WORLDWIDE MARINE RADIOFACSIMILE BROADCAST SCHEDULES

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

NATIONAL WEATHER SERVICE

JANUARY 20, 2000

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, 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, 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 new and exciting 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 Internet at:

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

This 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.

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SOUTH AMERICA

NORTH AMERICA

PACIFIC OCEAN BASIN

EUROPE

ANTARCTICA

APPENDICIES

ABOUT THIS PUBLICATION

Many of the schedules contained in this book, were obtained from the World Meteorological Organization (WMO) publication, AWeather Reporting, WMO/OMM number 9, Vol. C, Meteorological Messages.@ Some of the more current schedule changes were received from interested sources, direct from the broadcast source or from the country site on the INTERNET. Wherever possible, the schedules are dated with the latest change available. The National Weather Service would like to thank everyone who provided assistance.

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

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

For information on weather broadcasts worldwide, also refer to NIMA Publication 117 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. Both these publications are highly recommended.

We receive many inquires on the status of the U.S. Navy radiofax broadcasts. The U.S. Navy terminated all regularly scheduled radiofax transmissions with the exception of the Mediterranean beginning January 1, 1998 and services to the Mediterranean from Rota, Spain beginning March 1, 1999. **Radiofax products for the Mediterranean** (http://192.195.30.33/nemoc/prods/faxsked.html) are still made available via Internet, however. The system is operated in a back-up mode for on-demand service by fleet units upon request. Previous plans to permanently terminate the Navy radiofax program by January 1, 1999 are being reviewed. These transmissions are to meet the requirements of the U.S. military and have no direct connection to the National Weather Service's radiofax program. For questions on the U.S. Navy's radiofax program, contact the NAVLANTMETOCCEN Command Duty Officer at 1-757-444-4044, e-mail cdo@nlmoc.navy.mil

Please direct comments, recommendations, additions or deletions for this publication to:

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AFRICA

CAIRO 1, EGYPT

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
SUU 36	4526	kHz	CONTINUOUS	F3C	10 KW
SUU 2	10123	kHz	CONTINUOUS	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	12HR SURFACE PROG	120/576	06/18	A
0020/1220	SURFACE ANALYSIS	120/576	18/06	A
0040/-------	30MB ANALYSIS	120/576	1200	A
-------/1240	SATELLITE IMAGE/WIND ANAL	120/576	1200	A
0340/1540	12HR 500MB PROG	120/576	12/00	A
0400/1600	12HR 300MB PROG	120/576	12/00	A
0420/1620	12HR 200MB PROG	120/576	12/00	A
0440/1640	12HR SIGNIFICANT WEATHER PROG	120/576	12/00	A
0500/1700	12HR MAX WIND PROG	120/576	12/00	A
0520/1720	12HR 700MB PROG	120/576	12/00	A
0540/1740	12HR 250MB PROG	120/576	12/00	A
0600/1800	12HR SURFACE PROG	120/576	12/00	A
0640/1240	24HR SURFACE PROG	120/576	00/12	A
0700/1900	850MB ANALYSIS	120/576	00/12	A
0720/1920	700MB ANALYSIS	120/576	00/12	A
0740/1940	500MB ANALYSIS	120/576	00/12	A
0800/2000	300MB ANALYSIS	120/576	00/12	A
0820/2020	250MB ANALYSIS	120/576	00/12	A
0840/2040	200MB ANALYSIS	120/576	00/12	A
0900/2100	TROPOPAUSE/MAX WIND ANALYSIS	120/576	00/12	A
0920/2120	100MB ANALYSIS	120/576	00/12	A
0940/2140	18HR 500MB PROG	120/576	18/06	A
1000/2200	18HR 300MB PROG	120/576	18/06	A
1020/2220	18HR 200MB PROG	120/576	18/06	A
1040/2240	18HR SIGNIFICANT WEATHER PROG	120/576	18/06	A
1120/2320	18HR 700MB PROG	120/576	18/06	A
1140/2340	18HR 250MB PROG	120/576	18/06	A

NOTES: 1. DURATION TIMES (I.E. 18HR) MAY BE INCORRECT.

