

WORLDWIDE MARINE RADIOFACSIMILE BROADCAST SCHEDULES

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

NATIONAL WEATHER SERVICE

Sep 10, 2009

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>.

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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. In several cases, unofficial reception reports have been received identifying the station as no longer being operational. 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:

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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://www.weathersa.co.za/Marine/FrequencyShipFCBroadcast.jsp>

ASIA

BEIJING (PEKING), CHINA

| CALL SIGNS | FREQUENCIES | TIMES | EMISSION | POWER |
|------------|-------------|-------|----------|--------|
| BAF6 | 5526.9 kHz | | F3C | 6-8 KW |
| BAF36 | 8121.9 kHz | | F3C | 6-8 KW |
| BAF4 | 10116.9 kHz | | F3C | 10 KW |
| BAF8 | 14366.9 kHz | | F3C | 15 KW |
| BAF9 | 16025.9 kHz | | F3C | ?? KW |
| BAF33 | 18236.9 kHz | | F3C | 6-8 KW |

| TIME | CONTENTS OF TRANSMISSION | RPM/IOC | VALID TIME | MAP AREA |
|------|--|---------|------------|----------|
| 0008 | 24HR/36HR/48HR PRECIPITATION PROG (1 JUN-30 SEP) | 120/576 | 1200 | E |
| 0132 | 36HR/48HR SURFACE PROG | 120/576 | 1200 | A1 |
| 0154 | TYPHOON WARNING (IN ENGLISH & CHINESE)(1) | 120/576 | 0000 | |
| 0216 | 36HR MINIMUM TEMP PROG(1 OCT-30 APR) | 120/576 | | E |
| | 48HR MAXIMUM TEMP PROG(1 MAY-30 SEP) | 120/576 | | E |
| 0238 | 24HR/48HR PRECIPITATION PROG (1 MAY-30 SEP) | 120/576 | 0000 | E |
| | 60HR MINIMUM TEMP PROG (1 OCT-30 APR) | 120/576 | | E |
| 0300 | SATELLITE PICTURE ANALYSIS (1 MAY-30 SEP) | 120/576 | | |
| 0406 | 500MB PLOTTED DATA | 120/576 | 0000 | E |
| 0428 | 48HR SURFACE PROG | 120/576 | 1800 | F |
| 0450 | SURFACE ANAL | 120/576 | 0000 | H |
| 0724 | SATELLITE PICTURE ANALYSIS (1 MAY-30 SEP) | 120/576 | | |
| 0746 | TYPHOON WARNING (IN ENGLISH & CHINESE)(1) | 120/576 | 0600 | |
| 0830 | SURFACE PRESSURE ANALYSIS | 120/576 | 0000 | C |
| 0852 | 24HR PRECIPITATION PROG | 120/576 | | J |
| 1126 | TYPHOON TRACK PROG (2) | 120/576 | 0000 | D |
| 1148 | TEST CHART (4) | 120/576 | | |
| 1158 | PROGRAM AMENDMENTS (4) | 120/576 | | |
| 1340 | TYPHOON WARNING (IN ENGLISH AND CHINESE)(1) | 120/576 | 1200 | |
| 1904 | 500MB PLOTTED DATA | 120/576 | 1200 | E |
| 1926 | SURFACE PRESSURE ANALYSIS | 120/576 | 1200 | G |
| 1948 | TYPHOON WARNING (IN ENGLISH AND CHINESE)(1) | 120/576 | 1800 | |
| 2134 | 24 HR SURFACE ANALYSIS | 120/576 | 1200 | A1 |
| 2218 | 36HR/48HR 500 MB VORICITY ANALYSIS | 120/576 | 1200 | I |
| 2240 | TYPHOON TRACK PROG (2) | 120/576 | 1200 | D |

