 16.
RT (HF)	Weather	8803 kHz	0730, 1200, 1630, 2030 local time	in French.

**300AY. Germany**

**Haburg (DDH-49)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: L Range: 250nm	490 kHz	0150, 0550, 0950, 1350, 1750, 2150	
	B1 Character: S Range: 250nm	518 kHz	0300, 0700, 1100, 1500, 1900, 2300	

**MRCC Bremen**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 16	On receipt, every hour +00m, +30m until canceled	Remote stations: Blumenthal, Borkum, Cuxhaven, Helgoland, Kampen, Norderney, Stade, Wangerooge, Westerhever, Bastorf, Damp, Darssar Ort, Greifswalder Oie, Holnis, Marienleuchte, Rugen, Stralsund, Travemunde, Waterneverstorf.

**Offenbach/Pinneberg (DDH, DDK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Weather	147.3, 11039, 14467.3 kHz	on request, 0000, 0300, 0500, 0600, 0900, 0950*, 1200, 1500, 1715*, 1800, 2100	*Local navigational warnings in German and English.
	Weather	4583, 7646, 10100.8 kHz	on request, 0000, 0300, 0515*, 0600, 0900, 1200, 1500, 1715*, 1800, 2100	*Local navigational warnings in German and English.
	Weather	147.3, 11039, 14467.3 kHz	0005, 0020, 0030, 0055, 0125, 0130, 0135, 0200, 0235, 0305, 0320, 0325, 0350, 0425, 0430, 0435, 0505, 0520, 0530, 0535, 0605, 0620, 0630, 0700, 0725, 0730, 0734, 0755, 0820, 0840, 0905, 0920, 0930, 1010, 1025, 1030, 1035, 1100, 1120, 1145, 1205, 1220, 1230, 1300, 1325, 1330, 1420, 1440, 1505, 1520, 1530, 1545, 1610, 1625, 1630, 1635, 1735, 1805, 1820, 1830, 1900, 1925, 1930, 1934, 1955, 2020, 2040, 2105, 2120, 2130, 2155, 2225, 2230, 2235, 2305.	in German.
	Weather	4583, 7646, 10100.8 kHz	0005, 0020, 0030, 0035, 0200, 0305, 0320, 0330, 0355, 0415, 0440, 0535, 0550, 0603, 0604, 0630, 0735, 0815, 0835, 0850, 0905, 0930, 0955, 1015, 1035, 1110, 1115, 1135, 1150, 1205, 1210, 1335, 1435, 1450, 1505, 1530, 1550, 1557, 1610, 1635, 1735, 1750, 1803, 1804, 1830, 1935, 2015, 2035, 2050, 2105, 2130, 2155, 2215, 2235, 2315.	

**Offenbach/Pinneberg (DDH, DDK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Facsimile	Weather and ice	3855, 7880, 13882.5 kHz	0430, 0512, 0525, 0546, 0559, 0612, 0625, 0638, 0651, 0704, 0717, 0730, 0743, 0804, 0817, 0830, 0842, 0854, 0906, 0930*, 0945, 1007*, 1029, 1050, 1132, 1145, 1205, 1220, 1520*, 1540*, 1600, 1800, 1821, 1834, 1847, 1900, 1913, 1926, 1939, 2100*, 2115*, 2136, 2200 (Broadcast schedule at 1111)	* Ice only.

**Seefiml (Hamburg) (DP07)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 23-27, 28, 60, 61, 66, 83	on receipt, 0745, 0945, 1245, 1645, 1945	in German. Operational Mar - Oct. After prior announcement on VHF Ch 16. Remote stations: Accumersiel, Borkum, Bremen, Elbe-Weser, Nordfriesland, Arkona, Flensburg, Kiel, Lubeck, Rostock.

**300AZ. Greece**

**Corfu (SVK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: K Range: 280nm	518 kHz	0140, 0540, 0940, 1340, 1740, 2140	

**Heraklion (SVH)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: H Range: 280nm	518 kHz	0110, 0510, 0910, 1310, 1710, 2110	



**Limnos (SVL)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: L Range: 280 nm	518 kHz	0150, 0550, 0950, 1350, 1750, 2150	

**Olympia (SVO, SVU4)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 01,02, 04, 23, 25, 27, 60, 63, 82, 83, 85	0600, 1000, 1600, 2200	in Greek and English. On request on Ch. 16. Remote stations: Astypalaia, Chios, Faistos, Kefallinia, Kerkyra, Knosos, Kythira, Limnos, Moustakos, Mytilini, Parnis, Patrai, Petalidion, Pilion, Rodos, Sfendamion, Siteia, Syros, Thasos.
	Navigational warnings	Ch. 01,02, 04, 23, 25, 27, 60, 63, 82, 83, 85	on receipt, 0500, 1100, 1730, 2330	in Greek and English. On request on Ch. 16. Remote stations: Astypalaia, Chios, Faistos, Kefallinia, Kerkyra, Knosos, Kythira, Limnos, Moustakos, Mytilini, Parnis, Patrai, Petalidion, Pilion, Rodos, Sfendamion, Siteia, Syros, Thasos.
RT (MF)	Weather	2624, 2799, 2730, 2830 kHz	on receipt, 0633, 0903, 1533, 2133	in Greek and English. Remote stations: Irakleio (SVH), Kerkyra (SVK), Limnos (SVL), Rodos (SVR).
	Navigational warnings	2624, 2799 kHz	0703, 1133, 1733, 2333	in Greek and English. Remote stations: Irakleio (SVH), Kerkyra (SVK), Limnos (SVL), Rodos (SVR).
	Navigational warnings and weather	2730, 2830 kHz	0033, 0703, 1033, 1633	in Greek and English. Remote stations: Irakleio (SVH), Kerkyra (SVK), Limnos (SVL), Rodos (SVR).
Radio-Telex	Weather	8424 kHz	0930, 2130	in Greek and English.
Radio- Facsimile	Weather (Mediterranean and Aegean Sea).	4481, 8105 kHz	0845, 0857, 0909, 0921, 0933, 0945, 0957, 1009, 1021, 1033, 1044	Station operational 0845-1055 UTC.

**METAREA III**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-E	1000, 2200	

## 300BA. Greenland

## Aasiaat (OYR)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 01-04, 23-28, 60, 63	0605, 1105, 1605, 2105 local time	in English, Dutch and Greenlandic. After prior announcement on VHF Ch 16. Remote stations: Angiit, Arsuutaa, Attup Uummanaa, Ikerasassuaq, Ilulissat, Illutalissuaq, Kangaamiut, Kangaarsuk, Maniitsoq, Nanortalik, Narsaq, Narsarsauq, Niaqornaq, Paamiut, Pingu, Qaarsorsuaq, Qaqatoq, Qaqortoq, Qingaaq, Quarmii Qaaja, Sermersooq, Simiutaq, Sermiligaaq, Sisimiut, Tinumanersuaq, Top 775, Uperniviuq Qaqqaa, Uummanaq, Uunartuarsuup Qaqqaa.
	Ice and weather	Ch. 01-04, 23-28, 60, 63	On request.	
	Navigational warnings	Ch. 01-04, 23-28, 60, 63	0035, 0335, 0635, 0935, 1235, 1535, 1835, 2135, on request	in English and Dutch. After prior announcement on VHF Ch 16. Remote stations: Angiit, Arsuutaa, Attup Uummanaa, Ikerasassuaq, Ilulissat, Illutalissuaq, Kangaamiut, Kangaarsuk, Maniitsoq, Nanortalik, Narsaq, Narsarsauq, Niaqornaq, Paamiut, Pingu, Qaarsorsuaq, Qaqatoq, Qaqortoq, Qingaaq, Quarmii Qaaja, Sermersooq, Simiutaq, Sermiligaaq, Sisimiut, Tinumanersuaq, Top 775, Uperniviuq Qaqqaa, Uummanaq, Uunartuarsuup Qaqqaa.
RT (MF)	Weather	2116, 2129, 2265, 2400, 2225, 2250, 2304, 3125, 3276, 3280 kHz	0605, 1105, 1605, 2105 local time	in English, Dutch and Greenlandic. After prior announcement on RT (MF) 2182 kHz. Remote stations: Ikerasassuaq, Kook Island, Maniitsoq, Paamiut, Qeqertarsuaq, Simiutaq, Sisimiut, Tasiilaq, Upernavik, Uummanaq
	Ice and weather	2116, 2129, 2265, 2400, 2225, 2250, 2304, 3125, 3276, 3280 kHz	On request.	
	Navigational warnings	2116, 2129, 2265, 2400, 2225, 2250, 2304, 3125, 3276, 3280 kHz	0035, 0335, 0635, 0935, 1235, 1535, 1835, 2135, on request	in English and Dutch. After prior announcement on RT (MF) 2182 kHz. Remote stations: Ikerasassuaq, Kook Island, Maniitsoq, Paamiut, Qeqertarsuaq, Simiutaq, Sisimiut, Tasiilaq, Upernavik, Uummanaq

**Aasiaat (OYR)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	6522, 4381 kHz	0605, 1105, 1605, 2105 local time	in English, Dutch and Greenlandic.
	Ice and weather	6522, 4381 kHz	0605, 1105, 1605, 2105 local time	in English, Dutch and Greenlandic.
	Navigational warnings	6522, 4381 kHz	0035, 0335, 0635, 0935, 1235, 1535, 1835, 2135, on request	in English and Dutch.

**Island Commander Greenland**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 12	On receipt.	in English and Danish. Remote station: Groennedal.

**Kook Island (Nuuk) (OXI)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: W Range: 400nm	518 kHz	0340, 0740, 1140, 1540, 1940, 2340	

**Simiutaq (OXF)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: M	518 kHz	0120, 0520, 0920, 1320, 1720, 2120	

**Upernavik (OYN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: I	518 kHz	0120, 0520, 0920, 1320, 1720, 2120	

**300BB. Grenada**

Grenada Coast Guard (S. Georges), MRSC				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal weather	Ch. 16, 87	On request	

**300BC. Guam (USA)**

Guam (NRV)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local Notice to Mariners and weather.	Ch. 22A	0900, 2100	U.S. Coast Guard.
RT (MF)	Local Notice to Mariners and weather.	2670 kHz	0705, 2205	U.S. Coast Guard. Remote controlled by CAMSPAC (Point Reyes).
RT (HF)	Maritime Safety Information (MSI), tsunami warnigns and weather.	6501, 13089 kHz	0330, 0930, 1530, 2130	U.S. Coast Guard. Remote controlled by CAMSPAC (Point Reyes).
Radio-Telex	Weather for N Pacific Ocean West of 180 and the Indian Ocean.	12579, 16806.5, 22376 kHz	0230, 0500, 0900, 1500, 1900, 2315	U.S. Coast Guard.
NAVTEX	B1 Character: V Range: 100nm	518 kHz	0100, 0500, 0900, 1300, 1700, 2100	U.S. Coast Guard.

**300BD. Iceland**

Grindavik (TFK)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: K	518 kHz	0140, 0540, 0940, 1340, 1740, 2140	
	B1 Character: X	518 kHz	0350, 0750, 1150, 1550, 1950, 2350	

**Hornafjordur (Coast Guard Radio)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 25	on receipt, 0205, 0505, 0805, 1105, 1405, 1705, 2005, 2305	in Icelandic and English. After prior announcement on frequencies VHF Ch 16 and DSC VHF Ch 70. Broadcasts remotely controlled from Reykjavik. Remote station: Haxl.
RT (MF)	Weather	1659 kHz	on receipt, 0205, 0505, 0805, 1105, 1405, 1705, 2005, 2305	in Icelandic and English. After prior announcement on RT (MF) 2182 kHz. Broadcasts remotely controlled from Reykjavik.

**Isafjordur (Coast Guard Radio)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 23	on receipt, 0203, 0503, 0803, 1103, 1403, 1703, 2003, 2303	in Icelandic and English. After prior announcement on frequencies VHF Ch 16 and DSC VHF Ch 70. Broadcasts remotely controlled from Reykjavik. Remote station: Bolafjall.
RT (MF)	Weather	2724 kHz	on receipt, 0203, 0503, 0803, 1103, 1403, 1703, 2003, 2303	in Icelandic and English. After prior announcement on RT (MF) 2182 kHz. Broadcasts remotely controlled from Reykjavik.