MAP AREA: A - 1:20,000,000 20W - 085E 61N - 10S

(INFORMATION DATED 09/1996)

CAIRO 2, EGYPT

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
SUU29	11015	kHz	1900-0700	F3C	10 KW
SUU33	15664	kHz	#	F3C	10 KW
SUU45	17635	kHz	0700-1900	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0010/1210	18HR 250MB PROG	120/576	06/18	A
0030/1230	18HR SURFACE PROG	120/576	06/18	A
0050/1250	SURFACE ANALYSIS	120/576	18/06	A
0110/-------	24HR 500MB PROG	120/576	1200	A
-------/1310	NEPHANALYSIS	120/576	-------	A
-------/1610	24HR 500MB PROG	120/576	0000	A
0430/1630	24HR 300MB PROG	120/576	12/00	A
0450/1650	24HR 200MB PROG	120/576	12/00	A
0510/1710	24HR SIGNIFICANT WEATHER PROG	120/576	12/00	
0530/1730	24HR TROPOPAUSE/MAX WIND PROG	120/576	12/00	A
0550/1750	24HR 700MB PROG	120/576	12/00	A

CAIRO 2, EGYPT

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0610/-------	24HR 250MB PROG	120/576	1200	A
0630/-------	24HR SURFACE PROG	120/576	1200	A
-------/1840	24HR 250MB PROG	120/576	0000	A
-------/1850	24HR SURFACE PROG	120/576	0000	A
0730/1930	SURFACE ANALYSIS	120/576	00/12	A
0750/1950	700MB ANALYSIS	120/576	00/12	A
0810/2010	500MB ANALYSIS	120/576	00/12	A
0830/2030	300MB ANALYSIS	120/576	00/12	A
0850/2050	250MB ANALYSIS	120/576	00/12	A
0910/2110	200MB ANALYSIS	120/576	00/12	A
0930/2130	TROPOPAUSE/MAX WIND ANALYSIS	120/576	00/12	A
0950/2150	100MB ANALYSIS	120/576	00/12	A
1010/2210	18HR 500MB PROG	120/576	18/06	A
1030/2230	18HR 300MB PROG	120/576	18/06	A
1050/2250	18HR 200MB PROG	120/576	18/06	A
1110/2310	18HR SIGNIFICANT WEATHER PROG	120/576	18/06	A
1130/2330	18HR TROPOPAUSE/MAX WIND PROG	120/576	18/06	A
1150/2350	18HR 700MB PROG	120/576	18/06	A

NOTES: 1. POINT TO POINT BROADCAST BETWEEN CAIRO AND NAIROBI. THIS BROADCAST MAY ONLY BE AVAILABLE ALONG THE EAST COAST OF AFRICA AND THE RED SEA.
2. # - ON REQUEST BY NAIROBI ONLY.

MAP AREA: A - 1:20,000,000 22W-85E, 61N-10S

(INFORMATION DATED 07/1983)

