WORLDWIDE MARINE RADIOFACSIMILE BROADCAST SCHEDULES

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC and ATMOSPHERIC ADMINISTRATION

NATIONAL WEATHER SERVICE

Aug 13, 2010

INTRODUCTION

A printed copy of this publication is distributed free of charge to all ships that participate in the U.S. Voluntary Observing Ship (VOS) program. If your ship is not participating in this worthwhile international program, we urge you to join. Remember, the meteorological agencies that do the weather forecasting cannot help you without input from you. ONLY YOU KNOW THE WEATHER AT YOUR POSITION!!

Please report the weather at 0000, 0600, 1200, and 1800 UTC as explained in the National Weather Service Observing Handbook No. 1 for Marine Surface Weather Observations.

Within 300 nm of a named hurricane, typhoon or tropical storm, or within 200 nm of U.S. or Canadian waters, also report the weather at 0300, 0900, 1500, and 2100 UTC. Your participation is greatly appreciated by all mariners.

For assistance, contact a Port Meteorological Officer (PMO), who will come aboard your vessel and provide all the information you need to observe, code and transmit weather observations.

Appendix C contains information on a PC software program known as AMVER/SEAS which greatly assists in coding and transmitting meteorological observations and AMVER position reports.

This publication is made available via the Internet at:

http://www.nws.noaa.gov/om/marine/rfax.pdf

The following webpage contains information on the dissemination of U.S. National Weather Service marine products including radiofax, such as frequency and scheduling information as well as links to products. A listing of other recommended webpages may be found in the Appendix.

http://www.nws.noaa.gov/om/marine/home.htm

The electronic version of this publication contains links to http pages and FTPMAIL commands. The FTPMAIL links may not be compatible with all PDF readers and email systems. The Internet is not part of the National Weather Service's operational data stream and should never be relied upon as a means to obtain the latest forecast and warning data. Become familiar with and use other means such as NOAA Weather Radio to obtain the latest forecasts and warnings. Please read our ***disclaimer*** ***http://www.nws.noaa.gov/disclaimer.php***.

TABLE of C O N T E N T S

ABOUT THIS PUBLICATION

The schedules contained in this book were obtained from official and unofficial sources. The information herein may neither be complete or accurate. Wherever possible, the schedules are dated with the latest change available. The National Weather Service would like to thank everyone who provided assistance.

For ease of use, all stations are listed by WMO region, in alphabetical order, by country and location. All times listed herein are Universal Coordinated Time (UTC), unless otherwise indicated.

Unless otherwise stated, assigned frequencies are shown, for carrier frequency subtract 1.9 kHz. Typically dedicated radiofax receivers use assigned frequencies, while receivers or transceivers, connected to external recorders or PC's, are operated in the upper sideband (USB) mode using carrier frequencies.

For information on weather broadcasts worldwide, also refer to NGA Publication 117, the Canadian Coast Guard Radio Aids to Navigation (Canada Only) and the British Admiralty List of Signals, which are updated through Notices to Mariners. Information on these and other marine weather publications may be found in Appendix D. These publications are HIGHLY recommended.

This document also includes information on how to obtain National Weather Service text forecasts, graphic forecasts, and marine observations via the Internet and e-mail (FTPMAIL). Mariners are highly encouraged to explore these options.

The electronic version of this publication contains links to http pages and FTPMAIL commands. The FTPMAIL links may not be compatible with all PDF readers and email systems. The Internet is not part of the National Weather Service's operational data stream and should never be relied upon as a means to obtain the latest forecast and warning data. Become familiar with and use other means such as NOAA Weather Radio to obtain the latest forecasts and warnings. Please read our ***disclaimer*** ***http://www.nws.noaa.gov/disclaimer.php***.

The accuracy of this publication depends on YOUR input.

Please direct comments, recommendations, and corrections for this publication to:

National Weather Service W/OS21
1325 East-West Highway
Silver Spring, MD 20910 USA
1-301-713-1677 x128
1-301-713-1520 (fax)
marine.weather@noaa.gov
http://www.nws.noaa.gov/om/marine/home.htm

AFRICA

CAPE NAVAL, SOUTH AFRICA

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER	
ZSJ	4014	kHz	16Z-06Z (when available)	F3C	10	KW
ZSJ	7508	kHz	ALL BROADCAST TIMES	F3C	10	KW
ZSJ	13538	kHz	ALL BROADCAST TIMES	F3C	10	KW
ZSJ	18238	kHz	06Z-16Z (when available)	F3C	10	KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0430	SCHEDULE	120/576		
0500	SURFACE ANALYSIS(SHIPPING)	120/576	0000	ASXX
0630	AIR PROGNOSES (PREVIOUS DAY'S RUN)	120/576	1200	FUXX
0730	SURFACE PROGNOSES (PREVIOUS DAY'S RUN)	120/576	1200	FSXX
0800	ANTARCTIC ICE LIMITS (OCTOBER TO MARCH)	120/576		AIAA
0915	RTTY WEATHER BULLETINS FOR COASTAL WATERS AND HIGHSEAS	RTTY (170 Hz shift, 75 Baud)		
1030	SURFACE ANALYSIS(SHIPPING)	120/576	0600	ASXX
1100	SURFACE PROGNOSES	120/576	0000	FSXX
1530	SURFACE ANALYSIS(SHIPPING)	120/576	1200	ASXX
1700	RTTY WEATHER BULLETINS FOR COASTAL WATERS AND HIGHSEAS	RTTY (170 Hz shift, 75 baud)		
2230	SURFACE ANALYSIS(SHIPPING)	120/576	1800	ASXX

MAP AREAS:

ASXX	1:20,000 Lambert	00S20W	00S70E	60S50W	60S90E
FUXX	1:20,000 Mercator	05S15W	05S60E	60S15W	60S60E
FSXX	1:20,000 Mercator	05S15W	05S60E	60S15W	60S60E
AIAA	30E to 30W Antarctic coast to edge of ice pack except NIC West				

(INFORMATION DATED 2009) http://old.weathersa.co.za/Marine/FrequencyShipFCBroadcast.jsp

ASIA

TOKYO, JAPAN

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
JMH	3622.5 kHz	ALL BROADCAST TIMES	F3C	5 KW
JMH2	7795 kHz	ALL BROADCAST TIMES	F3C	5 KW
JMH4	13988.5 kHz	ALL BROADCAST TIMES	F3C	5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	RETRANSMISSION OF 2200/0750 (1)	120/576		
0020/------	96HR SURFACE PRESSURE, PRECIP PROGS	120/576	1200	C
0040/------	120HR SURFACE PRESSURE, PRECIP PROGS	120/576	1200	C
-------/1220	12/24/48/72HR OCEAN WAVE PROG	120/576	0000	
-------/1240	24 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG 24HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG	120/576	0000	
-------/1251	36 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG 36HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG	120/576	0000	
0103/1303	TEST CHART	120/576		
0110/1310	METEOROLOGICAL SATELLITE PICTURE (MSAT)	120/576	00/12	C'
0130/1330	RETRANSMISSION OF 1019/0730	120/576		
0150/1350	TROPICAL CYCLONE FORECAST(1)	120/576	00/12	C’
0210/------	SEA SURFACE CURRENT, WATER TEMPERATURE AT 100M DEPTH (2)	120/576		
0229/-------	RADIO PREDICTION (3)	120/576		
-------/1420	RETRANSMISSION OF 0210 (2)			
0240/1440	SURFACE ANALYSIS	120/576	00/12	C’
0300/-------	SEA SURFACE WATER TEMPERATURE (2)	120/576		
0320/1520	THE FIRST RETRANSMISSION OF 0240/1440	120/576		
0340/-------	BROADCAST SCHEDULE and MANUAL AMENDMENTS	120/576		
0400/1540	TROPICAL CYCLONE FORECAST (6)	120/576		
------/1600	RETRANSMISSION OF 0300 (2)	120/576		
0421/1620	OCEAN WAVE ANALYSIS	120/576	00/12	C”
0440/-------	COASTAL WAVE ANALYSIS	120/576	0000	X
0459/1640	500HPA HEIGHT, TEMPERATURE	120/576	00/12	C
0518/1700	850HPA HEIGHT, TEMPERATURE, DEW POINT DEPRESSION	120/576	00/12	C
-------/1719	COASTAL WAVE ANALYSIS	120/576	1200	X
0537/1739	24HR 500HPA HEIGHT, VORTICITY PROGNOSIS 24 HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS	120/576	00/12	
0548/-------	24HR SURFACE PRESSURE, WIND, FOG, ICING, SEA ICE PROG	120/576	0000	C’
0610/1750	RETRANSMISSION OF 0150/1350 (1)	120/576		
0630/-------	48/72 HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS	120/576	00/00	
------/1810	36HR 500HPA HEIGHT, VORTICITY PROGNOSIS 36HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS	120/576	1200	
------/1821	24 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG 24HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG	120/576	1200	
------/1832	36 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG 36HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG	120/576	1200	
------/1850	12/24/48/72HR OCEAN WAVE PROG	120/576	1200	
0651/------	24HR WAVE PROG (NORTH PACIFIC)	120/576	0000	C”
0710/1910	METEOROLOGICAL SATELLITE PICTURE (MSAT)	120/576	06/18	C'
0730/------	24HR COASTAL WAVE PROG	120/576	0000	X
-------/1930	24HR SURFACE PRESSURE, WIND, FOG, ICING, SEA ICE PROG	120/576	1200	C’
0750/1950	TROPICAL CYCLONE FORECAST (1)	120/576	06/18	C’
------/2010	24HR COASTAL WAVE PROG (1)	120/576	1200	X
0809/-------	36HR 500HPA HEIGHT, VORTICITY PROGNOSIS 36HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS	120/576	0000	
0820/------	48HR SURFACE PRESSURE, WIND, FOG, ICING, SEA ICE PROG	120/576	0000	C’
0840/2040	SURFACE ANALYSIS	120/576	06/18	C'
-------/2100	48HR SURFACE PRESSURE, WIND, FOG, ICING, SEA ICE PROG	120/576	1200	C
0900/------	TROPICAL CYCLONE FORECAST (6)	120/576		
0920/2120	THE FIRST RETRANSMISSION OF 0840/2040	120/576		
0940/------	RETRANSMISSION OF 0630/1950	120/576		
------/2140	TROPICAL CYCLONE FORECAST(6)	120/576	1800	C’
1000/------	RETRANSMISSION OF 0820	120/576		

TOKYO, JAPAN

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID	MAP
------/2200	48/72HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS	120/576	1200	
1019/-------	SEA ICE CONDITION ANAL(4), 48HR & 168 HR PROGS(5)	120/576	LATEST	L/L'
------/2220	RETRANSMISSION OF 1719	120/576		
1040/2240	RETRANSMISSION OF 0548/1950	120/576		
1100/2300	RETRANSMISSION OF 0421/1930	120/576		
1119/2320	RETRANSMISSION OF 0440/2010	120/576		
1140/2340	RETRANSMISSION OF 0651/2100	120/576		

NOTES: (1) IN CASE OF TROPICAL CYCLONE
(2) EVERY TUESDAY AND FRIDAY
(3) ON THE 20TH AND 21ST.
(4) EVERY TUESDAY AND FRIDAY (SEASONAL) RETRANSMISSION: AT 0130 ON THE NEXT DAY
(5) EVERY WEDNESDAY AND SATURDAY (SEASONAL). RETRANSMISSION: AT 0130 ON THE NEXT DAY
(6) IF A TROPICAL CYCLONE IS EXPECTED IN 4 DAYS

A. For the purpose of maintaining the JMH broadcasting system, the test chart will be transmitted during the period from 01:55 to 02:35 UTC on 3, 4, 6, 10 and 11 Dec 2008 as well as 4 and 5 Feb 2009.

B. If WTAS07 is broadcast, each test will be cancelled. If additional tests are necessary, the notification will be distributed as MANAM in advance.

MANAM 13th Feb.2009
JMA changes the transmitting station of JMH broadcasting
from Ibaraki(36.10N 139.51E) to Kagoshima(31.19N 130.31E) at 4/Mar/2009 13:21 (JST).

MAP AREAS:									
C - 1:20,000,000	27N	062E,	51N	152W,	05S	106E,	02N	160E
C' - 1:20,000,000	39N	066E,	39N	146W,	01S	113E,	01S	167E
C'' - 1:20,000,000	38N	067E,	39N	148W,	01S	112E,	01S	167E
L - 1:10,000,000	SEA OF OKHOTSK, NORTHERN SEA OF JAPAN, BO HAI, AND ADJACENT WATERS OF THE NORTH PACIFIC.							
L' - 1:05,000,000	49N	140E	49N	151E,	41N	140E	40N	149E
X - 1: 6,000,000	46N	107E,	43N	160E,	18N	118E,	17N	147E

(INFORMATION DATED 15 Jun 2010) http://www.jma.go.jp/jma/kishou/177jmh/JMH-ENG.pdf

PEVEK, CHUKOTKA PENINSULA

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
	148 kHz	ALL BROADCAST TIMES	F3C	

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0530-0730	ICE	90/576		
1130-1330	ICE	90/576		
1430-1630	ICE	90/576		

(INFORMATION DATED 11/97)

TAIPEI, REPUBLIC OF CHINA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
BMF	4616 kHz		F3C	10 KW
	8140 kHz		F3C	10 KW
	13900 kHz		F3C	10 KW
	18560 kHz		F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0040/-------	BROADCAST SCHEDULE	120/576		
0110/1300	TYPHOON WARNINGS* (ENGLISH & CHINESE)	120/576	00/12	
0120/1320	GMS SATELLITE IMAGE	120/576	00/12	
0305/1505	FISHERY WEATHER FORECAST (IN CHINESE)	120/576	00/12	
0330/1530	SURFACE ANALYSIS WITH PLOTTED DATA	120/576	00/12	
0350/------	24HR SURFACE PROG	120/576	0000	
0410/1600	TYPHOON WARNING* (ENGLISH & CHINESE)	120/576	03/15	
0430/1620	500HPA HEIGHT ANALYSIS WITH PLOTTED DATA	120/576	00/12	
0440/1630	SURFACE PRESSURE ANALYSIS RFS 500HPA HEIGHT ANALYSIS	120/576	00/12	
0450/1640	RFS SURFACE PRESSURE PROGNOSIS 12 HOUR RFS 500HPA HEIGHT PROGNOSIS 12 HOUR	120/576	00/12	
0500/1650	RFS SURFACE PRESSURE PROGNOSIS 24 HOUR RFS 500HPA HEIGHT PROGNOSIS 24 HOUR	120/576	00/12	
0510/1700	RFS SURFACE PRESSURE PROGNOSIS 36 HOUR RFS 500HPA HEIGHT PROGNOSIS 36 HOUR	120/576	00/12	
0520/1710	RFS SURFACE PRESSURE PROGNOSIS 48 HOUR RFS 500HPA HEIGHT PROGNOSIS 48 HOUR	120/576	00/12	
0530/1720	RFS SURFACE PRESSURE PROGNOSIS 72 HOUR RFS 500HPA HEIGHT PROGNOSIS 72 HOUR	120/576	00/12	
0700/1900	TYPHOON WARNINGS* (ENGLISH & CHINESE)	120/576	06/18	
0720/1920	GMS SATELLITE IMAGE	120/576	06/18	
-------/2050	GFS 500HPA HEIGHT PROGNOSIS 96 HOUR	120/576	1200	
0905/2105	FISHERY WEATHER FORECAST (IN CHINESE)	120/576	06/18	
0930/2130	SURFACE ANALYSIS WITH PLOTTED DATA	120/576	06/18	
-------/2150	GFS 500HPA HEIGHT PROGNOSIS 120 HOUR	120/576	1200	
1000/2200	TYPHOON WARNINGS* (ENGLISH & CHINESE)	120/576	09/21	

MAP AREA: 48N 060E, 48N 172W, EQ 099E, EQ 154E
* IN CASE OF TYPHOON WARNING

(SCHEDULE EFFECTIVE MAY 01, 2009)
(INFORMATION DATED MAY 01, 2009)

SEOUL, REPUBLIC OF KOREA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
HLL2	3585 kHz	1200-0000 UTC	F3C	3 KW
HLL2	5857.5 kHz	ALL BROADCAST TIMES	F3C	3 KW
HLL2	7433.5 kHz	ALL BROADCAST TIMES	F3C	3 KW
HLL2	9165 kHz	ALL BROADCAST TIMES	F3C	3 KW
HLL2	13570 kHz	0000-1200 UTC	F3C	3 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	SPECIAL WEATHER REPORT	120/576		
0033/1233	SEA-SHORE WEATHER OBSERVATION REPORT	120/576		
0047/1247	FISHERY WEATHER OBSERVATION REPORT	120/576		
0100/-------	MANAM	120/576		
0133/-------	LIGHTHOUSE WEATHER OBSERVATION REPORT	120/576		B
0147/1347	SURFACE ANALYSIS FAR EAST	120/576		
0200/1400	WARNING TYPHOON REPORT	120/576		
0214/------	GENERAL WEATHER CONDITIONS REPORT	120/576		
------/1500	SPECIAL WEATHER REPORT	120/576		
------/1530	SST OBSERVATION CHART OF NEAR KOREAN PENINSULA AREA	120/576		
0314/1547	LIGHTHOUSE SIGN WEATHER OBSERVATION REPORT	120/576		
0333/-------	LIGHTHOUSE WEATHER OBSERVATION REPORT	120/576		
0400/1600	SURFACE ANALYSIS FAR ASIA	120/576		
0447/1647	SURFACE ANALYSIS FAR EAST	120/576		B
0500/1700	500hPa UPPER AIR WEATHER CHART	120/576		A
0513/1713	650hPa UPPER AIR WEATHER CHART	120/576		A
0526/1726	700hPa UPPER AIR WEATHER CHART	120/576		A
0539/1739	300hPa UPPER AIR WEATHER CHART	120/576		A
0600/1800	SPECIAL WEATHER REPORT	120/576		
0633/-------	LIGHTHOUSE WEATHER OBSERVATION REPORT	120/576		
------/1833	SEA-SHORE WEATHER OBSERVATION REPORT	120/576		
0647/1847	FISHERY WEATHER OBSERVATION REPORT	120/576		
0700/1900	12HR WAVE HEIGHT & SEA SURFACE WIND FORECAST	120/576		C
0714/1914	24HR WAVE HEIGHT & SEA SURFACE WIND FORECAST	120/576		C
0728/1928	36HR WAVE HEIGHT & SEA SURFACE WIND FORECAST	120/576		C
0747/1947	SURFACE ANALYSIS FAR EAST	120/576		
0800/2000	WARNING TYPHOON REPORT	120/576		
0814/2014	GENERAL WEATHER CONDITIONS REPORT	120/576		
0828/-------	SST OBSERVATION CHART OF NEAR KOREAN PENINSULA AREA	120/576		
0846/2046	MAIN SEASHORE WEATHER FORECAST FOR SHIP ROUTE	120/576		
0900/2100	SEA FORECAST	120/576		
0914/2114	LIGHTHOUSE SIGN WEATHER OBSERVATION REPORT	120/576		
0933/2133	LIGHTHOUSE WEATHER OBSERVATION REPORT	120/576		
0947/2147	WEEKLY SEA WEATHER FORECAST	120/576		
------/2233	LIGHTHOUSE WEATHER OBSERVATION REPORT	120/576		
1047/2247	SURFACE ANALYSIS FAR EAST	120/576		B

NOTES:
1. IN CASE OF TYPHOON.
2. NOVEMBER TO APRIL.
3. MAY TO SEPTEMBER
4. ALTERNATING BLACK AND WHITE SIGNALS WITH FREQUENCY OF 300 Hz WILL BE TRANSMITTED FOR 10 SECONDS PRIOR TO THE PHASING SIGNAL.
5. PHASING SIGNALS WILL BE TRANSMITTED FOR 30 SECONDS PRIOR TO TRANSMISSION OF EACH CHART.
6. STOP SIGNALS WILL BE TRANSMITTED FOR 15 SECONDS AFTER EACH TRANSMISSION.
7. “TSUNAMI WARNING” IS TANSMITTED WITHOUT DELAY

MAP AREA: A – Lambert Conformal Conic 01.1N, 084.0E, 39.7N 41.9E, 06.5N 156.8E, 55.1N 199.4E
B – Lambert Conformal Conic 16.3N,100.7E, 49.5 N 82.6E, 17.8N 145.5E, 52.4N 160.4E
C – Lambert Conformal Conic 20-50N, 115-150E

(INFORMATION DATED Jan 01, 2009) Many of these reports may be in Korean

BANGKOK, THAILAND

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
HSW64	7395.0 kHz *		F3C	3 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0050/------	TEST CHART	120/576		
0100/0700	FORECAST FOR SHIPPING (IN ENGLISH)	120/576	00/06	A
0120/------	SURFACE PRESSURE	120/576	1200	A
0140------	SURFACE ANALYSIS	120/576	1800	A
0200/------	BROADCAST SCHEDULE	120/576		
0300/0720	24 HR SURFACE PROG	120/576	12/12	A
0320/0740	48 HR SURFACE PROG	120/576	12/12	A
0340/0800	72 HR SURFACE PROG	120/576	12/12	A
------/0820	24 HR 850 MB WIND/TEMP PROG	120/576	1200	A
0400/1000	FORECAST FOR SHIPPING (IN ENGLISH)	120/576	03/09	A
0420/------	24 HR 850 MB WIND/TEMP PROG	120/576	1200	A
0500/1020	SURFACE ANALYSIS	120/576	00/06	A
0520/------	850 MB ANALYSIS	120/576	0000	A
0540/------	700 MB ANALYSIS	120/576	0000	A
0600/------	500 MB ANALYSIS	120/576	0000	A
------/1300	FORECAST FOR SHIPPING (IN ENGLISH)	120/576	1200	A
------/1700	FORECAST FOR SHIPPING (IN ENGLISH)	120/576	1700	A
------/1720	SURFACE ANALYSIS	120/576	1200	
------/2300	FORECAST FOR SHIPPING (IN ENGLISH)	120/576	1700	A
------/2320	SURFACE ANALYSIS	120/576	1800	A

MAP AREA: A - 1:20,000,000 50N 045E, 50N 160E, 30S 045E, 30S 160E

* May refer to carrier frequency, for center frequency add 1.9 kHz

(INFORMATION DATED JAN 2009)

KYODO NEWS AGENCY, JAPAN/SINGAPORE

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER	
JJC	4316	kHz	ALL BROADCAST TIMES	F3C	5	KW
JJC	8467.5	kHz	ALL BROADCAST TIMES	F3C	10	KW
JJC	12745.5	kHz	ALL BROADCAST TIMES	F3C	15	KW
JJC	16971	kHz	ALL BROADCAST TIMES	F3C	15	KW
JJC	17069.6	kHz	ALL BROADCAST TIMES	F3C	15	KW
JJC	22542	kHz	ALL BROADCAST TIMES	F3C	15	KW
9VF/252	16035	kHz	0740-1010, 1415-1815	F3C	10	KW
9VF/252	17430	kHz	0740-1010, 1415-1815	F3C	10	KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0145	Sports Ed 2(R), (Seasonal during Sumo or High School baseball series)	60/576		
0200	MON: NX for 1 week	120/576		
0200	TUE-SUN: NX (R),Epidemic Information(R)(SUN only),	120/576		
	Ocean Information(N)(4th,14th, and 24th,3rd,13th,23rd if a MON)	60/576		
0245	Morning Ed(R), Sports Ed 1(R), NX(R)	60/576		
0430	WX Chart	120/576	0000	
0430	Ocean Information(n)(4th,14th, and 24th)	120/576		
0540	TUE&FRI: Satellite Fishery Information	60/576		
0540	SAT&SUN: Ocean Graphic Information	60/576		
0540	SUN&MON: Sea Surface Current Prog	60/576		
0610	TUE-SAT: English Ed (R)	120/576		
0635	MON-SAT: FAX DAYORI 4(N), (except 2nd & 4th MON	60/576		
	and every WED and FRI)			
0650	SUN:WX Chart, Fishing Information (3 times per month)	60/576	0300	
0650	MON-SAT: WX Chart	60/576	0300	
0705	Background Stories(N), Life(N)(except MON)	60/576		
0745	SUN:			
	Sunday Ed(N), FAX DAYORI 1,2,3 (N)	60/576		
	Sumo match (begins 0930 SAT as well)	60/576		
0745	MON-SAT:			
	Evening Ed(N), Kaiun-Suisan News(N) (Except SAT),	60/576		
	Epidemic Information(N)(SAT only), FAX DAYORI 1(N),	60/576		
	Sumo match (Seasonal)(N), FAX DAYORI 2(N)(except TUE&SAT)	60/576		
0745	NATIONAL HOLIDAYS:			
	Morning Ed(R), Sports Ed 1 (R), FAX DAYORI 1(N),	60/576		
	Sumo match (Seasonal)(N)FAX DAYORI 2(N)	60/576		
1100	NX (N), Sumo match (Seasonal)(R)	60/576		
1130	MON-FRI: English Ed (N)	60/576		
1335	Background Stories(R), Life(R)(except MON)	60/576		
1415	MON-FRI: Kaiun-Suisan News(R)	60/576		
1445	Sports Ed 2(N), (Seasonal during Sumo or High School baseball series)	60/576		
1500	Morning Ed(N), Sports Ed 1(N), NX(R)	60/576		
1645	MON: Sunday Ed(R)	60/576		
1645	TUE-SUN: Evening Ed(R)	60/576		
1810	TUE-SAT: English Ed (R)	60/576		
1930	MON: Evening Ed(R), NX(R), FAX DAYORI 2,1,3 (R)	60/576		
1930	TUE-SUN: Evening Ed(R), NX(R), FAX DAYORI 2,1,4	60/576		
	(no 4 on THU,SAT and TUE following 2nd & 4th MON			
	Also no 2 on WED and SUN)(R)			
2030	DAY AFTER NATIONAL HOLIDAYS: NX(R), FAX DAYORI 2,1,4 (R)	60/576		
2215	MON and DAY AFTER NATIONAL HOLIDAYS:			
	Morning Ed(R),Sports Ed 1,2(R),NX(R),FAX DAYORI 1-3(R)(3 Mon only)	60/576		
	WX Chart	60/576	2100	
2215	TUE-SUN:			
	Morning Ed(R), Sports Ed 1,2(R), NX(R),	60/576		
	Kaiun-Suisan News(R) (Except SUN), Epidemic Info (SUN only)	60/576		
	FAX DAYORI 1,2 (R)(no 2 on SUN and WED)	60/576		
	WX Chart	60/576	2100	

NX: Navigational Warning, N: New, R: Repeat

Some of these transmissions may be encrypted

(INFORMATION DATED March 1, 1999 provided by Kyodo News April 2001)

NORTHWOOD, UNITED KINGDOM (PERSIAN GULF)