**Neskaupstadur (Coast Guard Radio)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 23, 27	on receipt, 0203, 0503, 0803, 1103, 1403, 1703, 2003, 2303	in Icelandic and English. After prior announcement on frequencies VHF Ch 16 and DSC VHF Ch 70. Broadcasts remotely controlled from Reykjavik. Remote station: Graennipa, Hellisheioi.
RT (MF)	Weather	1761 kHz	on receipt, 0203, 0503, 0803, 1103, 1403, 1703, 2003, 2303	in Icelandic and English. After prior announcement on RT (MF) 2182 kHz. Broadcasts remotely controlled from Reykjavik.

**Reykjavik (TFA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 26, 27	on receipt, 0205, 0505, 0805, 1105, 1405, 1705, 2005, 2305	in Icelandic and English. After prior announcement on frequencies VHF Ch 16 and DSC VHF Ch 70. Remote station: Haenuvik, Sandur, Thorbjorn.
RT (MF)	Weather	1876 kHz	on receipt, 0205, 0505, 0805, 1105, 1405, 1705, 2005, 2305	in Icelandic and English. After prior announcement on RT (MF) 2182 kHz.

**Saudanes (TFA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: E	518 kHz	0040, 0440, 0840, 1240, 1640, 2040	
	B1 Character: R	518 kHz	0250, 0650, 1050, 1450, 1850, 2250	

**Siglufjordur (Coast Guard Radio)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 24, 26, 27	on receipt, 0205, 0505, 0805, 1105, 1405, 1705, 2005, 2305	in Icelandic and English. After prior announcement on frequencies VHF Ch 16 and DSC VHF Ch 70. Broadcasts remotely controlled from Reykjavik. Remote station: Grimsey, Skagi, Vioarfjall.
RT (MF)	Weather	1883 kHz	on receipt, 0205, 0505, 0805, 1105, 1405, 1705, 2005, 2304	in Icelandic and English. After prior announcement on RT (MF) 2182 kHz. Broadcasts remotely controlled from Reykjavik.

**Vestmannaeyjar (Coast Guard Radio)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 26, 27	on receipt, 0203, 0503, 0803, 1103, 1403, 1703, 2003, 2303	in Icelandic and English. After prior announcement on RT (MF) 2182 kHz. Broadcasts remotely controlled from Reykjavik.
RT (MF)	Weather	1713 kHz	on receipt, 0203, 0503, 0803, 1103, 1403, 1703, 2003, 2303	in Icelandic and English. After prior announcement on frequencies VHF Ch 16 and DSC VHF Ch 70. Broadcasts remotely controlled from Reykjavik. Remote station: Hafell, Klif.

**300BE. India**

Chennai (Madras) (VWN)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: P Range: 250nm	518 kHz	0230, 0630, 1030, 1430, 1830, 2230	

Mumbai (Bombay) (VWB)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: G Range: 250nm	518 kHz	0100, 0500, 0900, 1300, 1700, 2100	

METAREA VIII				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	IOR	0900, 1800	Northern part of AOR
			0130, 1330	Southern part of AOR. La Reunion.
	Tropical Storm warnings	IOR	0000, 0600, 1200, 1800, as needed	East of 90E. La Reunion.

NAVAREA VIII				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	IOR	1000	

**300BF. Indonesia**

Amboina (PKE)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: B Range: 300nm	518 kHz	0010, 0410, 0810, 1210, 1610, 2010	

**Jakarta (PKX)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Weather	2690 kHz	1100	
Radio-Telex	Weather and navigational warnings	8416.5 kHz	0000, 1130	
	Weather and navigational warnings	16806.5 kHz	0030, 1200	
NAVTEX	B1 Character: E Range: 300nm	518 kHz	0040, 0440, 0840, 1240, 1640, 2040	

**Jayapura (PNK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: A Range: 300nm	518 kHz	0000, 0400, 0800, 1200, 1600, 2000	

**Makasar (PKF)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: D Range: 300nm	518 kHz	0030, 0430, 0830, 1230, 1630, 2030	

**300BG. Iran****Abbas Radio (EQI)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: I Range: 300nm	490 kHz	0120, 0520, 0920, 1320, 1720, 2120	in Farsii.
	B1 Character: F Range: 300nm	518 kHz	0050, 0450, 0850, 1250, 1650, 2050	



**Bandar Khomeyni (EQN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 18	0430*, 0500, 1230*, 1300	in English and Farsi. *Weather only. Broadcasts are made 1 hour later when daylight savings time is observed.

**Bandar Raja'I (EQI)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 18	0430*, 0500, 1230*, 1300	in English and Farsi. *Weather only. Broadcasts are made 1 hour later when daylight savings time is observed.

**Bushehr (EQM)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 18	0430*, 0500, 1230*, 1300	in English and Farsi. *Weather only. Broadcasts are made 1 hour later when daylight savings time is observed.
NAVTEX	B1 Character: D Range: 300nm	490 kHz	0030, 0430, 0830, 1230, 1630, 2030	in Farsi.
	B1 Character: A Range: 300nm	518 kHz	0000, 0400, 0800, 1200, 1600, 2000	

**Chabahar (EQJ)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 18	0430*, 0500, 1230*, 1300	in English and Farsi. *Weather only. Broadcasts are made 1 hour later when daylight savings time is observed.

**Fereydoonkenar (EQO)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: J Range: 300nm	490 kHz	0130, 0530, 0930, 1330, 1730, 2130	in Farsii.
	B1 Character: G Range: 300nm	518 kHz	0100, 0500, 0900, 1300, 1700, 2100	

**300BH. Ireland**

**Dublin-Coastguard MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 02, 04, 23, 83	on receipt, 0033, 0433, 0833, 1233, 1633, 2033	After prior announcement on VHF Ch 16. Remote stations: Carlingford, Mine Head, Rosslare, Wicklow Head.
	Weather	Ch. 02, 04, 23, 83	on receipt, 0033*, 0103, 0403, 0633*, 0703, 1003, 1233*, 1303, 1603, 1833*, 1903, 2203 local time	*Weather warnings. After prior announcement on VHF Ch 16. Remote stations: Carlingford, Mine Head, Rosslare, Wicklow Head.

**Malin Head-Coastguard MRSC (EJM)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 02, 23, 24, 26, 83	0033*, 0103, 0403, 0633*, 0703, 1003, 1233*, 1603, 1833*, 1903, 2203 local time	*Weather warnings. After prior announcement on VHF Ch 16.
	Local navigational warnings	Ch. 02, 23, 24, 26, 83	on receipt, 0033, 0433, 0833, 1233, 1633, 2033	After prior announcement on VHF Ch 16.
RT (MF)	Local navigational warnings	1677 kHz	on receipt, 0033, 0433, 0833, 1233, 1633, 2033	After prior announcement on RT (MF) 2182 kHz.
NAVTEX	B1 Character: A Range: 400nm	490 kHz	0000, 0400, 0800, 1200, 1600, 2000	Inland weather.
	B1 Character: Q Range: 400nm	518 kHz	0240, 0640, 1040, 1440, 1840, 2240	

Valentia-Coastguard MRSC (EJK)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 04, 23, 24, 26, 28	on receipt, 0033*, 0103, 0403, 0633*, 0703, 1003, 1233*, 1303, 1603, 1833*, 1903, 2203 local time	*Weather warnings. After prior announcement on VHF Ch 16.
	Local navigational warnings	Ch. 04, 23, 24, 26, 28	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	After prior announcement on VHF Ch 16.
RT (MF)	Local navigational warnings	1752 kHz	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	
	Weather	1752 kHz	on receipt, 0303, 0833, 0903, 1503, 2033, 2103	
NAVTEX	B1 Character: W Range: 400nm	518 kHz	0340, 0740, 1140, 1540, 1940, 2340	

### 300BI. Israel

Haifa (4XO)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: P Range: 200nm	518 kHz	0020, 0230, 0420, 0630, 0820, 1030, 1220, 1430, 1620, 1830, 2020, 2230	

## Roma (IAR)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 01, 02, 04, 05, 07, 19-22, 25-28, 61-65, 79, 81-86	on receipt, 0135, 0735, 1335, 1935	in Italian and English. Remote stations: Abbate Argento, Bari, Monte Sardo, Casa d'Orso, Monte Calvario, Belvedere di Siracusa, Campo Lato Alto, Monte Lauro, Cefalu, Erice, Monte Pellegrino, Ustica, Forte Spuria, Gela, Mazara del Vallo, Monte San Calogero, Pantelleria, Grecale, Iampedusa Ponente, Capo Colonna, Capo dell' Armi, Monteparano, Monte Titiolo, Punta Stilo, Monte Mancuso, Capri, Posillipo, Serra del Tuono, Varco del Salice, Silvi, Conconello, Forte Garibaldi, Monte Cero, Monte Conero, Monte Secco, Piancavallo, Ravenna, Badde Urbara, Margine Rosso, Monte Serpeddi, P. Campu Spina, Monte Limbara, Monte Moro, Monte Tului, Osilo, Porto Cervo, Castellaccio, Monte Bignone, Zoagli, Formia, Monte Argentario, Monte Cavo, Monte Paradiso, Gorgona, Monte Nero.
	Navigational warnings	Ch. 01, 02, 05, 19-22, 25-27, 61, 62, 79, 81, 82, 84-86	on receipt, 0333, 0833, 1233, 1633, 2033	in Italian and English. Remote stations: Abbate Argento, Bari, Monte Sardo, Casa d'Orso, Monte Calvario, Belvedere di Siracusa, Campo Lato Alto, Monte Lauro, Cefalu, Erice, Monte Pellegrino, Ustica, Forte Spuria, Gela, Mazara del Vallo, Monte San Calogero, Pantelleria, Grecale, Iampedusa Ponente, Capo Colonna, Capo dell' Armi, Monteparano, Monte Titiolo, Punta Stilo, Monte Mancuso, Capri, Posillipo, Serra del Tuono, Varco del Salice.
	Navigational warnings	Ch. 01, 02, 04, 07, 19, 20, 21, 25-28, 61, 62, 64, 65, 82, 83, 85	on receipt, 0403, 0803, 1133, 1603, 2003	in Italian and English. Remote stations: Silvi, Conconello, Forte Garibaldi, Monte Cero, Monte Conero, Monte Secco, Piancavallo, Ravenna, Badde Urbara, Margine Rosso, Monte Serpeddi, P. Campu Spina, Monte Limbara, Monte Moro, Monte Tului, Osilo, Porto Cervo, Castellaccio, Monte Bignone, Zoagli, Formia, Monte Argentario, Monte Cavo, Monte Paradiso, Gorgona, Monte Nero.
NAVTEX	B1 Character: R Range: 320nm	518 kHz	0250, 0650, 1050, 1450, 1850, 2250	

**Cagliari (IDC)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2680 kHz	0135, 0403*, 0735, 0803*, 1203*, 1335, 1603*, 1935, 2003*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.
NAVTEX	B1 Character: T Range: 320nm	518 kHz	0310, 0710, 1110, 1510, 1910, 2310	

**Augusta (IQA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2656 kHz	0135, 0333*, 0735, 0833*, 1233*, 1335, 1633*, 1935, 2033*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.
NAVTEX	B1 Character: V Range: 320nm	518 kHz	0330, 0730, 1130, 1530, 1930, 2230	

**Porto Torres (IZN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2719 kHz	0135, 0403*, 0735, 0803*, 1203*, 1335, 1603*, 1935, 2003*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Ancona (IPA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2656 kHz	0135, 0403*, 0735, 0803*, 1203*, 1335, 1603*, 1935, 2003*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Genova (ICB)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2642 kHz	0135, 0403*, 0735, 0803*, 1203*, 1335, 1603*, 1935, 2003*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Livorno (IPL)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	1925 kHz	0135, 0403*, 0735, 0803*, 1203*, 1335, 1603*, 1935, 2003*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Civitavecchia (IPD)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	1888 kHz	0135, 0403*, 0735, 0803*, 1203*, 1335, 1603*, 1935, 2003*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Napoli (IQH)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2632 kHz	0135, 0333*, 0735, 0833*, 1233*, 1335, 1633*, 1935, 2033*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Messina (IDF)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2789 kHz	0135, 0333*, 0735, 0833*, 1233*, 1335, 1633*, 1935, 2033*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Palermo (IPP)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	1852 kHz	0135, 0333*, 0735, 0833*, 1233*, 1335, 1633*, 1935, 2033*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Mazara del Vallo (IQQ)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2600 kHz	0135, 0333*, 0735, 0833*, 1233*, 1335, 1633*, 1935, 2033*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Lampedusa (IQN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	1876 kHz	0135, 0333*, 0735, 0833*, 1233*, 1335, 1633*, 1935, 2033*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Crotone (IPC)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2663 kHz	0135, 0333*, 0735, 0833*, 1233*, 1335, 1633*, 1935, 2033*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Bari (IPB)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2579 kHz	0135, 0333*, 0735, 0833*, 1233*, 1335, 1633*, 1935, 2033*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**San Benedetto del Tronto (IQP)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	1855 kHz	0135, 0403*, 0735, 0803*, 1203*, 1335, 1603*, 1935, 2003*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.