NAIROBI, KENYA

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
5YE1	9043	kHz	CONTINUOUS	F3C	6 KW
5YE2	12315	kHz	CONTINUOUS	F3C	30 KW
5YE8	15525	kHz	CONTINUOUS	F3C	30 KW
5YE6	16315	kHz	CONTINUOUS	F3C	30 KW
5YE3	17365	kHz	CONTINUOUS	F3C	6 KW
5YE7	22867	kHz	CONTINUOUS	F3C	30 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0010/-------	18HR SIGNIFICANT WEATHER PROG (MID LEVEL)	120/576	1200	B
-------/1210	700MB ANALYSIS	120/576	0600	B
-------/1229	500MB ANALYSIS	120/576	0600	B
-------/1248	300MB ANALYSIS	120/576	0600	B
-------/1307	250MB ANALYSIS	120/576	0600	B
-------/1326	200MB ANALYSIS	120/576	0600	E
-------/1345	SURFACE ANALYSIS (INDIAN OCEAN)	120/576	0600	E
-------/1430	LOW LEVEL CONVERGENCE ZONES	120/576	1200	C
-------/1455	24HR PRESSURE CHANGE	120/576	1200	D
0350/-------	TEST CHART	120/576		
0400/1600	18HR SIGNIFICANT WEATHER PROG (MID LEVEL)	120/576	18/06	A
-------/1638	SURFACE ANALYSIS	120/576	1200	D
-------/1653	850MB ANALYSIS	120/576	1200	D
-------/1708	SURFACE ANALYSIS	120/576	1200	E
-------/1722	18HR SIGNIFICANT WEATHER PROG (HI LEVEL)	120/576	0600	A
0540/-------	18HR SIGNIFICANT WEATHER PROG (LOW LEVEL)	120/576	1800	A
0600/1742	18HR SIGNIFICANT WEATHER PROG (MID LEVEL)	120/576	18/06	B
-------/1802	24HR SURFACE PROG	120/576	1200	D
-------/1820	700MB ANALYSIS	120/576	1200	B
-------/1839	500MB ANALYSIS	120/576	1200	

NAIROBI, KENYA

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-------/1858	300MB ANALYSIS	120/576	1200	B
-------/1917	250MB ANALYSIS	120/576	1200	B
-------/1936	200MB ANALYSIS	120/576	1200	B
0830/-------	TEST CHART	120/576		
0844/2055	24HR 500MB PROG	120/576	00/12	B
0903/2114	24HR 300MB PROG	120/576	00/12	B
0922/2133	24HR 250MB PROG	120/576	00/12	B
0941/2152	24HR 200MB PROG	120/576	00/12	B
1000/2210	18HR SIGNIFICANT WEATHER PROG (MID LEVEL)	120/576	00/12	A
1017/2350	18HR SIGNIFICANT WEATHER PROG (HI LEVEL)	120/576	00/12	A
1037/-------	18HR SIGNIFICANT WEATHER PROG (MID LEVEL)	120/576	0000	B
1057/-------	SURFACE ANALYSIS	120/576	0600	D
1112/-------	UPPER AIR ANALYSIS	120/576	0600	D
1127/-------	24HR PRESSURE CHANGE	120/576	0600	D
1142/-------	24HR SURFACE PROG	120/576	0600	D

NOTE: CHANGES TO THE SCHEDULE WILL BE TRANSMITTED AT 0830 IN PLACE OF THE NORMAL TEST CHART.

MAP AREAS:

A - 1:15,000,000	30N	005W,	30N	070E,	30S	005W,	30S	070E
B - 1:25,000,000	55N	020W,	55N	090E,	35S	020W,	35S	090E
C - 1:07,500,000	22N	025E,	22N	060E,	02S	025E,	02S	060E
D - 1:15,000,000	30N	015E,	30N	070E,	30S	015E,	30S	070E
E - 1:15,000,000	20N	030E,	20N	070E,	30S	030E,	30S	070E

(INFORMATION DATED 09/1996)

ST. DENIS/CHAUDRON, REUNION

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
FZR81	8176 kHz		F3C	1 KW
FZS63	16335 kHz		F3C	1 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0430	TEST CHART	120/576		
0433	12HR 850-700MB WINDS PROG	120/576	1200	SIO
0445	12HR 500-200MB WINDS PROG	120/576	1200	SIO
0457	12HR 850-200MB VERTICAL SHEARING PROG	120/576	1200	SIO
0509	12HR 850MB VORTICITY-DIVERGENCE PROG	120/576	1200	SIO
0521	12HR 200MB VORTICITY-DIVERGENCE PROG	120/576	1200	SIO
0533	12HR STEERING CURRENT ANALYSIS-PROG	120/576	1200	SIO
0545	24HR/48HR STEERING CURRENT PROG	120/576	1200	SIO
0730	TEST CHART	120/576		
0733	SURFACE ANALYSIS (MSL)	120/576	0000	
0745	9HR SIGNIFICANT WEATHER PROG	120/576	0900	SIO
0758	24HR/48HR SURFACE PROG	120/576	0000	SIO
0807	24HR 850-700MB WINDS PROG	120/576	0000	SIO
0843	24HR/48HR 850-200MB VERTICAL SHEARING PROG	120/576	0000	SIO
0855	48HR 850-700MB WINDS PROG	120/576	0000	SIO
0919	OBSERVED AND FORECAST TROPICAL CYCLONE(S) TRACK	120/576		
1040	24HR 850MB VORTICITY-DIVERGENCE PROG	120/576	0000	SIO
1104	SURFACE ANALYSIS	120/576	0600	SIO
1114	48HR 850MB VORTICITY-DIVERGENCE PROG	120/576	0000	SIO
1138	12HR SURFACE WINDS ANALYSIS-PROG	120/576	0000	SIO