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
GYA	6834	kHz	1800-0800 UTC	F3C	10 KW
GYA	12390	kHz	ALL BROADCAST TIMES	F3C	10 KW
GYA	18261	kHz	0800-1800 UTC	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0106/1306	SCHEDULE	120/576		
0118/1318	QSL REPORT			
0142/------	SYMBOLOGY			
0306/1506	SURFACE ANALYSIS	120/576	00/12	
0354/1554	STREAMLINE ANALYSIS	120/576	00/12	
0406/1606	SURFACE ANALYSIS	120/576	00/12	
0418/1618	700 hPA WBPT/PPTN +24	120/576	00/12	
0430/1630	AIR TEMP/DEW POINT +24	120/576	00/12	
0442/1642	SURFACE PROG T+24	120/576	00/12	
0454/1654	GULF TAFS	120/576	03/15	
0506/1706	SURFACE ANALYSIS	120/576	00/12	
0518/1718	SURFACE PROG T+24	120/576	00/12	
0530/1730	SURFACE PROG T+48	120/576	00/12	
0542/1742	GULF TAFS	120/576	06/18	
0606/1818	SURFACE ANALYSIS	120/576	0000	
0618/1830	SURFACE PROG T+24	120/576	00/12	
0654/1854	GULF TAFS	120/576	06/18	
0706/1906	SPARE TAFS	120/576		
0718/1918	SIGNIFICANT WINDS PROG T+24	120/576	00/12	
0730/1930	SURFACE PROG T+48	120/576	00/12	
0742/1942	SURFACE PROG T+72	120/576	00/12	
0754/1954	SURFACE PROG T+96	120/576	00/12	
-------/2006	SURFACE PROG T+120	120/576	1200	
0818/2018	THICKNESS/GEOPONTENTIAL HEIGHT ANALYSIS	120/576	00/12	
0830/2030	SURFACE SIGNIFINT WINDS T+48	120/576	00/12	
0842/2042	SURFACE SIGNIFINT WINDS T+72	120/576	00/12	
0854/2054	SURFACE SIGNIFINT WINDS T+96	120/576	00/12	
0906/------	SURFACE ANALYSIS	120/576	0600	
------/2106	THICKNESS/GEOPONTENTIAL HEIGHT ANALYSIS	120/576	1200	
0930/2130	THICKNESS/GEOPONTENTIAL HEIGHT T+24	120/576	00/12	
0942/2142	850 hPA WINDS T+24	120/576	00/12	
0954/2154	700 hPA WINDS T+24	120/576	00/12	
1006/2206	SEA SURFACE TEMP	120/576	00/12	
1018/------	SURFACE PROG T+24	120/576	0600	
1042/2242	700 hPA WBPT/PPTN T+24	120/576	06/18	
1054/2254	AIR TEMP/DEW POINT +24	120/576	06/18	
1130/2330	SEA AND SWELL PROGNOSIS T+24	120/576	06/18	

ALL MAPS 40°30′N.15°30′E 40°30′N.80°E 03°N.15°30′E 3°N.80°E
WBPT WET BULB POTENTIAL TEMPERATURE
PPTN PRECIPITATION

(INFORMATION DATED OCT 24 2007)

SOUTH AMERICA

RIO DE JANEIRO, BRAZIL

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
PWZ-33	12665	kHz	ALL BROADCAST TIMES	F3C	1 KW
PWZ-33	16978	kHz	ALL BROADCAST TIMES	F3C	1 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0745/1630	TEST CHART	120/576		
0750/1635	SURFACE ANALYSIS (Hpa)	120/576	00/12	A
0810/1655	WAVES SIG HEIGHT (m) AND DIR PROG 12/00Z+36HR	120/576	00/12	B
0830/1715	WIND AT 10 m (KTS) PROG 12/00Z +36 HR	120/576	00/12	C
0850/1735	SEA SURFACE TEMPERATURE	120/576	12/00	D

MAP AREA: A: 1:101,200,000 20N 090W,20N 000E,70 S 090W, 70S 000E
B: 1:58,500,000 20N 090W,20N 020E,70S 090W,70S 020E
C: 1:58,500,000 20N 090W, 20N 020E, 70S 090W, 70S 020E
D: 1:32,700,000 15N 072W, 15N 018W, 50S 072W, 50S 018E

(INFORMATION DATED 28 Oct 2008) http://www.mar.mil.br/dhn/chm/meteo/info/transmissoes/apend3ing.htm

VALPARAISO PLAYA ANCHA, CHILE

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
CBV	4228.0	kHz	ALL BROADCAST TIMES	F3C	1 KW
CBV	8677.0	kHz	ALL BROADCAST TIMES	F3C	1 KW
CBV	17146.4	kHz	ALL BROADCAST TIMES	F3C	1 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
1115	SURFACE ANALYSIS	120/576	0600	A
1130	SATELLITE IMAGE	120/576	0900	A
1630	SURFACE ANALYSIS	120/576	1200	A
1645	SATELLITE IMAGE	120/576	1500	A
1915	SIGNIFICANT WAVE MAP (MTS)	120/576	1200	A
1930	SATELLITE IMAGE	120/576	1800	A
2200	SURFACE ANALYSIS	120/576	1800	A
2215	ICE REPORT	120/576		A
2230	12HR WINDS BARB ISOTACHS FORECAST	120/576	1200	A
2310	12HR SURFACE FORECAST	120/576		A
2325	SATELLITE IMAGE	120/576	2100	A

MAP AREA: A: 10S-120W, 10S-050W, 80S-130W, 80S-030W

(INFORMATION DATED Sep 10, 2003)

NORTH AMERICA

HALIFAX, NOVA SCOTIA, CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
CFH	122.5 kHz	ALL BROADCAST TIMES	F3C	10 KW
	4271 kHz	ALL BROADCAST TIMES	F3C	6 KW
	6496.4 kHz	ALL BROADCAST TIMES	F3C	6 KW
	10536 kHz	ALL BROADCAST TIMES	F3C	6 KW
	13510 kHz	ALL BROADCAST TIMES	F3C	6 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC TIME	VALID AREA	MAP
0001/------	Ice Chart #1 (see note): Latest)	120/576	LATEST	
-------/1201	3-DAY PROG	120/576	1200	G
0101/------	SATELLITE PHOTO INFRARED	120/576	0000	
-------/1222	4-DAY PROG	120/576	1200	G
-------/1301	5-DAY PROG	120/576	1200	G
0201/1401	12/00Z SIGNIFICANT WEATHER DEPICTION	120/576	12/00	A
0301/1501	500MB ANALYSIS	120/576	00/12	B
0322/1522	SURFACE ANALYSIS	120/576	00/12	F
-------/1601	850MB ANALYSIS	120/576	1200	B
0401/1622	36HR 500MB FORECAST	120/576	12/00	H
0422/1701	24HR SURFACE PROG	120/576	00/12	A
0501/-----	850 MB FORECAST WINDS	120/576	18&00	C
0601/1801	36HR SURFACE PROG	120/576	12/00	A
------/1822	850MB FORECAST WINDS	120/576	06&12	C
0701/1901	18/06Z SIIGNIFICANT WEATHER DEPICTION	120/576	18/06	A
0801/2001	24/36HR SIGNIFICANT WAVE PROGNOSIS	120/576	0&12/12&0	A
0901/2101	SURFACE ANALYSIS	120/576	06/18	F
1001/------	SST: NOVA SCOTIA - MON NEWFOUNDLAND - TUE/FRI	120/576	LATEST	E/D
1001/------	OFA: NOVA SCOTIA - WED/SAT NEWFOUNDLAND - SUN/THU	120/576	LATEST	E/D
------/2201	SST: NOVA SCOTIA - TUE/THU/FRI NEWFOUNDLAND - WED/SAT	120/576	LATEST	E/D
------/2201	OFA: NOVA SCOTIA - SUN NEWFOUNDLAND - MON	120/576	LATEST	E/D
1022/------	SATELLITE PHOTO INFRARED	120/576	0900	
-------/2222	NEWFOUNDLAND ICE CHART	120/576	LATEST	
1101/------	CFH BROADCAST SCHEDULE	120/576		
-------/2301	GULF OF ST LAWRENCE ICE CHART (SEASONAL)	120/576	LATEST	

NOTES:

This schedule of chart and text transmission is subject to short notice change according to the requirements of the Canadian Forces.

The geographical area of coverage for the ice charts varies according to season. The typical areas are: Gulf of St. Lawrence, East Newfoundland waters, Labrador Coast, Hudson Strait, Davis Strait and Baffin Bay. The Canadian Ice Service prepares all ice charts.

MAP AREAS:
A. 56N 87W, 56N 24W, 34N 38W, 34N 73W
B. 76N 16W, 30N 20W, 23N 11W, 08N 69W
C. 52N 80W, 65N 15W, 30N 60W, 34N 17W
D. 60N 68W, 60N 33W, 43N 33W, 43N 68W
E. 50N 75W, 50N 48W, 34N 48W, 34N 75W
F. 52N 98W, 58N 24W, 30N 39W, 28N 78W
G. 52N 98W, 56N 24W, 30N 39W, 28N 78W
H. 30N 107W, 15N 67W, 34N 24W, 79N 60W
I. 54N 100W, 58N 22W, 30N 39W, 28N 78W

(INFORMATION DATED 2010) http://www.ccg-gcc.gc.ca/folios/00026/docs/atlantic-2010-eng.pdf

IQALUIT, N.W.T., CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
VFF	3253.0 kHz	2100 – 2330 UTC	J3C	5 KW
VFF	7710.0 kHz	0010 – 0900 UTC	J3C	5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0100/1000	Marine Surface Analysis (Arctic) Marine Wind Prognosis (Arctic)(experimental product) Regional Marine Wind Prognosis (on request)	120/576		
0200/1100	Ice analysis Hudson Bay south, Hudson Bay north, Hudson Strait, Foxe Basin, Labrador Coast, Davis Strait, Baffin Bay	120/576		
0600/2100	Marine Surface Analysis (Arctic) Marine wind prognosis (Arctic) (experimental product) Regional Marine Wind Prognosis (on request)	120/576		
0700/2200	Ice Analysis Hudson Bay south, Hudson Bay north, Hudson Strait, Foxe Basin, Labrador Coast, Davis Strait, Baffin Bay.	120/576		

Operating only from approximately mid-June until late-November

(INFORMATION DATED 2010) http://www.ccg-gcc.gc.ca/folios/00026/docs/atlantic-2010-eng.pdf

RESOLUTE, N.W.T., CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
VFR	3253.0 kHz	0010 – 0900 UTC	J3C	5 KW
VFR	7710.0 kHz	2100 – 2330 UTC	J3C	5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0100/1000	Marine Surface Analysis (Arctic) Marine wind prognosis (Arctic) (experimental product) Regional Marine Wind Prognosis (on request)	120/576		
0200/1100	Ice analysis Baffin Bay, Approaches to Resolute, Resolute-Byam, Eureka Sound, McClure Strait, Parry Channel and Queen Maude.	120/576		
0600/2100	Marine Surface Analysis (Arctic) Marine wind prognosis (Arctic) (experimental product) Regional Marine Wind Prognosis (on request)	120/576		
0700/2200	Ice analysis Baffin Bay, Approaches to Resolute, Resolute-Byam, Eureka Sound, McClure Strait, Parry Channel and Queen Maude.	120/576		

Operating only from approximately mid-June until late-November

(INFORMATION DATED 2010) http://www.ccg-gcc.gc.ca/folios/00026/docs/atlantic-2010-eng.pdf

SYDNEY - NOVA SCOTIA, CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
VCO	4416 kHz	1121-1741	J3C	
VCO	6915.1 kHz	2200-2331	J3C	

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
1121	ICE ANALYSIS GULF OF ST. LAWRENCE	120/576		
1142	ICE ANALYSIS EAST OR SOUTHEAST NEWFOUNDLAND WATERS	120/576		
1741	ICE ANALYSIS ICEBERG LIMIT	120/576		
2200	ICE ANALYSIS GULF OF ST. LAWRENCE	120/576		
2331	ICE ANALYSIS EAST OR SOUTHEAST NEWFOUNDLAND WATERS	120/576		

(INFORMATION DATED 2010) http://www.ccg-gcc.gc.ca/folios/00026/docs/atlantic-2010-eng.pdf

INUVIK, CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
VFA	8457.8 kHz		J3C	1 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0200	Marine Wind Prognosis (Availability of charts may vary depending on shipping Ice Analysis (mid July to October 15) Amundsen Gulf, Queen Maud and McClure Strait. Ice Analysis Beaufort Sea/Alaskan Coast	120/576	1200	
1630	Marine Surface Analysis (Availability of charts may vary depending on shipping Ice Analysis (mid July to October 15) Amundsen Gulf, Queen Maud and McClure Strait. Ice Analysis Beaufort Sea/Alaskan Coast	120/576	1200	

Note: Also available on request

(INFORMATION DATED 2010) http://www.ccg-gcc.gc.ca/folios/00026/docs/pacific-2010-eng.pdf

KODIAK, ALASKA, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
NOJ	2054 kHz	ALL BROADCAST TIMES	F3C	4 KW
	4298 kHz	ALL BROADCAST TIMES	F3C	4 KW
	8459 kHz	ALL BROADCAST TIMES	F3C	4 KW
	12412.5 kHz	ALL BROADCAST TIMES	F3C	4 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0400/1600	TEST PATTERN	120/576		
0403/1603	SURFACE ANALYSIS	120/576	00/12	2
0427/1627	REBROADCAST 24HR SURFACE F'CAST 2227/1027	120/576	12/00	3
0437/1637	REBROADCAST 48HR SURFACE F'CAST 2237/1037	120/576	1200	1
0447/1647	REBROADCAST 96HR SURFACE F'CAST 2348	120/576	LATEST	
0456/1656	SEA STATE ANALYSIS/REBROADCAST	120/576	00/00	1
0506/1706	GOES IR SATELLITE IMAGE	120/576	00/12	5
0517/1717	500 MB ANALYSIS	120/576	00/12	1
0527/1727	SYMBOLS AND CONTRACTIONS/SCHEDULE	120/576		
0548/1748	REQUEST FOR COMMENTS/PRODUCT NOTICE	120/576		
0558/1758	24HR 500 MB FORECAST	120/576	00/12	1
0950/2150	TEST PATTERN	120/576		
0953/2153	SURFACE ANALYSIS	120/576	06/18	2
1017/2217	24HR WIND/WAVE FORECAST	120/576	00/12	3
1027/2227	24HR SURFACE FORECAST	120/576	00/12	3
1037/2237	48HR SURFACE FORECAST	120/576	00/12	1
1047/2247	48HR WIND/WAVE FORECAST	120/576	00/12	1
1057/2257	5-DAY SEA ICE FORECAST/SEA ICE ANALYSIS	120/576	LATEST	6
1117/2317	GOES IR SATELLITE IMAGE	120/576	00/12	5
1128/2328	48HR WAVE PERIOD, SWELL DIRECTION	120/576	00/12	1
1138/2338	48HR 500 MB FORECAST	120/576	00/12	1
1148/------	SEA SURFACE TEMPERATURE ANALYSIS	120/576	LATEST	4
1159/------	COOK INLET SEA ICE FORECAST	120/576	LATEST	7
------/2348	96HR SURFACE FORECAST	120/576	1200	1
------/2358	96HR WIND/WAVE FORECAST	120/576	1200	1
------/0008	96HR WAVE PERIOD, SWELL DIRECTION	120/576	1200	1
------/0018	96HR 500 MB FORECAST	120/576	1200	1

MAP AREAS:
1. 20N - 70N, 115W - 135E
2. 40N - 70N, 125W - 150E
3. 40N - 70N, 115W - 170E
4. 40N - 60N, 125W - 160E
5. 05N - 60N, 110W - 160W
6. ICE COVERED AK WATERS
7. COOK INLET

NOTES: 1. CARRIER FREQUENCY IS 1.9 kHz BELOW THE ASSIGNED FREQUENCY
2. COMMENTS AND SUGGESTIONS SHOULD BE DIRECTED TO:

METEOROLOGIST-IN-CHARGE
NATIONAL WEATHER SERVICE/NOAA
6930 SAND LAKE ROAD
ANCHORAGE, AK 99502-1845
PH: (907) 266-5105/FAX: (907) 266-5188
E-MAIL: nws.ar.pafc.webauthors@noaa.gov

Many of these charts also broadcast from Pt. Reyes, CA

If you have access to the World Wide Web be certain to check out the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov	Cellphone page (Requires WML/WAP Browser)
mobile.weather.gov/	Mobile Page

(SCHEDULE EFFECTIVE DEC 02 2008)
(INFORMATION DATED FEB 24 2009) http://weather.noaa.gov/pub/fax/hfak.txt

PT. REYES, CALIFORNIA, U.S.A.

CALL SIGN	FREQUENCIES	TIMES (UTC)	EMISSION	POWER
NMC	4346 kHz	0140-1608	F3C	4 KW
	8682 kHz	ALL BROADCAST TIMES	F3C	4 KW
	12786 kHz	ALL BROADCAST TIMES	F3C	4 KW
	17151.2 kHz	ALL BROADCAST TIMES	F3C	4 KW
	22527 kHz	1840-2356	F3C	4 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0140/1400	TEST PATTERN	120/576		
0143/1403	NE PACIFIC GOES IR SATELLITE IMAGE	120/576	00/12	6
0154/1414	PACIFIC GOES IR SATELLITE IMAGE	120/576	00/12	5
0205/1425	TROPICAL SEA STATE ANALYSIS	120/576	00/12	4
0215/1435	TROPICAL 48HR SURFACE FORECAST	120/576	12/00	4
0225/------	TROPICAL 48HR WIND/WAVE FORECAST	120/576	1200	4
0235/------	TROPICAL 72HR WIND/WAVE FORECAST	120/576	1200	4
0245/1445	500MB ANALYSIS	120/576	00/12	1
0255/1455	SEA STATE ANALYSIS, WIND/WAVE ANALYSIS	120/576	00/12	1/8
0305/1505	PRELIM SURFACE ANALYSIS (PART 1 NE PAC)	120/576	00/12	2
0318/1518	PRELIM SURFACE ANALYSIS (PART 2 NW PAC)	120/576	00/12	3
0331/1531	FINAL SURFACE ANALYSIS(PART 1 NE PAC)	120/576	00/12	2
0344/1544	FINAL SURFACE ANALYSIS(PART 2 NW PAC)	120/576	00/12	3
0357/1557	CYCLONE DANGER AREA* or HIGH WIND/WAVES	120/576	03/15	10
0408/1608	TROPICAL SURFACE ANALYSIS	120/576	00/12	4
0655/1840	TEST PATTERN			
0657/------	2033Z REBROADCAST (96HR 500MB)	120/576	1200	1
0707/------	2043Z REBROADCAST (96HR SURFACE)	120/576	1200	1
0717/------	2053Z REBROADCAST (96HR WIND/WAVE)	120/576	1200	1
0727/------	2103Z REBROADCAST (96HR WAVE PERIOD)	120/576	1200	1
------/1842	SST ANALYSIS	120/576	LATEST	9
------/1852	SST ANALYSIS	120/576	LATEST	6
0737/1902	TROPICAL GOES IR SATELLITE IMAGE	120/576	06/18	7
0748/1913	WIND/WAVE ANALYSIS	120/576	06/18	8
0758/1923	24HR 500MB FORECAST	120/576	00/12	1
0808/1933	24HR SURFACE FORECAST	120/576	00/12	8
0818/1943	24HR WIND/WAVE FORECAST	120/576	00/12	8
0828/1953	48HR 500MB FORECAST	120/576	00/12	1
0838/2003	48HR SURFACE FORECAST	120/576	00/12	1
0848/2013	48HR WIND/WAVE FORECAST	120/576	00/12	1
0858/2023	48HR WAVE PERIOD/SWELL DIRECTION	120/576	00/12	1
------/2033	96HR 500MB FORECAST	120/576	1200	1
------/2043	96HR SURFACE FORECAST	120/576	1200	1
------/2053	96HR WIND/WAVE FORECAST	120/576	1200	1
------/2103	96HR WAVE PERIOD/SWELL DIRECTION	120/576	1200	1
0908/2113	PACIFIC GOES IR SATELLITE IMAGE	120/576	06/18	5
0919/2124	SURFACE ANALYSIS (PART 1 NE PACIFIC)	120/576	06/18	2
0932/2137	SURFACE ANALYSIS (PART 2 NW PACIFIC)	120/576	06/18	3
0945/2150	TROPICAL SURFACE ANALYSIS	120/576	06/18	4
0959/2204	TROPICAL 24HR WIND/WAVE FORECAST	120/576	00/12	4
1009/2214	CYCLONE DANGER AREA* or HIGH WIND/WAVES	120/576	09/21	10
1120/2320	TEST PATTERN	120/576		
1124/2324	BROADCAST SCHEDULE (PART 1)	120/576		
1135/2335	BROADCAST SCHEDULE (PART 2)	120/576		
1146/------	REQUEST FOR COMMENTS	120/576		
1157/------	PRODUCT NOTICE BULLETIN	120/576		
1208------	TROPICAL 48HR WIND/WAVE FORECAST	120/576	0000	4
1218/------	TROPICAL 72HR WIND/WAVE FORECAST	120/576	0000	4
1228/2346	TROPICAL 48HR WAVE PERIOD/SWELL DIR	120/576	00/12	4
------/2356	TROPICAL 72HR WAVE PERIOD/SWELL DIR	120/576	0000	4

* Tropical Cyclone Danger Area chart replaced by High Wind/Wave Warning chart
Dec 01 - May 14

PT. REYES, CALIFORNIA, U.S.A.

MAP AREAS:
1. 20N - 70N, 115W - 135E
2. 20N - 70N, 115W - 175W
3. 20N - 70N, 175W - 135E
4. 20S - 30N, EAST OF 145W
5. 05N - 55N, EAST OF 180W
6. 23N - 60N, EAST OF 150W
7. 05N - 32N, EAST OF 130W
8. 18N - 62N, EAST OF 157W
9. 40N - 53N, EAST OF 136W
10. 0N - 40N, 80W - 180W

NOTES: 1. CARRIER FREQUENCY IS 1.9 kHz BELOW THE ASSIGNED FREQUENCY
2. COMMENTS AND SUGGESTIONS SHOULD BE DIRECTED TO:

NATIONAL WEATHER SERVICE/NOAA
NATIONAL CENTER FOR ENVIRONMENTAL PREDICTION
MARINE FORECAST BRANCH W/NMC31
5200 AUTH ROAD
CAMP SPRINGS, MD 20746-4304
PHONE: (301) 763-8294x7401/FAX: (301) 763-8085
EMAIL: David.Feit@noaa.gov

Many of these charts also broadcast from Kodiak, AK and Honolulu, HI

If you have access to the World Wide Web be certain to check out
the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov	Cellphone page (Requires WML/WAP Browser)
mobile.weather.gov/	Mobile Page

(SCHEDULE EFFECTIVE NOV 03, 2008 1719z)
(INFORMATION DATED FEB 24, 2009) http://weather.noaa.gov/pub/fax/hfreyes.txt

NEW ORLEANS, LOUISIANA, U.S.A.

CALL SIGN	FREQUENCIES	TIMES (UTC)	EMISSION	POWER
NMG	4317.9 kHz	ALL BROADCAST TIMES	F3C	4 KW
	8503.9 kHz	ALL BROADCAST TIMES	F3C	4 KW
	12789.9 kHz	ALL BROADCAST TIMES	F3C	4 KW
	17146.4 kHz	1200-2045	F3C	4 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	TEST PATTERN	120/576		
0005/1205	U.S./TROPICAL SURFACE ANALYSIS (W HALF)	120/576	18/06	1
0020/1220	TROPICAL SURFACE ANALYSIS (E HALF)	120/576	18/06	2
0035/1235	(REBROADCAST OF 1835/0635)	120/576	12/00	3
0045/1245	(REBROADCAST OF 1845/0645)	120/576	12/00	3
0055/1255	(REBROADCAST OF 1855/0655)	120/576	12/00	3
0105/1305	(REBROADCAST OF 1905/0705)	120/576	12/00	3
0115/1315	(REBROADCAST OF 1915/0715)	120/576	12/00	3
0125/1325	(REBROADCAST OF 1925/0725)	120/576	12/00	3
0135/1335	CYCLONE DANGER AREA* or 48 HR HIGH WIND/WAVES	120/576	21/09	6
0150/------	(REBROADCAST OF 0825)	120/576	0000	3
------ /1350	36 HR WIND/WAVE FORECAST	120/576	1200	3
0200/1400	GOES IR TROPICAL SATELLITE IMAGE	120/576	00/12	4
0215/1415	00 HR SEA STATE ANALYSIS	120/576	00/12	3
0225/1425	REQUEST FOR COMMENTS/PRODUCT NOTICE	120/576		
0245/1445	HIGH SEAS FORECAST (IN ENGLISH)	120/576	22/10	5
0600/1800	TEST PATTERN	120/576		
0605/1805	U.S./TROPICAL SURFACE ANALYSIS (W HALF)	120/576	00/12	1
0620/1820	TROPICAL SURFACE ANALYSIS (E HALF)	120/576	00/12	2
0635/1835	24 HR WIND/WAVE FORECAST	120/576	00/12	3
0645/1845	48 HR WIND/WAVE FORECAST	120/576	00/12	3
0655/1855	72 HR WIND/WAVE FORECAST	120/576	00/12	3
0705/1905	24 HR SURFACE FORECAST	120/576	00/12	3
0715/1915	48 HR SURFACE FORECAST	120/576	00/12	3
0725/1925	72 HR SURFACE FORECAST	120/576	00/12	3
0735/1935	CYCLONE DANGER AREA* or 48HR HIGH WIND/WAVES	120/576	03/15	6
0750/1950	48 HR WAVE PERIOD/SWELL DIRECTION	120/576	00/12	3
0800/2000	GOES IR TROPICAL SATELLITE IMAGE	120/576	07/18	4
0815/2015	(REBROADCAST OF 0215/1415)	120/576	00/12	3
0825/------	72 HR WAVE PERIOD/SWELL DIRECTION	120/576	0000	3
0835/------	(REBROADCAST OF 1350)	120/576	1200	
------/2025	BROADCAST SCHEDULE	120/576		
0845/2045	HIGH SEAS FORECAST (IN ENGLISH)	120/576	04/16	5

* Tropical Cyclone Danger Area chart replaced by 48HR High Wind/Wave Warning chart Dec 01-May 14. Valid times 00z, 06z, 12z and 18z. Map area 05N-40N, 35W-100W

MAP AREAS: 1. 5S - 50N, 55W - 125W
2. 5S - 50N, 0W - 70W
3. 0N - 31N, 35W - 100W
4. 12S - 44N, 28W - 112W
5. 7N - 31N, 35W - 98W (AREA COVERED BY TEXT FORECAST)
6. 05N - 60N, 0W - 100W

NOTES: 1. CARRIER FREQUENCY IS 1.9 kHz BELOW THE ASSIGNED FREQUENCY
2. THIS BROADCAST ORIGINATES FROM THE TROPICAL PREDICTION CENTER (FORMERLY THE NATIONAL HURRICANE CENTER) OF THE NATIONAL WEATHER SERVICE). COMMENTS AND SUGGESTIONS SHOULD BE DIRECTED TO:

TROPICAL PREDICTION CENTER
ATTN: CHIEF TAFB
11691 SOUTHWEST 17TH STREET
MIAMI, FL 33165-2149
PHONE: (305) 229-4430/FAX: (305) 553-1264
EMAIL: tpc.mar@noaa.gov

Further information see: http://www.nws.noaa.gov/om/marine/home.htm

(Schedule Effective Dec 01, 2008)
(Information dated FEB 24, 2009) http://weather.noaa.gov/pub/fax/hfgulf.txt

BOSTON, MASSACHUSETTS, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
NMF	4235 kHz	0230z-1028z	F3C	4 KW
	6340.5 kHz	ALL BROADCAST TIMES	F3C	4 KW
	9110 kHz	ALL BROADCAST TIMES	F3C	4 KW
	12750 kHz	1400z-2228z	F3C	4 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0230/1400	TEST PATTERN	120/576		
------/1405	BROADCAST SCHEDULE (PART 1)	120/576		
------/1420	BROADCAST SCHEDULE (PART 2)	120/576		
------/1433	REQUEST FOR COMMENTS	120/576		
------/1443	PRODUCT NOTICE BULLETIN	120/576		
0233/1453	PRELIMINARY SURFACE ANALYSIS	120/576	00/12	1
0243/------	BROADCAST SCHEDULE (PART 1)	120/576		
0254/------	BROADCAST SCHEDULE (PART 2)	120/576		
0305/------	REQUEST FOR COMMENTS	120/576		
------/1503	SATELLITE IMAGE	120/576	1200	5
0315/1515	WIND/WAVE ANALYSIS	120/576	00/12	8
0325/1525	SURFACE ANALYSIS (PART 1 NE ATLANTIC)	120/576	00/12	2
0338/1538	SURFACE ANALYSIS (PART 2 NW ATLANTIC)	120/576	00/12	3
0351/------	SATELLITE IMAGE	120/576	0000	5
------/1600	ICE CHARTS	120/576	LATEST	
------/1720	TEST PATTERN	120/576		
0402/1723	(REBROADCAST OF 0325/1525)	120/576	00/12	2
0415/1736	(REBROADCAST OF 0338/1538)	120/576	00/12	3
0428/1749	500MB ANALYSIS	120/576	00/12	4
------/1759	SEA STATE ANALYSIS	120/576	1200	4
0438/1810	ICE CHARTS	120/576	LATEST	
0452/1824	CYCLONE DANGER AREA* or 48HR HIGH WIND/WAVES	120/576	03/15	7
0745/1900	TEST PATTERN	120/576		
0755/----	PRELIMINARY SURFACE ANALYSIS	120/576	0600	1
0805/1905	24HR SURFACE FORECAST	120/576	00/12	8
0815/1915	24HR WIND/WAVE FORECAST	120/576	00/12	8
0825/1925	24HR 500MB FORECAST	120/576	00/12	4
0835/1935	36HR 500MB FORECAST	120/576	12/00	4
0845/1945	48HR 500MB FORECAST	120/576	00/12	4
0855/1955	48HR SURFACE FORECAST	120/576	00/12	4
0905/2005	48HR WIND/WAVE FORECAST	120/576	00/12	4
0915/2015	48HR WAVE PERIOD FORECAST	120/576	00/12	4
------/2025	PRELIMINARY SURFACE ANALYSIS	120/576	1800	1
------/2035	96 HR 500MB FORECAST	120/576	1200	4
------/2045	96 HR SURFACE FORECAST	120/576	1200	4
------/2055	96 HR WIND/WAVE FORECAST	120/576	1200	4
------/2105	96 HR WAVE PERIOD FORECAST	120/576	1200	4
------/2115	(REBROADCAST OF 2045)	120/576	1200	4
0925/2125	SURFACE ANALYSIS (PART 1 NE ATLANTIC)	120/576	06/18	2
0938/2138	SURFACE ANALYSIS (PART 2 NW ATLANTIC)	120/576	06/18	3
0951/2151	SATELLITE IMAGE	120/576	06/18	6
1002/2202	(REBROADCAST OF 0925/2125)	120/576	06/18	2
1015/2215	(REBROADCAST OF 0938/2138)	120/576	06/18	3
1028/2228	CYCLONE DANGER AREA* or 48HR HIGH WIND/WAVES	120/576	09/21	7

* Tropical Cyclone Danger Area chart replaced by 48HR High Wind/Wave Warning chart Dec 01-May 14. Valid times 00z, 06z, 12z and 18z. Map area 05N-40N, 35W-100W

MAP AREAS 1. 28N-52N, 45W-85W 2. 18N-65N, 10E-45W
3. 18N-65N, 40W-95W 4. 18N-65N, 10E-95W
5. 20N-55N, 55W-95W 6. EQ-60N, 40W-130W
7. 05N-60N, 0W-100W 8. 22N-51N, 40W-98W

BOSTON, MASSACHUSETTS, U.S.A.