NOTES: (1) IN CASE OF TYPHOON
(4) ON MONDAYS

MAP AREAS:

| | | | | | | | | | |
|------|--------------|---------------------|-------|-----|-------|-----|-------|-----|------|
| A1 - | 1:30,000,000 | NORTHERN HEMISPHERE | | | | | | | |
| C - | 1:23,000,000 | 70S | 040E, | 70S | 130W, | 40N | 040E, | 40N | 130W |
| D - | 1:10,000,000 | 50N | 105E, | 50N | 160E, | 45N | 105E, | 45N | 160E |
| E - | 1:20,000,000 | 10N | 085E, | 10N | 135E, | 45N | 066E, | 45N | 150E |
| F - | 1:20,000,000 | 05S | 033E, | 04S | 130E, | 43N | 041E, | 20N | 160E |
| G - | 1:10,000,000 | 06N | 085E, | 03N | 142E, | 47N | 063E, | 41N | 168E |
| H - | 1:10,000,000 | 04S | 070E, | 02S | 145E, | 42N | 023E, | 48N | 174E |
| I - | 1:10,000,000 | 15N | 075E, | 15N | 125E, | 40N | 040E, | 45N | 150E |
| J - | 1:03,000,000 | 43N | 108E, | 43N | 120E, | 33N | 108E | 33N | 120E |

(INFORMATION DATED 11/1997, update 2005 – service probably ceased in 2002)

BEIJING (PEKING), CHINA

| CALL SIGNS | FREQUENCIES | TIMES | EMISSION | POWER |
|------------|-------------|-------|----------|-------|
| 3SD | 8461.9 kHz | | F3C | 10 KW |
| 3SD | 12831.9 kHz | | F3C | 10 KW |
| 3SD | 16903.9 kHz | | F3C | 30 KW |

| TIME | CONTENTS OF TRANSMISSION | RPM/IOC | VALID TIME | MAP AREA |
|-----------|--|---------|------------|----------|
| 0755/1130 | Wave Analysis, 24h forecast 10 Day SST 10th, 20th and 31st (or last day of the month) 10 day ice forecast on 9th, 19th and 29th (or the last day of the month) | 120/576 | | |

(Date of Information Unknown)

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 2200/0840 | 120/576 | | |
| 0020/----- | 96HR SURFACE PRESSURE, PRECIP PROGS | 120/576 | 1200 | C |
| 0400/----- | 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 | 120/576 | 0000 | |
| -----/1251 | 24HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG | | | |
| -----/1251 | 36 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG | 120/576 | 0000 | |
| -----/1251 | 36HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG | | | |
| 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, MANUAL AMENDMENTS | 120/576 | | |
| 0400/1540 | RETRANSMISSION OF 0150/1350 (1) | 120/576 | | |
| -----/1620 | RETRANSMISSION OF 0300 (2) | 120/576 | | |
| 0421/----- | OCEAN WAVE ANALYSIS (NORTH PACIFIC) | 120/576 | 0000 | 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 (1) | 120/576 | 1200 | X |
| 0537/1739 | 24HR 500HPA HEIGHT, VORTICITY PROGNOSIS | 120/576 | 00/12 | |
| -----/1739 | 24 HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS | | | |
| 0548/----- | 24HR SURFACE PRESSURE, WIND, FOG, ICING, SEA ICE PROG | 120/576 | 0000 | C' |
| 0610/1750 | THE SECOND RETRANSMISSION OF 0240/1440 | 120/576 | | |
| 0630/----- | 48/72 HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS | 120/576 | 00/00 | |
| -----/1810 | 36HR 500HPA HEIGHT, VORTICITY PROGNOSIS | 120/576 | 1200 | |
| -----/1810 | 36HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS | | | |
| -----/1821 | 24 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG | 120/576 | 1200 | |
| -----/1821 | 24HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG | | | |
| -----/1832 | 36 HR 500HPA TEMPERATURE AND 700HPA DEWPOINT DEPRESSION PROG | 120/576 | 1200 | |
| -----/1832 | 36HR 850HPA TEMPERATURE WIND AND 700HPA VERTICAL P-VELOCITY PROG | | | |
| -----/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 (GOES-9) | 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 | 120/576 | 0000 | |
| -----/2010 | 36HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS | | | |
| 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/----- | RETRANSMISSION OF 0750 (1) | 120/576 | | |
| 0920/2120 | THE FIRST RETRANSMISSION OF 0840/2040 | 120/576 | | |
| 0940/2140 | RETRANSMISSION OF 0630/1950 | 120/576 | | |
| 1000/----- | RETRANSMISSION OF 0820 | 120/576 | | |
| -----/2200 | 48/72HR SURFACE PRESSURE, PRECIPITATION PROGNOSIS | 120/576 | 12/12 | |