MAP AREAS: SIO - TROPICAL AND SUB-TROPICAL SOUTH INDIAN OCEAN

(INFORMATION DATED 10/1996)

DAKAR, SENEGAL

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
6VU 23	4790.5 kHz	CONTINUOUS	F3C	5 KW
6VU 73	13667.5 kHz	CONTINUOUS	F3C	10 KW
6VU 79	19750 kHz	CONTINUOUS	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-------/1240	TEST CHART	120/576		
0100/1300	18HR SIGNIFICANT WEATHER PROG	60/576	12/00	B
0340/-------	TEST CHART	120/576		
0400/1600	SURFACE ANALYSIS	120/576	00/12	A
0445/1645	850MB ANALYSIS	120/576	00/12	A
0500/1700	700MB ANALYSIS	120/576	00/12	A
0515/1715	300MB ANALYSIS	120/576	00/12	A
0530/1730	250MB ANALYSIS	120/576	00/12	A
0545/1745	18HR SIGNIFICANT WEATHER PROG	60/576	18/06	C
0615/1815	200MB ANALYSIS	120/576	00/12	A
0630/1830	500MB ANALYSIS	120/576	00/12	A/B
0700/1900	18HR SIGNIFICANT WEATHER PROG	60/576	18/06	B
0740/1940	TEST CHART	120/576		
0820/2020	24HR UPPER AIR PROG (FL 180)	120/576	00/12	B
0840/2040	24HR UPPER AIR PROG (FL 300)	120/576	00/12	B
0900/2100	24HR UPPER AIR PROG (FL 340)	120/576	00/12	B
0920/2120	24HR UPPER AIR PROG (FL 390)	120/576	00/12	B
0940/2140	TEST CHART	120/576		
1000/2200	SURFACE ANALYSIS	120/576	06/18	A
1040/2240	TEST CHART	120/576		
1145/2345	18HR SIGNIFICANT WEATHER PROG	60/576	00/12	C

NOTE: THE TRANSMISSION IS CENTERED 1.900 Hz ABOVE THE ASSIGNED FREQUENCY.

MAP AREAS:	A -		35N	035W,	35N	022.5E,	EQ	035W,	EQ	022.5E
	B -	1:15,000,000	55N	030W,	55N	040.0E,	05S	030W,	05S	040.0E
	C -	1:25,000,000	40N	050W,	40N	033.0E,	20S	050W,	20S	033.0E

(INFORMATION DATED 09/1996)