NOTES: 1. CARRIER FREQUENCY IS 1.9 kHz BELOW THE ASSIGNED FREQUENCY
2. COMMENTS AND SUGGESTIONS SHOULD BE DIRECTED TO:

NATIONAL WEATHER SERVICE/NOAA
NATIONAL CENTER FOR ENVIRONMENTAL PREDICTION
MARINE FORECAST BRANCH W/NMC31
5200 AUTH ROAD
CAMP SPRINGS, MD 20746-4304
PHONE: (301) 763-8294x7401/FAX: (301) 763-8085
EMAIL: David.Feit@noaa.gov

Tropical cyclone charts also broadcast from New Orleans, LA

If you have access to the World Wide Web be certain to check out the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov	Cellphone page (Requires WML/WAP Browser)
mobile.weather.gov/	Mobile Page

(EFFECTIVE DATE: MAY 16, 2006/DEC 01, 2008)
(INFORMATION DATED FEB 24, 2009) http://weather.noaa.gov/pub/fax/hfmarsh.txt

PACIFIC OCEAN BASIN

CHARLEVILLE, AUSTRALIA

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
VMC	2628	kHz	0900-1900	F3C	1 KW
VMC	5100	kHz	All Broadcast Times	F3C	1 KW
VMC	11030	kHz	All Broadcast Times	F3C	1 KW
VMC	13920	kHz	All Broadcast Times	F3C	1 KW
VMC	20469	kHz	1900-0900	F3C	1 KW

WILUNA, AUSTRALIA

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER
VMW	5755	kHz	1100-2100	F3C	1 KW
VMW	7535	kHz	All Broadcast Times	F3C	1 KW
VMW	10555	kHz	All Broadcast Times	F3C	1 KW
VMW	15615	kHz	All Broadcast Times	F3C	1 KW
VMW	18060	kHz	2100-1100	F3C	1 KW

TIME	CONTENTS OF TRANSMISSION		RPM/IOC	VALID TIME	MAP AREA
------/1200	Australian MSLP Prog (H+36)		120/576	1200	AUST
0015/1215	VMC/VMW Schedule Page 1 of 2		120/576		
0030/1230	VMC/VMW Schedule Page 2 of 2		120/576		
0045/-------	VMC/VMW Information Notice		120/576		
0100/-------	IPS Recommended Frequencies for VMC (Charleville))		120/576		
0130/-------	IPS RECOMMENDED FREQUENCIES FOR VMW		120/576		
------/1245	Indian Ocean MSLP Prog (H+36)		120/576	1200	IO
------/1315	South Pacific Ocean Total Waves (H+48)		120/576	0000	SWP
------/1330	Indian Ocean Total Waves (H+48)		120/576	0000	IO
------/1345	Pacific Ocean Sea Surface Temps (Weekly)		120/576	LATEST	SWP
------/1400	Indian Ocean Sea Surface Temps (Weekly)		120/576	LATEST	IO
0200/-------	Australian MSLP Prog (H+36)		120/576	0000	AUST
------/1415	Casey Eastern and Western High Seas (H+48)		120/576	0000	
0245/1430	Australian MSLP Anal (Manual)		120/576	00/12	AUST
0300/1500	Australian 500 hPa Anal		120/576	00/12	AUST
0315/------	Voice Broadcast Information for VMW (Wiluna)		120/576		
------/1515	Australian MSLP Prog (H+36)		120/576	1200	AUST
0400/1600	Australian 500 hPa (H+24) Prog		120/576	00/12	AUST
0430/------	Australian MSLP 4-day forecast, Days 1 and 2		120/576		
0445-------	Australian MSLP 4-day forecast, Days 3 and 4		120/576		
------/1630	IPS Recommended Frequencies for VMC (Charleville)		120/576		
------/1700	IPS Recommended Frequencies for VMW (Wiluna)		120/576		
0600/1800	Asian (Part A) Gradient Level Wind Anal (Manual)		120/576	00/12	A
0623/1823	Asian (Part B) Gradient Level Wind Anal (Manual)		120/576	00/12	B
0645/-------	Asian MSLP Anal (Manual)		120/576	0000	C
0730/1915	Indian Ocean MSLP Anal (Manual)		120/576	00/12	IO
0745/1930	Australian Wind Waves Ht(m) Prog		120/576	00/12	AUST
0800/1945	Australian Swell Waves Ht(m) Prog (H+24)		120/576	00/12	AUST
0830/-------	South Pacific Ocean MSLP Anal		120/576	0000	SWP
0845/-------	Australian MSLP Anal (Manual)		120/576	0600	AUST
0900/-------	Australian MSLP Prog (H+36) (Repeat)		120/576	0000	AUST
0915/-------	Australian MSLP 4-day forecast, Days 1 and 2	(Repeat)	120/576		
0930/-------	Australian MSLP 4-day forecast, Days 3 and 4	(Repeat)	120/576		
------/2000	South Pacific Ocean MSLP Anal (Manual)		120/576	1200	SWP
------/2015	Casey Eastern and Western High Seas (H+24)		120/576	1200	
------/2030	Australian MSLP Anal (Manual)		120/576	1800	AUST
1015/------	Casey Eastern and Western High Seas (H+24)		120/576	0000	
------/2215	Casey Eastern and Western High Seas (H+36)		120/576	1200	
1030/2230	S.H. 500 hPa Prog (H+48)		120/576	00/12	SH
1045/2245	S.H. MSLP Prog (H+48)		120/576	00/12	SH
1100/------	Casey Eastern and Western High Seas (H+36)		120/576	0000	
1115/2300	S.H. 500 hPa Anal		120/576	00/12	SH
------/2315	Casey Eastern and Western High Seas (H+48)		120/576	1200	
1130/-------	Asian Sea Surface Temp Anal (Weekly)		120/576	LATEST	E
------/2330	Australian MSLP Prog (H+36)		120/576	0000	AUST
------/2345	Indian Ocean MSLP Prog (H+48)		120/576	1200	IO
1145/-------	VMC/VMW Information Notice		120/576		

CHARLEVILLE & WILUNA, AUSTRALIA

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA

The following charts are repeat broadcasts on 11030 kHz only via a directional aerial pointing from Charleville (VMC) towards Tasmania.

0345 Australian MSLP Anal (Manual) Valid 0000
0500 Australian MSLP 4-day Forecast, Days 1 and 2
0515 Australian MSLP 4-day Forecast, Days 3 and 4
0000 Indian Ocean MSLP Anal (Manual) Valid 1200

FOR FURTHER INFORMATION CONTACT:

SYSTEM HELP DESK
PH: (03) 9669 4054
EMAIL: webops@bom.gov.au

MAP AREAS:			
A:		30N - 35S, 120E – 180
AUST:	LAMBERT	10S - 50S, 090E - 170E
B:		30N - 35S, 070E - 130E
C:		30N - 35S, 070E - 180
E:		40N - 40S, 70E – 180
IO	POLAR	10S - 90S, 0 - 090E - 180
CASEY	MERCATOR	50S - 70S, 080E - 160E
SH	POLAR	20S - 90S, all longitudes
PSST	MERCATOR	20N - 50S, 140E - 180 - 100W
SWP	POLAR	20S - 90S, 150E - 180 - 90W
IOSST	MERCATOR	20N - 50S, 30E - 150E

(INFORMATION DATED Nov 14, 2007) http://www.bom.gov.au/marine/radio-sat/radio-fax-schedule.shtml

WELLINGTON, NEW ZEALAND

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
ZKLF	3247.4 kHz	0945-1700	F3C	5 KW
	5807 kHz	ALL BROADCAST TIMES	F3C	5 KW
	9459 kHz	ALL BROADCAST TIMES	F3C	5 KW
	13550.5 kHz	ALL BROADCAST TIMES	F3C	5 KW
	16340.1 kHz	2145-0500	F3C	5 KW

Single transmitter used. Times below reflect broadcast times at 5807 kHz
Add 15 minutes for 9459 kHz, 30 minutes for 13550.5 kHz and 45 minutes for 3247.4 and 16340.1 kHz

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	SOUTHWEST PACIFIC 30HR SURFACE PROG (MSL)	120/576	00/12	SWP
0100/1300	SOUTHWEST PACIFIC 48HR SURFACE PROG (MSL)	120/576	00/12	SWP
0200/1400	SOUTHWEST PACIFIC 72HR SURFACE PROG (MSL)	120/576	00/12	SWP
0300/1500	TASMAN-NEW ZEALAND MSL ANALYSIS	120/576	00/12	TNZ
0400/1600	SOUTHWEST PACIFIC MSL ANALYSIS	120/576	00/12	SWP
0900/2100	TASMAN-NEW ZEALAND MSL ANALYSIS	120/576	06/18	TNZ
1000/2200	SOUTHWEST PACIFIC MSL ANALYSIS	120/576	06/18	SWP
1100/2300	TRANSMISSION SCHEDULE			

MAP AREAS: TNZ - TASMAN SEA - NEW ZEALAND
SWP - SOUTHWEST PACIFIC

(INFORMATION DATED MAY 2002) http://www.metservice.com/marine/radio/zklf-radiofax-schedule

HONOLULU, HAWAII, U.S.A.

CALL SIGN	FREQUENCIES	TIMES (UTC)	EMISSION	POWER
KVM70	9982.5 kHz	0519-1556	F3C	4 KW
	11090 kHz	ALL BROADCAST TIMES	F3C	4 KW
	16135 kHz	1719-0356	F3C	4 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0519/1719	TEST PATTERN	120/576		
0524/1724	SIGNIFICANT CLOUD FEATURES	120/576	03/15	D
0535/1735	CYCLONE DANGER AREA	120/576	03/15	E
0555/1755	STREAMLINE ANALYSIS	120/576	00/12	B
0615/1815	SURFACE ANALYSIS	120/570	00/12	C
0635/1835	EAST PACIFIC GOES IR SATELLITE IMAGE	120/576	06/18	G
0649/1849	SW PACIFIC GOES IR SATELLITE IMAGE	120/576	06/18	H
0701/1901	24HR SURFACE FORECAST	120/576	00/12	A
0714/1914	48HR SURFACE FORECAST	120/576	00/12	A
0727/1927	72HR SURFACE FORECAST	120/576	00/12	A
0740/1940	WIND/WAVE ANALYSIS	120/576	00/12	B
0753/1953	24HR WIND/WAVE FORECAST	120/576	00/12	B
0806/2006	24HR WIND/WAVE FORECAST	120/576	00/12	4
0816/2016	48HR SURFACE FORECAST	120/576	00/12	1
0826/2026	48HR WIND/WAVE FORECAST	120/576	00/12	1
0836/2036	48/96HR WAVE PERIOD,SWELL DIRECTION	120/576	00/12	1
0846/2046	rebroadcast/ 96HR SURFACE FORECAST	120/576	12/12	1
0856/2056	rebroadcast/ 96HR WIND/WAVE FORECAST	120/576	12/12	1
0906/2106	PACIFIC GOES IR SATELLITE IMAGE	120/576	06/18	5
0917/2117	SURFACE ANALYSIS (PART 1 NE PACIFIC)	120/576	06/18	2
0930/2130	SURFACE ANALYSIS (PART 2 NW PACIFIC)	120/576	06/18	3
0943/2143	TROPICAL GOES IR SATELLITE IMAGE	120/576	06/18	Y
0954/2154	TROPICAL SURFACE ANALYSIS	120/576	06/18	Z
1008/2208	24HR TROPICAL WIND/WAVE FORECAST	120/576	00/12	Z
1042/2242	CYCLONE DANGER AREA	120/570	09/21	E
1102/2302	48HR WIND/WAVE FORECAST	120/576	00/12	B
1115/2315	72HR WIND/WAVE FORECAST	120/576	00/12	B
1128/2328	SEA SURFACE TEMPS	120/576	LATEST	F
1141/2341	rebroadcast 24HR WIND/WAVE FORECASTS	120/576	00/12	B
1154/2354	STREAMLINE ANALYSIS	120/576	06/18	B
1214/0014	SURFACE ANALYSIS	120/576	06/18	C
1234/0034	EAST PACIFIC GOES IR SATELLITE IMAGE	120/576	12/00	G
1248/0048	SW PACIFIC GOES IR SATELLITE IMAGE	120/576	12/00	H
1300/0100	SCHEDULE PART I	120/576		
1320/0120	SCHEDULE PART II	120/576		
1340/0140	SYMBOLS OR PRODUCT NOTICE BULLETIN	120/576		
1400/0200	24HR TROPICAL SURFACE FORECAST	120/576	00/12	Z
1410/0210	48HR TROPICAL SURFACE FORECAST	120/576	00/12	Z
1420/0220	72HR TROPICAL SURFACE FORECAST	120/576	00/12	Z
1430/0230	48/72HR TROPICAL WAVE PERIOD,SWELL DIR	120/576	00/00	Z
1440/0240	TROPICAL SEA STATE ANALYSIS	120/576	12/00	Z
1450/0250	rebroadcast 24HR TROPICAL WIND/WAVE FORECASTS	120/576	00/12	Z
1500/0300	48HR TROPICAL WIND/WAVE FORECAST	120/576	00/12	Z
1510/0310	72HR TROPICAL WIND/WAVE FORECAST	120/576	00/12	Z
1520/0320	rebroadcast/SEA STATE ANALYSIS	120/576	00/00	1
1530/0330	SURFACE ANALYSIS(PART 1 NE PAC)	120/576	12/00	2
1543/0343	SURFACE ANALYSIS(PART 2 NW PAC)	120/576	12/00	3
1556/0356	TROPICAL SURFACE ANALYSIS	120/576	12/00	Z

MAP AREAS:

A. 30S - 50N, 110W - 130E	B. 30S - 30N, 110W - 130E	Honolulu Forecast Office
C. EQ - 50N, 110W - 130E	D. 30S - 50N, 110W - 160E	Honolulu Forecast Office
E. EQ - 40N, 80W - 170E	F. EQ - 55N, 110W - 160E	Honolulu Forecast Office
G. 05S - 55N, 110W - 155E	H. 40S - 05N, 130W - 165E	Honolulu Forecast Office
1. 20N - 70N, 115W - 135E	2. 20N - 70N, 115W - 175W	Ocean Prediction Center
3. 20N - 70N, 175W - 135E	4. 18N - 62N, EAST OF 157W	Ocean Prediction Center
5. 05N - 55N, EAST OF 180W		Ocean Prediction Center
Y. 05N - 32N, EAST OF 130W	Z. 20S - 30N, EAST OF 145W	Tropical Prediction Center

HONOLULU, HAWAII, U.S.A.

STREAMLINES ARE LINES OF CONSTANT WIND DIRECTION.
WIND SPEEDS ARE GIVEN BY WIND BARBS INDEPENDENT OF STREAMLINES.

THE SIGNIFICANT CLOUD FEATURES CHARTS DEPICT CLOUD FEATURES BASED UPON IMAGES FROM THE VARIOUS GEOSTATIONARY AND POLAR ORBITING SATELLITES OVER THE PACIFIC. ABBREVIATIONS ON THESE CHARTS INCLUDE: AC - ALTOCUMULUS; AS - ALTOSTRATUS; BKN - BROKEN; CB - CUMULONIMBUS; CC - CIRROCUMULUS; CI - CIRRUS; CS - CIRROSTRATUS; CU - CUMULUS; FEW - FEW; ISOL - ISOLATED; LYRS - LAYERS; NS - NIMBOSTRATUS; OVC - OVERCAST; SC - STRATO-CUMULUS; SCT - SCATTERED; TCU - TOWERING CUMULUS; TSTM – THUNDERSTORM

RADIOFAX FREQUENCIES ARE ASSIGNED FREQUENCIES. TO CONVERT TO CARRIER FREQUENCIES, SUBTRACT 1.9 KHZ FROM THE ASSIGNED FREQUENCIES.

YOU MAY ADDRESS COMMENTS ABOUT THIS BROADCAST TO:

Meteorologist In Charge
National Weather Service
2525 Correa Rd.
Honolulu, HI 96822
PHONE: (808) 973-5270/FAX: (808) 973-5281
E-Mail norman.hui@noaa.gov

Many of these charts also broadcast via Pt. Reyes, CA and Kodiak, AK

If you have access to the World Wide Web be certain to check out the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov	Cellphone page (Requires WML/WAP Browser)
mobile.weather.gov/	Mobile Page

(SCHEDULE EFFECTIVE Nov 03, 2008)
(INFORMATION DATED FEB 24, 2009) http://weather.noaa.gov/pub/fax/hfhi.txt

EUROPE

ATHENS, GREECE

CALL SIGN	FREQUENCY	TIMES	EMISSION	POWER
SVJ4	4481 kHz		F3C	8 KW
SVJ4	8105 kHz		F3C	8 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0845	SURFACE ANALYSIS	120/576	0600	A
0857	SURFACE PROG (H+24)	120/576	0600	A
0909	SURFACE PROG (H+48)	120/576	0600	A
0921	WAVE HEIGHT PROG (H+30)	120/576	1800	B
0933	WAVE HEIGHT PROG (H+36)	120/576	0000	B
0945	WAVE HEIGHT PROG (H+42)	120/576	0600	B
0957	WAVE HEIGHT PROG (H+48)	120/576	1200	B
1009	WAVE HEIGHT PROG (H+30)	120/576	1800	C
1021	WAVE HEIGHT PROG (H+36)	120/576	0000	C
1033	WAVE HEIGHT PROG (H+42)	120/576	0600	C
1044	WAVE HEIGHT PROG (H+48)	120/576	1200	C

MAP AREA: A - SOUTH EUROPE , MEDITERRANEAN SEA, BLACK SEA
B - MEDITERRANEAN
C - AEGEAN

(INFORMATION DATED (03/2007)

MURMANSK, RUSSIA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
RBW 41	5336 kHz		F3C	
	6445.5 kHz	ALL BROADCAST TIMES	F3C	
	7908.8 kHz	1900-0600	F3C	
RBW48	10130 kHz	0600-1900	F3C	

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0700	36HR SURFACE PROG	120/576	0000	A
0800	SEA STATE ANALYSIS	120/576	0600	C
1400	SURFACE TEMP ANALYSIS/ICEBERG POSITIONS	120/576	1200	B
1400	ANAL OF ICEBERG POSITIONS FOR PAST+24HR	120/576	1200	C
1430	24HR SEA STATE PROG	120/576	1200	C
1850	BROADCAST SCHEDULE	90/576		
2000	ICEBERG PROGNOSIS	120/576		

NOTES: (1) BASIC COVERAGE AREA IS FOR BARENTS SEA.MAP AREAS:

A	-1:05,000,000	67N	032W,	53N	047E,	72N	074E,	51N	004W
B	-1:03,000,000	79N	010E,	74N	010E,	79N	040E,	74N	040E
C	-1:05,000,000	78N	010E,	66N	010E,	78N	070E,	66N	070E

(INFORMATION DATED 11/97)
Update 03/2000 - Current operational frequencies report as being 6446 and 8444 kHz (nights) and 7907 kHz (days).
Update 03/2000 - Broadcast schedule may no longer be transmitted on-air.
Update 03/2002 - May only be transmitting on 6446 kHz.

HAMBURG/PINNEBERG, GERMANY

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER	
DDH3	3855	kHz	ALL BROADCAST TIMES	F3C	10	KW
DDK3	7880	kHz	ALL BROADCAST TIMES	F3C	20	KW
DDK6	13882.5	kHz	ALL BROADCAST TIMES	F3C	20	KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
------/1520	Ice conditions chart West Baltic Sea or special area	120/576	0900	
------/1540	Ice conditions chart European Arctic Sea or special area	120/576	0900	
0430/1600	Surface weather chart	120/576	00/12	
0512/-------	h + 30 (GME) surface pressure	120/576	1800	
0525/1800	surface pressure analysis, arrows showing the movement of pressure systems, significant weather, ice	120/576	00/12	
0546/1821	Information of tropical storms, North Atlantic (during the season)	120/576	03/15	
-------/1834	H+24 (GME) surface pressure	120/576	1200	
0559/-------	H + 12, H + 24 (GME) 500 hPa H + T, surface P	120/576	0000	
0612/-------	H + 12, H + 24 (GME) 850 hPa H + T, 700 hPa U	120/576	0000	
0625/-------	H + 36, H + 48 (GME) 500 hPa H + T, surface P	120/576	0000	
0638/-------	H + 36, H + 48 (GME) 850 hPa H + T, 700 hPa U	120/576	0000	
0651/-------	H + 60, H + 72 (GME) 500 hPa H + T, surface P	120/576	0000	
0704/------	H + 60, H + 72 (GME) 850 hPa H + T, 700 hPa U	120/576	0000	
0717/-------	Repetition chart 0512 UTC	120/576	1800	
0730/1847	H+48 (GME) surface pressure	120/576	00/12	
0743/-------	Repetition chart 0525 UTC	120/576	0000	
0804/1900	H+84 (GME) surface pressure	120/576	00/12	
0817/-------	H+108 (GME) surface pressure	120/576	0000	
0830/1913	H+24 (GSM) Sea and swell, wind direction, direction of swell	120/576	00/12	
0842/1926	H+48 (GSM) Sea and swell, wind direction, direction of swell	120/576	00/12	
0854/1939	H+72 (GSM) Sea and swell, wind direction, direction of swell	120/576	00/12	
0906/------	H+96 (GSM) Sea and swell, wind direction, direction of swell	120/576	0000	
0930/2100	Ice conditions chart Northwest Atlantic	120/576	00/12	
0945/-------	Sea surface temperature North Sea	120/576	0000	
1007/2115	Ice conditions chart West Baltic Sea	120/576	00/15	
1029/2136	H+48 wave prediction North Atlantic	120/576	00/12	
1050/2200	Surface weather chart	120/576	06/18	
1111/------	Transmission schedule	120/576		
1132/------	Test chart	120/576		
1145/-------	Repetition chart 1050 UTC	120/576	0600	
1205/-------	Repetition chart 0512 UTC	120/576	1800	
1220/-------	Repetition chart 0730 UTC	120/576	0000	

Notes: Abbreviations have the following meaning: GME Global model (31 layers, 60 km)
H Contour lines (gpdam) MSL Mean sea level T Isotherms (° C) U Relative humidity (%)

(INFORMATION DATED (032010)
http://www.dwd.de/bvbw/generator/DWDWWW/Content/Schifffahrt/Sendeplan/broadcast__fax__032010,templateId=raw,property=publicationFile.pdf/broadcast_fax_032010.pdf

NORTHWOOD, UNITED KINGDOM

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
GYA	2618.5 kHz	2000-0600 UTC	F3C	10 KW
GYA	4610 kHz	ALL BROADCAST TIMES	F3C	10 KW
GYA	8040 kHz	ALL BROADCAST TIMES	F3C	10 KW
GYA	11086.5 kHz	0600-2000 UTC	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	SFC ANALYSIS	120/576	18/06	
0012/1212	SFC PRONOSIS T+24	120/576	18/06	
0024/1224	850MB WEBT/PPTN T+24	120/576	18/06	
0036/1236	OAT AND TD CONTOUR T+24	120/576	18/06	
0048/1248	SHIP ICE ACCRETION	120/576	12/00	
0100/1300	MAIN SCHEDULE	120/576		
0124/1324	QSL REPORT	120/576		
0136/1336	OCEAN FRONTS	120/576		
0148/1348	300MB GPH	120/576	18/06	
0212/------	SYMBOLOGY	120/576		
------/1400	SEA SURFACE TEMP	120/576	0000	
0236/1436	SFC ANALYSIS	120/576	00/12	
0300/1500	SFC ANALYSIS	120/576	00/12	
0348/1548	GALE WARNING SUMMARY	120/576	04/16	
0400/1600	SFC ANALYSIS	120/576	00/12	
0412/------	OAT AND TD CONTOUR T+24	120/576	0000	
------/1612	TA AND TD CONTOUR T+24	120/576	1200	
0424/1624	850MB WEBT/PPTN T+24	120/576	00/12	
0436/1636	SURFACE PROGNOSIS T+24	120/576	00/12	
0448/1648	SCEXA TAFS	120/576		
0500/1700	SFC ANALYSIS	120/576	00/12	
0512/1712	SURFACE PROGNOSIS T+24	120/576	00/12	
0524/1724	SURFACE PROGNOSIS T+48	120/576	00/12	
0536/1736	SCEXA TAFS	120/576	06/18	
0548/1748	GALE WARNING SUMMARY	120/576	06/18	
0600/------	NWEXAS TAFS	120/576		
0612/1800	SFC ANALYSIS	120/576	00/12	
0624/1812	SURFACE PROGNOSIS T+24	120/576	00/12	
------/1824	NWEXAS TAFS	120/576		
0648/1848	SCEXA TAFS	120/576	07/19	
0700/------	SPARE SCEXA TAFS	120/576	0700	
------/1900	THICKNESS/GPH ANALYSIS	120/576	1200	
0712/1912	SIG WINDS T+24	120/576	00/12	
0724/1924	SFC PROGNOSIS T+48	120/576	00/12	
0736/1936	SFC PROGNOSIS T+72	120/576	00/12	
0748/1948	SFC PROGNOSIS T+96	120/576	00/12	
0800/2012	SFC PROGNOSIS T+120	120/576	00/12	
0812/------	THICKNESS/GPH ANALYSIS	120/576	00/12	
0824/2024	SIG WINDS T+48	120/576	00/12	
0836/2036	SIG WINDS T+72	120/576	00/12	
0848/2048	SIG WINDS T+96	120/576	00/12	
0900/2100	SFC ANALYSIS	120/576	06/18	
0912/2112	THICKNESS/GPH ANALYSIS	120/576	00/12	
0924/2124	THICKNESS/GPH T+24	120/576	00/12	
0936/2136	850MB SPOT WINDS T+24	120/576	00/12	
0948/2148	700MB SPOT WINDS T+24	120/576	00/12	
1000/2200	SFC ANALYSIS	120/576	06/18	
1012/2212	SURFACE PROGNOSIS T+24	120/576	06/18	
1024/2224	REDUCED VIS T+24	120/576	06/18	
1036/2236	850MB WEBT/PPTN T+24	120/576	06/18	
1048/2248	OAT AND TD CONTOUR T+24	120/576	06/18	
1100/2300	SFC ANALYSIS	120/576	06/18	
1112/2312	SURFACE PROGNOSIS T+24	120/576	06/18	
1124/2324	SEA AND SWELL T+24	120/576	00/12	
1136/2336	THICKNESS/GPH T+24	120/576	12/00	
1148/2348	GALE WARNING SUMMARY			

All MAPS 54°N.82°W 26°N.45°W 54°N.51°E 28°N.12°E
OAT Outside Air Temperature
TD Dewpoint Temperature
SCEXA TAFS South Coast Exercise Area Terminal Airfield Forecasts

(INFORMATION DATED MAY 27 2009)

APPENDICIES

NATIONAL WEATHER SERVICE MARINE PRODUCTS VIA INTERNET INCLUDING RADIOFAX

The Internet is not part of the National Weather Service's operational data stream and should never be relied upon as a means to obtain the latest forecast and warning data. Become familiar with and use other means such as NOAA Weather Radio to obtain the latest forecasts and warnings. Please read our ***disclaimer*** ***http://www.nws.noaa.gov/disclaimer.php***.