TOKYO, JAPAN

| TIME | CONTENTS OF TRANSMISSION | RPM/IOC | VALID | MAP |
|------------|---|---------|--------|------|
| 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 0548/2040 | 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

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 01 MAR 2007/ Feb 2009) <http://www.jma.go.jp/jma/kishou/177jmh/JMH-ENG.pdf>

PEVEK, CHUKOTKA PENINSULA

| CALL SIGNS | FREQUENCIES 148 kHz | TIMES ALL BROADCAST TIMES | EMISSION F3C | POWER |
|------------|--------------------------|------------------------------|-----------------|----------|
| 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 | 120/576 | 00/12 | |
| | RFS 500HPA HEIGHT ANALYSIS | | | |
| 0450/1640 | RFS SURFACE PRESSURE PROGNOSIS 12 HOUR | 120/576 | 00/12 | |
| | RFS 500HPA HEIGHT PROGNOSIS 12 HOUR | | | |
| 0500/1650 | RFS SURFACE PRESSURE PROGNOSIS 24 HOUR | 120/576 | 00/12 | |
| | RFS 500HPA HEIGHT PROGNOSIS 24 HOUR | | | |
| 0510/1700 | RFS SURFACE PRESSURE PROGNOSIS 36 HOUR | 120/576 | 00/12 | |
| | RFS 500HPA HEIGHT PROGNOSIS 36 HOUR | | | |
| 0520/1710 | RFS SURFACE PRESSURE PROGNOSIS 48 HOUR | 120/576 | 00/12 | |
| | RFS 500HPA HEIGHT PROGNOSIS 48 HOUR | | | |
| 0530/1720 | RFS SURFACE PRESSURE PROGNOSIS 72 HOUR | 120/576 | 00/12 | |
| | RFS 500HPA HEIGHT PROGNOSIS 72 HOUR | | | |
| 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)

<http://marine.cwb.gov.tw/qa/BMF-BROADCAST-SCHEDULE.htm>

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 TRANSMITTED 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), Ocean Information(N)(4th, 14th, and 24th, 3rd, 13th, 23rd if a MON) | 120/576 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 and every WED and FRI) | 60/576 | | |
| 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) Sumo match (begins 0930 SAT as well) | 60/576 60/576 | | |
| 0745 | MON-SAT: Evening Ed(N), Kaiun-Suisan News(N) (Except SAT), Epidemic Information(N)(SAT only), FAX DAYORI 1(N), Sumo match (Seasonal)(N), FAX DAYORI 2(N)(except TUE&SAT) | 60/576 60/576 60/576 | | |
| 0745 | NATIONAL HOLIDAYS: Morning Ed(R), Sports Ed 1 (R), FAX DAYORI 1(N), Sumo match (Seasonal)(N)FAX DAYORI 2(N) | 60/576 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 (no 4 on THU,SAT and TUE following 2nd & 4th MON Also no 2 on WED and SUN)(R) | 60/576 | | |
| 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 60/576 | 2100 | |
| 2215 | WX Chart TUE-SUN: Morning Ed(R), Sports Ed 1,2(R), NX(R), Kaiun-Suisan News(R) (Except SUN), Epidemic Info (SUN only) FAX DAYORI 1,2 (R)(no 2 on SUN and WED) WX Chart | 60/576 60/576 60/576 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/----- | SYMBOLOLOGY | | | |
| 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) <http://www.directemar.cl/meteo/operador/horarios.htm>