**Trieste (IQX)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2624 kHz	0135, 0403*, 0735, 0803*, 1203*, 1335, 1603*, 1935, 2003*	in Italian and English. * Navigational warnings only. Remote controlled by Roma Radio.
NAVTEX	B1 Character: U Range: 320nm	518 kHz	0320, 0720, 1120, 1520, 1920, 2320	

**300BK. Jamaica**

**Jamaica Coast Guard (6YX) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 13	0130*, 1330, 1430*, 1830, 1900*	* weather only.
	Hurricane and tropical storm warnings affecting Jamaica	Ch. 13	Every hour +30m	
RT (HF)	Navigational warnings and weather	8291 kHz	1330, 1830	
	Hurricane and tropical storm warnings affecting Jamaica	8291 kHz	Every hour +00m	

**300BL. Japan**

**Hiroshima (JNE) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1015, 1615 local time	in Japanese and English.



**Hokkaido (JNL) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1025, 1625 local time	in Japanese and English.

**Kagoshima (JNJ) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1020, 1620 local time	in Japanese and English.

**Kobe (JGD) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1033, 1633 local time	in Japanese and English.

**Kushiro (JNX)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: K Range: 400nm	425 kHz	0140, 0540, 0940, 1340, 1740, 2140	In Japanese. Tsunami & ice warnings (Jan-April, 0930 & 1330) are issued when needed.
	B1 Character: K Range: 400nm	518 kHz	0108, 0508, 0908, 1308, 1708, 2108	Ice: Jan-April, 0930 & 1330

**Maizuru (JNC) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1020, 1620 local time	in Japanese and English.

**Moji (JNR) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1003, 1603 local time	in Japanese and English.
NAVTEX	B1 Character: H Range: 400nm	425 kHz	0017, 0417, 0817, 1217, 1617, 2017	In Japanese. Tsunami & ice warnings are issued when needed.
	B1 Character: H Range: 400nm	518 kHz	0110, 0510, 0910, 1310, 1710, 2110	

**Naha (JNB)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: G Range: 400nm	425 kHz	0000, 0400, 0800, 1200, 1600, 2000	In Japanese. Tsunami & ice warnings are issued when needed.
	B1 Character: G Range: 400nm	518 kHz	0100, 0500, 0900, 1300, 1700, 2100	

**Nagoya (JNT) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1010, 1610 local time	in Japanese and English.

**Niigata (JNV) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1015, 1615 local time	in Japanese and English.

**Okinawa (JNB) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1010, 1610 local time	in Japanese and English.

**Otaru (JLN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: J Range: 400nm	425 kHz	0051, 0451, 0851, 1251, 1651, 2051	In Japanese. Tsunami & ice warnings are issued when needed.
	B1 Character: J Range: 400nm	518 kHz	0130, 0530, 0930, 1330, 1730, 2130	

**Shiogama (JNN) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1033, 1633 local time	in Japanese and English.

**Yokohama (JGC)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and storm warnings	Ch. 16	on receipt, 1020, 1620 local time	in Japanese and English.
NAVTEX	B1 Character: I Range: 400nm	425 kHz	0034, 0434, 0834, 1234, 1634, 2034	In Japanese. Tsunami & ice warnings are issued when needed.
	B1 Character: I Range: 400nm	518 kHz	0120, 0520, 0920, 1320, 1720, 2120	

**NAVAREA XI**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	IOR, POR	0005, 0805, 1205	

**300BM. Jordan****Ababa (JYO)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 12, 77	On receipt	

**300BN. Kiribati**

**Tarawa**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Local weather	4387 kHz	Every hour +00m	

**300BO. Korea (Republic of)**

**Chukpyon (HL)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: V	490 & 518 kHz	0330, 0730, 1130, 1530, 1930, 2330	

**Gangneung (HLK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings	2836 kHz	0903	in Korean and English.

**Gunsan (HLN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings	2507 kHz	0403	in Korean and English.

**Incheon (HLC)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings	2284 kHz	0003	in Korean and English.

**Jeju (HLE)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings	2299 kHz	0902, 1702	in Korean and English.

**Pyonsan (HL)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: W	490 & 518 kHz	0340, 0740, 1140, 1540, 1940, 2340	

**300BP. Kuwait****Al Kuwayt (9KK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Weather	2750 kHz	0530, 1730	

**300BQ. Latvia****Riga Rescue Radio (YLQ) MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather warnings	Ch. 71	Every hour +03m and +33m	in English and Latvian. After prior announcement on frequencies VHF Ch 16, DSC VHF Ch 70.
	Local navigational warnings and weather	Ch. 71	0703, 1503 local time, on request	in English and Latvian. After prior announcement on frequencies VHF Ch 16, DSC VHF Ch 70.

**300BR. Lebanon****Beyrouth**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 16	On request	
RT (MF)	Navigational warnings	2182 kHz	On request	

**300BS. Libya**

Tarabulus (Tripoli) (5AT)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Local navigational warnings	2182 kHz	on receipt, 0903, 1903	
	Weather	2197 kHz	0833, 1733	

**300BT. Lithuania**

Klaipeda (LYL) VTS				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 09	on request	in Lithuanian, English and Russian. On request.

**300BU. Madeira (Portugal)**

Centro de Comunicacoes da Madeira (CTQ)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 11	1030, 1630 local time	in Portuguese and English.
RT (MF)	Local navigational warnings and weather	2657 kHz	0735, 1935	in Portuguese and English.

Porto Santo (CTQ)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: M	490 kHz	0100, 0500, 0900, 1300, 1700, 2100	in Portuguese.
	B1 Character: P	518 kHz	0230, 0630, 1030, 1430, 1830, 2230	

**300BV. Malaysia**

<b>Miri (9WR)</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
NAVTEX	B1 Character: T Range: 350nm	518 kHz	0310**, 0710, 1110, 1510**, 1910, 2310	** Nav & weather (when all are not selected).

<b>Penang (9MG)</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Coastal navigational warnings	Ch. 16	0148, 0548, 0948, 1348, 1748, 2148	Remote stations: Kuantan, Port Klang.
NAVTEX	B1 Character: U Range: 350nm	518 kHz	0320**, 0720, 1120, 1520**, 1920, 2320	** Nav & weather (when all are not selected).

<b>Sandakan (9WS)</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
NAVTEX	B1 Character: S Range: 350nm	518 kHz	0300**, 0700, 1100, 1500**, 1900, 2300	** Nav & weather (when all are not selected).

**300BW. Malta**

<b>RCC Malta</b>				
<b>Type</b>	<b>Nature of Broadcast</b>	<b>Frequency/ Channel</b>	<b>Times (UTC)</b>	<b>Additional Information</b>
VHF	Navigational warnings and weather	Ch. 01-04	0603*, 1003, 1603, 2103	* weather only. Warnings up to 10 days old are broadcast Mon-Sat. All warnings still in force are broadcast on Sun.
RT (MF)	Navigational warnings and weather	2625 kHz	0603*, 1003, 1603, 2103	* weather only. Warnings up to 10 days old are broadcast Mon-Sat. All warnings still in force are broadcast on Sun.
NAVTEX	B1 Character: O	518 kHz	0220, 0620, 1020, 1420, 1820, 2220	

**Valletta VTS**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal weather	Ch. 11	0803, 1203, 1803, 2303 local time	After prior announcement on frequencies VHF Ch 12, 14 and 16.

**300BX. Mauritius**

**Mauritius (3BM)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 14	on receipt, 0205, 1405	Warnings after prior announcement on VHF Ch 16. Cyclone warnings repeated every 2 hours.
RT (HF)	Weather	4402 kHz	0115, 0730*, 1315, 1930*	*Only when cyclone warning is in force. Cyclone warnings repeated every 2 hours. Warnings after prior announcement on RT (MF) 2182 kHz.
	Local navigational warnings	4402 kHz	0433, 1233, 1603	After prior announcement on RT (MF) 2182 kHz.
NAVTEX	B1 Character: C Range: 400nm	518 kHz	0020, 0420, 0820, 1220, 1620, 2020	

**300BY. Mexico**

**Acapulco (XFA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 25	0335, 0935, 1535	
	Navigational warnings	Ch. 26	0335, 0935, 1535	

**Chetumal (XFP)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 26	0335, 0935, 1535	



## Ciudad Del Carmen (XFB)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 26	0335, 0935, 1535	

## Coatzacoalcos (XFF)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 26	0335, 0935, 1535	

## Cozumel (XCF)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 26	0335, 0935, 1535	

## Ensenada (XFE)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 25	0335, 0935, 1535	
	Navigational warnings	Ch. 26	0335, 0935, 1535	

## Lazaro Cardenas

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 27	0335, 0935, 1535	
	Navigational warnings	Ch. 26	0335, 0935, 1535	

## Manzanillo (XFM)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 25	0335, 0935, 1535	
	Navigational warnings	Ch. 26	0335, 0935, 1535	

**Mazatlan (XFL)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 25	0335, 0935, 1535	
	Navigational warnings	Ch. 26	0335, 0935, 1535	
RT (HF)	Navigational warnings	8514 kHz	0335, 0935, 1535	

**Progreso**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 26	0335, 0935, 1535	
RT (HF)	Navigational warnings and weather	8514 kHz	0335, 0935, 1535	

**Puerto Vallarta**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 27	0335, 0935, 1535	
	Navigational warnings	Ch. 26	0335, 0935, 1535	

**Veracruz (XFU)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 26	0335, 0935, 1535	

**300BZ. Monaco****Monaco (3AC, 3AF)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 20, 23-25	Continuous. (Western Mediterranean 0930, 1403, 1903 local time)	in French and English.

**Monaco (3AC, 3AF)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	4363, 8728, 13146, 17260 kHz	0800, 0930, 1030 (Western Mediterranean 0930, 1403, 1903 local time)	in French and English.

**300CA. Montenegro**

**Bar (4OB)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 24	0850, 1420, 2050	in Montenegrin and English. After prior announcement on frequencies VHF Ch 16, DSC VHF Ch 70.
RT (HF)	Navigational warnings and weather	1720.4 kHz	0850, 1420, 2050	in Montenegrin and English. After prior announcement on RT (MF) 2182 kHz, DSC (MF) 2187.5 kHz.

**300CB. Morocco**

**Agadir (CND)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Local navigational warnings	1911 kHz	1048, 1628	in French. After prior announcement on RT (MF) 2182 kHz.
	Weather	1911 kHz	on receipt, every hour +33m, 0935, 1615, on request	in French. After prior announcement on RT (MF) 2182 kHz.

**Casablanca (CNP)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Local navigational warnings	2586 kHz	0918, 2028	in French. After prior announcement on RT (MF) 2182 kHz.
	Weather	2586 kHz	Every hour +33m, 0945, 1645	in French. After prior announcement on RT (MF) 2182 kHz.