ASIA

BEIJING (PEKING), CHINA

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
BAF6	5525 kHz		F3C	6-8 KW
BAF36	8120 kHz		F3C	6-8 KW
BAF4	10115 kHz		F3C	10 KW
BAF8	14365 kHz		F3C	15 KW
BAF9	16025 kHz		F3C	UNK
BAF33	18235 kHz		F3C	6-8 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0008	500MB SYNOPTIC TREND PROG FOR THE NEXT DECADE (9)	120/576	1200	F
	24HR/36HR/48HR PRECIPITATION PROG (1 JUN-30 SEP)	120/576	1200	E
0030	RETRANSMISSION	120/576	1200	B1
0048	700MB WIND SPEED ANALYSIS/500-850MB POTENTIAL TEMP			
	700MB POTENTIAL TEMP	120/576	1200	I
0110	700MB TEMP-DP DIFFERENCE/700MB VAPOR FLUX			
	DIVERGENCE/500-1000MB THICKNESS/850MB TEMP ANALYSIS	120/576	1200	I
0132	36HR/48HR SURFACE PRESSURE 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		
0322	850MB PLOTTED DATA	120/576	0000	E
0344	700MB PLOTTED DATA	120/576	0000	E
0406	500MB PLOTTED DATA	120/576	0000	E
0428	48HR SURFACE PROG	120/576	1800	F
0450	SURFACE ANAL	120/576	0000	H
0512	48/72HR 500MB PROGS (ECMWF)	120/576	1200	B2
0534	96/120HR 500MB PROGS (ECMWF)	120/576	1200	B2
0556	500MB ANALYSIS	120/576	0000	F
0618	700MB ANALYSIS	120/576	0000	F
0640	850MB ANALYSIS	120/576	0000	F
0702	RADAR ECHO (1 JUN-30 SEP)	120/576		J
0724	SATELLITE PICTURE ANALYSIS (1 MAY-30 SEP)	120/576		
0746	TYPHOON WARNING (IN ENGLISH & CHINESE)(1)	120/576	0600	
0808	700MB VERTICAL P-VELOCITY/500MB VORTICITY			
	24HR PRECIPITATION PROG/12-36HR PRECIPITATION PROG	120/576	0000	I
0830	SURFACE PRESSURE ANALYSIS	120/576	0000	C
0852	24HR PRECIPITATION PROG	120/576		J
0914	RADAR ECHO (1 JUN-30 SEP)	120/576		J
0936	200MB ANALYSIS	120/576	0000	C
0958	500MB MONTHLY MEAN ULTRA-LONG WAVE (13)	120/576	1200	A2
	500MB HEIGHT FOR THE NEXT MONTH (5)	120/576	1200	B2
	500MB MEAN HEIGHT OF THE PRECEDING PENTAD (6)	120/576	1200	A2
	RETRANSMISSION (12)			
1020	500MB MONTHLY MEAN SPHERICAL HARMONIC (11)			
	COEFFICIENT AND MEAN KINETIC ENERGY	120/576	1200	A2
	500MB MEAN HEIGHT OF THE PRECEDING DECADE (7)	120/576	1200	A2
	PRECIP ANOMALY PERCENTAGE FOR THE NEXT MONTH (5)	120/576	1200	E
1030	MEAN TEMP ANOMALY FOR THE NEXT MONTH (5)	120/576	1200	E
1042	500MB MONTHLY MEAN VORTICITY ANOMALY (11)	120/576	1200	A2
	500MB MEAN HEIGHT OF THE PERCEDING MONTH (8)	120/576	1200	A2
	500MB MONTHLY MEAN CIRCULATION CHARACTERISTIC (10)			
	VALUE/SEA TEMPERATURE	120/576	1200	A2
1104	500MB HEIGHT ANOMALY OF THE PRECEDING MONTH (8)	120/576	1200	A2
1126	TYPHOON TRACK FORECAST (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	
1820	850MB PLOTTED DATA	120/576	1200	E
1842	700MB PLOTTED DATA	120/576	1200	E
1904	500MB PLOTTED DATA	120/576	1200	E
1926	SURFACE PRESSURE ANALYSIS	120/576	1200	G