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 SIGNIFICANT WEATHER DEPICTION | 120/576 | 18/06 | A |
| 0801/2001 | 24/36HR SIGNIFICANT WAVE PROGNOSIS | 120/576 | 0&12/12&0 | F |
| 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 E. 50N 75W, 50N 48W, 34N 48W, 34N 75W
 B. 76N 16W, 30N 20W, 23N 11W, 08N 69W F. 52N 98W, 58N 24W, 30N 39W, 28N 78W
 C. 52N 80W, 65N 15W, 30N 60W, 34N 17W G. 52N 98W, 56N 24W, 30N 39W, 28N 78W
 D. 60N 68W, 60N 33W, 43N 33W, 43N 68W H. 30N 107W, 15N 67W, 34N 24W, 79N 60W
 I. 54N 100W, 58N 22W, 30N 39W, 28N 78W

(INFORMATION DATED 2009) <http://www.ccg-gcc.gc.ca/folios/00026/docs/atlantic-2009-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 2009) <http://www.ccg-gcc.gc.ca/folios/00026/docs/atlantic-2009-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 2009) <http://www.ccg-gcc.gc.ca/folios/00026/docs/atlantic-2009-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 2009) <http://www.ccg-gcc.gc.ca/folios/00026/docs/atlantic-2009-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 2009) <http://www.ccg-gcc.gc.ca/folios/00026/docs/pacific-2009-eng.pdf>

KODIAK, ALASKA, U.S.A.

| CALL SIGN NOJ | FREQUENCIES | TIMES | EMISSION | POWER |
|------------------|-------------|---------------------|----------|-------|
| | 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>

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

cell.weather.gov

mobile.weather.gov/

NWS Homepage

NWS Marine Page

Cellphone page (Requires WML/WAP Browser)

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/default/index.php?alias=radiofaxschedule.txt>

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>

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

cell.weather.gov

mobile.weather.gov/

NWS Homepage

NWS Marine Page

Cellphone page (Requires WML/WAP Browser)

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) <http://www.gnto.gr/pages.php?pageID=238&langID=2>)

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 West Baltic 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 | |
| 1029/2137 | H+48 wave prediction | 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 | |

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 (Jan 11, 2007)

http://www.dwd.de/bvbw/generator/Sites/DWDWWW/Content/Oeffentlichkeit/TI/TI1/Informationstechnik/Datenverteilung/Broadcasting/Pinneberg/pdf/Sendeplan_20Seefax.templateId=raw.property=publicationFile.pdf/Sendeplan%20Seefax.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/----- | SYMBOLGY | 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 web servers.

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/cwtq/>.

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/mdl/>. 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.fags.org/fags/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.

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:

- 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

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 ftpcommand.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 marinel.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 marinel0.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.atl.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 | Cellphone page |
| mobile.weather.gov | Mobile Page |

Author: Timothy Rulon, Marine and Coastal Weather Services Branch W/OS21
National Weather Service
Last Modified Aug 05, 2009
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.

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.

PAY ATTENTION TO 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
```

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

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>)

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 | Cellphone page |
| mobile.weather.gov | Mobile Page |

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified Nov 14, 2008
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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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.

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.

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

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PAY ATTENTION TO 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 PWBE10.TIF
                       get PWBM99.gif
                       quit
```

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

| | FILE NAME |
|---|----------------------------|
| WIND/WAVE CHARTS | |
| 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 VT06Z 20S-30N, E of 145W | PWFE02.TIF |
| 24HR Wind/Wave Forecast VT12Z 20S-30N, E of 145W | PWFE03.TIF |
| #24HR Wind/Wave Forecast VT18Z 20S-30N, E of 145W | PWFE04.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 |

These charts will no longer be available after Nov 03, 2008

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 |

* Transmitted 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 | Cellphone page |
| mobile.weather.gov | Mobile Page |

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified Nov 07, 2008
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

**** 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.

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 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. 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.