Note: Any reference to a commercial product or service does not imply any endorsement by the National Weather Service as to function or suitability for your purpose or environment.

Marine Text Forecasts and Products

The majority of National Weather Service (NWS) forecasts and warnings may be found under the ***NWS webpage*** ***http://www.nws.noaa.gov/***. Of specific interest to mariners are the ***NWS Marine Text Forecasts and Products*** ***http://www.nws.noaa.gov/om/marine/home.htm#text*** . For convenience, High Seas, Offshore and Coastal marine forecasts are subdivided by sea area or zone and available via the Internet using our text interface or graphic interface. Individual NWS Forecast Offices and Centers producing marine forecasts provide links to their products as well as additional regionally focused information.

Explanation of Codes Used in Various Marine Text Forecasts and Weather Broadcasts:

- Valid Time Event Code
- Universal Geographic Code (UGC)
- MAFOR
- Ships Synoptic Code (BBXX)
- MARS
- MAROB
- NOAA Weather Radio SAME Codes
- XML, CAP, RSS
- General Text Specification for Weather Products
- How to read the Hurricane Forecast/Advisory (TCM), More
- Others (coming...check back)

Marine Graphic Forecasts and Products

Graphic marine forecasts are produced by NWS for broadcast via **radiofax** **http://www.nws.noaa.gov/om/marine/radiofax.htm** and also made available via the Internet at ***Marine Radiofax Charts*** ***http://weather.noaa.gov/fax/marine.shtml***.

The National Weather Service also plans to make available marine forecast data in gridded and vector formats for display on electronic charts and use by other value-added applications. Graphics using these data are available via the Internet for most U.S. coastal areas. See ***Marine News - Gridded and Vector Data*** ***http://www.nws.noaa.gov/om/marine/newsgridded.htm***. Gridded forecast data for offshore and high seas areas are forthcoming. Also *see* ***Computer Generated Model Guidance*** below.

Satellite and RADAR Imagery

Satellite imagery may be found on the ***GOES webpage*** ***http://www.goes.noaa.gov/***, and is also available from ***NASA*** ***http://rsd.gsfc.nasa.gov/goes/***. Ocean surface winds and other data derived from polar orbiting and geostationary satellites may be found on ***NOAA's Marine Observing Systems Team Homepage*** ***http://manati.orbit.nesdis.noaa.gov/*** and ***NOAA's Coastwatch Homepage*** ***http://coastwatch.noaa.gov/*** Information and links to Sea Surface Temperature Charts and Gulf Stream charts may be found on our ***FAQ*** ***http://www.nws.noaa.gov/om/marine/faq.htm*** webpage. ***NEXRAD Doppler Radar images*** ***http://radar.weather.gov/Conus/index_lite.php*** are available on the Internet on the ***NWS Homepage*** ***http://www.nws.noaa.gov/*** and local ***NWS Forecast Offices*** ***http://www.nws.noaa.gov/om/marine/marine_map.htm*** homepages. NEXRAD Doppler Radar images may also be found on local cable channels and the webpages of local media including TV stations, radio stations and newspapers as well as others.

Ice Analysis, Forecasts and Iceberg Reports

Ice analyses, forecasts and iceberg reports are available from the ***National Ice Center*** ***http://www.natice.noaa.gov/***, the ***U.S. Coast Guard's International Ice Patrol******http://www.uscg.mil/lantarea/iip/home.html***, and ***local NWS marine forecast offices*** ***http://www.nws.noaa.gov/om/marine/marine_map.htm*** in areas such as ***Alaska*** ***http://pafc.arh.noaa.gov/ice.php*** where ice is a concern. Ice forecasts and observations are also made available as ***radiofax*** ***http://www.nws.noaa.gov/om/marine/radiofax.htm***, ***text products*** ***http://www.nws.noaa.gov/om/marine/home.htm#text*** and computer generated model guidance.

Computer Generated Model Guidance

Computer generated model guidance products used by marine forecasters is available from the ***Ocean Modeling Branch*** ***http://polar.ncep.noaa.gov/***, ***National Centers for Environmental Prediction*** ***http://www.ncep.noaa.gov/***, the ***Environmental Modeling Center*** ***http://www.emc.ncep.noaa.gov/***, the ***National Ocean Service's Chesapeake Bay Operational Forecast System******http://tidesandcurrents.noaa.gov/ofs/cbofs/cbofs.html***, and the ***Great Lakes Forecasting System*** ***http://superior.eng.ohio-state.edu/***.

NCEP model data in graphic and gridded binary (GRIB) form may be found on ***NCEP's N.O.M.A.D.S. (NOAA Operational Model Archive Distribution System)*** ***http://www.nomad3.ncep.noaa.gov/***, NOMADS3, NOMADS5 and NOMADS6 webservers.

The ***Weather Charts*** ***http://weather.noaa.gov/fax/graph.shtml*** webpage contains charts, intended as guidance to forecasters, which can prove of value to mariners. Note: Several charts listed under "Weather Charts", which are no longer required to support NWS operations, may be terminated or made available at alternate sites. This should not include those which are broadcast by marine radiofacsimile.

Caution...these data have not been validated by marine forecasters and may be misleading. Mariners should use these data in conjunction with forecaster generated forecasts.

Marine Climatological Information

User-friendly climatological information for marine coastal areas may be found in ***Appendix T of the National Ocean Service's Coast Pilot's, volumes 1-9*** ***http://chartmaker.ncd.noaa.gov/nsd/coastpilot.htm***. These appendices, which were prepared by the ***National Climatic Data Center*** ***http://lwf.ncdc.noaa.gov/oa/ncdc.html***, also contain other useful meteorological information such as conversion tables. Visit their webpage for further information.

The National Geospatial-Intelligence Agency now makes available some of its ***Pilot Charts*** ***http://www.nga.mil/portal/site/maritime/*** on-line.

Foreign Marine Forecasts

Links to ***foreign meteorological services*** ***http://www.wmo.int/pages/members/index_en.html*** , and foreign marine meteorological services are available courtesy of the ***World Meteorological Organization (WMO)*** ***http://www.wmo.int/pages/index_en.html***.

The WMO has also introduced an experimental ***GMDSS Webpage*** ***http://weather.gmdss.org/*** which, as a first step, provides links to worldwide meteorological bulletins and warnings issued for the high seas via SafetyNet.

Also try these Navy links ***https://www.fnmoc.navy.mil*** and ***https://www.navo.navy.mil*** and "Computer Generated Model Guidance" above for data which is outside the area of U.S. marine forecast responsibility.

WEBCAMS

The advent of the Internet has brought about a new type of observation system popular with beachgoers, surfers, and others - the WEBCAM which displays live images of current conditions. To find WEBCAMS for marine areas use your favorite Internet search engine to search for such key words as Beach Cams, Surf Cams, Coastal Cams, Ocean Cams, Port Cams and Cruise Cams. You may wish to refine your search by adding your geographic area to the search's key words.

Buoy and Other Real-Time Observations

The latest coastal and offshore weather observations from NOAA fixed and drifting data buoys and Coastal-Marine Automated Network (C-MAN) stations may be found at the ***National Data Buoy Center*** ***http://www.ndbc.noaa.gov/*** webpage. Real time meteorological and oceanographic observations for several sites are also available from the ***Physical Oceanographic Real-Time System (Ports)*** ***http://tidesandcurrents.noaa.gov/ports.html***. PORTS is a program of the U.S. ***National Ocean Service*** ***http://oceanservice.noaa.gov/*** that supports safe and cost-efficient navigation by providing ship masters and pilots with accurate real-time information required to avoid groundings and collisions. ***Several National Ocean Service tide gages are also equipped with ancillary meteorological sensors*** ***http://tidesonline.nos.noaa.gov/geographic.html***. Regionally focused observation data may also be found on the webpages of local ***NWS Forecast Offices*** ***http://www.nws.noaa.gov/om/marine/marine_map.htm***. Some marine observations may also be found on our ***NWS Marine Product Listing and Schedule*** ***http://www.nws.noaa.gov/om/marine/forecast.htm***. Historical and real-time beach temperature data is available from the ***NODC Coastal Water Temperature Guide*** ***http://www.nodc.noaa.gov/dsdt/cwtg/***.

NOAA's Forecast Systems Laboratory (FSL) offers a ***Display of Surface Data*** ***http://www-frd.fsl.noaa.gov/mesonet/*** from several government, commercial and voluntarily operated mesonets as well as observations of those of the ***Voluntary Observing Ship (VOS) Program*** ***http://www.vos.noaa.gov/*** and data buoys. A variety of marine observations may also be viewed on the ***National Ocean Service's nowCOAST Web Portal(BETA)*** ***http://chartmaker.ncd.noaa.gov/csdl/op/nowcoast.htm***.

For mariners with a low speed Internet connection..... The latest buoy or C-MAN data may be retrieved via the Internet as in the following example where 44017 refers to buoy #44017.

http://www.ndbc.noaa.gov/mini_station_page.php?station=44017

Tide Predictions, Observations and Storm Surge Forecasts

Near real-time Water Level Observations, and Predicted Tide Information for the calendar year **http://tidesandcurrents.noaa.gov/**, are available from the ***National Ocean Service*** ***http://oceanservice.noaa.gov/*** Read the ***NOS Tides FAQ******http://tidesandcurrents.noaa.gov/faq1.html*** for further information on obtaining NOS tides and tidal current data. Caution is urged in using tide data made available at University and other webpages. This information may not be based on current government data and be of unknown quality.

The National Weather Service's Cleveland Forecast Office makes available a series of ***experimental Great Lakes Water Levels Graphs*** ***http://marine.wcle.noaa.gov/levels.html***, using National Ocean Service data, intended to be low speed connection friendly for Internet access by vessels afloat.

Experimental, computer generated, ***Extratropical Water Level Forecasts*** ***http://www.nws.noaa.gov/mdl/etsurge/*** are available from the National Weather Service's ***Meteorological Development Laboratory*** ***http://www.nws.noaa.gov/tdl/***. Status maps are provided to give the user a quick overview of a region. Forecasts of storm surge produced as a result of a tropical storm or hurricane are available from your ***local NWS Forecast Office*** ***http://www.weather.gov/organization.php***.

The ***National Ocean Service's Chesapeake Bay Operational Forecast System (CBOFS)*** ***http://tidesandcurrents.noaa.gov/ofs/cbofs/cbofs.html*** and ***The Port of New York and New Jersey Operational Forecast System (NYOFS)*** ***http://tidesandcurrents.noaa.gov/nyofs.html*** have been created by NOS to provide the maritime community with improved short-term predictions of water levels. Please be advised that these predictions are based on a hydrodynamic model and, as such, should be considered as computer-generated forecast guidance.

For Emergency Responders and Planners

NOAA's Office of Response and Restoration, National Ocean Service ***http://response.restoration.noaa.gov/index.php***, offers a series of job aids and software to predict weather and ocean affects on the trajectory of hazardous materials such as oil spills. The information may be helpful for further applications as well.

Historic Weather Forecasts, Satellite Images and Oceanographic Data

For historic weather forecasts, satellite images and oceanographic data, contact the National Climatic Data Center and National Oceanographic Data Center, found on our listing of ***Phone Numbers and Addresses*** ***http://www.nws.noaa.gov/om/marine/phone.htm***.

Voluntary Observations from Mariners

All NWS marine forecasts rely heavily on the ***Voluntary Observing Ship (VOS)*** ***http://www.vos.noaa.gov/*** program for obtaining meteorological observations. Ship observations may also be found on the ***NOAA's Forecast Systems Laboratory (choose maritime)*** ***http://www-frd.fsl.noaa.gov/mesonet/***, ***CoolWX*** ***http://coolwx.com/buoydata/***, and ***SailWX.info*** ***http://www.sailwx.info***, ***Oceanweather*** ***http://www.oceanweather.com/data/index.html*** webpages.

The National Weather Service has a number of other volunteer observation programs including the ***SKYWARN, MAREP, MAROB, MARS, APRSWXNET/Citizen Weather Observer Program (CWOP) and the Cooperative Observer Program (COOP) see*** ***http://www.nws.noaa.gov/om/marine/voluntary.htm*** which are of benefit to the marine community.

Marine Webpages

The Internet contains a great number of webpages of interest to the mariner. Visit our ***Links*** ***http://www.nws.noaa.gov/om/marine/mlinks.htm*** page for a listing of recommended webpages pertaining to Marine Weather. The ***U.S. Coast Guard Maritime Telecommunications Information webpage*** ***http://www.navcen.uscg.gov/marcomms*** contains an excellent description of marine communication systems. There are also many other Internet sites of interest to the mariner. Use one the Internet search engines to search on topics such as "marine weather", "radiofax", "radiofacsimile", "weather buoys", "tides", etc. The ***NOAA Library*** ***http://www.lib.noaa.gov/*** provides an excellent listing of links to marine related webpages within NOAA and elsewhere.

Marine Weather Publications On the Web

Many marine weather related government publications are available on the Web. Visit our ***publications webpage*** ***http://www.nws.noaa.gov/om/marine/pub.htm*** for several we recommend including our popular Marine Service Charts, the Weather Log Magazine, and our listing of Worldwide Marine Radiofacsimile Broadcast Schedules.

Internet Access for Mariners

Internet at sea can be problematic unless you stay within cellular telephone range of shore. The maximum speed for cellular telephones is typically 14.4 Kbaud, however, a number of cellular service providers are now offering enhanced services with speeds in the range of 56 Kbaud - 144 Kbaud. Terrestrial wireless Internet services such as those provided by GoAmerica, TeleSea, and Motient, are beginning to become available, however, these provide limited maritime coverage. These companies may employ "Marine WIFI" technology which is rapidly becoming popular at marinas and in favorite harbor areas. Satellite services including Inmarsat, Iridium, Globalstar, Thuraya, Emsat, ACeS, tracNet/DirecPC, Mobile Satellite Ventures, Boatracs, Orbcomm , Digital Seas International , and MTN are available, however, costs are generally greater. Several companies offer e-mail services designed to optimize satellite connectivity including MAILASAIL, MarineNet, OCENS, Telaurus, UUPLUS and XGate . Full Internet access is often available if you have a satellite terminal onboard, but presently unless you restrict your use to e-mail messages, costs can be high. A number of satellite services such as Inmarsat-C offer e-mail messaging services only and provide no access to the World Wide Web. Several transmission and data compression schemes are available and in development to make the Web more accessible to the mariner. There are also several public FTP-to-EMAIL and WWW-to-EMAIL servers available to allow Internet access for users who do not have direct or cost effective access to the World Wide Web but who are equipped with an e-mail system. *See* *http://www.faqs.org/faqs/internet-services/access-via-email/* for information. Low cost, worldwide, access to the World Wide Web via satellite should be available to the mariner in the next five to ten years.

If you have an HF marine radio, E-mail service is available from companies such as Sailmail, SeaMail, CruiseEmail, Global Marine Networks, MarineNet Wireless, Kielradio, Globe Wireless and Mobile Marine Radio (WLO)/Telaurus. E-mail can be accomplished at no cost using ***amateur radio*** ***http://www.nws.noaa.gov/om/marine/ham.htm***.

The domain of the Internet is rapidly expanding to now include wireless devices such as so-called "Internet-Ready" digital cellular phones and Personal Data Assistants (PDAs). These offer great potential for making marine forecasts available to coastal mariners, who have limited other options available. The majority of these other options are by voice where there is always the possibility of misunderstanding.

A webpage for the most popular marine text forecasts compatible with many PDA's may be found at ***http://www.nws.noaa.gov/om/marine/marinewxi.htm***.

Visit ***http://www.nhc.noaa.gov/aboutwap.shtml*** where you will find NHC/TPC's wireless web page. There you can find the link to obtain NHC/TPC's most popular hurricane products, offshore forecasts, and high seas forecasts.

A WAP webpage for compatible cellphones containing marine and public forecasts may be found at: ***cell.weather.gov*** NOW WITH GREATLY ENHANCED MARINE LINKS (includes a capability to view the forecast for any zip/city and radar images).

A low bandwidth webpage containing marine and public forecasts intended for mobile devices may be found at: ***http://mobile.weather.gov/*** (includes a capability to view the forecast for any zip/city and radar images). Note....WAP/WML webpages require a WAP-capable cellphone or other WAP-capable device.

A number of Cellular service providers are beginning to offer value-added Internet-like services which provide access to NOAA tide data, marine forecasts, and other items of interest to the wireless customer. These require a digital phone with some of the more advanced features. See your Cellular service provider for details. There may be a nominal fee required for using these services.

National Weather Service Products Available Via E-MAIL (FTPMAIL

National Weather Service marine text forecasts, radiofax charts and buoy observations are available via e-mail. Further, FTPMAIL may be used to acquire any file on the tgftp.nws.noaa.gov FTP server. The FTPMAIL server is intended to allow Internet access for mariners and other users who do not have direct access to the World Wide Web but who are equipped with an e-mail system. Turnaround is generally in under one hour, however, performance may vary widely and receipt cannot be guaranteed. To get started in using the NWS FTPMAIL service, follow these simple directions to obtain the FTPMAIL "help" file (11 KBytes), or ***see http://weather.noaa.gov/pub/fax/ftpmail.txt***.

Send an e-mail to: ***ftpmail@ftpmail.nws.noaa.gov***
Subject line: Put anything you like
Body: help

An FAQ webpage describing several public and commercial FTP-to-EMAIL and WWW-to-EMAIL servers may be found at: ***www.faqs.org/faqs/internet-services/access-via-email/***

A webpage describing several different e-mail "robots" similar in concept to FTPMAIL, including some with advanced features such as allowing retrieval of NWS marine GRIB files, simple webpages, and allowing products to be retrieved on a scheduled, recurring basis may be found at: ***http://weather.noaa.gov/pub/fax/robots.txt***

Internet Broadcasts

Marine weather data may also be obtained via the Internet using EMWIN http://www.nws.noaa.gov/om/marine/emwin.htm. As part of the ***New NOAA Weather Wire Service*** ***http://www.nws.noaa.gov/om/marine/wxwire.htm***, ***Computer Sciences Corporation*** ***http://dynis.fedcsc.com/contracts/other/nwws/default.htm*** broadcasts the entire ***Weather Wire product stream on the Internet as a commercial service*** ***http://dynis.fedcsc.com/contracts/other/nwws/options.htm***.

Watches, Warnings and Advisories Using RSS and CAP XML Based Formats

The National Weather Service provides access to ***watches, warnings and advisories for land areas*** ***http://www.weather.gov/alerts/***, and for ***hurricane watches and warnings*** ***http://www.nhc.noaa.gov/aboutrss.shtml***, via ***RSS*** ***http://www.weather.gov/alerts/#rss*** and ***CAP/XML*** ***http://www.weather.gov/alerts/#cap*** to aid the automated dissemination of this information. Planning is in progress to extend this to marine warnings.

Directories of NWS Marine Forecasts

For Website developers or other "power" users, many NWS marine text forecast products are available at the following URL's, indexed by WMO header or zone.
http://weather.noaa.gov/pub/data/forecasts/marine/
ftp://tgftp.nws.noaa.gov/data/forecasts/marine/
http://weather.noaa.gov/pub/data/raw/
ftp://tgftp.nws.noaa.gov/data/raw/
http://www.ndbc.noaa.gov/data/Forecasts/
http://www.weather.gov/data/
http://www.srh.noaa.gov/data
http://www.weather.gov/view/validProds.php

Many National Weather Service Weather Charts may be found in the following directories, indexed by WMO ID or other identifier.
http://weather.noaa.gov/pub/fax/
ftp://tgftp.nws.noaa.gov/fax/

Change Notices

For details on changes to NWS products, visit the ***Office of Climate, Water, and Weather Services Service Change Notifications*** ***http://www.nws.noaa.gov/om/notif.htm***, the ***Data Product Change Management Status Reports*** ***http://www.nws.noaa.gov/om/cm/status.html***, and ***NWS Telecommunication Operations Center (TOC) Data Management Change Notices*** ***http://www.nws.noaa.gov/datamgmt/notices.shtml*** webpages. ***See*** ***http://www.nws.noaa.gov/om/marine/recent.htm***for a summary of recent changes of most interest to mariners and coastal residents.

NATIONAL WEATHER SERVICE INTERNET SITES

NWS Homepage	http://www.nws.noaa.gov
NWS Marine Forecasts	http://www.nws.noaa.gov/om/marine/home.htm
NWS Marine Text Products	http://www.nws.noaa.gov/om/marine/home.htm#text
NWS Marine Radiofax Products	http://weather.noaa.gov/fax/marine.shtml
NWS Voluntary Observing Ship Program	http://www.vos.noaa.gov
AMVER/SEAS Homepage	http://seas.amverseas.noaa.gov/seas/

U.S. NAVY AND OTHER WEATHER INTERNET SITES

See these sites for further links

Naval Oceanography Portal	http://www.usno.navy.mil/
Naval Oceanographic Office	https://www.navo.navy.mil/
Navy Fleet Numerical	https://www.fnmoc.navy.mil/
International Ice patrol	http://www.uscg-iip.org/
National Ice Center	http://www.natice.noaa.gov
WMO Homepage	http://www.wmo.ch
JCOMM GMDSS	http://weather.gmdss.org/
USCG Maritime Telecommunications	http://www.navcen.uscg.gov/marcomms

APPENDIX B
FTPMAIL INSTRUCTIONS

National Weather Service marine text forecasts, radiofax charts and buoy observations are available via e-mail. Further, FTPMAIL may be used to acquire any file on the tgftp.nws.noaa.gov FTP server. The FTPMAIL server is intended to allow Internet access for mariners and other users who do not have direct access to the World Wide Web but who are equipped with an e-mail system. Turnaround is generally in under one hour, however, performance may vary widely and receipt cannot be guaranteed.

The electronic version of this publication contains links to http pages and FTPMAIL commands. The FTPMAIL links may not be compatible with all PDF readers and email systems. The Internet is not part of the National Weather Service's operational data stream and should never be relied upon as a means to obtain the latest forecast and warning data. Become familiar with and use other means such as NOAA Weather Radio to obtain the latest forecasts and warnings. Please read our ***disclaimer*** ***http://www.nws.noaa.gov/disclaimer.php***.

FTPMAIL help file
****
*   WARNING
*

*   This is a United States Government Computer. Use of
*   this computer for purposes for which authorization
*   has not been extended is a violation of federal law.
*
*   (Reference Public Law 99-474)

*   For Help contact:
*
*   marine.weather@noaa.gov   301-713-1677 x 128
*
****

**** IMPORTANT NOTICES **** Read these notes carefully ****

Effective January 08, 2008, the address of the FTPMAIL service changed
from ftpmail@weather.noaa.gov to ftpmail@ftpmail.nws.noaa.gov.
If you restrict incoming e-mail as a means of preventing spam, you must
configure your e-mail system to allow mail from ftpmail@ftpmail.nws.noaa.gov

CAUTION - READ THIS HELP FILE CAREFULLY - 99% OF ERRORS USING FTPMAIL
ARE SIMPLE TYPO'S, INCORRECT CAPITALIZATION, FAILURE TO SEND IN PLAIN
TEXT FORMAT, LEADING OR TRAILING SPACES, OR FAILURE TO SET UP ANY SPAM
FILTERS PROPERLY. FOLLOW THE EXAMPLES CLOSELY!

FTPMAIL e-mail requests must be sent in ASCII/Plain Text only.
HTML formatting will likely result in no response from the FTPMAIL
server.

This "help" file contains a detailed description of the FTPMAIL system
and available products. To obtain another copy of the FTPMAIL "help" file:

Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject Line: Put anything you like
Body: help

These instructions are subject to revision....download frequently.

tgftp.nws.noaa.gov is the only valid FTP site for this service.

This National Weather Service (NWS) FTPMAIL server is intended to
allow Internet access for users who do not have direct access to
the World Wide Web but who are equipped with an e-mail system.
The service is free and no signup is required. Using FTPMAIL,
users can request files from NWS and have them automatically
e-mailed back to them. Turnaround is generally in under one
hour, however, performance may vary widely and receipt cannot be
guaranteed.

NOTICE - Check time and date of forecasts. Downloaded data may not
represent the latest forecast. The Internet is not part of the
National Weather Service's operational data stream and should never
be relied upon as a means to obtain the latest forecast and warning

data. Become familiar with and use other means such as NOAA Weather Radio to obtain the latest forecasts and warnings. Please read our disclaimer at http://www.nws.noaa.gov/disclaimer.php

Although these instructions are tailored for marine users to gain access to graphic(radiofax) and text products via e-mail, all publicly available data on the tgftp.nws.noaa.gov Internet FTP server is accessible using the FTPMAIL service.

To use FTPMAIL, the user sends a small script file via e-mail to NWS requesting the desired file(s). A list of available product directories, retrievable via FTPMAIL is shown below.