**Casablanca (CNP)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: M Range: 180nm	518 kHz	0200, 0600, 1000, 1400, 1800, 2200	

**300CC. Namibia**

**Walvis Bay (V5W)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 23, 26, 27	0935, 1235, 1635	Remote station: Luderitz (Ch. 23)
	Local navigational warnings	Ch. 23, 26, 27	0905, 1605	Remote station: Luderitz (Ch. 23)
RT (MF)	Weather	2182 kHz	On receipt.	
RT (HF)	Weather	4357, 8719, 13077 kHz	0935, 1235, 1635	
	Local navigational warnings	4357, 8719, 13077 kHz	0905, 1605	
NAVTEX	B1 Character: B Range: 378nm	518 kHz	0010, 0410, 0810, 1210, 1610, 2010	

**300CD. Netherland Antilles**

**Curacao (PJC)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: H Range: 400nm	518 kHz	0110, 0510, 0910, 1310**, 1710, 2110	** Nav & weather (when all are not selected).

**300CE. Netherlands**

**Den Helder (PBK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: P	518 kHz	0230, 0630, 1030, 1430, 1830, 2230	

Netherlands Coast Guard (PBK)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 23, 83	0805, 1305, 1905, 2305 local time	After prior announcement on VHF Ch 16. Remote stations: Huisduinen, Ijmuiden, Kornwerderzand, Renesse, Schiermonnikoog, Wezep, Woensdrecht, Appingedam, Hoorn, Scheveningen, Schoorl, Westkapelle, West-Terschelling.
	Navigational warnings	Ch. 23, 83	0333, 0733, 1133*, 1533, 1933, 2333	*Includes Ice. After prior announcement on VHF Ch 16. Remote stations: Huisduinen, Ijmuiden, Kornwerderzand, Renesse, Schiermonnikoog, Wezep, Woensdrecht, Appingedam, Hoorn, Scheveningen, Schoorl, Westkapelle, West-Terschelling.
RT (MF)	Navigational warnings and weather	3673 kHz	0333, 0733, 0940*, 1133**, 1533, 1933, 2140*, 2333	*Weather only. ** Navigational warnings, ice and weather. After prior announcement on RT (MF) 2182, 3673 kHz.

3 - 134 300CF. New Caledonia

Noumea (FJP)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 23-26, 28, 82, 83, 87	0630, 0930, 1515, 1830 local time	in French and in English on request. Remote stations: Fayaoue/Ouvea, Kafeate, La Roche/Mare, Mandjelia, Mont Do, Mou/Lifou, Oungone.
	Local navigational warnings	Ch. 23-26, 28, 82, 83, 87	0415, 0730, 1930, 2230	in French and in English on request. Remote stations: Fayaoue/Ouvea, Kafeate, La Roche/Mare, Mandjelia, Mont Do, Mou/Lifou, Oungone.

300CG. New Zealand

Taupo Maritime Radio (ZLM)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather for Chatham Islands.	Ch. 60, 62	0603, 1403, 1803, 2203 local time	Local time is 45m ahead of NZ standard time. Remote stations: Chatham Islands, Pitt Island. After prior announcement on VHF Ch 16.
	Weather	Ch. 25, 67-69, 71	0133, 0533, 0733, 1033, 1333, 1733, 2133 local time	After prior announcement on VHF Ch 16.
RT (MF)	Navigational warnings and weather	2207 kHz	0133, 0533, 0803, 1203, 1333, 1733, 2003 local time	
RT (HF)	Navigational warnings and weather	4146, 6224 kHz	0133, 0533, 0803*, 1203*, 1333, 1733, 2003* local time	* weather only.
	Navigational warnings and weather	6224, 12356 kHz	0303, 0903, 1503, 2103 local time	Broadcasts are made 1 hour later when daylight savings time is observed.
	Navigational warnings and weather	8297, 16531 kHz	0333, 0933, 1533, 2133 local time	Broadcasts are made 1 hour later when daylight savings time is observed.

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METAREA XIV				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	POR	0130*, 0330**, 0930, 1330*, 1530**, 2130	*In local time & NZ coast only. The Bass Strait bulletins are Coastal Warnings and Forecasts transmitted onto SafetyNET Coastal Area D in NAVREA X. ** Storm warnings only.

NAVAREA XIV				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	POR	0900, 2100	

RADIO NAVIGATIONAL WARNINGS

**300CH. Nigeria**

Lagos (50W)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: S	518 kHz	0300, 0700, 1100, 1500, 1900, 2300	

Port Harcourt (50Z)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: E	518 kHz	0040, 0440, 0840, 1240, 1640, 2040	

**300CI. North Korea**

Hungnam (HMH)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: E	490 kHz	0040, 0440, 0840, 1240, 1840, 2240	in Korean.
	B1 Character: E	518 kHz	0040, 0440, 0840, 1240, 1840, 2240	

Pyongyang (HMZ)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: D	490 kHz	0030, 0430, 0830, 1230, 1630, 2230	in Korean.
	B1 Character: D	518 kHz	0030, 0430, 0830, 1230, 1630, 2230	

## 300CJ. Norway

## Bodo (LGP)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 01, 05, 07, 20-22, 27, 28, 60, 66, 78, 79, 81	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	in English and Norwegian. Local weather and Ice on request. Remote stations: Andenes, Ramnan, Bjorndalen, Longyearbyen, Bjornoya, Ronvikfjell, Harstad, Harstadasen, Harstad, Sorollnes, Isfjord (Svalbard), Leirfjord, Horva, Lenvik, Kistefjell, Lodingen, Fenes, Meloy, Mo I Rana, Vattahaugen, Nesna, Raften/Svolvaer, Sorfold, Fornesfjell, Stamnes, Sortland, Steigen, Smatindane, Storheia/Hadsel, Tjeldsundet, Balstadasen, Traenfjord, Hestmannen, Tromso, Rostbakken, Hillesoy, Sandoy, Tonsnes, Tysfjord, Hellandsberg, Vaeroya, Vega, Gulsvagfjell, Veggen/Narvik, Vesteralen, Kraknes, Vestvagoy, Kvalnes, Vevelstad, Vistenfjord.
RT (MF)	Navigational warnings and weather	1770 kHz	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	in English and Norwegian. Ice on request.
	Navigational warnings and weather	1659, 1731, 1743, 1710 kHz	on receipt, 0233, 0633, 1033, 1203, 1433, 1833, 2233, 2303	in English and Norwegian. Ice on request. Remote stations: Andenes, Isfjord (Svalbard), Jan Mayen, Sandnessjoen.
RT (HF)	Navigational warnings and weather	4357 kHz	on receipt, 0233, 0633, 1033, 1203, 1433, 1833, 2233, 2303	in English and Norwegian. Ice on request. Remote station: Isfjord (Svalbard).
NAVTEX	B1 Character: B Range: 450nm	518 kHz	0010, 0410, 0810, 1210, 1610, 2010	

## Floro (LGL)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 01, 07, 20-22, 27, 28, 66, 78, 79, 81	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	in English and Norwegian. Local weather and Ice on request.
RT (MF)	Navigational warnings and weather	1680, 1782 kHz	on receipt, 0233, 0633, 1033, 1215*, 1433, 1833, 2233, 2315*	in English and Norwegian. * Weather only. Ice on request.



## Orlandet (LFO)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: N Range: 450nm	518 kHz	0210, 0610, 1010, 1410, 1810, 2210	

## Rogaland (LGQ)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 01, 07, 20-22, 27, 28, 60, 66, 78, 79, 81	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	in English and Norwegian. Local weather and Ice on request. Remote stations: Bergen, Lindas, Gladihaug, Rundemanen, Bjerkreim, Urdalsnipa, Draupner (Rig), Ekofisk (Rig), Farsund, Frigg (Rig), Haugesund, Steinsfjeld, Heimdal (Rig), I.Hardanger, Grimo, Lifjell, Sandnes, Lindesnes, Skibmannsheia, Lista, Storefjell, Lyngdal, Kalaskniben, Mandal, Husheia, Sand, Prestasen, Sleipner A (Rig), Sotra, Pyttane, Stavanger, Ullandhaug, Stord, Kattnakken, Ula (Rig), Valhall (Rig), Y.Hardanger, Ljonesasen.
RT (MF)	Navigational warnings and weather	1728, 1785 kHz	on receipt, 0233, 0633, 1033, 1215*, 1433, 1833, 2233, 2315*	in English and Norwegian. Ice on request. * Weather only. Remote stations: Bergen, Farsund.
	Navigational warnings and weather	1692 kHz	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	in English and Norwegian. Ice on request. Remote station: Vigre.
NAVTEX	B1 Character: L Range: 450nm	518 kHz	0150, 0550, 0950, 1350, 1750, 2150	

**Tjome (LGT)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 01, 07, 20-22, 27, 66, 79, 81	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	in English and Norwegian. Local weather and Ice on request. Remote stations: Arendal, Hisoya, Bangsberget, Mjosa, Drammen, Bukten, Halden, Hoyas, Horten, Kristiansand, Dolsveden, Lillesand, Justoya, Oslo, Tryvann, Porsgrunn, Vealos, Risor, Ranvikheia, Svendsheia, Sogne, Tjome, Tonsberg.
RT (MF)	Navigational warnings and weather	1665 kHz	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	in English and Norwegian. Ice on request.

**Vardo (LGV)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 01, 07, 20-22, 27, 28, 60, 66, 78, 79	on receipt, 0233, 0633, 1033, 1433, 1833, 2233	in English and Norwegian. Local weather and Ice on request. Remote stations: Alta, Helligfjell, Batsfjord, Hamnefjell, Berlevag, Berlevagfjell, Hammerfest, Hammerfjell, Tyven, Hasvik, Fuglen, Havoysund, Havoygavlen, Karlsoy, Torsvag, Kirkenes, Lebesby, Oksen, Mehamn, Trollhetta, Nordkapp, Honningsvag, Skjervoy, Stussnesfjell, Trolltind, Tana, Algasvarre, Varangerfjord, Torsvarde, Vardo, Domen.
RT (MF)	Navigational warnings and weather	1635, 1695, 1713 kHz	on receipt, 0233, 0633, 1033, 1203*, 1433, 1833, 2233, 2303*	in English and Norwegian. Ice on request. * Weather only. Remote stations: Hammerfest, Berlevag.
Radio-Telex	METAREA XIX bulletins for arctic waters that are not covered by INMARSAT SafetyNet service	4210 kHz	0645*, 1115, 1845*, 2315	*includes ice. Remote station: Svalbard.
	METAREA XIX bulletins for arctic waters that are not covered by INMARSAT SafetyNet service	8416.5 kHz	0630*, 1100, 2300*	* includes ice. Remote station: Svalbard.
NAVTEX	B1 Character: V Range: 450nm	518 kHz	0330, 0730, 1130, 1530, 1930, 2330	

**METAREA XIX**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-E	1100, 2300	

**NAVAREA XIX**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-E	0630, 1830	

**300CK. Oman****Muscat (A4M)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: M Range: 270nm	518 kHz	0200, 0600, 1000, 1400, 1800, 2200	

**300CL. Pakistan****Karachi (ASK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: P Range: 400nm	518 kHz	0230, 0630, 1030, 1430, 1830, 2230	

**METAREA IX**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	IOR	0700	

**NAVAREA IX**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	IOR	0800	

**300CM. Papua New Guinea**

**Port Moresby (P2M)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Local navigational warnings and weather	4405, 6510 kHz	On receipt, 0003, 0603. Gale warnings every hour +03m	Operating hours 2100 - 1200 UTC
	Local navigational warnings		0603, 2203. Urgent warnings next even hour +03m	

**300CN. Peru**

**Callao (OBC-3)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: U Range: 400nm	518 kHz	0320, 0720*, 1120, 1520, 1920*, 2320	*Weather only

**Paita (OBY-2)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: S Range: 400nm	518 kHz	0300*, 0700, 1100, 1500*, 1900, 2300	*Weather only

**Mollendo (OBF-4)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: W Range: 400nm	518 kHz	0340, 0740, 1140*, 1540, 1940, 2340*	*Weather only

**NAVAREA XVI**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-W	0519, 1119, 1719, 2319	

300CO. Philippines

**Manila (DZS-4)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather.	Ch. 09, 16, 20	0030, 0330, 0630, 0930, 1230, on request	
RT (HF)	Local navigational warnings and weather.	8776.8 kHz	0030, 0330, 0630, 0930, 1230, on request	
NAVTEX	B1 Character: J Range: 320nm	518 kHz	0130, 0530, 0930, 1330, 1730, 2130	

**Puerto Princesa (DVS)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: I Range: 320nm	518 kHz	0120, 0520, 0920, 1320, 1720, 2120	

**Davao (DWT)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: K Range: 320nm	518 kHz	0140, 0540, 0940, 1340, 1740, 2140	

**Monsanto (CTV)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: G Range: 520nm	490 kHz	0100, 0500, 0900, 1300, 1700, 2100	in Portuguese
	B1 Character: R Range: 520nm	518 kHz	0250, 0650, 1050, 1450, 1850, 2250	

## 300CP. Poland

Witowo (SPS)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 24-26	0135, 0735, 1335, 1935, on request	in English and Polish. After prior announcement on VHF Ch 16.
	Coastal Navigational warnings	Ch. 24-26	0133, 0533, 0933, 1333, 1733, 2133, on request	
	Ice	Ch. 24-26	1035, 1335, on request	
RT (MF)	Weather	2720 kHz	0135, 0735, 1335, 1935, on request	
	Coastal Navigational warnings	2720 kHz	0133, 0533, 0933, 1333, 1733, 2133, on request	
	Ice	2720 kHz	1035, 1335, on request	

Slupsk VTS				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 10	0715, 1245, 1845, 2345 local time	in English and Polish. After prior announcement on VHF Ch 16, 71.
	Weather. Ice reports on request	Ch. 12	0705, 1235, 1835, 2335 local time	in Polish. Ice can also be in Baltic Ice Code. After prior announcement on VHF Ch 16, 71.