PAY ATTENTION TO 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 PWEE11.TIF
                       get PYEA11.gif
                       quit
```

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
```

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 VT06, 0N-31N, 35W-100W | PWEE90.TIF |
| 24HR Wind/Wave Forecast VT12, 0N-31N, 35W-100W | PWEE91.TIF |
| #24HR Wind/Wave Forecast VT18, 0N-31N, 35W-100W | PWEE92.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 |

These charts will no longer be available after Nov 03, 2008 1800z
+ New chart available beginning Nov 03, 2008 1800z

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

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 |
| mobile.weather.gov | Mobile Page |

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified Nov 14, 2008
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

**** IMPORTANT NOTICES ****

Effective Tuesday December 2, 2008 the Anchorage Forecast Office will terminate production and dissemination of the Coastal Marine Forecast Tables. For questions regarding this notice please contact: bob.hopkins@noaa.gov

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.

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.

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.

PAY ATTENTION TO 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 PJBI99.TIF
get PYBE10.gif

quit

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

| | FILE NAME |
|---|----------------------------|
| WIND/WAVE CHARTS | |
| 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](#)

OTHER PRODUCTS

AK Coastal Forecast Tables (To be terminated Dec 02, 2008) [PLBZ00.TIF](#)

SCHEDULE INFORMATION and MISCELLANEOUS

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

xxxxxxx.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 Cellphone page
mobile.weather.gov Mobile Page

Author: Tim Rulon, NWS Marine And Coastal Weather Services Branch W/OS21
Last Modified Nov 14, 2008
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 ****

On Nov 03, 2008 several radiofax charts produced by the Tropical Prediction Center/National Hurricane Center and broadcast from New Orleans, Pt. Reyes and Honolulu be based on information from different model run times. A 36 hour wind/wave chart will be added to the New Orleans broadcast. The new broadcast schedules may be found at <http://weather.noaa.gov/fax/marine.shtml> and will be broadcast on-air beginning on or about Oct 27, 08. This change is to better align workflow to model production.

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.

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.

PAY ATTENTION TO 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

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

| | FILE NAME |
|--|----------------------------|
| WIND/WAVE CHARTS - CENTRAL PACIFIC | |
| 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 VT06Z 20S-30N, E of 145W | PWFE02.TIF |
| 24HR Wind/Wave Forecast VT12Z 20S-30N, E of 145W | PWFE03.TIF |
| #24HR Wind/Wave Forecast VT18Z 20S-30N, E of 145W | PWFE04.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 |

These charts will no longer be available after Nov 03, 2008 1840z

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 | xxxxxxx.TIF |
| @06Z North Pacific Preliminary Analysis 20N-80N, 110W-110E | xxxxxxx.TIF |
| @12Z North Pacific Preliminary Analysis 20N-80N, 110W-110E | xxxxxxx.TIF |
| @18Z North Pacific Preliminary Analysis 20N-80N, 110W-110E | xxxxxxx.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 | xxxxxxx.TIF |
| @\$06Z Tropical Surface Analysis 40S-40N, 100W-120E | xxxxxxx.TIF |
| @\$12Z Tropical Surface Analysis 40S-40N, 100W-120E | xxxxxxx.TIF |
| @\$18Z Tropical Surface Analysis 40S-40N, 100W-120E | xxxxxxx.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

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
mobile.weather.gov Mobile Page

Author: Timothy Rulon, Marine and Coastal Weather Services Branch W/OS21
National Weather Service
Last Modified Oct 28, 2008

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 ****

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.

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 forecasts
                    cd marine
                    cd high_seas
                    get north_pacific.txt
                    get north_atlantic.txt
                    quit
```

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
```

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 utilized 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>
cell.weather.gov
mobile.weather.gov

NWS Marine Page
Cellphone page
Mobile Page

Author: Timothy Rulon, Office of Marine and Coastal Services W/OS21,
National Weather Service
Last Modified Aug 14, 2009
Document URL: <http://weather.noaa.gov/pub/fax/marinel.txt>
<ftp://tgftp.nws.noaa.gov/fax/marinel.txt>

NATIONAL WEATHER SERVICE MARINE TEXT PRODUCTS
HURRICANE PRODUCTS

**** IMPORTANT NOTICES ****

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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

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

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 |

Author: Timothy Rulon, Marine and Coastal Weather Services Branch W/OS21
National Weather Service
Last Modified Aug 27, 2008
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<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.