Users should be familiar with sending and receiving messages and attachments with their particular e-mail system. Attachments are received in UUencoded form. The majority of modern e-mail systems handle the conversion automatically, other users will need to run the UUdecode program for their particular system. If your e-mail system does not UUENCODE automatically, you will get back a bunch of gibberish starting with something like "begin 600 PWAE98.TIF" See your system administrator if you have any questions on this topic. UUdecode freeware and shareware may also be found on the Web, but the easier solution is to try a different e-mail system if that option is open to you. The UUencoding process can add 0 to >100% overhead depending on your system and the type of file.

Files sizes for NWS radiofax graphic files average 35KB but can be much greater. Users should be aware of the costs for operating their particular e-mail system before attempting to use FTPMAIL, especially when using satellite communication systems. For marine users, using FTPMAIL via INMARSAT-C for obtaining current NWS radiofax graphic files is cost prohibitive. Using the FTPMAIL compression feature of FTPMAIL is not recommended as these files are already in a compressed T4(G4) format enveloped in TIFF for viewing. You will need a graphics program capable of displaying files in this format in order to view them. Suggestions for TIFF viewers may be found in file http://weather.noaa.gov/fax/rfaxtif.txt

NEW! Radiofax .TIF files now also available as (larger) .gif files

The following examples demonstrate the use of FTPMAIL. Indexes of currently available marine products, the list FTPMAIL commands, and suggestions for TIFF viewers may be obtained following these instructions.

To use FTPMAIL:
- Send an e-mail via the Internet to: ftpmail@ftpmail.nws.noaa.gov
- Put anything you like on the subject line
- Enter a command script in the body of the message

NOTE: Correct capitalization for commands, directory and file names is critical

Example scripts are:

help

Connect to default_site (tgftp.nws.noaa.gov) and send back this help file to e-mail address of requestor

```
open
cd fax
get PWAE98.TIF
quit
```

Connect to default_site (tgftp.nws.noaa.gov) and send back
the chart file PWAE98.TIF to e-mail address of requestor

```
open
cd data
cd forecasts
cd marine
cd coastal
cd an
get anz231.txt
quit
```

Connect to default_site (tgftp.nws.noaa.gov) and send back coastal
marine zone forecast ANZ231 to e-mail address of requestor

```
open
cd data
cd forecasts
cd zone
cd md
get mdz009.txt
quit
```

Connect to default_site (tgftp.nws.noaa.gov) and send back public
land zone forecast MDZ009 to e-mail address of requestor.
(Contact your local forecast office to identify the public
forecast zone number for your county, known as the UGC code)

```
reply-to captain.kidd@noaa.gov
open
dir
quit
```

Connect to default_site (tgftp.nws.noaa.gov) and send back the
contents of the top level directory to captain.kidd@noaa.gov

```
open
cd fax
get ftpcmd.txt      (List of FTPMAIL commands)
get rfaxtif.txt     (TIFF suggestions)
get rfaxatl.txt     (Atlantic radiofax file directory)
get rfaxpac.txt     (Pacific radiofax file directory)
get rfaxmex.txt     (Gulf of Mexico and Trop Atl radiofax file dir)
get rfaxak.txt      (Alaska radiofax and ice file directory)
get rfaxhi.txt      (Hawaii radiofax file directory)
get otherfax.txt    (Foreign charts file directory)
get marine1.txt     (Highseas,Offshore,Open Lakes,NAVTEX text file dir)
get marine2.txt     (Hurricane text file directory)
get marine3.txt     (Coastal forecasts text file directory)
get marine4.txt     (Offshore forecasts by zone directory)
get marine5.txt     (Atlantic coastal forecasts by zone directory)
get marine6.txt     (Pacific coastal forecasts by zone directory)
get marine7.txt     (Gulf of Mexico coastal forecasts by zone dir)
```

```
get marine8.txt     (Great Lakes coastal forecasts by zone directory)
get marine9.txt     (Alaska coastal forecasts by zone directory)
get marine10.txt    (Hawaii&Trust coastal forecasts by zone directory)
get uk.txt          (UK marine forecasts from Bracknell directory)
get canada.txt      (Canadian marine text forecast directory)
get tsunami.txt     (Tsunami products directory)
get buoydata.txt    (Buoy and C-MAN station observations directory)
get robots.txt      (Marine forecasts and info via e-mail systems)
quit
```

Connect to default_site (tgftp.nws.noaa.gov) and send back the requested files to e-mail address of requestor.

Many, but not all National Weather Service forecast products may be obtained using FTPMAIL if the WMO/AWIPS Header is known as follows.

Example:
To obtain the Atlantic high seas Forecast, WMO header FZNT01 KWBC, AWIPS header HSFAT1

```
Send an e-mail to:      ftpmail@ftpmail.nws.noaa.gov
Subject Line:           Put anything you like
Body:                   open
                        cd data
                        cd raw
                        cd fz
                        get fznt01.kwbc.hsf.at1.txt
                        quit
```

**********SPECIAL NOTES**********

CAUTION - READ THIS HELP FILE CAREFULLY - 99% OF ERRORS USING FTPMAIL ARE SIMPLE TYPO'S, INCORRECT CAPITALIZATION, FAILURE TO SEND IN PLAIN TEXT FORMAT, LEADING OR TRAILING SPACES, OR FAILURE TO SET UP ANY SPAM FILTERS PROPERLY. FOLLOW THE EXAMPLES CLOSELY!

FTPMAIL e-mail requests must be sent in ASCII/Plain Text only. HTML formatting will likely result in no response from the FTPMAIL server.

If you see the following response and believe your script to be correct, the most likely problem is that you are sending your e-mail in HTML format rather than the required plain text format.

```
<FTP EMAIL> response
ftpmail has failed to queue your request with an error of:
      Must have an 'open [site [user [pass]]]'
```

tgftp.nws.noaa.gov is the only valid FTP site for this service.

Problems have been reported by users of Hotmail. (This may now be fixed)

If you restrict incoming e-mail as a means of preventing spam, you must program your e-mail system to allow messages from: ftpmail@ftpmail.nws.noaa.gov

The majority of error messages have been disabled. You may or may not receive an error message back from FTPMAIL if your script is in error.

FTPMAIL problems are occasionally encountered when embedded control characters are received within the e-mail message received by the FTPMAIL server. These control characters may be introduced by the user's e-mail system and may be unavoidable.

Also be certain that each of your commands does not have any leading and/or trailing space(s) or you may see an error message with a number of statements saying "=20"

Problems may also be encountered in trying to go down several levels of directories simultaneously, e.g. "cd data/forecasts/marine/test". Use a series of commands "cd data", "cd forecasts", "cd marine" instead. In both these instances, the likely error will be "Directory not Found"

If the FTPMAIL server is too busy, you will receive an e-mail with a subject line similar to: "ftpmail job queuing for retry queue/097095.69568" Your request will be resubmitted automatically and your requested file(s) should be received within several hours.

****

An FAQ webpage describing several public and commercial FTP-to-EMAIL and WWW-to-EMAIL servers may be found at:
www.faqs.org/faqs/internet-services/access-via-email/

If you have access to the Internet, be certain to check out the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov (WAP/WML brower required)	Cellphone page
mobile.weather.gov	Mobile Page

Author: Timothy Rulon, Marine and Coastal Weather Services Branch W/OS21
National Weather Service
Last Modified May 28, 2010
Document URL: http://weather.noaa.gov/pub/fax/ftpmail.txt
ftp://tgftp.nws.noaa.gov/fax/ftpmail.txt

FTPMAIL commands for ftpmail@ftpmail.nws.noaa.gov FTPMAIL server

**** IMPORTANT NOTICES ****

Effective January 08, 2008, the address of the FTPMAIL service changed
from ftpmail@ftpmail.nws.noaa.gov to ftpmail@ftpmail.nws.noaa.gov.
If you restrict incoming e-mail as a means of preventing spam, you must
configure your e-mail system to allow mail from ftpmail@ftpmail.nws.noaa.gov

Read the help file carefully - 99% of errors using FTPMAIL are simple
typo's, incorrect capitalization, failure to send in plain text format,
leading or trailing spaces, or failure to set up any spam filters properly.

These instructions are subject to revision....download frequently.

FTP's files and sends them back via electronic mail

NOTE: *.noaa.gov are the only valid FTP sites for this FTPMAIL server.

NOTE: Capitalization is critical for this server. Commands are
      un-capitalized, while some directory and file names are
      CAPITALIZED, while others are un-capitalized.

To use FTPMAIL:
o Send an E-mail via the Internet to ftpmail@ftpmail.nws.noaa.gov
o Put anything you like on the subject line
o Enter a command script in the body of the message

Example scripts are:

```
reply-to lmjm@server.big.ac.uk
open
dir
quit
```

     Connect to default_site (tgftp.nws.noaa.gov) and send back the
     contents of the top level directory to lmjm@server.big.ac.uk

```
open
cd fax
get PWAG01.TIF
quit
```

     Connect to default_site (tgftp.nws.noaa.gov) and send back the
     chart file PWAG01.TIF to e-mail address of requestor

>>Valid commands to the ftpmail gateway are:

```
reply-to email-address   Who to send the response to.  This is optional
                         and defaults to the users email address

>>Followed by one of:

help                     Just send back help

delete jobid             Delete the given job
                   (jobid is received from server)

open [site [user [pass]]]
                         Site to ftp to.  Default is:

                         default_site anonymous reply-to-address.


>>If there was an open then it can be followed by up to 100 of the
>>following commands

cd pathname              Change directory.
cd ..                    Move up 1 directory.
cd /                     Move to the root directory.

ls [pathname]            Short listing of pathname.
                               Default pathname is current directory.

dir [pathname]           Long listing of pathname.
                               Default pathname is current directory.

get pathname            Get a file and email it back.

compress                  Compress files/dir-listings before emailing back

gzip                         Gzip files/dir-listings before emailing back

uuencode                 These are mutually exclusive options for
btoa                        converting a binary file before emailing.
                              (Default is uuencode.)

force uuencode          Force all files or directory listings to
force btoa                be encoded before sending back.
                              There is no default.

mime                    Send the message as a Mime Version 1.0 message.
                          Text will be sent as text/plain charset=US-ASCII
                          Non-text as application/octet-stream.
                          If the file is splitup then it will be sent
                          as a message/partial.

force mime              As mime but force text files to be sent as
                          application/octet-stream

no [compress|gzip|uuencode|btoa|mime]
                         Turn the option off.

size num[K|M]           Set the max size a file can be before it
                          is split up and emailed back in parts to
                          the given number of Kilo or Mega bytes.
                          This is limited to 275KB. Default is 275KB.

mode binary             Change the mode selected for the get
```

mode ascii	command. Defaults to binary.
quit	End of input - ignore any following lines.

Author: Timothy Rulon, Marine and Coastal Weather Services Branch W/OS21
National Weather Service
Last Modified Sep 12, 2008
Document URL: http://weather.noaa.gov/pub/fax/ftpcmd.txt
ftp://tgftp.nws.noaa.gov/fax/ftpcmd.txt

Suggested TIFF Viewers

The (G4)/TIFF format is used because the facsimile charts are in BLACK & WHITE and other encoding formats generate significantly larger files. The suggested TIFF viewers listed here are to help in your selection and have been found to work in viewing these charts in past testing. The viewers and sources listed imply no endorsement by the NWS.

Commercial Viewers for DOS/Windows 3.1

HyperFax.111 by Hypersoft	(603) 356-0210
Viewdirector by TMS, Inc.	(800) 944-7654
Imagehandler by LeadTools	(800) 637-4699
Keyview by FTP Software	(800) 242-4FTP
Snowview Platinum by Snowbound Software	(617) 630-9495

Shareware viewers for DOS/Windows 3.1
Paint Shop Pro 3.0 by Jasc, Inc. (612) 930-9171
Graphic Workshop v1.1p
VIDVUE v1.1 by L. Gozum
QuickView v1.2e (limited - can't rotate)

Shareware viewers for OS/2
PMJPEG
PMView v0.9

Shareware viewer for Apple/MAC
GraphicConverter 2.6
All programs that support Quicktime 6.0+
Netscape 7.0 (Free)
Internet Explorer 5.1 (Free)
Eudora Pro 4.2 (shareware)
PictureViewer QT 6.0 (Free included with Macs)
Graphic Converter 3.6 - 4.x (shareware)
Canvas 7.0 +
Photoshop Elements 2.0 (Free with Wacom Tablets etc.)
Photoshop 6.0 +
Canon file viewer utility 1.3.2.9 (included with Canon Digital cameras)
Media Assistant 2.0.4 (image cataloger) Low cost
Cumulus 5.5 (Image Cataloger) Low cost

Author: Timothy Rulon, Marine and Coastal Weather Services Branch W/OS21
National Weather Service
Last Modified Aug 27, 2008
Document URL: http://weather.noaa.gov/pub/fax/rfaxtif.txt
ftp://tgftp.nws.noaa.gov/fax/rfaxtif.txt

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the Western Atlantic Ocean

**** IMPORTANT NOTICES ****

Effective January 08, 2008, the address of the FTPMAIL service changed
from ftpmail@weather.noaa.gov to ftpmail@ftpmail.nws.noaa.gov.
If you restrict incoming e-mail as a means of preventing spam, you must
configure your e-mail system to allow mail from ftpmail@ftpmail.nws.noaa.gov

Read the help file carefully - 99% of errors using FTPMAIL are simple
typo's, incorrect capitalization, failure to send in plain text format,
leading or trailing spaces, or failure to set up any spam filters properly.

The "help" file contains a more detailed description of the
FTPMAIL system and available products. To obtain a copy of the
FTPMAIL "help" file.

Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject Line: Put anything you like
Body: help

These instructions are subject to revision....download frequently.

****

U.S. Coast Guard Communications Station NMF - Boston, Massachusetts

Assigned frequencies 4235.0, 6340.5, 9110, 12750 kHz

Select a carrier frequency 1.9 kHz below those listed when using a
single sideband radio in the USB mode to receive these broadcasts.

The latest version of marine weather charts for broadcast by the U.S. Coast
Guard are available from the National Weather Service Telecommunication
Gateway on this server. The listed charts are in the G4(T4) format and
enveloped in TIFF for viewing. Satellite images are in JPEG format.
These charts may be found in directory: ftp://tgftp.nws.noaa.gov/fax or
http://weather.noaa.gov/pub/fax

For information of how these files and other text and graphic marine
forecasts may be downloaded via e-mail (FTPMAIL) see:
http://weather.noaa.gov/pub/fax/ftpmail.txt

.TIF files now also available as .gif files

This file is intended to assist mariners using the FTPMAIL system
which is used to obtain National Weather Service products via
e-mail. The following is an example in the use of the FTPMAIL
system. NOTE CAPITALIZATION!

Example using FTPMAIL:

Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject line: Put anything you like
Body: open
cd fax
get PPAE10.TIF

get PWAE98.gif
quit

WIND/SEAS CHARTS	FILE NAME
12Z Sea State Analysis, 10E-95W Northern Hemisphere	PJAA99.TIF
00Z Wind/Wave Analysis, 40W-98W Northern Hemisphere	PWAA88.TIF
12Z Wind/Wave Analysis, 40W-98W Northern Hemisphere	PWAA89.TIF
Wind/Wave Analysis, (Most Current)	PWAA90.TIF
24HR Wind/Wave Chart VT00Z Forecast 40W-98W N. Hemisphere	PWAE98.TIF
24HR Wind/Wave Chart VT12Z Forecast 40W-98W N. Hemisphere	PWAE99.TIF
24HR Wind/Wave Chart Forecast (Most Current)	PWAE10.TIF
48HR Wind/Wave VT00Z Forecast 10E-95W Northern Hemisphere	PJAI98.TIF
48HR Wind/Wave VT12Z Forecast 10E-95W Northern Hemisphere	PJAI99.TIF
48HR Wind/Wave Chart Forecast (Most Current)	PJAI10.TIF
48HR Wave Period VT00Z Forecast 10E-95W Northern Hemisphere	PJAI88.TIF
48HR Wave Period VT12Z Forecast 10E-95W Northern Hemisphere	PJAI89.TIF
48HR Wave Period Chart Forecast (Most Current)	PJAI20.TIF
96HR Wind/Wave Chart VT12Z Forecast 10E-95W N. Hemisphere	PJAM98.TIF
96HR Wave Period VT12Z Forecast 10E-95W N. Hemisphere	PJAM88.TIF
SURFACE CHARTS	
00Z Preliminary Surface Chart Analysis 45W-85W N. Hemisphere	PYAA10.TIF
06Z Preliminary Surface Chart Analysis 45W-85W N. Hemisphere	PYAB01.TIF
12Z Preliminary Surface Chart Analysis 45W-85W N. Hemisphere	PYAC01.TIF
18Z Preliminary Surface Chart Analysis 45W-85W N. Hemisphere	PYAD01.TIF
Preliminary Surface Chart Analysis (Most Current)	PYAD10.TIF
00Z Surface Analysis Chart, Part 1, 10E-45W N. Hemisphere	PYAA01.TIF
00Z Surface Analysis Chart, Part 2, 40W-95W N. Hemisphere	PYAA02.TIF
06Z Surface Analysis Chart, Part 1, 10E-45W N. Hemisphere	PYAA03.TIF
06Z Surface Analysis Chart, Part 2, 40W-95W N. Hemisphere	PYAA04.TIF
12Z Surface Analysis Chart, Part 1, 10E-45W N. Hemisphere	PYAA05.TIF
12Z Surface Analysis Chart, Part 2, 40W-95W N. Hemisphere	PYAA06.TIF
18Z Surface Analysis Chart, Part 1, 10E-45W N. Hemisphere	PYAA07.TIF
18Z Surface Analysis Chart, Part 2, 40W-95W N. Hemisphere	PYAA08.TIF
Surface Analysis Chart, Part 1, (Most Current)	PYAA11.TIF
Surface Analysis Chart, Part 2, (Most Current)	PYAA12.TIF
24HR Surface Chart VT00Z Forecast 40W-98W Northern Hemisphere	PPAE00.TIF
24HR Surface Chart VT12Z Forecast 40W-98W Northern Hemisphere	PPAE01.TIF
24HR Surface Chart Forecast (Most Current)	PPAE10.TIF
48HR Surface Chart VT00Z Forecast 10E-95W Northern Hemisphere	QDTM85.TIF
48HR Surface Chart VT12Z Forecast 10E-95W Northern Hemisphere	QDTM86.TIF
48HR Surface Chart Forecast (Most Current)	QDTM10.TIF
96HR Surface Chart VT12Z Forecast 10E-95W Northern Hemisphere	PWAM99.TIF
UPPER AIR CHARTS	
00Z 500MB Surface Chart Analysis 10E-95W Northern Hemisphere	PPAA50.TIF
12Z 500MB Surface Chart Analysis 10E-95W Northern Hemisphere	PPAA51.TIF
500MB Surface Chart Analysis (Most Current)	PPAA10.TIF
24HR 500MB Chart VT00Z Forecast 10E-95W Northern Hemisphere	PPAE50.TIF
24HR 500MB Chart VT12Z Forecast 10E-95W Northern Hemisphere	PPAE51.TIF
24HR 500MB Chart Forecast (Most Current)	PPAE11.TIF
36HR 500MB Chart VT00Z Forecast 10E-95W Northern Hemisphere	PPAG50.TIF
36HR 500MB Chart VT12Z Forecast 10E-95W Northern Hemisphere	PPAG51.TIF
36HR 500MB Chart Forecast (Most Current)	PPAG11.TIF
48HR 500MB Chart VT00Z Forecast 10E-95W Northern Hemisphere	PPAI50.TIF
48HR 500MB Chart VT12Z Forecast 10E-95W Northern Hemisphere	PPAI51.TIF
48HR 500MB Chart Forecast (Most Current)	PPAI10.TIF

96HR 500MB Chart VT12Z Forecast 10E-95W Northern Hemisphere	PPAM50.TIF

TROPICAL CYCLONE CHARTS

Tropical Cyclone Danger Area* VT03, 05N-60N, 00W-100W	PWEK89.TIF
Tropical Cyclone Danger Area* VT09, 05N-60N, 00W-100W	PWEK90.TIF
Tropical Cyclone Danger Area* VT15, 05N-60N, 00W-100W	PWEK91.TIF
Tropical Cyclone Danger Area* VT21, 05N-60N, 00W-100W	PWEK88.TIF
Tropical Cyclone Danger Area* (Most Current)	PWEK11.TIF

SATELLITE IMAGERY

00Z GOES IR Satellite Image, West Atlantic	evnt00.jpg
06Z GOES IR Satellite Image, Atlantic	evnt06.jpg
12Z GOES IR Satellite Image, West Atlantic	evnt12.jpg
18Z GOES IR Satellite Image, Atlantic	evnt18.jpg
W Atlantic or Atlantic (Most Current)	evnt99.jpg

ICE CHARTS

Ice Chart from U.S. Coast Guard International Ice Patrol (During Ice Season only ~Feb-Sep, for further information see: http://www.uscg.mil/lantarea/iip/home.html)	PIEA88.TIF

SCHEDULE INFORMATION

Radiofax Schedule Part 1 (Boston, MA)	PLAZ01.TIF
Radiofax Schedule Part 2 (Boston, MA)	PLAZ02.TIF
Radiofax Schedule (DOS Text Version)	hfmarsh.txt
Request for Comments	PLAZ03.TIF
Product Notice Bulletin	PLAZ04.TIF
Test Pattern	PZZZ94.TIF
Internet File Names (This file)	rfaxatl.txt

* Tropical Cyclone Danger Area chart replaced by 48HR High Wind/Wave Warning chart Dec 01 - May 14 Valid times 00z,06z,12z and 18z, Map area 05N-40N, 35W-100W

Tropical cyclone charts also broadcast from New Orleans, LA

If you have access to the World Wide Web be certain to check out the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov (WAP/WML brower required)	Cellphone page
mobile.weather.gov	Mobile Page

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified May 28, 2010
Document URL: http://weather.noaa.gov/pub/fax/rfaxatl.txt
ftp://tgftp.nws.noaa.gov/fax/rfaxatl.txt

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the North and Tropical East Pacific

**** IMPORTANT NOTICES ****

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Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject Line: Put anything you like
Body: help

These instructions are subject to revision....download frequently.

****

U.S. Coast Guard Communications Station NMC - Point Reyes, CA

Assigned frequencies 4346, 8682, 12786, 17151.2, 22527 kHz

Select a carrier frequency 1.9 kHz below those listed when using a
single sideband radio in the USB mode to receive these broadcasts.

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For information of how these files and other text and graphic marine
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.TIF files now also available as .gif files

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Example using FTPMAIL:

Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject line: Put anything you like
Body: open
cd fax

```
get PWBE10.TIF
get PWBM99.gif
quit
```

WIND/WAVE CHARTS	FILE NAME
00Z Sea State Analysis 20N-70N, 115W-135E	PJBA99.TIF
@00Z Wind/Wave Analysis 18N-62N, E OF 157W	PWBA88.TIF
06Z Wind/Wave Analysis 18N-62N, E OF 157W	PWBB88.TIF
12Z Wind/Wave Analysis 18N-62N, E OF 157W	PWBA89.TIF
18Z Wind/Wave Analysis 18N-62N, E OF 157W	PWBD89.TIF
Wind/Wave Analysis 18N-62N, E OF 157W (Most Current)	PWBA90.TIF
24HR Wind/Wave Forecast VT00Z 18N-62N, E of 157W	PWBE98.TIF
24HR Wind/Wave Forecast VT12Z 18N-62N, E of 157W	PWBE99.TIF
24HR Wind/Wave Forecast (Most Current)	PWBE10.TIF
48HR Wind/Wave Forecast VT00Z 20N-70N, 115W-135E	PJBI98.TIF
48HR Wind/Wave Forecast VT12Z 20N-70N, 115W-135E	PJBI99.TIF
48HR Wind Wave Forecast (Most Current)	PJBI10.TIF
48HR Wave Period/Swell Direction VT00Z 20N-70N, 115W-135E	PJBI88.TIF
48HR Wave Period/Swell Direction VT12Z 20N-70N, 115W-135E	PJBI89.TIF
48HR Wave Period/Swell Direction (Most Current)	PJBI20.TIF
96HR Wind/Wave Forecast VT12Z 20N-70N, 115W-135E	PJBM98.TIF
96HR Wave Period/Swell Direction VT12Z 20N-70N, 115W-135E	PJBM88.TIF

TROPICAL WIND/WAVE CHARTS	
Tropical Sea State Analysis VT00Z 20S-30N, E of 145W	PKFA88.TIF
Tropical Sea State Analysis VT12Z 20S-30N, E of 145W	PKFA89.TIF
Tropical Sea State Analysis (Most Current)	PKFA10.TIF
24HR Wind/Wave Forecast VT00Z 20S-30N, E of 145W	PWFE01.TIF
24HR Wind/Wave Forecast VT12Z 20S-30N, E of 145W	PWFE03.TIF
24HR Wind/Wave Forecast (Most Current)	PWFE10.TIF
48HR Wind/Wave Forecast VT00Z 20S-30N, E of 145W	PWFI88.TIF
48HR Wind/Wave Forecast VT12Z 20S-30N, E of 145W	PWFI90.TIF
48HR Wind/Wave Forecast (Most Current)	PWFI10.TIF
48HR Wave Period/Swell Direction VT00Z 20S-30N,E of 145W	PJFI87.TIF
48HR Wave Period/Swell Direction VT12Z 20S-30N, E of 145W	PJFI88.TIF
48HR Wave Period/Swell Direction (Most Current)	PJFI11.TIF
72HR Wind/Wave Forecast VT00Z 20S-30N, E of 145W	PWFK92.TIF
72HR Wind/Wave Forecast VT12Z 20S-30N, E of 145W	PWFK93.TIF
72HR Wind/Wave Forecast (Most Current)	PWFK10.TIF
72HR Wave Period/Swell Direction VT00Z 20S-30N,E of 145W	PJFK93.TIF

SURFACE CHARTS	
00Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA01.TIF
00Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA02.TIF
06Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA03.TIF
06Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA04.TIF
12Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA05.TIF
12Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA06.TIF
18Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA07.TIF
18Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA08.TIF
Surface Analysis, Part 1 (Most Current)	PYBA90.TIF
Surface Analysis, Part 2 (Most Current)	PYBA91.TIF
24HR Surface Forecast VT00Z Forecast 18N-62N, E of 157W	PPBE00.TIF
24HR Surface Forecast VT12Z Forecast 18N-62N, E of 157W	PPBE01.TIF
24HR Surface Forecast (Most Current)	PPBE10.TIF

48HR Surface Forecast VT00Z 20N-70W, 115W-135E	PWBI98.TIF
48HR Surface Forecast VT12Z 20N-70W, 115W-135E	PWBI99.TIF
48HR Surface Forecast (Most Current)	PWBI10.TIF
96HR Surface Forecast VT12Z 20N-70W, 115W-135E	PWBM99.TIF

TROPICAL SURFACE CHARTS

00Z East Pacific Surface Analysis 20S-30N, E of 145W	PYFA96.TIF
06Z East Pacific Surface Analysis 20S-30N, E of 145W	PYFA97.TIF
12Z East Pacific Surface Analysis 20S-30N, E of 145W	PYFA98.TIF
18Z East Pacific Surface Analysis 20S-30N, E of 145W	PYFA99.TIF
East Pacific Surface Analysis Most Current	PYFA90.TIF
@00Z U.S./Tropical Surface Analysis 5S-50N,55W-125W	PYEB86.TIF
@06Z U.S./Tropical Surface Analysis 5S-50N,55W-125W	PYEB87.TIF
@12Z U.S./Tropical Surface Analysis 5S-50N,55W-125W	PYEB85.TIF
@18Z U.S./Tropical Surface Analysis 5S-50N,55W-125W	PYEB88.TIF
@ U.S./Tropical Surface Analysis (Most Current)	PYEB11.TIF
@24HR Tropical Surface ForecastVT00,20S-30N,80W-145W	PYFE79.TIF
@24HR Tropical Surface ForecastVT12,20S-30N,80W-145W	PYFE80.TIF
@24HR Tropical Surface Forecast(Most Current);	PYFE10.TIF
@*48HR Tropical Surface ForecastVT00,20S-30N,80W-145W	PYFI81.TIF
@*48HR Tropical Surface ForecastVT12,20S-30N,80W-145W	PYFI82.TIF
@*48HR Tropical Surface Forecast(Most Current);	PYFI10.TIF
@72HR Tropical Surface ForecastVT00,20S-30N,80W-145W	PYFK83.TIF
@72HR Tropical Surface ForecastVT12,20S-30N,80W-145W	PYFK84.TIF
@72HR Tropical Surface Forecast (Most Current);	PYFK10.TIF