Zatoka Gdansk VTS				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 66	0005, 0705, 1305, 1905 local time	in Polish. After prior announcement on VHF Ch 16, 71.
			0105, 0805, 1405, 2005 local time	in English. After prior announcement on VHF Ch 16, 71.

**Swinoujscie VTS**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 71	0003, 0603, 1203, 1803 local time	in English and Polish. After prior announcement on VHF Ch 12.

**Szczecin VTS**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 71	0533, 1133, 1733, 2333 local time	in English and Polish. After prior announcement on VHF Ch 69.

**300CQ. Portugal**

**Alges**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local, Coastal navigational warnings and weather	Ch. 11	0905, 2105	in Portuguese, repeated in English where possible.
RT (MF)		2657 kHz		

**Faro**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local, Coastal navigational warnings and weather	Ch. 11	0805, 2005	in Portuguese, repeated in English where possible.

**Lisbon**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 11	1100, 1630 local time	in Portuguese.

**Leixoes**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local, Coastal navigational warnings and weather	Ch. 11	0705, 1905	in Portuguese, repeated in English where possible.

**Setubal**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 11	1100, 1630 local time	in Portuguese.

**300CR. Qatar****Doha (A7D)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 24	0500, 1000, 1600	
	Local navigational and weather warnings		On receipt.	
RT (MF)	Weather	2768 kHz	0500, 1000, 1600	
	Local navigational and weather warnings		On receipt.	



**300CS. Reunion (France)**
**La Reunion-COSSRU, MRCC**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 79	0705, 0735, 0805, 0835, 1205, 1235, 1305, 1335, 1805, 1835, 1905, 1935 local time	in French. After prior announcement on VHF Ch 16. Remote stations: Colorado, Le Plate, Manapany, Reservious.
	Tropical Storm warnings		on receipt, every hour +05m, +20m, +35m, +50m	in French. After prior announcement on VHF Ch 16. Remote stations: Colorado, Le Plate, Manapany, Reservious.
	Inshore and local navigational warnings		0715, 0730, 0745, 0800, 0945, 1000, 1015, 1030, 1300, 1315, 1330, 1345, 1500, 1515, 1530, 1545, 1800, 1815, 1830, 1845, 2000, 2015, 2030, 2045 local time	After prior announcement on VHF Ch 16. Remote stations: Colorado, Le Plate, Manapany, Reservious.
RT (MF)	Weather	2600 kHz	0830, 1430, 2030 local time	in French. After prior announcement on RT (MF) 2182 kHz.
	Tropical Storm warnings		on receipt, every hour +30m	After prior announcement on RT (MF) 2182 kHz.
	Inshore and local navigational warnings		0830, 1400, 1630 local time	After prior announcement on RT (MF) 2182 kHz.

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RADIO NAVIGATIONAL WARNINGS

**300CT. Romania**
**Constanta (YQI)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch.12, 24, 26	0703, 1003*, 1303, 1603*, 1903, 2203*	Weather in Romanian and English. Navigational warnings in English. *Navigational warnings only. After prior announcement on DSC VHF Ch 70.
RT (MF)		2748 kHz	0733, 1033*, 1333, 1633*, 1933	Weather in Romanian and English. Navigational warnings in English. *Navigational warnings only. After prior announcement on DSC (MF) 2187.5 kHz.

**Constanta (YQI)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: L Range: 400nm	490 kHz	0150, 0550, 0950, 1350, 1750, 2150	

**300CU. Russia****Archangel (UGE)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: L Range: 300nm	518 kHz	0050, 0450, 0850, 1250, 1650, 2050	

**Astrakhan (UJB)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: W Range: 250nm	518 kHz	0340, 0740, 1140, 1540, 1940, 2340	

**Beringovskiy**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Weather	2525, 3730 kHz	Continuous	Station open 15 May - 01 Dec.
Radio-Telex		2182 kHz		

**Kaliningrad (UIW)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Navigational warnings	4228, 8454, 12877.5, 16927 kHz	1000, 1620	

**Kholmok (UFO)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: B Range: 300nm	518 kHz	0010, 0410, 0810, 1210, 1610, 2010	

**Magadan (UIB)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Weather	2400 kHz	0203, 1233	in Russian.
	Local navigational warnings		1303	in Russian.
NAVTEX	B1 Character: D Range: 120nm	518 kHz	0030, 0430, 0830, 1230, 1630, 2030	

**Murmansk (UDK, UDK2, UHY)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Coastal warnings	13050 kHz	0400, 1730	in Russian. Broadcasts are made 1 hour later when daylight savings time is observed.
	Weather		0420, 1740	in Russian. Broadcasts are made 1 hour later when daylight savings time is observed.
Radio-Facsimile	Weather and ice	6446, 7907 (1900-0600 UTC), 8444 kHz	0700, 0800, 1400, 1430, 2000 (Broadcast schedule at 1850)	
NAVTEX	B1 Character: K Range: 300nm	518 kHz	0020, 0420, 0820, 1220, 1620, 2020	

**Novorossiysk (UDN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: A Range: 300nm	518 kHz	0300, 0700, 1100, 1500, 1900, 2300	

**Okhotsk (UCV-2)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Weather	2560 kHz	0000, 0550, 1400, 2200	in Russian.
NAVTEX	B1 Character: G Range: 300nm	518 kHz	0100, 0500, 0900, 1300, 1700, 2100	

**Petropavlovsk (UBE-2)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: C Range: 300nm	518 kHz	0020, 0420, 0820, 1220, 1620, 2020	

**Petropavlovsk-Kamchatskiy (UFH)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Navigational warnings and weather.	4255, 6405, 12825 kHz	0900, 2100	
	Coastal Navigational warnings.	4323, 6360.5, 8451, 12603, 17045 kHz	0000, 0700	

**Vladivostok (UFL, UFZ)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Telex	Navigational warnings and weather	3165, 8595, 12729 kHz	1100, 2300	
		3165, 8595, 12729 kHz	1130	
		3165, 8595, 12729, 17175.2 kHz	2330	Inforce message on Sundays.
		4241, 6460 kHz	0900, 2300	in Russian.
		12799.5, 17155 kHz	2300	in Russian.
		8643, 12799.5 kHz	0900	in Russian.
		6314, 12579 kHz	0200, 1100	
		16806.5 kHz	0200	
		8416.5 kHz	1100	
NAVTEX	B1 Character: A Range: 230nm	518 kHz	0000, 0400, 0800, 1200, 1600, 2000	

**Yuzhno-Sakhalinsk**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	4030, 6997 kHz	1900	in Russian.
		4480, 5170 kHz	0130, 0630	in Russian.

**METAREA XIII**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	POR	0930, 2130	

**METAREA XX**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	IOR	0600, 1800	

**METAREA XXI**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	POR	0600, 1800	

**NAVAREA XIII**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	POR	0930, 2130	

**NAVAREA XX**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	IOR	0530, 1730	

**NAVAREA XXI**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	POR	0630, 1830	

**Jiddah (HZH)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings	Ch. 25	On request	
	Weather			
RT (MF)	Local navigational warnings	1726 kHz	0333, 0733, 1133, 1533, 1933, 2333	
	Weather			0503, 0533, 1133, 1703, 1733, 2333
NAVTEX	B1 Character: H Range: 390nm	518 kHz	0705, 1305, 1905	

300CV. Saudi Arabia

**300CW. Senegal**

Dakar (6VA)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: M Range: 200nm	490 kHz	0200, 0600, 1000, 1400, 1800, 2200	
	B1 Character: C Range: 200nm	518 kHz	0020, 0420, 0820, 1220, 1620, 2020	

**300CX. Seychelles**

Seychelles				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Coastal weather	8770 kHz	0518, 1548	

**300CY. Singapore**

Singapore (9VG-49)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: C Range: 400nm	518 kHz	0020**, 0420, 0820, 1220**, 1620, 2020	** Nav & weather (when all are not selected)

**300CZ. South Africa**

Cape Naval-NAVCOMCEN Cape (ZSJ)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Facsimile	Weather	4014 (1600-0600 UTC), 7508, 13538, 18238(0600-1600 UTC) kHz	0430, 0500, 0630, 0730, 0800, 1030, 1100, 1530, 2230 (Broadcast schedule at 0430)	Only broadcast between Oct - Mar.

**Cape Town (ZSC)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 01, 03, 04, 23-28, 83-86	1015, 1333*, 1815	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Albertinia, Alexander Bay, Bluff (Durban), Botha's Hill, Cape St. Lucia, Constantiagberg, Doringbaai, East London, Elandsbaai, Governorskop, Hermanus, Hondeklipbaai, Kareedouw, Knysna, Kosi Bay, Mazeppa Bay, Milnerton, Pearly Beach, Port Edward, Port Nolloth, Port Shepstone, Port St. Johns, Richards Bay, Saldanha Bay, Sodwana, Struisbaai
RT (HF)		4375, 8740, 13146 kHz		*Weather only. After prior announcement on RT (MF) 2182 kHz.
NAVTEX	B1 Character: C Range: 300nm	518 kHz	0020, 0420, 0820, 1220, 1620, 2020	

**Durban (ZSD)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: O Range: 300nm	518 kHz	0220, 0620, 1020, 1420, 1820, 2220	

**Port Elizabeth (ZSQ)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: I Range: 300nm	518 kHz	0120, 0520, 0920, 1320, 1720, 2120	



**METAREA VII**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-W (west of 20E)	0940, 1940	Forecasts for area 30S 50E and 50S 80E and tropical cyclone warnings are prepared by La Reunion.
		IOR (east of 20E)		

**NAVAREA VII**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-W, IOR	1940	

**300DA. Spain****MRSC Algeciras**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 74	On request	in Spanish and English.
	Weather		0315, 0515, 0715, 1115, 1515, 1915, 2315	

**MRCC Almeria**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 74	Every odd hour +15m	in Spanish and English.

**MRCC Barcelona**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 10	On receipt	in Spanish and English.
	Weather		0700, 1100, 1600, 2100 local time	

**MRCC Bilbao**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 24, 26, 27, 60	0840, 1240*, 2010	in Spanish. *Weather only. Remote stations: Cabo Penas, Navia, Pasajes, Santander
	Weather	Ch. 10, 74	on receipt, 0033, 0233, 0433, 0633, 0833, 1033, 1233, 1433, 1833, 2033, 2233	in Spanish and English.
RT (MF)	Navigational warnings and weather	1677, 1707 kHz	0703, 1303*, 1903	in Spanish. *Weather only. Remote stations: Cabo Penas, Machinchaco

**Cabo de la Nao (EAV)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: M Range: 300nm	490 kHz	0200, 0600, 1000, 1400, 1800, 2200	in Spanish
	B1 Character: X Range: 300nm	518 kHz	0350, 0750, 1150, 1550, 1950, 2350	

**MRSC Cadiz**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 74	on receipt, 0315, 0715, 1115, 1515, 1915, 2315	in Spanish and English.