BEIJING (PEKING), CHINA

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
1948	TYPHOON WARNING (IN ENGLISH AND CHINESE)(1)	120/576	1800	
2010	700MB ANALYSIS	120/576	1200	B1
2028	200/100MB ANALYSIS	120/576	1200	A1
2050	500/300MB ANALYSIS	120/576	1200	A1
2112	500MB VORTICITY ANALYSIS/700MB VAPOR FLUX ANALYSIS/ 700MB VERTICAL P-VELOCITY ANALYSIS/ 850MB VAPOR FLUX ANALYSIS	120/576	1200	I
2134	24HR PRESSURE CHANGES/72HR 500MB PROG	120/576	1200	A1
2156	48HR 500MB PROG/36HR 700MB PROG	120/576	1200	
2218	36HR/48HR 500MB VORTICITY PROGS/ 36HR/48HR 700MB VERTICAL P-VELOCITY PROGS	120/576	1200	I
2240	TYPHOON TRACK FORECAST(2)	120/576	1200	D
2302	36HR/48HR 700MB VAPOR FLUX PROGS/ 36HR 850MB VAPOR FLUX PROG/ 48HR 700MB VAPOR FLUX DIVERGENCE	120/576	1200	I
2324	36HR 700MB WIND SPEED PROG/ 36HR 500/850MB POTENTIAL TEMP DIFFERENCE PROG/ 36HR 850MB WIND SPEED PROG 36HR 700MB POTENTIAL TEMP DIFFERENCE PROG	120/576	1200	I
2346	36HR 700MB TEMP-DP DIFFERENCE PROG/12-36HR 500MB HEIGHT CHANGE PROG/36HR 500-1000 THICKNESS PROG/ 36HR 850MB TEMP PROG	120/576	1200	I

NOTES:
(1) IN CASE OF TYPHOON.
(2) UNFIXED ISSUE OF FORECAST ACCORDING TO TYPHOON DEVELOPMENT.
(4) ON MONDAYS.
(5) ON THE 24TH OF EACH MONTH.
(6) ON THE 3RD, 7TH, 13TH, 17TH, 23RD, AND 27TH OF EACH MONTH.
(7) ON THE 3RD, 13TH, 23RD OF EACH MONTH.
(8) ON THE 3RD OF EACH MONTH.
(9) ON THE 10TH, 20TH, AND AT THE END OF EACH MONTH.
(10) ON THE 13TH OF EACH MONTH.
(11) ON THE 7TH OF EACH MONTH.
(12) ON THE 14TH OF EACH MONTH.
(13) TRANSMISSION IS CENTERED 1900 kHz ABOVE THE REGISTERED FREQUENCY.

MAP AREAS:

A1 -	1:30,000,000	NORTHERN HEMISPHERE							
A2 -	1:55,000,000	NORTHERN HEMISPHERE							
B1 -	1:30,000,000	EQ	000,	EQ	180,	90N	000,	90N	180
B2 -	1:55,000,000	80N	000,	80N	180,	EQ	000,	EQ	180
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	T108E	33N	120E

(INFORMATION DATED 06/1993)

SHANGHAI, CHINA

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER
BDF	3241	kHz		F3C	
	5100	kHz		F3C	
	7420	kHz		F3C	
	11420	kHz		F3C	
	18940	kHz		F3C	

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0010	SURFACE PROG	120/576		B
0130	SURFACE ANALYSIS	120/576		A
1810	SURFACE PROG	120/576		B
2030	SURFACE ANALYSIS	120/576		A

MAP AREAS: A - 60N 90E, 50N 180, 10N 100E, 05N 160E
B - YELLOW SEA, EAST CHINA SEA

(INFORMATION DATED 12/1992)