* Transmited beginning Nov 03, 2008 1840z

UPPER AIR CHARTS

00Z 500 MB Analysis 20N-70N 115W-135E	PPBA50.TIF
12Z 500 MB Analysis 20N-70N, 115W-135E	PBBA51.TIF
500 MB Analysis (Most Current)	PPBA10.TIF
24HR 500 MB Forecast VT00Z 20N-70N, 115W-135E	PPBE50.TIF
24HR 500 MB Forecast VT12Z 20N-70N, 115W-135E	PPBE51.TIF
24HR 500 MB Forecast (Most Current)	PPBE11.TIF
48HR 500 MB Forecast VT00Z 20N-70N, 115W-135E	PPBI50.TIF
48HR 500 MB Forecast VT12Z 20N-70N, 115W-135E	PPBI51.TIF
48HR 500 MB Forecast (Most Current)	PPBI10.TIF
96HR 500 MB VT12Z 20N-70N, 115W-135E	PPBM50.TIF

TROPICAL CYCLONE CHARTS

72 HR Tropical Cyclone Danger Area VT 03Z 0N-40N, 80W-180W	PWFK88.TIF
72 HR Tropical Cyclone Danger Area VT 09Z 0N-40N, 80W-180W	PWFK89.TIF
72 HR Tropical Cyclone Danger Area VT 15Z 0N-40N, 80W-180W	PWFK90.TIF
72 HR Tropical Cyclone Danger Area VT 21Z 0N-40N, 80W-180W	PWFK91.TIF
72 HR Tropical Cyclone Danger Area (Most Current)	PWFK11.TIF

Note: Tropical Cyclone Danger Area chart replaced by 48HR High Wind/Wave Warning chart Dec 01 - May 14 Valid times 00z,06z,12z and 18z

SEA SURFACE TEMPERATURES

Pacific SST Chart 40N-53N, E of 136W	PTBA88.TIF
Pacific SST Chart 23N-42N, E of 150W	PTBA89.TIF

SATELLITE IMAGERY

@00Z GOES IR Satellite Image, Tropical East Pacific	evpn02.jpg
06Z GOES IR Satellite Image, Tropical East Pacific	evpn07.jpg
@12Z GOES IR Satellite Image, Tropical East Pacific	evpn04.jpg
18Z GOES IR Satellite Image, Tropical East Pacific	evpn08.jpg
GOES IR Satellite Image, Tropical East Pac (MOST CURRENT)	evpn10.jpg
@06Z GOES IR Satellite Image, East Pacific	evpn03.jpg
12Z GOES IR Satellite Image, East Pacific	evpn13.jpg
@18Z GOES IR Satellite Image, East Pacific	evpn14.jpg
21Z GOES VISIBLE Satellite Image, East Pacific	evpn00.jpg
GOES Satellite Image, East Pacific (MOST CURRENT)	evpn98.jpg
00Z GOES IR Satellite Image, Pacific	evpn01.jpg
06Z GOES IR Satellite Image, Pacific	evpn06.jpg
12Z GOES IR Satellite Image, Pacific	evpn12.jpg
18Z GOES IR Satellite Image, Pacific	evpn18.jpg
GOES IR Satellite Image, Pacific (MOST CURRENT)	evpn99.jpg

SCHEDULE INFORMATION

Radiofax Schedule Part 1 (Point Reyes, CA)	PLBZ01.TIF
Radiofax Schedule Part 2 (Point Reyes, CA)	PLBZ02.TIF
Radiofax Schedule (DOS Text Format)	hfreyes.txt
Request for Comments	PLBZ03.TIF
Product Notice Bulletin	PLBZ04.TIF
Test Pattern	PZZZ93.TIF
Internet File Names (This file)	rfaxpac.txt

@ Not transmitted via Pt. Reyes radiofax but listed here for convenience

Many of these charts also broadcast from Kodiak, AK and Honolulu, HI

If you have access to the World Wide Web be certain to check out
the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov (WAP/WML brower required)	Cellphone page
mobile.weather.gov	Mobile Page

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified May 28, 2010
Document URL: http://weather.noaa.gov/pub/fax/rfaxpac.txt
ftp://tgftp.nws.noaa.gov/fax/rfaxpac.txt

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the Gulf of Mexico, Caribbean, Tropical Atlantic and Tropical E Pacific

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Subject Line: Put anything you like
Body: help

These instructions are subject to revision....download frequently.

****

U.S. Coast Guard Communications Station NMG - New Orleans, Louisiana

Assigned frequencies 4317.9, 8503.9 12789.9, 17146.4 kHz

Select a carrier frequency 1.9 kHz below those listed when using a
single sideband radio in the USB mode to receive these broadcasts.

The latest version of marine weather charts for broadcast by the U.S. Coast
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For information of how these files and other text and graphic marine
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http://weather.noaa.gov/pub/fax/ftpmail.txt

.TIF files now also available as .gif files

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Example using FTPMAIL:

Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject line: Put anything you like
Body: open
cd fax
get PWEE11.TIF

```
                        get PYEA11.gif
                        quit
```

WIND/WAVE CHARTS	FILE NAME
00Z Sea State Analysis, 0N-31N, 35W-100W	PJEA88.TIF
12Z Sea State Analysis, 0N-31N, 35W-100W	PJEA90.TIF
Sea State Analysis (Most Current)	PJEA11.TIF
24HR Wind/Wave Forecast VT00, 0N-31N, 35W-100W	PWEE89.TIF
24HR Wind/Wave Forecast VT12, 0N-31N, 35W-100W	PWEE91.TIF
24HR Wind/Wave Forecast (Most Current)	PWEE11.TIF
36HR Wind/Wave Forecast VT12, 0N-31N, 35W-100W	PWED98.TIF
48HR Wind/Wave Forecast VT00, 0N-31N, 35W-100W	PWEI88.TIF
48HR Wind/Wave Forecast VT12, 0N-31N, 35W-100W	PWEI89.TIF
48HR Wind/Wave Forecast (Most Current)	PWEI11.TIF
48HR Wave Period/Swell Dir Forecast VT00, 0N-31N, 35W-100W	PJEI88.TIF
48HR Wave Period/Swell Dir Forecast VT12, 0N-31N, 35W-100W	PJEI89.TIF
48HR Wave Period/Swell Direction Forecast (Most Current)	PJEI11.TIF
72HR Wind/Wave Forecast VT00, 0N-31N, 35W-100W	PJEK88.TIF
72HR Wind/Wave Forecast VT12, 0N-31N, 35W-100W	PJEK89.TIF
72HR Wind/Wave Forecast (Most Current)	PJEK11.TIF
72HR Wave Period/Swell Dir Forecast VT00, 0N-31N, 35W-100W	PKEK88.TIF

SURFACE CHARTS	
@00Z U.S./Tropical Surface Analysis (W Half) 5S-50N,55W-125W	PYEB86.TIF
@06Z U.S./Tropical Surface Analysis (W Half) 5S-50N,55W-125W	PYEB87.TIF
@12Z U.S./Tropical Surface Analysis (W Half) 5S-50N,55W-125W	PYEB85.TIF
@18Z U.S./Tropical Surface Analysis (W Half) 5S-50N,55W-125W	PYEB88.TIF
@ U.S./Tropical Surface Analysis (W Half) (Most Current)	PYEB11.TIF
00Z Tropical Surface Analysis (E Half) 5S-50N, 0W-70W	PYEA86.TIF
06Z Tropical Surface Analysis (E Half) 5S-50N, 0W-70W	PYEA87.TIF
12Z Tropical Surface Analysis (E Half) 5S-50N, 0W-70W	PYEA85.TIF
18Z Tropical Surface Analysis (E Half) 5S-50N, 0W-70W	PYEA88.TIF
Tropical Surface Analysis (E Half) (Most Current)	PYEA11.TIF
24HR Tropical Surface Forecast(E Half)VT00,00N-31N, 35W-100W	PYEE79.TIF
24HR Tropical Surface Forecast(E Half)VT12,00N-31N, 35W-100W	PYEE80.TIF
Tropical Surface Forecast(Most Current)	PYEE10.TIF
48HR Tropical Surface Forecast(E Half)VT00,00N-31N, 35W-100W	PYEI81.TIF
48HR Tropical Surface Forecast(E Half)VT12,00N-31N, 35W-100W	PYEI82.TIF
Tropical Surface Forecast(Most Current)	PYEI10.TIF
72HR Tropical Surface Forecast(E Half)VT00,00N-31N, 35W-100W	PYEK83.TIF
72HR Tropical Surface Forecast(E Half)VT12,00N-31N, 35W-100W	PYEK84.TIF
Tropical Surface Forecast(Most Current)	PYEK10.TIF

@ For further forecasts covering the Tropical East Pacific,
see Pt. Reyes and Honolulu charts

TROPICAL CYCLONE CHARTS	
Tropical Cyclone Danger Area* VT03, 05N-60N, 00W-100W	PWEK89.TIF
Tropical Cyclone Danger Area* VT09, 05N-60N, 00W-100W	PWEK90.TIF
Tropical Cyclone Danger Area* VT15, 05N-60N, 00W-100W	PWEK91.TIF
Tropical Cyclone Danger Area* VT21, 05N-60N, 00W-100W	PWEK88.TIF
Tropical Cyclone Danger Area* (Most Current)	PWEK11.TIF

HIGH SEAS FORECASTS

04Z High Seas Forecast 7N-31N, 35W-98W, In English	PLEA86.TIF
10Z High Seas Forecast 7N-31N, 35W-98W, In English	PLEA87.TIF
16Z High Seas Forecast 7N-31N, 35W-98W, In English	PLEA89.TIF
22Z High Seas Forecast 7N-31N, 35W-98W, In English	PLEA88.TIF
High Seas Forecast (Most Current)	PLEA10.TIF

SATELLITE IMAGERY

0645Z GOES IR Satellite Image, 12S-44N, 28W-112W	evst06.jpg
1145Z GOES IR Satellite Image, 12S-44N, 28W-112W	evst12.jpg
1745Z GOES IR Satellite Image, 12S-44N, 28W-112W	evst18.jpg
2345Z GOES IR Satellite Image, 12S-44N, 28W-112W	evst00.jpg
GOES IR Satellite Image (Most Current)	evst99.jpg

SCHEDULE INFORMATION

Radiofax Schedule (New Orleans, LA)	PLEZ01.TIF
Radiofax Schedule (DOS Text Format)	hfgulf.txt
Request for Comments	PLEZ02.TIF
Product Notice Bulletin	PLEZ03.TIF
Test Chart	PZZZ95.TIF
Internet File Names, (This file)	rfaxmex.txt

* Tropical Cyclone Danger Area chart replaced by 48HR High Wind/Wave Warning chart Dec 01 - May 14 Valid times 00z,06z,12z and 18z, Map area 05N-40N, 35W-100W

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http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov (WAP/WML brower required)	Cellphone page
mobile.weather.gov	Mobile Page

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified May 28, 2010
Document URL: http://weather.noaa.gov/pub/fax/rfaxmex.txt
ftp://tgftp.nws.noaa.gov/pub/fax/rfaxmex.txt

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the Northeast and Eastern Pacific

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Subject Line: Put anything you like
Body: help

These instructions are subject to revision....download frequently.

****

U.S. Coast Guard Communications Station NOJ - Kodiak, Alaska

Assigned frequencies 2054, 4298, 8459, 12412.5 kHz

Select a carrier frequency 1.9 kHz below those listed when using a
single sideband radio in the USB mode to receive these broadcasts.

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Subject line: Put anything you like
Body: open
cd fax
get PJBI99.TIF
get PYBE10.gif
quit

WIND/WAVE CHARTS	FILE NAME
00Z Sea State Analysis 20N-70N, 115W-135E	PJBA99.TIF
24HR Wind/Wave Forecast VT00Z 40N-70N, 115W-170E	PJBE88.TIF
24HR Wind/Wave Forecast VT12Z 40N-70N, 115W-170E	PJBE89.TIF
24HR Wind Wave Forecast (Most Current)	PJBE10.TIF
48HR Wind/Wave Forecast VT00Z 20N-70N, 115W-135E	PJBI98.TIF
48HR Wind/Wave Forecast VT12Z 20N-70N, 115W-135E	PJBI99.TIF
48HR Wind Wave Forecast (Most Current)	PJBI10.TIF
48HR Wave Period/Swell Direction VT00Z 20N-70N, 115W-135E	PJBI88.TIF
48HR Wave Period/Swell Direction VT12Z 20N-70N, 115W-135E	PJBI89.TIF
48HR Wave Period/Swell Direction (Most Current)	PJBI20.TIF
96HR Wind/Wave Forecast VT12Z 20N-70N, 115W-135E	PJBM98.TIF
96HR Wave Period/Swell Direction VT12Z 20N-70N, 115W-135E	PJBM88.TIF

SURFACE CHARTS	
00Z Surface Analysis 40N-70N, 125W-150E	PYCA00.TIF
06Z Surface Analysis 40N-70N, 125W-150E	PYCA01.TIF
12Z Surface Analysis 40N-70N, 125W-150E	PYCA02.TIF
18Z Surface Analysis 40N-70N, 125W-150E	PYCA03.TIF
Surface Analysis (Most Current)	PYCA10.TIF
24HR Surface Chart Forecast VT00Z 40N-70N, 115W-170E	PYBE00.TIF
24HR Surface Chart Forecast VT12Z 40N-70N, 115W-170E	PYBE01.TIF
24HR Surface Chart Forecast (Most Current)	PYBE10.TIF
48HR Surface Chart Forecast VT00Z 20N-70N 115W-135E	PWBI99.TIF
48HR Surface Chart Forecast VT12Z 20N-70N 115W-135E	PWBI98.TIF
48HR Surface Chart Forecast (Most Current)	PWBI10.TIF
96HR Surface Chart Forecast VT12Z	PWBM99.TIF

UPPER AIR CHARTS	
00Z 500 MB Analysis 20N-70N 115W-135E	PPBA50.TIF
12Z 500 MB Analysis 20N-70N, 115W-135E	PBBA51.TIF
500 MB Analysis (Most Current)	PPBA10.TIF
24HR 500 MB Forecast VT00Z 20N-70N, 115W-135E	PPBE50.TIF
24HR 500 MB Forecast VT12Z 20N-70N, 115W-135E	PPBE51.TIF
24HR 500 MB Forecast (Most Current)	PPBE11.TIF
48HR 500 MB Forecast VT00Z 20N-70N, 115W-135E	PPBI50.TIF
48HR 500 MB Forecast VT12Z 20N-70N, 115W-135E	PPBI51.TIF
48HR 500 MB Forecast (Most Current)	PPBI10.TIF
96HR 500 MB VT12Z 20N-70N, 115W-135E	PPBM50.TIF

SEA SURFACE TEMPERATURES	
Sea Surface Temperature Analysis 40N-60N,125W - 160E	PTCA88.TIF

SATELLITE IMAGERY	
00Z GOES IR Satellite Image, Pacific	evpn01.jpg
06Z GOES IR Satellite Image, Pacific	evpn06.jpg
12Z GOES IR Satellite Image, Pacific	evpn12.jpg
18Z GOES IR Satellite Image, Pacific	evpn18.jpg
GOES IR Satellite Image, Pacific (MOST CURRENT)	evpn99.jpg

ICE CHARTS

Sea Ice Analysis	PTCA89.TIF
5 Day Sea Ice Forecast	PTCO89.TIF
Cook Inlet Sea Ice Analysis	PTCA87.TIF

SCHEDULE INFORMATION and MISCELLANEOUS

Radiofax Schedule Kodiak, AK;	PLBZ05.TIF
Radiofax Schedule (DOS Text Version)	hfak.txt
Request for Comments	xxxxxx.xxx
Product Notice Bulletin	xxxxxx.xxx
Test Pattern;	xxxxxx.xxx
Radiofacsimile Symbols and Contractions	PLBZ06.TIF
Internet File Names; (This file)	rfaxak.txt

xxxxxx.xxx = Currently unavailable

Many of these charts also broadcast from Pt. Reyes, CA

If you have access to the World Wide Web be certain to check out the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov (WAP/WML brower required)	Cellphone page
mobile.weather.gov	Mobile Page

Author: Tim Rulon, NWS Marine And Coastal Weather Services Branch W/OS21
Last Modified May 28, 2010
Document URL: http://weather.noaa.gov/pub/fax/rfaxak.txt
ftp://tgftp.nws.noaa.gov/fax/rfaxak.txt

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the Central, Southeast and North Pacific

**** IMPORTANT NOTICES ****

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FTPMAIL "help" file.

Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject Line: Put anything you like
Body: help

These instructions are subject to revision....download frequently.

****

NAVY Communications Station KVM-70 - Honolulu, Hawaii

Assigned frequencies 9982.5, 11090 and 16135 kHz

Select a carrier frequency 1.9 kHz below those listed when using a
single sideband radio in the USB mode to receive these broadcasts.

The latest version of NWS marine weather charts for broadcast by the NAVY
are available from the National Weather Service Telecommunication
Gateway on this server. The listed charts are in the G4(T4) format and
enveloped in TIFF for viewing. These charts may be found in directory:
ftp://tgftp.nws.noaa.gov/fax or http://weather.noaa.gov/pub/fax

For information of how these files and other text and graphic marine
forecasts may be downloaded via e-mail (FTPMAIL) see:
http://weather.noaa.gov/pub/fax/ftpmail.txt

xxxxxx (Not yet available from these directories)

.TIF files now also available as .gif files

This file is intended to assist mariners using the FTPMAIL system
which is used to obtain National Weather Service products via
e-mail. The following is an example in the use of the FTPMAIL
system. NOTE CAPITALIZATION!

Example using FTPMAIL:

Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject line: Put anything you like
Body: open
cd fax

```
get PJFD89.TIF
get PBFA11.gif
quit
```

WIND/WAVE CHARTS - CENTRAL PACIFIC	FILE NAME
00Z Pacific Wind/Wave Analysis 30S-30N, 110W-130E	PJFB89.TIF
12Z Pacific Wind/Wave Analysis 30S-30N, 110W-130E	PJFD89.TIF
Pacific Wind/Wave Analysis (Most Current)	PJFB10.TIF
24HR Pacific Wind/Wave Forecast VT00Z 30S-30N, 110W-130E	PWFE82.TIF
24HR Pacific Wind/Wave Forecast VT12Z 30S-30N, 110W-130E	PWFE84.TIF
24HR Pacific Wind/Wave Forecast (Most Current)	PWFE11.TIF
48HR Pacific Wind/Wave Forecast VT00Z 30S-30N, 110W-130E	PJFI89.TIF
48HR Pacific Wind/Wave Forecast VT12Z 30S-30N, 110W-130E	PJFI91.TIF
48HR Pacific Wind/Wave Forecast (Most Current)	PJFI10.TIF
72HR Pacific Sea State Forecast VT00Z 30S-30N, 110W-130E	PJFK89.TIF
72HR Pacific Sea State Forecast VT12Z 30S-30N, 110W-130E	PJFK91.TIF
72HR Pacific Sea State Forecast (Most Current)	PJFK10.TIF

WIND/WAVE CHARTS - SE PACIFIC	
Tropical Sea State Analysis VT00Z 20S-30N, E of 145W	PKFA88.TIF
Tropical Sea State Analysis VT12Z 20S-30N, E of 145W	PKFA89.TIF
Tropical Sea State Analysis (Most Current)	PKFA10.TIF
24HR Wind/Wave Forecast VT00Z 20S-30N, E of 145W	PWFE01.TIF
24HR Wind/Wave Forecast VT12Z 20S-30N, E of 145W	PWFE03.TIF
24HR Wind/Wave Forecast (Most Current)	PWFE10.TIF
48HR Wind/Wave Forecast VT00Z 20S-30N, E of 145W	PWFI88.TIF
48HR Wind/Wave Forecast VT12Z 20S-30N, E of 145W	PWFI90.TIF
48HR Wind/Wave Forecast (Most Current)	PWFI10.TIF
@48HR Wave Period/Swell Direction VT00Z 20S-30N,E of 145W	PJFI87.TIF
48HR Wave Period/Swell Direction VT12Z 20S-30N, E of 145W	PJFI88.TIF
48HR Wave Period/Swell Direction (Most Current)	PJFI11.TIF
72HR Wind/Wave Forecast VT00Z 20S-30N, E of 145W	PWFK92.TIF
72HR Wind/Wave Forecast VT12Z 20S-30N, E of 145W	PWFK93.TIF
72HR Wind/Wave Forecast (Most Current)	PWFK10.TIF
72HR Wave Period/Swell Direction VT00Z 20S-30N,E of 145W	PJFK93.TIF

WIND/WAVE CHARTS - NORTH PACIFIC	
00Z Sea State Analysis 20N-70N, 115W-135E	PJBA99.TIF
@00Z Wind/Wave Analysis 18N-62N, E OF 157W	PWBA88.TIF
@06Z Wind/Wave Analysis 18N-62N, E OF 157W	PWBB88.TIF
@12Z Wind/Wave Analysis 18N-62N, E OF 157W	PWBA89.TIF
@18Z Wind/Wave Analysis 18N-62N, E OF 157W	PWBD89.TIF
@ Wind/Wave Analysis 18N-62N, E OF 157W (Most Current)	PWBA90.TIF
24HR Wind/Wave Forecast VT00Z 18N-62N, E of 157W	PWBE98.TIF
24HR Wind/Wave Forecast VT12Z 18N-62N, E of 157W	PWBE99.TIF
24HR Wind/Wave Forecast (Most Current)	PWBE10.TIF
48HR Wind/Wave Forecast VT00Z 20N-70N, 115W-135E	PJBI98.TIF
48HR Wind/Wave Forecast VT12Z 20N-70N, 115W-135E	PJBI99.TIF
48HR Wind Wave Forecast (Most Current)	PJBI10.TIF
48HR Wave Period/Swell Direction VT00Z 20N-70N, 115W-135E	PJBI88.TIF
@48HR Wave Period/Swell Direction VT12Z 20N-70N, 115W-135E	PJBI89.TIF
48HR Wave Period/Swell Direction (Most Current)	PJBI20.TIF
96HR Wind/Wave Forecast VT12Z 20N-70N, 115W-135E	PJBM98.TIF
96HR Wave Period/Swell Direction VT12Z 20N-70N, 115W-135E	PJBM88.TIF

SURFACE CHARTS - CENTRAL PACIFIC

@00Z North Pacific Preliminary Analysis 20N-80N, 110W-110E	xxxxxx.TIF
@06Z North Pacific Preliminary Analysis 20N-80N, 110W-110E	xxxxxx.TIF
@12Z North Pacific Preliminary Analysis 20N-80N, 110W-110E	xxxxxx.TIF
@18Z North Pacific Preliminary Analysis 20N-80N, 110W-110E	xxxxxx.TIF
@ North Pacific Preliminary Analysis (Most Current)	PYPA00.TIF
00Z Pacific Surface Analysis EQ-50N, 110W-130E	PPBA88.TIF
06Z Pacific Surface Analysis EQ-50N, 110W-130E	PPBA89.TIF
12Z Pacific Surface Analysis EQ-50N, 110W-130E	PPBA90.TIF
18Z Pacific Surface Analysis EQ-50N, 110W-130E	PPBA91.TIF
Pacific Surface Analysis (Most Current)	PPBA11.TIF
00Z Pacific Streamline Analysis 30S-30N, 110W-130E	PWFA90.TIF
06Z Pacific Streamline Analysis 30S-30N, 110W-130E	PWFA91.TIF
12Z Pacific Streamline Analysis 30S-30N, 110W-130E	PWFA92.TIF
18Z Pacific Streamline Analysis 30S-30N, 110W-130E	PWFA93.TIF
Pacific Streamline Analysis (Most Current)	PWFA11.TIF
@$00Z Tropical Surface Analysis 40S-40N, 100W-120E	xxxxxx.TIF
@$06Z Tropical Surface Analysis 40S-40N, 100W-120E	xxxxxx.TIF
@$12Z Tropical Surface Analysis 40S-40N, 100W-120E	xxxxxx.TIF
@$18Z Tropical Surface Analysis 40S-40N, 100W-120E	xxxxxx.TIF
@$ Tropical Surface Analysis (Most Current)	QYFA99.TIF
03Z Significant Cloud Features 30S-50N, 110W-160E	PBFA99.TIF
15Z Significant Cloud Features 30S-50N, 110W-160E	PBFC99.TIF
Significant Cloud Features (Most Current)	PBFA11.TIF
24HR Pacific Surface Forecast VT00Z 30S-50N 110W-130E	PYFE87.TIF
24HR Pacific Surface Forecast VT12Z 30S-50N 110W-130E	PYFE88.TIF
24HR Pacific Surface Forecast (Most Current)	PYFE11.TIF
@$24HR Wind/Stream Forecast VT00Z 30S-50N, 100W-120E	QWFI99.TIF
@$48HR Wind/Stream Forecast VT00Z 30S-50N, 100W-120E	QWFQ99.TIF
48HR Pacific Surface Forecast VT00Z 30S-50N 110W-130E	PYFI87.TIF
48HR Pacific Surface Forecast VT12Z 30S-50N 110W-130E	PYFI88.TIF
48HR Pacific Surface Forecast (Most Current)	PYFI11.TIF
72HR Pacific Surface Forecast VT00Z 30S-50N 110W-130E	PYFK87.TIF
72HR Pacific Surface Forecast VT12Z 30S-50N 110W-130E	PYFK88.TIF
72HR Pacific Surface Forecast (Most Current)	PYFK11.TIF

$ These charts will no longer be available sometime after June 20, 2006

SURFACE CHARTS - SE PACIFIC

00Z East Pacific Surface Analysis 20S-30N, E of 145W	PYFA96.TIF
06Z East Pacific Surface Analysis 20S-30N, E of 145W	PYFA97.TIF
12Z East Pacific Surface Analysis 20S-30N, E of 145W	PYFA98.TIF
18Z East Pacific Surface Analysis 20S-30N, E of 145W	PYFA99.TIF
East Pacific Surface Analysis Most Current	PYFA90.TIF
@00Z U.S./Tropical Surface Analysis 5S-50N,55W-125W	PYEB86.TIF
@06Z U.S./Tropical Surface Analysis 5S-50N,55W-125W	PYEB87.TIF
@12Z U.S./Tropical Surface Analysis 5S-50N,55W-125W	PYEB85.TIF
@18Z U.S./Tropical Surface Analysis 5S-50N,55W-125W	PYEB88.TIF
@ U.S./Tropical Surface Analysis (Most Current)	PYEB11.TIF
24HR Tropical Surface Forecast VT00,20S-30N,80W-145W	PYFE79.TIF
24HR Tropical Surface Forecast VT12,20S-30N,80W-145W	PYFE80.TIF
24HR Tropical Surface Forecast(Most Current);	PYFE10.TIF
48HR Tropical Surface Forecast VT00,20S-30N,80W-145W	PYFI81.TIF
48HR Tropical Surface Forecast VT12,20S-30N,80W-145W	PYFI82.TIF
48HR Tropical Surface Forecast(Most Current);	PYFI10.TIF
72HR Tropical Surface Forecast VT00,20S-30N,80W-145W	PYFK83.TIF
72HR Tropical Surface Forecast VT12,20S-30N,80W-145W	PYFK84.TIF
72HR Tropical Surface Forecast (Most Current);	PYFK10.TIF