**MRSC Cartagena**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 10	On receipt	in Spanish and English.
	Weather		0115, 0515, 0915, 1315, 1715, 2115	

**MRSC Castellon**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 74	On receipt	in Spanish and English.
	Weather		0603, 0630, 1003, 1030, 1603, 1630, 2103, 2130 local time	

**MRSC Coruna (EAR)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 10	0205, 0605, 1005, 1405, 1805, 2205	in Spanish and English.
	Weather		0005, 0405, 0805, 1205, 1605, 2005	
	Navigational warnings and weather	Ch. 02, 21, 22, 26, 65	0840, 1240*, 2010	in Spanish. *Weather only. Remote stations: Cabo Ortegal, Finisterre, La Guardia, Vigo
RT (MF)	Navigational warnings and weather	1698, 1764 kHz	0703, 1303*, 1903	in Spanish. *Weather only. Remote station: Finisterre
NAVTEX	B1 Character: W Range: 400nm	490 kHz	0340, 0740, 1140, 1540, 1940, 2340	in Spanish
	B1 Character: D Range: 400nm	518 kHz	0030, 0430, 0830, 1230, 1630, 2030	

**MRCC Finisterre**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 11	0033, 0433, 0833, 1233, 1633, 2033	in Spanish and English.
	Weather		0233, 0633, 1033, 1433, 1833, 2233	

**MRCC Gijon**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 10	Every hour +15m	in Spanish and English.
	Weather		Every even hour +15m	

**MRSC Huelva**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 10	On receipt	in Spanish and English.
	Weather		0415, 0815, 1215, 1615, 2015	

**Malaga**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 26, 27, 81	0833, 1133*, 2003	in Spanish. *Weather only. Remote stations: Cabo Gata, Cadiz, Malaga, Tarifa
RT (MF)		1656, 1704 kHz	0733, 1233*, 1933	in Spanish. *Weather only. Remote stations: Chipiona, Tarifa

**MRSC Palamos**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 74	On receipt	in Spanish and English. Operational 01 Jul - 30 Sep.
	Weather		0830, 1030, 1130, 1530, 2030 local time	

**MRCC Palma**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 10	On receipt	in Spanish and English.
	Weather		0735, 1035, 1535, 2035	

## MRSC Santander

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 74	0045, 0445, 0845, 1245, 1645, 2045	in Spanish and English.
	Weather		0245, 0445, 0645, 0845, 1045, 1445, 1845, 2245	

## MRCC Tarifa

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 10, 67	On receipt	in Spanish and English.
	Weather including fog (visibility) warnings		Every even hour +15m	
NAVTEX	B1 Character: T Range: 400nm	490 kHz	0310, 0710, 1110, 1510, 1910, 2310	in Spanish
	B1 Character: G Range: 400nm	518 kHz	0100, 0500, 0900, 1300, 1700, 2100	

## MRSC Tarragona

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 74	On receipt	in Spanish and English.
	Weather		0533, 0933, 1533, 2033	

**MRCC Valencia**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 01, 03, 04, 20, 23, 25, 60, 85	0910, 1410*, 2110	in Spanish. *Weather only. Remote Stations: Alicante, Bagur, Barcelona, Cabo de la Nao, Cartagena, Castellon, Ibiza, Menorca, Palma, Tarragona
		Ch. 10, 11	Every hour +15m	in Spanish.
RT (MF)		1755, 1767 kHz	0750, 1303*, 1950	in Spanish. *Weather only. Remote stations: Palma, Cabo Gata

**MRSC Vigo**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 10	0215, 0615, 1015, 1415, 1815, 2215	in Spanish and English.
	Weather		0015, 0415, 0815, 1215, 1815, 2015	

**NAVAREA III**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-E	1200, 2400	

**300DB. Suriname**

**Paramaribo**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Weather	2818 kHz	1233, 2133, on request	

**300DC. Sudan**

Port Sudan				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 20	0810, 2010	
	Navigational warnings		on receipt and every hour	

**300DD. Svalbard**

Svalbard (LGS)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: A	518 kHz	0000, 0400, 0800, 1200, 1600, 2000	

**300DE. Sweden**

Hanosand (SAH)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: H Range: 300nm	518 kHz	0110, 0510, 0910, 1310, 1710, 2110	

## Stockholm Radio (SDJ)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 01, 21-28, 62, 64-66, 78, 81, 84	0200, 0600, 1000, 1400*, 1800, 2200	in Swedish and English. * Includes ice. Remote stations: Faro (Gotland), Gavle, Gotska Sandon, Harnosand, Hoburgen (Gotland), Hudiksvall, Kalix, Kalmar, Karlshamn, Karlskrona, Kivik, Kramfors, Lulea, Mjallom, Nacka (Stockholm), Norrkoping, Olands Sodra Udde, Ornskoldsvik, Osthammar, Skelleftea, Sodertalje, Sundsvall, Svenska Hogarna, Toro, Umea, Vaddo, Vasteras, Vastervik, Visby (Gotland).
	Weather	Ch. 01, 21-28, 62, 64-66, 78, 81, 84	0830, 0845, 0900, 0915, 0930, 1630, 1645, 1700, 1715, 1730, 2130, 2145, 2200, 2215, 2230 local time	in Swedish. Operational 01 May - 31 Oct. After prior announcement on VHF Ch 16. Remote stations: Faro (Gotland), Gavle, Gotska Sandon, Harnosand, Hoburgen (Gotland), Hudiksvall, Kalix, Kalmar, Karlshamn, Karlskrona, Kivik, Kramfors, Lulea, Mjallom, Nacka (Stockholm), Norrkoping, Olands Sodra Udde, Ornskoldsvik, Osthammar, Skelleftea, Sodertalje, Sundsvall, Svenska Hogarna, Toro, Umea, Vaddo, Vasteras, Vastervik, Visby (Gotland).
RT (MF)	Navigational warnings and weather	1779, 1797, 1710, 2733, 1674 kHz	0200, 0600, 1000, 1400*, 1800, 2200	in Swedish and English. * Includes ice. Ice on request as well. Remote stations: Bjuroklubb, Gislovshammar, Grimeton, Harnosand, Tingstade.
NAVTEX	B1 Character: J Range: 300nm	518 kHz	0130, 0530, 0930, 1330, 1730, 2130	

## Varberg (SAS)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: I Range: 300nm	518 kHz	0120, 0520, 0920, 1320, 1720, 2120	



**300DF. Syria**

Al Ladhiqiyah (Latakia)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 13	0400, 0800, 1200, 1600, 2000, 2400	
RT (MF)		3624 kHz		

Tartus (Tartous)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings	Ch. 20	0400, 0800, 1200, 1600	
RT (MF)		2662 kHz		

**300DG. Taiwan**

Chi-Lung (XSX)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: P	518 kHz	0630, 1430, 2230	

Linyan (XSW)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: P	518 kHz	0200, 1000, 1800	broadcasts are remotely controlled from Chi-Lung

**300DH. Thailand**

Bangkok				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	6765.1, 8743 kHz	0000, 0300, 0600, 0900, 1200, 1500, 1800, 2100	in Thai and English.

**Bangkok (HAS)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: F Range: 200nm	518 kHz	0050**, 0450, 0850**, 1250, 1650, 2050	** Nav & weather (when all are not selected)

**300DI. Tonga****Nuku'alofa**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Local weather	2080 kHz	0133, 0833, 2033	

**300DJ. Trinidad & Tobago****North Post (A3A)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather broadcasts	Ch. 14	1250, 1850*, storm warnings on receipt	* Weather only
RT (MF)		2735 kHz	1340*, 2040, storm warnings on receipt	

**300DK. Tunisia****La Goulette Port (3VW)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings	2182 kHz	On receipt, 0003, 0403, 0603, 1003, 1303, 1803, 1903, 2103	in French.
	Weather	2182 kHz	On receipt, every hour +03m	
		1743 kHz	0405, 1905	

**Tunis (3VT)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings	2670 kHz	On receipt, 0803, 1203, 2003. On request	in French.
	Weather		0805, 1705	
NAVTEX	B1 Character: V	518 kHz	0330, 0730, 1130, 1530, 1930, 2330	

**300DL. Turkey**

**Antalya (TAL)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 67	On receipt, 0700, 1900	in English and Turkish. Remote stations: Anamur, Cobandede, Dilektepe, Kazakin, Markiz, Palamut, Yumrutepe.
			0730, 0900, 0930, 1130, 1330, 1530, 1730, 1930	in Turkish. Remote stations: Anamur, Cobandede, Dilektepe, Kazakin, Markiz, Palamut, Yumrutepe.
NAVTEX	B1 Character: D	490 kHz	0030, 0430, 0830, 1230, 1630, 2030	In Turkish
	B1 Character: F	518 kHz	0050, 0450, 0850, 1250, 1650, 2050	

**Istanbul (TAH)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	4405, 8812, 13128 kHz	1000, 1800	in English and Turkish.
		4560, 8431, 12654 kHz	0800, 2000	
RT (HF)	Weather	4405, 8812, 13128 kHz	1000, 1800	in English and Turkish.
Radio-Telex	Weather	4560, 8431, 12654 kHz	0800, 2000	

**Istanbul (TAH)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: D Range: 250-400nm	490 kHz	0010, 0410, 0810, 1210, 1610, 2010	In Turkish
		518 kHz	0030, 0430, 0830, 1230, 1630, 2030	

**Izmir (TAN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: C Range: 250-400nm	490 kHz	0020, 0420, 082, 1220, 1620, 2020	In Turkish
	B1 Character: I Range: 250-400nm	518 kHz	0120, 0520, 0920, 1320, 1720, 2120	

**Samsun (TAF)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 67	On receipt, 0700, 1900	in English and Turkish. Remote stations: Akabat, Kikmen, Dutmen, Inebolu, Inebolu, Pazar, Yildiztepe, Zonguldak
			0730, 0900, 0930, 1130, 1330, 1530, 1730, 1930	in Turkish. Remote stations: Akabat, Kikmen, Dutmen, Inebolu, Inebolu, Pazar, Yildiztepe, Zonguldak
NAVTEX	B1 Character: A Range: 250-400nm	490 kHz	0000, 0400, 0800, 1200, 1600, 2000	In Turkish
	B1 Character: E Range: 250-400nm	518 kHz	0040, 0440, 0840, 1240, 1640, 2040	

**300DM. Ukraine**

Kerch (UUO)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	4143 kHz	0233**, 1033*, 1833	*Navigational warnings and Ice. ** Navigational warnings only.
			0633, 1433*, 2233**	In Russian. *Navigational warnings and Ice. ** Navigational warnings only.
NAVTEX	B1 Character: U Range: 120nm	490 kHz	0320, 0720, 1120, 1520, 1920, 2320	
	B1 Character: G Range: 120nm	518 kHz	0100, 0500, 0900, 1300, 1700, 2100	

Odessa (UTT, UII)				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	3310 kHz	0423**, 1223*, 2023	*Navigational warnings and Ice. ** Navigational warnings only.
			0023, 0823**, 1623*	In Russian. *Navigational warnings and Ice. ** Navigational warnings only.
NAVTEX	B1 Character: X Range: 280nm	490 kHz	0350, 0750, 1150, 1550, 1950, 2350	
	B1 Character: C Range: 280nm	518 kHz	0020, 0420, 0820, 1220, 1620, 2020	

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RADIO NAVIGATIONAL WARNINGS

**300DN. United States**

Anchorage, AK				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 22A	On receipt	

**Annette, AK**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 09	0050, 1500	Broadcasts are made 1 hour later when daylight savings time is observed. After prior announcement on VHF Ch 16.
RT (HF)		4125 kHz	0040, 1600	Broadcasts are made 1 hour later when daylight savings time is observed.