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

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

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.txt |
| 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 | fzsz50.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 |

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National Weather Service
Last Modified Aug 27, 2008
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.yyyzzzz
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 retrieve 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

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.

* In order to subscribe, the customer must be logged into the e-mail account to which they wish the notice sent. When the hyperlink below is selected, an e-mail window is generated with the "To" and "From" addresses filled out. The "Subject" and "Body" will be blank. Selecting "Send" subscribes the user to the e-mailed Notice to Mariners.

* Instructions to unsubscribe from the notice are included in each Notice to Mariners e-mail.

Privacy Act Advisory

Your e-mail address will be used for the purpose of electronically mailing the U.S. Notice to Mariners to you. Upon receipt of your subscription, your identification as the sender will be stripped from your e-mail and only the destination e-mail address you provide will be automatically added to the subscription list. Subscriptions will be processed automatically. If you unsubscribe, your e-mail address will be purged from the file and will not be retained. NGA may collect statistical data about the number of subscribers, number of subscription cancellations, and the number of delivery failures.

To subscribe to U.S. Notices to Mariners by E-mail:

Send an e-mail to: join-ntm@goldweb.nga.mil

Subject line: Leave blank

Body: Leave blank

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

Cellphone page

mobile.weather.gov

Mobile Page

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/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 Automated Mutual-assistance Vessel Rescue 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@battery.ny.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, Oceans, 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) - \$1.25¹

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.

| <u>Location</u> | <u>Number</u> |
|---|---------------|
| 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) Free⁶

[NWS Observing Handbook NO.1 \(7/04\)](#) Free⁶

[Marine Report User Guide](#)

[Worldwide Marine Radiofacsimile Broadcast Schedules](#) (Feb 24, 2009) Free⁴

[NOAA Weather Radio Brochure](#) (NOAA/PA 94070, 3/97) Free²

[NOAA Weather Radio Handout](#) (NOAA/PA 94061, 3/97) Free²

[A Mariners Guide to Marine Weather Services - Great Lakes](#) (NOAA/PA 98053) Free²

[A Mariners Guide to Marine Weather Services - Coastal, Offshore, and High Seas](#) (NOAA/PA 98054) Free²

[Safe Boating Weather Tips](#) (NOAA/PA 94058, 6/98) Free²

[National Ocean Service Coast Pilot, Volumes 1-9](#)¹

[Directory of Private Weather Services](#) - Free¹⁰

[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)

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[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](#) (Bowditch) 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) Free⁹

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 Signals⁸

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-908E¹²

NAVTEX Manual, 1994; IMO-951E¹²

GMDSS Handbook, 1995 (Includes GMDSS Master Plan); IMO-970E¹²

SOLAS Consolidated Edition, 1997; IMO-110E¹²

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 \(Includes broadcast information\)](#)

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<http://chartmaker.ncd.noaa.gov>

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2. Available Internet: Via <http://www.nws.noaa.gov/om/index.html>

Or from your [local National Weather Service Forecast Office](#).

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3. Superintendent of Documents
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<http://www.gpo.gov>
<http://www.vos.noaa.gov/mwl.shtml>
(Distributed free to ships in VOS program)
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4. (Printed version available only to ships participating in U.S. VOS program)
web version <http://www.nws.noaa.gov/om/marine/rfax.pdf>
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5. Joint Publication of National Weather Service and Naval Oceanography Command
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6. (Some publications available only to ships participating in U.S. VOS program)
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<http://www.ukho.gov.uk/amd/distributorsList.asp> (Distributors)
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<http://www.navcen.uscg.gov/marcomms/gmdss/#Brochure>
<http://www.navcen.uscg.gov/marcomms/default.htm>

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<http://www.prh.noaa.gov/itic/>**
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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.**
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<http://www.wmo.ch/web/catalogue/>**

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NOAA WEATHER RADIO NETWORK

- (1) 162.550 mHz
- (2) 162.400 mHz
- (3) 162.475 mHz
- (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.