NEW DELHI, INDIA

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
ATP57	7403	kHz	1430-0230	B9W	5 KW
ATV65	14840	kHz	0230-1430	B9W	7.5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0011/1211	SURFACE ANALYSIS	120/576	18/06	A
0030/1230	24HR 250MB WIND & TEMP PROG	120/576	12/00	H
0050/1248	24HR 500MB WIND & TEMP PROG	120/576	12/00	H
0110/1306	24HR 850MB WIND & TEMP PROG	120/576	12/00	H
0130/1324	12HR SIGNIFICANT WEATHER PROG (4 PANEL)	120/576	(1)	B
0150/------	96HR 500MB PROG (ECMWF)	120/576	1200	A
-------/1342	24HR 300MB WIND & TEMP PROG	120/576	0000	H
0200/1400	24HR 400MB WIND & TEMP PROG	120/576	12/00	H
0238/-------	24HR 300MB WIND & TEMP PROG	120/576	12/00	H
------/1430	24HR 200MB WIND & TEMP PROG	120/576	0000	H
0300/-------	24HR 700MB WIND & TEMP PROG	120/576	1200	H
------/1448	24HR 150MB WIND & TEMP PROG	120/576	0000	H
0300/-------	24HR 200MB WIND & TEMP PROG	120/576	1200	H
------/1506	24HR 700MB WIND & TEMP PROG	120/576	0000	H
0340/-------	24HR 150MB WIND & TEMP PROG	120/576	1200	H
0400/-------	48HR 200MB WIND PROG (ECMWF)	120/576	1200	A
0420/-------	72HR 500MB PROG (ECMWF)	120/576	1200	A
0440/-------	7 DAY MEAN SST ANALYSIS	120/576		F
0600/-------	INSAT IR SATELLITE IMAGE	120/576	0000	F
0622/1810	TEST CHART	120/576		
0634/1820	SURFACE ANALYSIS	120/576	00/12	A
-------/1840	500MB RELATIVE VORTICITY ANAL	120/576	1200	E
0654/1910	850MB ANALYSIS	120/576	00/12	A
0714/1928	700MB ANALYSIS	120/576	00/12	A
0734/1946	500MB ANALYSIS	120/576	00/12	A
0753/2004	300MB ANALYSIS	120/576	00/12	A
0812/2022	24HR SURFACE PROG	120/576	00/12	A
0834/2040	12HR SIGNIFICANT WEATHER PROG (4 PANEL)	120/576	(1)	B
0856/2100	200MB ANALYSIS	120/576	00/12	A
0916/2118	850-500MB THICKNESS ANALYSIS	120/576	00/12	A
0936/-------	24HR 500MB PROG	120/576	0000	A
-------/2136	500MB RELATIVE VORTICITY ANALYSIS	120/576	1200	D
1005/2205	SIGNIFICANT WEATHER RECEIVED FROM TOKYO	120/576		

NEW DELHI, INDIA

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-------/2223	24HR 500MB PROG	120/576	1200	A
1025/2241	24HR 300MB PROG	120/576	00/12	A
1055/2259	24HR 250MB PROG	120/576	00/12	B
1115/2317	24HR 200MB PROG	120/576	00/12	A
1135/2335	24HR TROPOPAUSE/MAX WIND PROG	120/576	00/12	A
1153/2353	24HR 100MB PROG	120/576	00/12	A

NOTES: 1. 0300-1500, 0900-2100, 1500-0300, 2100-0500

MAP AREAS: A - 1:20,000,000 45N - 25S, 30E - 125E
B - 1:20,000,000 EQ - 40N, 30E - 125E
D - 1:20,000,000 5N - 42.5N, 40E - 120E
E - 1:20,000,000 EQ - 60N, 25E - 120E
F - 1:20,000,000 EQ - 25N, 55E - 100E
H - 1:20,000,000 15S - 67.5N, 000E - 180E

(INFORMATION DATED 01/1998)