**Astoria, OR (NMW)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0533, 1733	U.S. Coast Guard.
RT (MF)		2670 kHz		
NAVTEX	B1 Character: W Range: 200nm	518 kHz	0340, 0740, 1140, 1540, 1940, 2340	

**Atlantic City, NJ (NMK-2)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1103, 2303	U.S. Coast Guard.
RT (MF)		2670 kHz		

**Baltimore, MD (NMX)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0130, 1205	U.S. Coast Guard.

## Barrow, AK

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 68	0300, 1600, 2100	Broadcasts are made 1 hour later when daylight savings time is observed. After prior announcement on VHF Ch 16.
RT (HF)		4125 kHz	0400, 1530	Operational 01 Apr - 31 Oct. Broadcasts are made 1 hour later when daylight savings time is observed.

## Bethel, AK

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 66	0100, 1630	Broadcasts are made 1 hour later when daylight savings time is observed. After prior announcement on VHF Ch 16.

## Boston, MA (NMF, NIK, NMF-7)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1035, 2235	U.S. Coast Guard. Remotely controlled from CAMSLANT.
RT (MF)		2670 kHz		
Radio-Telex	Ice (seasonal)	6314, 8416.5, 12579 kHz	0030	
		8416.5, 12579, 16806.5 kHz	1218	
	Weather for North Atlantic, West of 35W, including the Caribbean Sea and Gulf of Mexico	6314, 8416.5, 12579 kHz	1630	
		6314, 8416.5, 12579 kHz	0140	
NAVTEX	B1 Character: F Range: 200nm	518 kHz	0050, 0450, 0850, 1250, 1650, 2050	

**Buffalo, NY (NMD-47)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0255, 1455	U.S. Coast Guard.

**Cambria, CA (NMQ)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: Q Range: 350nm	518 kHz	0240, 0640, 1040, 1440, 1840, 2240	U.S. Coast Guard.

**Cape Hatteras, NC (NMN-13)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0100, 1055	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0133, 1303	

**Cape May, NJ**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt	U.S. Coast Guard.

**Charleston, SC (NMB, NME)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0420, 1620	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 1200, 2200	
NAVTEX	B1 Character: E Range: 200nm	518 kHz	0040, 0440, 0840, 1240, 1640, 2040	



## Chesapeake, VA (NMN) CAMSLANT, Portsmouth

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0230, 1120	*Weather only. U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0203, 1333	
RT (HF)		17314 kHz	1715*, 1730	
		4426 kHz	0330, 0500, 0515*, 0930	
	Navigational warnings	6501 kHz	0330, 0500, 0930, 1130, 1600, 2200, 2330	
		8764 kHz		
	Weather	13089 kHz	1130, 1600, 1730, 2200, 2330	
		6501 kHz	0330, 0515, 0930, 1115, 1530, 2130, 2315	
8764 kHz				
	13089 kHz	1115, 1530, 1715, 2130, 2315		
NAVTEX	B1 Character: N Range: 280nm	518 kHz	0210, 0610, 1010, 1410, 1810, 2210	

## Chincoteague, VA (NMN-70, NMN-71)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0200, 1145	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0233, 1403	

## Cold Bay, AK

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 09	0215, 1815	Broadcasts are made 1 hour later when daylight savings time is observed. After prior announcement on VHF Ch 16.
RT (HF)		4125 kHz	0530, 1930	Broadcasts are made 1 hour later when daylight savings time is observed.

**Corpus Christi, TX (NOY-8)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1040, 1240, 1640, 2240	U.S. Coast Guard.
RT (MF)		2670 kHz		

**Detroit, MI (NMD-25)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0135, 1335	U.S. Coast Guard.

**Fort Macon, NC (NMN-37)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0130, 1030	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0103, 1233	

**Galveston, TX (NOY)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1050, 1250, 1650, 2250	U.S. Coast Guard.
RT (MF)		2670 kHz		

**Grand Haven, MI (NMD-32)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0235, 1435	U.S. Coast Guard.

**Honolulu, HI (NMO, NMO-2)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings, tsunami warnings and weather	Ch. 22A	0500, 1700	U.S. Coast Guard. Broadcasts are remotely controlled from CAMSPAC (Point Reyes).
RT (MF)		2670 kHz	0545, 1145, 1745, 2345	
RT (HF)		6501, 8764 kHz	0600, 1200	
		8764, 13089 kHz	0005, 1800	
Radio-Telex	Weather	8416.5, 12579, 22376 kHz	0130, 2030	
		8416.5, 12579 kHz	0730, 1330	
NAVTEX	B1 Character: O Range: 350nm	518 kHz	0220, 0620, 1020, 1420, 1820, 2220	

**Humboldt Bay, CA (NMC-11)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1615, 2315	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0303, 1503	

**Juneau, AK (NMJ)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 22A	On receipt	U.S. Coast Guard.

**Key West, FL (NOK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1200, 2200	U.S. Coast Guard.

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## King Salmon, AK

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 09	0115, 1530	Broadcasts are made 1 hour later when daylight savings time is observed. After prior announcement on VHF Ch 16.
RT (HF)		4125 kHz	0130, 1830	Broadcasts are made 1 hour later when daylight savings time is observed.

## Kodiak, AK (NOJ)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 09	0200, 1500	Weather Office. Broadcasts are made 1 hour later when daylight savings time is observed. After prior announcement on VHF Ch 16. U.S. Coast Guard.
RT (HF)	Navigational warnings and weather	6501 kHz	0203, 1645	U.S. Coast Guard.
	Weather	4125 kHz	0400, 1700	Weather Office. Broadcasts are made 1 hour later when daylight savings time is observed. U.S. Coast Guard.
NAVTEX	B1 Character: J Range: 200nm	518 kHz	0130, 0530, 0930, 1330, 1730, 2130	Areas east of Kodiak. U.S. Coast Guard.
	B1 Character: X Range: 200nm		0350, 0750, 1150, 1550, 1950, 2350	Areas west of Kodiak. U.S. Coast Guard.

## Kotzebue, AK

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 68	0030, 1530	Weather Office. Broadcasts are made 1 hour later when daylight savings time is observed. After prior announcement on VHF Ch 16.

**Long Beach, CA (NMC, NMQ-9)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0200, 1800	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0503, 1303, 2103	

**Long Island Sound, CT (NMY-15)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1120, 2320	U.S. Coast Guard.

**Mayport, FL (NMV)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1215, 2215	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0620, 1820	

**Miami, FL (NMA, NCF)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1230, 2230	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0350, 1550	
NAVTEX	B1 Character: A Range: 240nm	518 kHz	0000, 0400, 0800, 1200, 1600, 2000	

**Milwaukee, WI (NMD-9)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0255, 1455	U.S. Coast Guard.

**Mobile, AL (NOQ, WLO)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1020, 1220, 1620, 2220	U.S. Coast Guard.
RT (MF)		2670 kHz		
RT (HF)	Weather for Gulf of Mexico, Southwest North Atlantic and Caribbean	4369, 4396, 6519, 8788, 8806, 13110, 13152, 17260, 17362, 22804 kHz	0500, 1100, 1700, 2300	
Radio-Telex	National Weather Service products, not a free service	4213, 6317, 8419, 8421, 8423.5, 12581.5, 12584.5, 16809, 16814, 19685.5, 22383.5 kHz	On request using command "WX+"	

**Moriches, NY (NMY-42)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0010, 1210	U.S. Coast Guard.
RT (MF)		2670 kHz		

**New Orleans, LA (NMG)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	1035, 1235, 1635, 2235	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0550, 1035, 1235, 1635, 2235	
RT (HF)		4316, 8502, 12788 kHz	on receipt, 0330, 0515, 0930, 1115, 1530, 1715, 2130, 2315	U.S. Coast Guard. Broadcasts are remotely controlled from CAMSLANT.
NAVTEX	B1 Character: G Range: 200nm	518 kHz	0100, 0500, 0900, 1300, 1700, 2100	U.S. Coast Guard.

**New York, NY (NMY-3)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1050, 2250	U.S. Coast Guard.

**Nome, AK**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 09	0400, 1600	Weather Office. Broadcasts are made 1 hour later when daylight savings time is observed.
RT (HF)		4125 kHz	0630, 2030	Weather Office. Broadcasts are made 1 hour later when daylight savings time is observed. After prior announcement on VHF Ch 16.

**North Bend, OR (NOE)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0603, 1803	U.S. Coast Guard.
RT (MF)		2670 kHz		

**Point Reyes, CA- CAMSPAC/San Francisco (NMC, NMC-17)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	4426 kHz	0430, 1030	U.S. Coast Guard.
		8764, 13089 kHz	0430, 1030, 1630, 2230	
		17314 kHz	1630, 2230	
Radio-Telex		8416.5, 16806.5 kHz	0015, 1730	
NAVTEX	B1 Character: C Range: 350nm	518 kHz	0020, 0420, 0820, 1220, 1620, 2020	

**Port Angeles, WA (NOW)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0615, 1815	U.S. Coast Guard.
RT (MF)		2670 kHz		

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**Portland, ME (NMF-31)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1105, 2305	U.S. Coast Guard.
RT (MF)		2670 kHz		

**Portland, OR (NMW-44)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1745	U.S. Coast Guard.

**Saint Paul Island, AK**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 06, 09	0200, 1500, 1630, 2300	Weather Office. Broadcasts are made 1 hour later when daylight savings time is observed. After prior announcement on VHF Ch 16.

**San Diego, CA**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	On receipt	U.S. Coast Guard.

**San Francisco, CA**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1630, 1900, 2130	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0203, 1403	



## San Juan (NMR, NMR-1 )

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	1210, 2210. Urgent warnings on receipt	U.S. Coast Guard.
RT (MF)		2670 kHz	0305, 1505. Urgent warnings on receipt	
NAVTEX	B1 Character: R Range: 200nm	518 kHz	0250, 0650, 1050, 1450, 1850, 2250	

## Sault St. Marie, MI (NOG)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0005, 1205	U.S. Coast Guard.

## Seattle, WA (KLB)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 0630, 1830	U.S. Coast Guard.
RT (HF)	Weather	4405, 8731, 13101, 17311 kHz	0800, 1500, 2000	U.S. Coast Guard. Remotely controlled by Mobile (WLO).
Radio-Telex	National Weather Service products, not a free service.	6318, 12590.5 kHz	On request using command "WX+"	U.S. Coast Guard. Remotely controlled by Mobile (WLO).

## Southwest Harbor, ME (NMF-44)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1135, 2335	U.S. Coast Guard.
RT (MF)		2670 kHz		

## St. Petersburg, FL (NME)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1300, 2300	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0320, 1420	

## Woods Hole, MA (NMF-2, NMF-3)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Local navigational warnings and weather	Ch. 22A	on receipt, 1005, 2205	U.S. Coast Guard.
RT (MF)		2670 kHz	on receipt, 0440, 1640	

## Yakutat, AK

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 09	0230, 1530	Weather Office. Broadcasts are made 1 hour later when daylight savings time is observed. After prior announcement on VHF Ch 16.
RT (HF)		4125 kHz	0430, 1415	Weather Office. Broadcasts are made 1 hour later when daylight savings time is observed.

## METAREA IV

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-W	0430, 1030, 1630, 2230	High Seas forecasts containing tropical storm warnings also broadcast over AOR-E. Hurricane & Tropical Storm advisories are sent as required, up to 4 times daily per active tropical storm. Tsunami warnings are sent as required on AOR-W and AOR-E.