SURFACE CHARTS - NORTH PACIFIC

00Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA01.TIF
00Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA02.TIF
06Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA03.TIF
06Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA04.TIF
12Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA05.TIF
12Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA06.TIF
18Z Surface Analysis NE Pacific (Part 1) 20N-70W, 115W-175W	PYBA07.TIF
18Z Surface Analysis NW Pacific (Part 2) 20N-70W, 175W-135E	PYBA08.TIF
Surface Analysis, Part 1 (Most Current)	PYBA90.TIF
Surface Analysis, Part 2 (Most Current)	PYBA91.TIF
@24HR Surface Forecast VT00Z Forecast 18N-62N, E of 157W	PPBE00.TIF
@24HR Surface Forecast VT12Z Forecast 18N-62N, E of 157W	PPBE01.TIF
@24HR Surface Forecast (Most Current)	PPBE10.TIF
48HR Surface Forecast VT00Z 20N-70W, 115W-135E	PWBI98.TIF
48HR Surface Forecast VT12Z 20N-70W, 115W-135E	PWBI99.TIF
48HR Surface Forecast (Most Current)	PWBI10.TIF
96HR Surface Forecast VT12Z 20N-70W, 115W-135E	PWBM99.TIF

TROPICAL CYCLONE CHARTS - PACIFIC

72 HR Tropical Cyclone Danger Area VT 03Z 0N-40N, 80W-170E	PWFK03.TIF
72 HR Tropical Cyclone Danger Area VT 09Z 0N-40N, 80W-170E	PWFK09.TIF
72 HR Tropical Cyclone Danger Area VT 15Z 0N-40N, 80W-170E	PWFK15.TIF
72 HR Tropical Cyclone Danger Area VT 21Z 0N-40N, 80W-170E	PWFK21.TIF
72 HR Tropical Cyclone Danger Area (Most Current)	PWFK12.TIF

SEA SURFACE TEMPERATURE CHARTS

Pacific SST Chart 55N-EQ, 110W-160E	PTFA88.TIF

SATELLITE IMAGERY (IR)

00Z Eastern Pacific Satellite Image 05S-55N, 110W-155E	evpz00.jpg
06Z Eastern Pacific Satellite Image 05S-55N, 110W-155E	evpz06.jpg
12Z Eastern Pacific Satellite Image 05S-55N, 110W-155E	evpz12.jpg
18Z Eastern Pacific Satellite Image 05S-55N, 110W-155E	evpz18.jpg
Eastern Pacific Satellite Image (Most Current)	evpz11.jpg
00Z Southwest Pacific Satellite Image 40S-05N, 130W-165E	evps00.jpg
06Z Southwest Pacific Satellite Image 40S-05N, 130W-165E	evps06.jpg
12Z Southwest Pacific Satellite Image 40S-05N, 130W-165E	evps12.jpg
18Z Southwest Pacific Satellite Image 40S-05N, 130W-165E	evps18.jpg
Southwest Pacific Satellite Image (Most Current)	evps11.jpg
@00Z Tropical East Pacific Satellite Image 20S-40N,E of 145W	evpn02.jpg
06Z Tropical East Pacific Satellite Image 20S-40N,E of 145W	evpn07.jpg
@12Z Tropical East Pacific Satellite Image 20S-40N,E of 145W	evpn04.jpg
18Z Tropical East Pacific Satellite Image 20S-40N,E of 145W	evpn08.jpg
Tropical East Pacific Satellite Image (MOST CURRENT)	evpn10.jpg
@00Z Pacific Satellite Image 05N-55N, E of 180W	evpn01.jpg
06Z Pacific Satellite Image 05N-55N, E of 180W	evpn06.jpg
@12Z Pacific Satellite Image 05N-55N, E of 180W	evpn12.jpg
18Z Pacific Satellite Image 05N-55N, E of 180W	evpn18.jpg
Pacific Satellite Image (MOST CURRENT)	evpn99.jpg

SCHEDULE INFORMATION

Radiofax Schedule (Honolulu, HI) Part I	PLBZ07.TIF

Radiofax Schedule (Honolulu, HI) Part II	PLBZ09.TIF
Radiofax Schedule (DOS Text Version)	hfhi.txt
Test/Map Symbols/General Notice	PLBZ08.TIF
Internet File Names (This file)	rfaxhi.txt

@ Not transmitted via Honolulu radiofax but listed here for convenience

Many of these charts also Broadcast via Pt. Reyes, CA and Kodiak, AK

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http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov (WAP/WML brower required)	Cellphone page
mobile.weather.gov	Mobile Page

Author: Timothy Rulon, Marine and Coastal Weather Services Branch W/OS21
National Weather Service
Last Modified May 28, 2010
Document URL: http://weather.noaa.gov/pub/fax/rfaxhi.txt
ftp://tgftp.nws.noaa.gov/fax/rfaxhi.txt

NATIONAL WEATHER SERVICE MARINE TEXT PRODUCTS
HIGHSEAS, FORECAST DISCUSSION, OFFSHORE, NAVTEX, and OPEN LAKE PRODUCTS

**** IMPORTANT NOTICES ****

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```
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Subject Line:            Put anything you like
Body:                    help
```

These instructions are subject to revision....download frequently.

****

This file is intended to assist mariners using the FTPMAIL system
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system. NOTE CAPITALIZATION!

```
Send an e-mail to:      ftpmail@ftpmail.nws.noaa.gov
Subject Line:           Put anything you like
Body:                   open
                        cd data
                        cd forecasts
                        cd marine
                        cd high_seas
                        get north_pacific.txt
                        get north_atlantic.txt
                        quit
```

HIGH SEAS FORECASTS

These files may be found in directory:
ftp://tgftp.nws.noaa.gov/data/forecasts/marine/high_seas/

PRODUCT DESCRIPTION	FILE NAME
Northwest Atlantic Highseas (GMDSS Area IV)	north_atlantic.txt
Northeast Pacific Highseas (GMDSS Area XII)	north_pacific.txt
Peru Highseas (GMDSS Area XVI)	east_pacific_3.txt
25S-0N, 160E-120W South Central Pacific	south_hawaii.txt
30-60N, east of 160 E (p/o NE Pacific)	east_pacific_1.txt
0-30N, E of 140W (p/o NE Pacific)	east_pacific_2.txt
0-30N, 160E-140W (p/o NE Pacific)	north_hawaii.txt

FORECAST DISCUSSION
These files may be found in directory:
ftp://tgftp.nws.noaa.gov/data/raw/ag/

Example:
Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject Line: Put anything you like
Body: open
cd data
cd raw
cd ag
get agnt40.kwnm.mim.atn.txt
quit

PRODUCT DESCRIPTION	FILE NAME
Northwest Atlantic	agnt40.kwnm.mim.atn.txt
Northeast Pacific	agpn40.kwnm.mim.pac.txt
Gulf, Caribbean Sea & SW N. Atlantic	agxx40.knhc.mim.ats.txt

Note...these Forecast Discussions are primarily intended for use by forecasters and make heavy use of abbreviations. A glossary is not available.

OFFSHORE FORECASTS

For offshore forecasts, NAVTEX forecasts can also be utililized which are nearly identical and may contain supplementary information at times for coastal areas.

These files may be found in directory:
ftp://tgftp.nws.noaa.gov/data/raw/fz/

Example:
Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject Line: Put anything you like
Body: open
cd data
cd raw
cd fz
get fznt21.kwbc.off.nt1.txt
quit

PRODUCT DESCRIPTION	FILE NAME
New England	fznt21.kwbc.off.nt1.txt
Mid-Atlantic	fznt22.kwbc.off.nt2.txt
SW North Atlantic, Caribbean	fznt23.knhc.off.nt3.txt
Gulf of Mexico	fznt24.knhc.off.nt4.txt
Washington, Oregon	fzpn25.kwbc.off.pz5.txt
California	fzpn26.kwbc.off.pz6.txt
Eastern Gulf of Alaska	fzak67.pajk.off.ajk.txt
Western Gulf of Alaska	fzak61.pafc.off.aer.txt
Bering Sea	fzak62.pafc.off.alu.txt
U.S. Arctic (Experimental)	fzak69.pafg.off.afg.txt
Hawaii	fzhw60.phfo.off.hfo.txt

NAVTEX FORECASTS

These files may be found in directory:
ftp://tgftp.nws.noaa.gov/data/raw/fz/

Example:
Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject Line: Put anything you like
Body: open
cd data
cd raw
cd fz
get fznt23.kwnm.off.n01.txt
quit

PRODUCT DESCRIPTION	FILE NAME
NAVTEX Boston, MA	fznt23.kwnm.off.n01.txt
NAVTEX Chesapeake, VA	fznt24.kwnm.off.n02.txt
NAVTEX Charleston, SC	fznt25.kwnm.off.n03.txt
NAVTEX Miami, FL	fznt25.knhc.off.n04.txt
NAVTEX San Juan, PR	fznt26.knhc.off.n05.txt
NAVTEX New Orleans, LA	fznt27.knhc.off.n06.txt
NAVTEX Astoria, OR	fzpn24.kwnm.off.n09.txt
NAVTEX Pt. Reyes, CA	fzpn23.kwnm.off.n08.txt
NAVTEX Cambria, CA	fzpn22.kwnm.off.n07.txt
NAVTEX Honolulu, HI	fzhw61.phfo.off.n10.txt
NAVTEX Kodiak,(SE) AK	fzak61.pajk.off.n11.txt
NAVTEX Kodiak,(N Gulf) AK	fzak63.pafc.off.n12.txt
NAVTEX Kodiak,(W) AK	fzak64.pafc.off.n13.txt
NAVTEX Kodiak,(NW and Artic) AK	fzak69.pafg.off.n14.txt

OPEN LAKE FORECASTS

These files may be found in directory:
ftp://tgftp.nws.noaa.gov/data/raw/fz/

Example:
Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject Line: Put anything you like
Body: open
cd data
cd raw
cd fz
get fzus61.kbuf.glf.sl.txt
quit

PRODUCT DESCRIPTION	FILE NAME
St. Lawrence	fzus61.kbuf.glf.sl.txt
Lake Ontario	fzus61.kbuf.glf.lo.txt
Lake Erie	fzus61.kcle.glf.le.txt
Lake St. Clair	fzus63.kdtx.glf.sc.txt
Lake Huron	fzus63.kdtx.glf.lh.txt
Lake Michigan	fzus63.klot.glf.lm.txt
Lake Superior	fzus63.kmqt.glf.ls.txt

If you have access to the World Wide Web be certain to check out the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov (WAP/WML brower required)	Cellphone page
mobile.weather.gov	Mobile Page

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified May 28, 2010
Document URL: http://weather.noaa.gov/pub/fax/marine1.txt
ftp://tgftp.nws.noaa.gov/fax/marine1.txt

NATIONAL WEATHER SERVICE MARINE TEXT PRODUCTS
HURRICANE PRODUCTS

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FTPMAIL system and available products. To obtain a copy of the
FTPMAIL "help" file.

```
Send an e-mail to:       ftpmail@ftpmail.nws.noaa.gov
Subject Line:            Put anything you like
Body:                    help
```

These instructions are subject to revision....download frequently.

****

This file is intended to assist mariners using the FTPMAIL system
which is used to obtain National Weather Service products via
e-mail. The following is an example in the use of the FTPMAIL
system. NOTE CAPITALIZATION!

```
Send an e-mail to:      ftpmail@ftpmail.nws.noaa.gov
Subject Line:           Put anything you like
Body:                   open
                        cd data
                        cd hurricane_products
                        cd atlantic
                        cd weather
                        get outlook.txt
                        cd /data
                        cd hurricane_products
                        cd atlantic
                        cd storm_2
                        get technical_advisory.txt
                        quit
```

ATLANTIC HURRICANE PRODUCTS

These files may be found in directory:
ftp://tgftp.nws.noaa.gov/data/hurricane_products/atlantic

PRODUCT DESCRIPTION	FILE NAME
Tropical WX Outlook	/weather/outlook.txt
Tropical WX Discussion	/weather/discussion.txt
Tropical WX Summary	/weather/summary.txt
Tropical WX Disturbance Stmt	/weather/advisory.txt
Tropical Cyclone Update (Storm #1)	/storm_1/update.txt

Tropical Cyclone Update (Storm #2)	/storm_2/update.txt
Tropical Cyclone Update (Storm #3)	/storm_3/update.txt
Tropical Cyclone Update (Storm #4)	/storm_4/update.txt
Tropical Cyclone Update (Storm #5)	/storm_5/update.txt
Tropical Cyclone Discussion (Storm #1)	/storm_1/discussion.txt
Tropical Cyclone Discussion (Storm #2)	/storm_2/discussion.txt
Tropical Cyclone Discussion (Storm #3)	/storm_3/discussion.txt
Tropical Cyclone Discussion (Storm #4)	/storm_4/discussion.txt
Tropical Cyclone Discussion (Storm #5)	/storm_5/discussion.txt
Public Advisory (Storm #1)	/storm_1/advisory.txt
Public Advisory (Storm #2)	/storm_2/advisory.txt
Public Advisory (Storm #3)	/storm_3/advisory.txt
Public Advisory (Storm #4)	/storm_4/advisory.txt
Public Advisory (Storm #5)	/storm_5/advisory.txt
Tropical Depression Forecast (Storm #1)	/storm_1/technical_advisory.txt
Tropical Depression Forecast (Storm #2)	/storm_2/technical_advisory.txt
Tropical Depression Forecast (Storm #3)	/storm_3/technical_advisory.txt
Tropical Depression Forecast (Storm #4)	/storm_4/technical_advisory.txt
Tropical Depression Forecast (Storm #5)	/storm_5/technical_advisory.txt
Hurricane Probabilities (Storm #1)	/storm_1/strike_probability.txt
Hurricane Probabilities (Storm #2)	/storm_2/strike_probability.txt
Hurricane Probabilities (Storm #3)	/storm_3/strike_probability.txt
Hurricane Probabilities (Storm #4)	/storm_4/strike_probability.txt
Hurricane Probabilities (Storm #5)	/storm_5/strike_probability.txt
RECON Plan	TBD

Atlantic Tropical Weather Outlook normally issued 0300z, 0900z, 1500z and 2100z during hurricane season, June 1 - November 30. Remaining products issued when active systems exist. May be issued at 3-hourly intervals and other unscheduled times as system approaches landfall.

EASTERN PACIFIC HURRICANE PRODUCTS

These files may be found in directory:
ftp://tgftp.nws.noaa.gov/data/hurricane_products/eastern_pacific

PRODUCT DESCRIPTION	FILE NAME
Tropical WX Outlook	/weather/outlook.txt
Tropical WX Discussion	/weather/discussion.txt
Tropical WX Summary	/weather/summary.txt
Tropical WX Disturbance Stmt	/weather/advisory.txt
Tropical Cyclone Update (Storm #1)	/storm_1/update.txt
Tropical Cyclone Update (Storm #2)	/storm_2/update.txt
Tropical Cyclone Update (Storm #3)	/storm_3/update.txt
Tropical Cyclone Update (Storm #4)	/storm_4/update.txt
Tropical Cyclone Update (Storm #5)	/storm_5/update.txt
Tropical Cyclone Discussion (Storm #1)	/storm_1/discussion.txt
Tropical Cyclone Discussion (Storm #2)	/storm_2/discussion.txt
Tropical Cyclone Discussion (Storm #3)	/storm_3/discussion.txt
Tropical Cyclone Discussion (Storm #4)	/storm_4/discussion.txt
Tropical Cyclone Discussion (Storm #5)	/storm_5/discussion.txt
Public Advisory (Storm #1)	/storm_1/advisory.txt
Public Advisory (Storm #2)	/storm_2/advisory.txt
Public Advisory (Storm #3)	/storm_3/advisory.txt
Public Advisory (Storm #4)	/storm_4/advisory.txt
Public Advisory (Storm #5)	/storm_5/advisory.txt
Tropical Depression Forecast (Storm #1)	/storm_1/technical_advisory.txt
Tropical Depression Forecast (Storm #2)	/storm_2/technical_advisory.txt
Tropical Depression Forecast (Storm #3)	/storm_3/technical_advisory.txt
Tropical Depression Forecast (Storm #4)	/storm_4/technical_advisory.txt
Tropical Depression Forecast (Storm #5)	/storm_5/technical_advisory.txt

RECON Plan TBD

Eastern Pacific Tropical Weather Outlook normally issued 0300z, 0900z, 1500z and 2100z during hurricane season, May 15 - November 30. Remaining products issued when active systems exist. May be issued at 3-hourly intervals and other unscheduled times as system approaches landfall.

CENTRAL PACIFIC HURRICANE PRODUCTS

These files may be found in directory:
ftp://tgftp.nws.noaa.gov/data/hurricane_products/central_pacific

PRODUCT DESCRIPTION	FILE NAME
Tropical WX Outlook	/weather/outlook.txt
Tropical WX Discussion	(discontinued)
Tropical WX Summary	/weather/summary.txt
Tropical WX Disturbance Stmt	/weather/advisory.txt
Tropical Cyclone Update (Storm #1)	/storm_1/update.txt
Tropical Cyclone Update (Storm #2)	/storm_2/update.txt
Tropical Cyclone Update (Storm #3)	/storm_3/update.txt
Tropical Cyclone Update (Storm #4)	/storm_4/update.txt
Tropical Cyclone Update (Storm #5)	/storm_5/update.txt
Tropical Cyclone Discussion (Storm #1)	/storm_1/discussion.txt
Tropical Cyclone Discussion (Storm #2)	/storm_2/discussion.txt
Tropical Cyclone Discussion (Storm #3)	/storm_3/discussion.txt
Tropical Cyclone Discussion (Storm #4)	/storm_4/discussion.txt
Tropical Cyclone Discussion (Storm #5)	/storm_5/discussion.txt
Public Advisory (Storm #1)	/storm_1/advisory.txt
Public Advisory (Storm #2)	/storm_2/advisory.txt
Public Advisory (Storm #3)	/storm_3/advisory.txt
Public Advisory (Storm #4)	/storm_4/advisory.txt
Public Advisory (Storm #5)	/storm_5/advisory.txt
Tropical Depression Forecast (Storm #1)	/storm_1/technical_advisory.txt
Tropical Depression Forecast (Storm #2)	/storm_2/technical_advisory.txt
Tropical Depression Forecast (Storm #3)	/storm_3/technical_advisory.txt
Tropical Depression Forecast (Storm #4)	/storm_4/technical_advisory.txt
Tropical Depression Forecast (Storm #5)	/storm_5/technical_advisory.txt
RECON PLAN	TBD

Central Pacific Tropical Weather Outlook normally issued 0300z, 0900z, 1500z and 2100z during hurricane season, June 1 - November 30. Remaining products issued when active systems exist. May be issued at 3-hourly intervals and other unscheduled times as system approaches landfall.

WESTERN PACIFIC HURRICANE PRODUCTS

These files may be found in directory:
http://tgftp.nws.noaa.gov/pub/data/raw/wt

Example:

```
Send an e-mail to:      ftpmail@ftpmail.nws.noaa.gov
Subject Line:           Put anything you like
Body:                   open
                        cd data
                        cd raw
                        cd wt
```

```
                      get  wtpq31.pgum.tcp.pq1.txt
                      quit
```

PRODUCT DESCRIPTION	FILE NAME
Public Advisory (Storm #1)	/wtpq31.pgum.tcp.pq1.txt
Public Advisory (Storm #2)	/wtpq32.pgum.tcp.pq2.txt
Public Advisory (Storm #3)	/wtpq33.pgum.tcp.pq3.txt
Public Advisory (Storm #4)	/wtpq34.pgum.tcp.pq4.txt
Public Advisory (Storm #5)	/wtpq35.pgum.tcp.pq5.txt

These products may only contain information on cyclones with potential landfalls in U.S. areas. See NAVY products below for additional information..

WESTERN PACIFIC HURRICANE PRODUCTS (NAVY)

These files may be found in directory:
http://tgftp.nws.noaa.gov/pub/data/raw/wt

Example:

```
Send an e-mail to:      ftpmail@ftpmail.nws.noaa.gov
Subject Line:           Put anything you like
Body:                   open
                        cd data
                        cd raw
                        cd wt
                        get  wtpn21.pgtw..txt
                        quit
```

PRODUCT DESCRIPTION	FILE NAME
NW Pacific Tropical Cyclone Formation Alert Storm #1	/wtpn21.pgtw..txt
NW Pacific Tropical Cyclone Formation Alert Storm #2	/wtpn22.pgtw..txt
NW Pacific Tropical Cyclone Formation Alert Storm #2	/wtpn23.pgtw..txt
NW Pacific Tropical Cyclone Formation Alert Storm #4	/wtpn24.pgtw..txt
NW Pacific Tropical Cyclone Formation Alert Storm #5	/wtpn25.pgtw..txt
SW Pacific Tropical Cyclone Formation Alert Storm #1	/wtps21.pgtw..txt
SW Pacific Tropical Cyclone Formation Alert Storm #2	/wtps22.pgtw..txt
SW Pacific Tropical Cyclone Formation Alert Storm #3	/wtps23.pgtw..txt
SW Pacific Tropical Cyclone Formation Alert Storm #4	/wtps24.pgtw..txt
SW Pacific Trocical Cyclone Formation Alert Storm #5	/wtps25.pgtw..txt
NW Pacific Tropical Cyclone Warning Storm #1	/wtpn31.pgtw..txt
NW Pacific Tropical Cyclone Warning Storm #2	/wtpn32.pgtw..txt
NW Pacific Tropical Cyclone Warning Storm #3	/wtpn33.pgtw..txt
NW Pacific Tropical Cyclone Warning Storm #4	/wtpn34.pgtw..txt
NW Pacific Tropical Cyclone Warning Storm #5	/wtpn35.pgtw..txt
SW Pacific Tropical Cyclone Warning Storm #1	/wtpS31.pgtw..txt
SW Pacific Tropical Cyclone Warning Storm #2	/wtpS32.pgtw..txt
SW Pacific Tropical Cyclone Warning Storm #3	/wtpS33.pgtw..txt
SW Pacific Tropical Cyclone Warning Storm #4	/wtpS34.pgtw..txt
SW Pacific Tropical Cyclone Warning Storm #5	/wtpS35.pgtw..txt

If you have access to the World Wide Web be certain to check out the following webpages. See these pages for further links.

http://www.nws.noaa.gov NWS Homepage

http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov (WAP/WML brower required)	Cellphone page
mobile.weather.gov	Mobile Page

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified May 28, 2010
Document URL: http://weather.noaa.gov/pub/fax/marine2.txt
ftp://tgftp.nws.noaa.gov/fax/marine2.txt

NATIONAL WEATHER SERVICE MARINE TEXT PRODUCTS
COASTAL and NEARSHORE MARINE FORECASTS

**** IMPORTANT NOTICES ****

Effective January 08, 2008, the address of the FTPMAIL service changed
from ftpmail@weather.noaa.gov to ftpmail@ftpmail.nws.noaa.gov.
If you restrict incoming e-mail as a means of preventing spam, you must
configure your e-mail system to allow mail from ftpmail@ftpmail.nws.noaa.gov

Read the help file carefully - 99% of errors using FTPMAIL are simple
typo's, incorrect capitalization, failure to send in plain text format,
leading or trailing spaces, or failure to set up any spam filters properly.

The "help" file contains a more detailed description of the
FTPMAIL system and available products. To obtain a copy of the
FTPMAIL "help" file.

Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject Line: Put anything you like
Body: help

These instructions are subject to revision....download frequently.

****

This file is intended to assist mariners using the FTPMAIL system
which is used to obtain National Weather Service products via
e-mail. The following is an example in the use of the FTPMAIL
system. NOTE CAPITALIZATION!

Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject Line: Put anything you like
Body: open
cd data
cd raw
cd fz
get fzus56.kmtr.cwf.mtr.txt
quit

COASTAL and NEARSHORE MARINE FORECASTS

These files may be found in directory:
ftp://tgftp.nws.noaa.gov/data/raw/fz

PRODUCT DESCRIPTION	FILE NAME
Caribou, ME	fzus51.kcar.cwf.car.txt
Gray, ME	fzus51.kgyx.cwf.gyx.txt
Taunton, MA	fzus51.kbox.cwf.box.txt
New York, NY	fzus51.kokx.cwf.okx.txt
Philadelphia, PA	fzus51.kphi.cwf.phi.txt
Washington, DC	fzus51.klwx.cwf.lwx.txt
Wakefield, VA	fzus51.kakq.cwf.akq.txt
Newport/Morehead City, NC	fzus52.kmhx.cwf.mhx.txt
Wilmington, NC	fzus52.kilm.cwf.ilm.txt
Charleston, SC	fzus52.kchs.cwf.chs.txt

Jacksonville, FL	fzus52.kjax.cwf.jax.txt
Melbourne, FL	fzus52.kmlb.cwf.mlb.txt
Miami, FL	fzus52.kmfl.cwf.mfl.txt
Key West, FL	fzus52.kkey.cwf.key.txt
San Juan, PR	fzca52.tjsj.cwf.sju.txt
San Juan, PR (Spanish)	fzca52.tjsj.cwf.spn.txt
Tampa, FL	fzus52.ktbw.cwf.tbw.txt
Tallahasee, FL	fzus52.ktae.cwf.tae.txt
Mobile, AL	fzus54.kmob.cwf.mob.txt
New Orleans, LA	fzus54.klix.cwf.lix.txt
Lake Charles, LA	fzus54.klch.cwf.lch.txt
Houston/Galveston, TX	fzus54.khgx.cwf.hgx.txt
Corpus Christi, TX	fzus54.kcrp.cwf.crp.txt
Brownsville, TX	fzus54.kbro.cwf.bro.txt
Seattle, WA	fzus56.ksew.cwf.sew.txt
Portland, OR	fzus56.kpqr.cwf.pqr.txt
Medford, OR	fzus56.kmfr.cwf.mfr.txt
Eureka, CA	fzus56.keka.cwf.eka.tx
San Francisco, CA	fzus56.kmtr.cwf.mtr.txt
Los Angeles, CA	fzus56.klox.cwf.lox.txt
San Diego, CA	fzus56.ksgx.cwf.sgx.txt
Hawaii	fzhw50.phfo.cwf.hfo.txt
Hawaii (Generalized)	fzhw50.phfo.cwf.hfo.txt
Marianas (Guam)	fzmy50.pgum.cwf.my.txt
East Micronesia	fzpq51.pgum.cwf.pq1.txt
West Micronesia	fzpq52.pgum.cwf.pq2.txt
Samoa	fzzs50.nstu.cwf.ppg.txt
Buffalo,NY	fzus51.kbuf.nsh.buf.txt
Cleveland,OH	fzus51.kcle.nsh.cle.txt
Detroit/Pontiac,MI	fzus53.kdtx.nsh.dtx.txt
Gaylord, MI	fzus53.kapx.nsh.apx.txt
Grand Rapids,MI	fzus53.kgrr.nsh.grr.txt
Northern Indiana, IN	fzus53.kiwx.nsh.ixw.txt
Chicago,IL	fzus53.klot.nsh.lot.txt
Milwaukee/Sullivan,WI	fzus53.kmkx.nsh.mkx.txt
Green Bay,WI	fzus53.kgrb.nsh.grb.txt
Marquette,MI	fzus53.kmqt.nsh.mqt.txt
Duluth,MN	fzus53.kdlh.nsh.dlh.txt
AK, SE Inner Coastal Waters	fzak51.pajk.cwf.ajk.txt
AK, SE Outside Coastal Waters	fzak52.pajk.cwf.aeg.txt
AK, Yakutat Bay	fzak57.paya.cwf.yak.txt
AK, North Gulf Coast and Kodiak	fzak51.pafc.cwf.aer.txt
AK, Valdez Arm and Narrows	fzak58.pavw.cwf.vws.txt
AK, Chiniak and Marmot Bays	fzak58.padq.cwf.adq.txt
Southwest AK and the Aleutians	fzak52.pafc.cwf.alu.txt
Western AK	fzak52.pafg.cwf.wcz.txt
Arctic Coast	fzak51.pafg.cwf.nsb.txt
Sea Ice Advisory West & Arctic AK	fzak80.pafc.ice.afc.txt

If you have access to the World Wide Web be certain to check out
the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov (WAP/WML brower required)	Cellphone page
mobile.weather.gov	Mobile Page

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified May 28, 2010
Document URL: http://weather.noaa.gov/pub/fax/marine3.txt
ftp://tgftp.nws.noaa.gov/fax/marine3.txt

Marine Forecasts and Related Information Available via E-mail

National Weather Service (and other) marine forecasts are available via a variety of Government, University, Commercial and Public/Freeware systems intended to make information accessible to users such as mariners who may have an e-mail capability but do not have direct Internet access. The following is a listing of several known automated systems.

Note: Any reference to any product or service does not imply any endorsement by the National Weather Service as to function or suitability for your purpose or environment.

This document (http://weather.noaa.gov/pub/fax/robots.txt) may be retrieved via e-mail as follows:

```
Send an e-mail to:   ftpmail@ftpmail.nws.noaa.gov
Subject line:        Put anything you like
Body:                open
                     cd fax
                     get robots.txt
                     quit
```

FTPMAIL

**** IMPORTANT NOTICES ****

Effective January 08, 2008, the address of the FTPMAIL service changed from ftpmail@weather.noaa.gov to ftpmail@ftpmail.nws.noaa.gov.
If you restrict incoming e-mail as a means of preventing spam, you must configure your e-mail system to allow mail from ftpmail@ftpmail.nws.noaa.gov

Read the help file carefully - 99% of errors using FTPMAIL are simple typo's, incorrect capitalization, failure to send in plain text format, leading or trailing spaces, or failure to set up any spam filters properly.

These instructions are subject to revision....download frequently.

National Weather Service marine text forecasts and radiofax charts are available via e-mail via an FTPMAIL server. Further, FTPMAIL may be used to acquire any file on the tgftp.nws.noaa.gov FTP server. The FTPMAIL server is intended to allow Internet access for mariners and other users who do not have direct access to the World Wide Web but who are equipped with an e-mail system. Turnaround is generally less than one hour, however, performance may vary widely and receipt cannot be guaranteed. To get started in using the NWS FTPMAIL service, follow these simple directions to obtain the FTPMAIL "help" file (11 KBytes), or see http://weather.noaa.gov/pub/fax/ftpmail.txt

```
Send an e-mail to:   ftpmail@ftpmail.nws.noaa.gov
Subject line:        Put anything you like
Body:                help
```

Not all NWS forecast products are available via FTP and therefore accessible via FTPMAIL such as worldwide computer generated model forecasts which include areas beyond the area of U.S. forecasting responsibility such as the Indian Ocean and South Atlantic.

To retrieve Wave Watch III (http://polar.ncep.noaa.gov/waves/main_table.html) and other forecasts via e-mail, use one of the www-to-email systems such as SAILDOCS or OTHERS described below. Be aware computer generated products from forecast models are not reviewed by forecasters and are therefore subject to error. E.G. per the Wave Watch III webpage:

URLs = http://polar.ncep.noaa.gov/waves/latest_run/xxxx.yyyyzzzz
e.g.
http://polar.ncep.noaa.gov/waves/latest_run/nww3_na.f024h.3.gif

where xxxx =
"nww3_at" Atlantic
"nww3_na" North Atlantic
"wna" Western North Atlantic
"wna_ecg" WNA US coastal zoom
"nah" North Atlantic Hurricane
"nah_ecg" NAH US coastal zoom
"nww3_in" Indian Ocean
"nww3_pa" Pacific
"nww3_np" North Pacific
"enp" Eastern North Pacific
"enp_haw" ENP Hawaii zoom
"enp_wc" ENP west coast zoom
"nph" North Pacific Hurricane
"nph_haw" NPH Hawaii zoom
"nph_wc" NPH west coast zoom
"akw" Alaskan Waters

where "yyyy" = "h006" or "h000" for -6 or zero hour hindcasts
where "yyyy" = "f006" to "f180" (multiples of 6 hours) for forecasts

where "zzzz" =
"h.gif" Wave Height Forecast
"h.2.gif" Wave Period and Direction Forecast
"h.3.gif" Wind Speed and Direction Forecast

e.g. 24hr Wind Speed and Direction Forecast for North Atlantic =
http://polar.ncep.noaa.gov/waves/latest_run/nww3_na.f024h.3.gif
(See SAILDOCS or OTHERS described below to retrieve via e-mail,
file size ~ = 30k Bytes)

And similarly, to retrive sea surface temperature and surface current forecasts from NOAA's for Real-Time Ocean Forecast System (Atlantic):

URLs = http://polar.ncep.noaa.gov/ofs/aofs_images/large/aofs_zzz_yyyy_xxxx.png
e.g.
http://polar.ncep.noaa.gov/ofs/aofs_images/large/aofs_cur_f120_wnatlzoom.png

where xxxx =
"natl" North Atlantic
"wnatl" Western North Atlantic
"wnatlzoom" Western North Atlantic zoom
"hurr" Gulf of Mexico

where yyyy =
"nowcast", "f024", "f048", "f072", "f096" or "f120"

where "zzz" =
"sst" Sea Surface Temperature (°C)
"cur" Surface Current (magnitude m/sec)

National Hurricane Center Listserver
The National Weather Service's National Hurricane Center operates an e-mail listserver which is special interest to mariners who do not have direct access to the World Wide Web but who are equipped with an e-mail system. This listserver provides an automated means to receive NWS hurricane forecast products via e-mail. However, performance may vary and receipt cannot be guaranteed. This is an experimental service. Interruptions or duplications in e-mail deliveries while we test the system are to be expected. To get started in using the National Hurricane Center Listserver, follow these simple directions for more information, or see: http://www.nhc.noaa.gov/signup.shtml

```
Send an e-mail to:   ftpmail@ftpmail.nws.noaa.gov
Subject line:        Put anything you like
Body:                open
                     cd fax
                     get nhclist.txt
                     quit
```

University of Illinois Listserver
The University of Illinois at Urbana-Champaign operates an e-mail listserver of which two Lists, WX-ATLAN, and WX-TROPL are of special interest to mariners who do not have direct access to the World Wide Web but who are equipped with an e-mail system. These Lists provide an automated means to receive NWS hurricane (and some marine) forecast products via e-mail. However, performance may vary and receipt cannot be guaranteed. To get started in using the University of Illinois Listserver, follow these simple directions to obtain further information, or see: http://www.lsoft.se/scripts/wl.exe?XH=LISTSERV.UIUC.EDU

```
Send an e-mail to:   ftpmail@ftpmail.nws.noaa.gov
Subject line:        Put anything you like
Body:                open
                     cd fax
                     get uiuclist.txt
                     quit
```

Hurricane Watch Net YahooGroup Listserver
The Amateur Radio "HAM" Hurricane Watch Net manages two YahooGroup Lists, HWN, and hwn_epac , which are of special interest to mariners who do not have direct access to the World Wide Web but who are equipped with an e-mail system. These Lists provide an automated means to receive NWS hurricane forecast products via e-mail. However, performance may vary and receipt cannot be guaranteed. Due to a system limitation, duplicate e-mails are likely. To get started in using the HWN/hwn_epac YahooGroup Listserver, follow these simple directions to obtain further information, or see: http://www.hwn.org/, http://groups.yahoo.com/group/HWN and http://groups.yahoo.com/group/hwn_epac

```
Send an e-mail to:   ftpmail@ftpmail.nws.noaa.gov
Subject line:        Put anything you like
Body:                open
                     cd fax
                     get hwnlist.txt
                     quit
```

SAILDOCS
SAILDOCS is an email-based document-retrieval system which currently offers two services: a document retrieval service which will return documents from the Internet or SAILDOCS own files, and a subscription service which will send Internet documents (for example weather reports) at scheduled intervals. SAILDOCS files include National Weather Service text forecasts and gridded binary (GRIB files) for wind, pressure, 500mb, and sea surface temperature. SAILDOCS is supported in part by Sailmail (www.sailmail.com) but is an independent service that can be used by anyone who agrees to the terms and conditions. To get started in using SAILDOCS, follow these simple directions to obtain further information, or see: http://www.saildocs.com/

Send an e-mail to: info@saildocs.com
Subject line: Put anything you like
Body: Put anything you like

ExpressWeather - MailASail's Free Weather Service
ExpressWeather is a free, simple system to offer popular weather forecasts and charts by email. It aims to provide a deliberately limited subset of all the weather available, and only to provide the most useful forecasts in an easy to access format. For details send a blank email with a BLANK subject line to weather@mailasail.com.
(Remember that some email programs insert "No subject". This has to be deleted
or see
http://weather.mailasail.com/Franks-Weather/Text-Chart-Grib-Forecasts-From-Mailasail

Send an e-mail to: weather@mailasail.com
Subject line: Leave blank
Body: Leave blank

NAVIMAIL
Météo-France's NAVIMAIL system enables you to receive gridded binary (GRIB files) for wind, pressure, waves, sea surface temperature, as well as text bulletins and satellite images. There is a service charge for GRIB data, however, text bulletins and satellite images are available at no charge. To get started in using NAVIMAIL, follow these simple directions to obtain further information, or see:
http://www.meteo.fr/marine/navimail

Send an e-mail to: ftpmail@ftpmail.nws.noaa.gov
Subject line: Put anything you like
Body: open
cd fax
get navimail.txt
quit

U.S. NOTICES TO MARINERS BY E-MAIL
The National Geospatial-Intelligence Agency (NGA) provides a service whereby the U.S Notices to Mariners are e-mailed to the requesting address every weekend, with the following limitations:

* The notice transmitted is listed on the Maritime Safety Information (MSI) Website in the "Notice to Mariners" section as "Entire NtM". Graphics provided in this version are inadequate

for navigation purposes. Navigation-quality chartlets are available for download on the MSI website as needed.
* Many networks and e-mail applications have restrictions on file sizes for e-mail attachments. In order to ensure all notices are received, the limit on file sizes for the receiving account should be changed to 2.5 Mb. Contact your system administrator or help desk for more assistance.
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U.S. COAST GUARD LOCAL NOTICES TO MARINERS (LNM) LISTSERVER
LNM's and other maritime related information are available via a one-way listserver at: http://www.navcen.uscg.gov/lnm/listserver.htm

NANUS & GPS STATUS MSGS BY EMAIL
Users with an urgent need to be notified of changes to the GPS Constellation may subscribe to the Navigation Center NANU List Server (http://cgls.uscg.mil/mailman/listinfo/nanu) and/or the GPS Status Message List Server (http://cgls.uscg.mil/mailman/listinfo/gps). These services provide emails containing the NANU and/or GPS Status Messages, generally within 60 minutes of notification by the Air Force of a change to the GPS Constellation. This is a free service. PRIVACY INFORMATION: Disclosure of your email address is voluntary. It is solicited for the sole purpose of delivering the requested information to you and will not be released to any other party.

OTHERS
A non-NWS FAQ webpage describing several FTP-to-EMAIL and WWW-to-EMAIL servers may be found at:

http://www.faqs.org/faqs/internet-services/access-via-email/

If you have access to the World Wide Web be certain to check out the following webpages. See these pages for further links.

http://www.nws.noaa.gov	NWS Homepage
http://www.nws.noaa.gov/om/marine/home.htm	NWS Marine Page
cell.weather.gov (WAP/WML brower required)	Cellphone page
mobile.weather.gov	Mobile Page

Author: Timothy Rulon, Marine and Coastal Weather Services Branch W/OS21
National Weather Service
Last Modified Jun 16, 2010
Document URL: http://weather.noaa.gov/pub/fax/robots.txt
ftp://tgftp.nws.noaa.gov/fax/robots.txt

AMVER/SEAS

In Pursuit of Safety At Sea

Under a cooperative agreement between the National Oceanic and Atmospheric Administration (NOAA) and the U. S. Coast Guard (USCG), software has been created to assist Volunteer Observing Ships (VOS) in submitting marine weather reports and participating in the **A**utomated **M**utual-assistance **VE**ssel **R**escue system (AMVER). The VOS program allows ships to report marine weather to the National Weather Service (NWS) so that high seas forecasts will be as timely and accurate as possible. The AMVER system allows ships to report their intended track so that in the event of an emergency all available resources may be focused on aiding ships in distress. Both of these systems are voluntary and are intended to aid all mariners on the high seas. All transmission costs are paid by the U.S. Coast Guard and NOAA. The ship is not responsible for any transmission costs, provided messages are sent to the address specified in the user=s guide.

NOAA's SEAS (Shipboard Environmental data Acquisition System) program relies on volunteer observers to report weather at least four times per day at 00Z, 06Z, 12Z, and 18Z. Ships are encouraged to also submit reports at 03Z, 09Z, 15Z and 21Z. In addition, a very limited number of ships are asked to collect oceanographic data. For these ships, a SEAS field representative installs the extra hardware needed and trains the crew in collecting and transmitting the data. Portions of the software needed for these observations are password protected to eliminate confusion.

AMVER reports allow the U. S. Coast Guard to track a vessel=s position. The AMVER program relies on ships to submit four types of reports: (1) Sail Plans; (2) Position Reports; (3) Arrival Reports and (4) Deviation Reports, when necessary. The U. S. Coast Guard updates their database with the position information from these reports, which allows them to identify vessels in the vicinity of a ship in distress.

Ships may participate in either the AMVER or SEAS program, but there are benefits to participating in both. A ship can reduce reporting requirements, since AMVER position reports are created from every weather message and automatically forwarded to the U.S. Coast Guard.

A typical voyage would require the submission of an AMVER Sail Plan before departure, submissions of weather reports four times per day and the submission of an Arrival Report upon arrival. A Deviation Report is only submitted if the ship deviates from its original plan. Ships that follow the same routes repeatedly get an additional benefit since Sail Plans can be stored in the system and recalled and modified rather than creating new ones.

The AMVER/SEAS PC software was developed for use with INMARSAT C transceivers. For those ships already participating in the SEAS program, GOES transmitters will continue to work for the transmission of SEAS observations. To participate in the AMVER program the ship must possess an INMARSAT C transmitter with a floppy drive and the ability to send messages in binary format, and a 286 (or better) IBM compatible PC.

A Windows 95/98/00/ME/NT/XP version of AMVER/SEAS is now available.

For Information on SEAS contact:

Your nearest U.S. Port Meteorological Officer or SEAS representative listed in the Appendix.

For Information on AMVER contact:

Ben Strong 1-212-668-7762 1-212-668-7684 (FAX)
e-mail: bmstrong@batteryny.uscg.mil

or visit the SEAS website at:
http://seas.amverseas.noaa.gov/seas/

MAROB

An Experimental Voluntary Marine Observation Program

All Information with Respect to the MAROB Program Are Preliminary and Subject to Revision

The MAROB Program is an experimental voluntary marine observation program of the National Weather Service in the early stages of development. It seeks the participation of all mariners, both commercial and recreational, which are not part of the more in-depth VOS program. It is the goal of the program to collect as many marine observations as practicable, to improve the accuracy of coastal, offshore and high seas forecasts, by taking advantage of technological advancements in marine communications and the proliferation of the Internet.

MAROB observations will be in coded form which can be better ingested, distributed and displayed by forecasters than observations in plain language. The MAROB report format will be identical to VOS coded reports, with the exception that "MAROB" will replace "BBXX". The MAROB program will differ from the VOS Program in at least several other aspects: Although MAROBs will be used by forecasters in forecast decision process, these data will likely not be used directly by computer models; Any communications charges and the cost of any observing equipment will not be reimbursed by the Weather Service; The observation elements collected will typically be a subset of those collected in the full VOS report.

The National Weather Service is in the process of developing cooperative arrangements with organizations such as the United States Power Squadrons, the Coast Guard Auxiliary, the WinLink 2000 Global Radio Network, the Maritime Mobile Service Network, CruiseEmail.com, Ocens, Sailmail, SkyMate, MarineNet Wireless, and the YOTREP Reporting System, to both train observers and forward observations to NWS. Technologies utilized may include cellular telephone, HF Marine radio, MF Marine radio, VHF Marine Radio, Ham Radio, Webforms and e-mail.

In several cases, MAROB reporting schemes will work in conjunction with vessel position reporting systems such as WinLink's Position Reporter, the Maritime Mobile Service Network's ShipTrak, and the YOTREPs Reporter, to enhance the safety of mariners.

At present, mariners may participate in the MAROB program in any of several ways.

For information on the MAROB Program see:

http://www.nws.noaa.gov/om/marine/marob.htm

Or contact:
timothy.rulon@noaa.gov
1-301-713-1677 x 128

For information on other marine observation programs of the National Weather Service see:

http://www.nws.noaa.gov/om/marine/voluntary.htm

Note: Any reference to a commercial product or service does not imply any endorsement by the National Weather Service as to function or suitability for your purpose or environment.

USEFUL MARINE WEATHER PUBLICATIONS

Marine Service Charts (MSC) - $1.25[1]

Marine Service Charts (MSC) list frequencies, schedules and locations of stations disseminating NWS products. They also contain additional weather information of interest to the mariner. Charts are also available via the Internet at: **http://www.nws.noaa.gov/om/marine/pub.htm**.

Note - As a result of budgetary constraints, these Marine Service Charts are no longer being updated on a regular cycle and may contain outdated information. In some cases the amount and/or types of outdated information has resulted in the unfortunate situation that we can no longer justify continuing to make that chart available. Updated information can most often be found on the Marine Forecasts or NOAA Weather Radio webpages or from your Local Weather Forecast Office.

Location	Number
Eastport, ME to Montauk Point, NY	MSC-1
Montauk Point, NY to Manasquan, NJ	MSC-2
Manasquan, NJ to Cape Hatteras, NC	MSC-3
Cape Hatteras, NC to Savannah, GA	MSC-4
Savannah, GA to Apalachicola, FL	MSC-5
Apalachicola, FL to Morgan City, LA	MSC-6
Morgan City, LA to Brownsville, TX	MSC-7
Mexican Border to Point Conception, CA	MSC-8
Point Conception, CA to Point St George,CA	MSC-9
Point St George, CA to Canadian Border	MSC-10
Great Lakes	MSC-11/12
Hawaiian Waters	MSC-13
Puerto Rico and Virgin Islands	MSC-14
Alaskan Waters	MSC-15
Guam and the Northern Mariana Islands	MSC-16

OTHER PUBLICATIONS OF VALUE TO THE MARINER

NOAA PUBLICATIONS

Mariner's Weather Log Magazine - $19.00/3 issues/yr ($26.60 foreign)[3]
Selected Marine Worldwide Weather Broadcasts (9/92)[5]
Voluntary Observing Ship Program Brochure (1999) Free[6]
NWS Observing Handbook NO.1 (7/04) Free [6]
Marine Report User Guide
Worldwide Marine Radiofacsimile Broadcast Schedules (Aug 13, 2010) Free[4]
NOAA Weather Radio Brochure (NOAA/PA 94070, 3/97) Free[2]
NOAA Weather Radio Handout (NOAA/PA 94061, 3/97) Free[2]
A Mariners Guide to Marine Weather Services - Great Lakes (NOAA/PA 98053) Free[2]
A Mariners Guide to Marine Weather Services - Coastal, Offshore, and High Seas (NOAA/PA 98054) Free[2]
Safe Boating Weather Tips (NOAA/PA 94058, 6/98) Free[2]
National Ocean Service Coast Pilot, Volumes 1-9[1]
Directory of Private Weather Services - Free[10]
Mariners Guide for Hurricane Awareness in the North Atlantic Basin (large file 2.3 MB PDF format)

NOAA SEA GRANT PUBLICATIONS

Lightning & Boats (NOAA/Sea Grant NCU-G-95-004)
Lightning & sailboats (NOAA/Sea Grant FLSGP-G-92-001)
Beach safety: protect yourself from lightning (NOAA/Sea Grant DELU-G-90-003)
Inadequacies in the US code for lightning protection of boats (NOAA/Sea Grant FLSGP-R-89-018)
BOATING - LIGHTNING PROTECTION (NOAA/Sea Grant FLSGP-G-85-001)
LIGHTNING: GROUNDING YOUR BOAT (NOAA/Sea Grant MDU-G-80-001)
LIGHTNING CONE OF PROTECTION (NOAA/Sea Grant MICHU-G-80-001)
Rip currents! Break the grip of the rip (NOAA/Sea Grant DELU-G-05-005)
STARFISHER'S LAST VOYAGE (NOAA/Sea Grant ORESU-G-75-004)
Safe boating tips (fact sheet) (NOAA/Sea Grant PENN-G-03-002)

NGA PUBLICATIONS

NGA Publication 117 "Radio Navigational Aids" (2005)...Includes CD [13]
American Practical Navigator (Bowdich) Publication 9 (2002) - [13]
Pilot Chart Atlas, 5 areas [13]
Sailing Directions, 42 volumes[13]
U.S. Notices to Mariners[14]
U.S. Notices to Mariners #1, Special Notice to Mariners Paragraphs [14]

U.S. COAST GUARD PUBLICATIONS

The Future in Marine Radio Communications - GMDSS (1998) Free[9]

NAVY PUBLICATIONS

U.S. NAVY Hurricane Havens/Heavy Weather Handbooks

Non-U.S. GOVERNMENT PUBLICATIONS

Canadian Coast Guard Radio Aids to Navigation - $18.95 Cdn
The British Admiralty List of Radio Signals[8]

- **Volume 1 Coast Radio Stations (2 parts)**
- **Volume 2 Radio Navigational Aids, Satellite Navigation Systems, Legal Time, Radio Time Signals & Electronic Fixing Systems**
- **Volume 3 Maritime Safety Information Services (2 Parts)**
- **Volume 4 Meteorological Observation Stations**
- **Volume 5 Global Maritime Distress and Safety Systems**
- **Volume 6 Pilot Services, Vessel Traffic Services & Port Operations (5 parts)**

INTERNATIONAL PUBLICATIONS

TSUNAMI The Great Waves - Free [11]
The SafetyNET Users Handbook - Free
International SafetyNET Manual, 1994; IMO-908E[12]
NAVTEX Manual, 1994; IMO-951E[12]
GMDSS Handbook, 1995 (Includes GMDSS Master Plan); IMO-970E[12]
SOLAS Consolidated Edition, 1997; IMO-110E[12]
World Meteorological Organization Publication 9 - Weather Reporting [15]

- **Volume A - Observing Stations**
- **Volume C1 - Meteorological Bulletins**
- **Volume C2 - Transmission Programmes (Includes broadcast information)**
- **Volume D - Information for Shipping (Includes broadcast information)**

1. FAA, National Aeronautical Charting Office
   Distribution Division, AJW-3550
   10201 Good Luck Road
   Glenn Dale, Maryland 20769
   (301) 436-8301
   (800) 638-8972 toll free, U.S. only
   (301) 436-6829 FAX
   Email: **9-AMC-chartsales@faa.gov**
   http://naco.faa.gov/ecomp/
   or your local chart agent: **http://www.naco.faa.gov/agents.asp**

2. Available Internet: Via http://www.nws.noaa.gov/om/index.html
Or from your local National Weather Service Forecast Office.
Click here for the GPO online order form

3. **Superintendent of Documents**
   P.O. Box 371954
   Pittsburgh, PA 15250-7954
   (202) 512-1800 (7:30am-4:30pm EST)
   (202) 512-2250 FAX
   http://www.gpo.gov
   http://www.vos.noaa.gov/mwl.shtml
   (Distributed free to ships in VOS program)
   Click here for the GPO printed order form

4. **(Printed version available only to ships participating in U.S. VOS program)**
   web version http://www.nws.noaa.gov/om/marine/rfax.pdf
   National Weather Service
   Voluntary Observing Ship Technical Lead
   Robert "Luke" Luke
   NDBC Bldg #1100
   Stennis Space Center, MS 39529
   (228) 688-1457
   (228) 688-3153 (fax)
   robert.luke@noaa.gov
   http://www.vos.noaa.gov

5. **Joint Publication of National Weather Service and Naval Oceanography Command**
   Out of date, no longer produced
   Marine Communications Program Manager, W/OS21
   National Weather Service, NOAA
   1325 East-West Highway
   Silver Spring, MD 20910
   (301)-713-1677 x128
   (301)-713-1598
   http://www.nws.noaa.gov/os/marine/feedback.htm

6. **(Some publications available only to ships participating in U.S. VOS program)**
   National Weather Service
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   NDBC Bldg #1100
   Stennis Space Center, MS 39529
   (228) 688-1457
   (228) 688-3153 (FAX)
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   http://www.vos.noaa.gov

8. **UK Hydrographic Office**
   Admiralty Way, Tauton, Somerset
   TA1 2DNm United Kingdom
   +44(0) 1823 337900 x3333
   +44(0) 1823 323753 FAX
   info@hydro.gov.uk
   http://www.ukho.gov.uk
   http://www.ukho.gov.uk/amd/distributorsList.asp (Distributors)

9. **Commandant (G-SCT)**
   U.S. Coast Guard
   2100 Second Street S.W.
   Washington, D.C. 20593
   (202)-267-2860
   (202)-267-4106 (FAX)
   cgcomms@comdt.uscg.mil
   http://www.navcen.uscg.gov/marcomms/gmdss/#Brochure
   http://www.navcen.uscg.gov/marcomms/default.htm

10. National Weather Service
Industrial Meteorology Staff
1325 East-West Highway
Silver Spring, MD 20910
(301)-713-0258
(301)-713-0610
nws.im@noaa.gov
http://www.nws.noaa.gov/im/

11. International Tsunami Information Centre
737 Bishop St. Suite 2200
Honolulu, HI 96813-3213
808-532-6422
808-532-5576 (FAX)
itic@itic.noaa.gov
http://www.prh.noaa.gov/itic/

12. International Maritime Organization (IMO)
4 Albert Embankment
London SE1 7SR UK
+44 207 7357611
+44 207 5873210 FAX (general enquiries)
+44 207 5873241 FAX (publication sales)
Telex: 23588
info@imo.org
http://www.imo.org

13. Since 2005?, available on-line and no longer printed by U.S. Government. Many NGA publications available from commercial vendors, see NGA webpage for references.

14. Since 2004, available on-line and no longer printed by U.S. Government. Many NGA publications available from commercial vendors, see NGA webpage for references.

15. American Meteorological Society
Attn: WMO Publications Center
45 Beacon Street
Boston, MA 02108 USA
1-617-227-2425 Fax: 1-617-742-8718
wmopubs@ametsoc.org
http://www.wmo.ch/web/catalogue/

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(4) 162.425 mHz
(5) 162.450 mHz
(6) 162.500 mHz
(7) 162.525 mHz

Channel numbers, e.g. (WX1, WX2) etc. have no special significance but are often designated this way in consumer equipment. Other channel numbering schemes are also prevalent.

The NOAA Weather Radio network provides voice broadcasts of local and coastal marine forecasts on a continuous cycle. The forecasts are produced by local National Weather Service Forecast Offices. Coastal stations also broadcast predicted tides and real time observations from buoys and coastal meteorological stations operated by NOAA's National Data Buoy Center. Based on user demand, and where feasible, Offshore and Open Lake forecasts are broadcast as well.

The NOAA Weather Radio network provides near continuous coverage of the coastal U.S, Great Lakes, Hawaii, and populated Alaska coastline. Typical coverage is 25 nautical miles offshore, but may extend much further in certain areas.