**METAREA XII**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-W	0545, 1145, 1745, 2345	High Seas forecasts containing tropical storm warnings also broadcast over AOR-E. Hurricane & Tropical Storm advisories are sent as required, up to 4 times daily per active tropical storm. Tsunami warnings are sent as required on AOR-W and AOR-E.
		POR		

**METAREA XVI**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-W	0515, 1115, 1715, 2315	

**NAVAREA IV**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-W	1000, 2200	

**NAVAREA XII**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-W, POR	1030, 2230	

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MRCC Aberdeen- Coastguard				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 23, 84, 86	0130, 0430, 0730, 1030, 1330, 1630, 1930, 2230 local time	After prior announcement on VHF Ch 16. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.
	Coastal navigational warnings (WZ) and weather		On receipt, 0730, 1930 local time	After prior announcement on VHF Ch 16. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.
RT (MF)	Weather	2226 kHz	On receipt, 0730, 1930 local time	WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.
	Coastal navigational warnings (WZ) and weather		0130, 0730, 1330, 1930 local time	WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

MRCC Belfast-Coastguard				
Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 23, 84, 86	On receipt, 0110*, 0410*, 0710, 1010*, 1310*, 1610*, 1910, 2210* local time	*Weather only. Remote stations: Black Mountain, Limavady, Navar, Orlock Head, Slieve Martin, West Torr. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.
MF (HF)		1883 kHz	On receipt, 0810, 0210*, 1410*, 2010 local time	*Weather only. Remote station: Tiree. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

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## MRCC Brixham-Coastguard

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 10, 23, 84, 86	0110*, 0410*, 0710, 1010*, 1310*, 1610*, 1910, 2210* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Berry Head, Dartmouth, East Prawle, Fowey, Rame Head. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

## MRCC Clyde-Coastguard

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 10, 23, 84, 86	On receipt, 0210*, 0510*, 0810, 1110*, 1410*, 1710*, 2010, 2310* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Glengorm, Kilchiaran, Law Hill, Rhu Staffinish, South Knapdale, Tiree, Torosay. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

## Cullercoats (GCC)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: U Range: 270nm	490 kHz	0720, 1920	
	B1 Character: G Range: 270nm	518 kHz	0100, 0500, 0900, 1300, 1700, 2100	

## MRCC Dover-Coastguard

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 84, 86	On receipt, 0110*, 0410*, 0710, 1010*, 1310*, 1610*, 1910, 2210* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Fairlight, Langdon Battery. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

## MRCC Falmouth-Coastguard

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 23, 84, 86	On receipt, 0110*, 0410*, 0710, 1010*, 1310*, 1610*, 1910, 2210* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Lizard, St. Mary's (Isles of Scilly), Trevose. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.
RT (MF)		1880 kHz	On receipt, 0110*, 0710, 1310*, 1910 local time	*Weather only. Remote station: Lizard. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

## MRCC Holyhead-Coastguard

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 23, 86	On receipt, 0150*, 0450*, 0750, 1050*, 1350*, 1650*, 1950, 2250* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Great Orme, South Stack. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

## MRCC Humber-Coastguard

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 23, 86	On receipt, 0150*, 0450*, 0750, 1050*, 1350*, 1650*, 1950, 2250* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Boulby, Cullercoats, Easington, Flamborough, Newton, Ravenscar. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.
RT (MF)		1925 kHz	On receipt, 0150*, 0750, 1350*, 1950 local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Flamborough. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

**MRCC Liverpool-Coastguard**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 23, 84, 86	On request, 0130*, 0430*, 0730, 1030*, 1330*, 1630*, 1930, 2230* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Caldbeck, Langthwaite, Moel-y-parc, Snaefell. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

**MRCC Milford Haven-Coastguard**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 84, 86	On receipt, 0150*, 0450*, 0750, 1050*, 1350*, 1650*, 1950, 2250 local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Blaenplwyf, Dinas Head, Monkstone Point, St. Ann's Head. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

**Niton (GNI)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: I Range: 270nm	490 kHz	0520, 1720	
	B1 Character: T Range: 270nm		0310, 0710, 1110, 1510, 1910, 2310	
	B1 Character: E Range: 270nm	518 kHz	0040, 0440, 0840, 1240, 1640, 2040	
	B1 Character: K Range: 270nm		0140, 0540, 0940, 1340, 1740, 2140	

**Northwood (GYA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
Radio-Facsimile	Weather (North Atlantic)	2618.5 (2000-0600 UTC), 4610, 8040, 11085.5 (0600-2000 UTC)	Every 12m (Broadcast schedule at 0100, 1300 for North Atlantic)	WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

**MRCC Portland-Coastguard**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 84, 86	On receipt, 0130*, 0430*, 0730, 1030*, 1330*, 1630*, 1930, 2230* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Beer Head, Grove. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

**Portpatrick (GPK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: O Range: 270nm	490 kHz	0220, 0620, 1020, 1420, 1820, 2220	
	B1 Character: C Range: 270nm	518 kHz	0420, 0820, 2020	



## MRCC Shetland-Coastguard

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 23, 84, 86	On receipt, 0110*, 0410*, 0710, 1010*, 1310*, 1610*, 1910, 2210* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Collafirth, Fitful Head, Lerwick, Saxa Vord, Wideford. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.
MF (HF)		1770 kHz	On receipt, 0110*, 0710, 1310*, 1910 local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Lerwick. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

## MRCC Stornoway-Coastguard

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 10, 23, 84, 86	On receipt, 0110*, 0410*, 0710, 1010*, 1310*, 1610*, 1910, 2210* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Arisaig, Barra, Butt of Lewis, Cletraval, Drumfearn, Forsnaval, Melvaig, Portnaguran, Rodel, Skriag. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.
MF (HF)		1743 kHz	On receipt, 0110*, 0710, 1310*, 1910 local time	*Weather only. After prior announcement on VHF Ch 16. Remote station: Butt of Lewis. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

**MRCC Solent-Coastguard**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 23, 86	On receipt, 0130*, 0430*, 0730, 1030*, 1330*, 1630*, 1930, 2230* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Boniface Down, Needles, Newhaven. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

**MRCC Swansea-Coastguard**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 23, 86	On receipt, 0150*, 0450*, 0750, 1050*, 1350*, 1650*, 1950, 2250 local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Combe Martin, Hartland Point, Mumbles, St. Hilary, Severn Bridge. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

**MRCC Thames-Coastguard**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 23, 84, 86	On receipt, 0110*, 0410*, 0710, 1010*, 1310*, 1610*, 1910, 2210* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Bawdsey, Bradwell, Shoeburyness, Walton on the Naze. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

**MRCC Yarmouth-Coastguard**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Coastal navigational warnings (WZ) and weather	Ch. 23, 86	On receipt, 0150*, 0450*, 0750, 1050*, 1650*, 1950, 2250* local time	*Weather only. After prior announcement on VHF Ch 16. Remote stations: Guy's Head, Langham, Lowestoft, Trimingham. WZ: Original reports to Hydrographer of the Navy, Radio Navigational Warnings, Ministry of Defence.

**METAREA I**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
METAREA	Weather	AOR-E	0930, 2130	

**NAVAREA I**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVAREA	Navigational warnings	AOR-E	0530, 1730	

300DP. Uruguay

**Atlantida Radio (CWC 43)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0533, 1333, 1933	

**Carmelo Prefectura Radio (CWC 22)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0303, 1503, 2133	

**Colonia Prefectura Radio (CWC-23)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0330, 1330, 2100	
RT (MF)		2722.1 kHz		

**Fray Bentos Prefectura Radio (CWC 25)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0500, 1100, 1700, 2300	

**La Paloma Radio (CWC-30, CWS-27)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0000, 0300, 1200, 1533, 2300	
RT (MF)		2722.1 kHz		
RT (HF)		4146 kHz		
NAVTEX	B1 Character: A Range: 280nm	490 kHz	0000, 0400, 0800, 1200, 1600, 2000	in Spanish.
	B1 Character: F Range: 280nm	518 kHz	0050, 0450, 0850, 1250, 1650, 2050	

**Montevideo Centro de Radio Prefectura (CWC-39)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0833, 1603, 2203	

**Montevideo Trouville (CWC-39)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2722.1 kHz	0833, 1603, 2203	
RT (HF)		4146 kHz		

**Nueva Palmiraa Prefectura Radio (CWC-31)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0000, 0900, 1500, 2100	

**Paysandu Prefectura Radio (CWC 32)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0300, 0900, 1500, 2100	

**Piriapolis Prefectura Radio (CWC 33)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0703, 1533, 2103	

**Puerto Sauce Prefectura Radio (CWC 27)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0133, 1303, 1933	

**Punta Carretas (CWF)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (MF)	Navigational warnings and weather	2768.5 kHz	0003, 1403, 2103	in Spanish and English.
RT (HF)		4357.4, 6518.8, 8291.1, 13128.7, 17260.8, 22636.3 kHz		

**Punta del Este Prefectura Radio (CWC-34)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0133, 1503, 2133	
RT (MF)		2722.1 kHz		

**Rio Branco Prefectura Radio (CWC 36)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0933, 1703, 2333	
RT (MF)		2722.1 kHz		

**Salto Prefectura Radio (CWC 37)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Navigational warnings and weather	Ch. 15	0500, 1100, 1700, 2300	

**300DQ. Vanuatu**

**Port-Vila (YJM)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	4385.3 kHz	0900, 1600 local time	in French, English and Bislama. Warnings on receipt after announcement on 4125 and 6215 kHz.

**300DR. Vietnam**

**Ben Thuy (XVB)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	7906 kHz	Every even hour +50m	in Vietnamese and English.
			0050, 1250	in Vietnamese.

**Ca Mau (XVA)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	7906 kHz	Every odd hour +35m	in Vietnamese and English.
			1135, 2335	in Vietnamese.

## Cam Ranh

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	1150, 2350 and every even hour +50m	in Vietnamese.

## Can Tho (XVU)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	1120, 2320 and every even hour +20m	in Vietnamese.
RT (HF)		7906 kHz	Every even hour +05m 0205, 1405	in Vietnamese and English. in Vietnamese.

## Cua Ong (XVC)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	1105, 2305 and every even hour +05m	in Vietnamese.

## Da Nang (XVT)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	7906, 8294 kHz	Every even hour +35m	in Vietnamese and English.
			0035, 1235	in Vietnamese.
NAVTEX	B1 Character: K Range: 400nm	518 kHz	0140*, 0540, 0940, 1340*, 1740, 2140	* Weather only.

## Hai Phong (XVG)

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	7906, 8294 kHz	Every even hour +05m	in Vietnamese and English.
			0005, 1205	in Vietnamese.

**Hai Phong (XVG)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
NAVTEX	B1 Character: W Range: 400nm	490 kHz	0340, 0740, 1140*, 1540, 1940, 2340*	In Vietnamese. * Weather only.

**Ho Chi Minh Ville (XVS)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	7906, 8294 kHz	Every even hour +05m	in Vietnamese and English.
			0105, 1305	in Vietnamese.
NAVTEX	B1 Character: X Range: 400nm	518 kHz	0350, 0750, 1150, 1550, 1950, 2350	

**Hon Gai (XVQ)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	1105, 2305 and every even hour +05m	in Vietnamese.
RT (HF)			7906 kHz	Every even hour +50m
		1050, 2250		in Vietnamese.

**Hue (XVD)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	1105, 2305 and every even hour +05m	in Vietnamese.
RT (HF)			7906 kHz	Every even hour +50m
		1050, 2250		in Vietnamese.



**Kien Giang (XVK)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	1135, 2335 and every even hour +35m	in Vietnamese.
RT (HF)		7906 kHz	Every even hour +20m	in Vietnamese and English.
			1020, 2220	in Vietnamese.

**Mong Cai (XVM)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	7906 kHz	Every odd hour +20m	in Vietnamese and English.
			0120, 1320	in Vietnamese.

**NHA Trang (XVN)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	7906 kHz	0005, 1205, every odd hour +05m & +50m	in Vietnamese.

**Phan Rang**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	1135, 2335 and every even hour +35m	in Vietnamese.
RT (HF)		7906 kHz	Every even hour +20m	in Vietnamese and English.
			0150, 1350	in Vietnamese.

**Phan Thiet (XVP)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	0120, 2320	in Vietnamese.
RT (HF)		7906 kHz	Every even hour +50m	in Vietnamese and English.
			1105, 2305	in Vietnamese.

**Phu Yen (XVY)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	1105, 2305 and every even hour +05m	in Vietnamese.
RT (HF)		7906 kHz	Every even hour +50m	in Vietnamese and English.
			1105, 2305	in Vietnamese.

**Quy Nhon (XVI)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	1120, 2320 and every even hour +20m	in Vietnamese.
RT (HF)		7906 kHz	Every even hour +35m	in Vietnamese and English.
			1035, 2235	in Vietnamese.

**Thanh HOA**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
VHF	Weather	Ch. 16	1135, 2335 and every even hour +35m	in Vietnamese.

**Vung Tau (XVR)**

Type	Nature of Broadcast	Frequency/ Channel	Times (UTC)	Additional Information
RT (HF)	Weather	7906 kHz	Every even hour +20m	in Vietnamese and English.
			0020, 1220	in Vietnamese.