TOKYO 1, JAPAN

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
JMH	3622.5 kHz	CONTINUOUS	F3C	5 KW
JMH2	7305 kHz	CONTINUOUS	F3C	5 KW
JMH3	9970 kHz	CONTINUOUS	F3C	5 KW
JMH4	13597 kHz	CONTINUOUS	F3C	5 KW
JMH5	18220 kHz	CONTINUOUS	F3C	5 KW
JMH6	23522.9 kHz	CONTINUOUS	F3C	5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/------	72HR SURFACE PRESSURE/PRECIP PROGS	120/576	1200	C
-------/1200	24HR/48HR 850MB STREAM LINES PROGS	120/576	0000	H
0020/------	96HR SURFACE PRESSURE/PRECIP PROGS	120/576	1200	C
-------/1220	850MB/200MB STREAM LINES ANALYSIS	120/576	0000	H
0040/------	120HR SURFACE PRESSURE/PRECIP PROGS	120/576	1200	C
-------/1240	24HR/48HR 200MB STREAM LINES PROGS	120/576	0000	H
0103/1303	TEST CHART	120/576		
0110/1310	GMS SATELLITE IMAGE	120/576	00/12	C'
0130/------	SEA ICE ANALYSIS (2) & 48HR/168HR PROG (3) (SEASONAL)	120/576		L/L'
0150/1350	TROPICAL CYCLONE FORECAST(1)	120/576	00/12	E
0210/------	10-DAY MEAN SEA SURFACE TEMP/CURRENT PROG (4)	120/576		J
	10-DAY MEAN SEA SURFACE TEMP (5)	120/576		J
	SEA SURFACE CURRENT (6)	120/576		K
	SUB-SURFACE TEMP AT 100M (7)	120/576		K'
	10-DAY MEAN SEA SURFACE TEMP, CURRENT PROG (8)	120/576		P
0229/-------	RADIO PREDICTION (9)	120/576		
0240/1440	SURFACE ANALYSIS	120/576	00/12	C
0300/-------	10-DAY SEA SURFACE TEMP ANOMALY(4)/ANOMALY PROG(8)	120/576	LATEST	J'/J
0320/1520	SURFACE ANALYSIS	120/576	00/12	C'
0340/-------	BROADCAST SCHEDULE/MANUAL AMENDMENTS	120/576		
0402/1620	700MB ANALYSIS	120/576	00/12	C
0421/-------	WAVE ANALYSIS (NORTH PACIFIC)	120/576	0000	C'
0440/-------	WAVE ANALYSIS (JAPAN AREA)	120/576	0000	
0459/1640	500MB ANALYSIS	120/576	00/12	C
0518/1700	850MB ANALYSIS	120/576	00/12	C
-------/1719	WAVE ANALYSIS (JAPAN AREA)	120/576	1200	
0537/1738	500MB HT/VORTICITY/850MB TEMP/700MB VERTICAL P-VEL ANALYSIS	120/576	00/12	A'
0548/-------	24HR SURFACE PROG	120/576	0000	C
0607/1749	24HR 500MB HT/VORTICITY/SURFACE PRES/PRECIP PROGS	120/576	00/12	C

TOKYO 1, JAPAN

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0618/1800	24HR 500MB TEMP & 700MB DEW POINT DEPRESSION PROG			
	24HR 850MB TEMP, WIND & 700MB VERTICAL P-VELOCITY PROG	120/576	00/12	A'
0629/1811	36HR 500MB HEIGHT & VORTICITY PROG/			
	36HR SURFACE PRESSURE/PRECIP PROG	120/576	1200	A'
0640/1822	36HR 500MB TEMP/700MB DP DEPRESSION PROG			
	36HR 850MB TEMP/WIND & 700MB VERT P-VELOCITY PROG	120/576	1200	A'
0651/------	24HR WAVE PROG (NORTH PACIFIC)	120/576	0000	
0710/1910	GMS SATELLITE IMAGERY	120/576	06/18	C'
0730/------	24HR WAVE HEIGHT PROG (JAPAN AREA)	120/576	0000	
------/1930	24HR SURFACE/PRECIP PROG	120/576	1200	
0750/1950	TROPICAL CYCLONE FORECAST (1)	120/576	06/18	E
------/2010	24HR WAVE HEIGHT PROG (1) (JAPAN AREA)	120/576	1200	
0820/------	48HR SURFACE PRESSURE/PRECIP PROG	120/576	00/C-	C
0840/2040	SURFACE ANALYSIS	120/576	06/18	C'
0900/------	48HR 500MB HT/VORTICITY PROG	120/576	0000	
-------/2100	48HR SURFACE PRESSURE/PRECIP PROGS	120/576	1200	C
0920/2120	SURFACE ANALYSIS	120/576	06/18	C
0940/------	72HR SURFACE PRESSURE/PRECIP PROG	120/576	0000	C
------/2140	48HR 500MB HT/VORTICITY PROG	120/576	1200	C
1000/------	72HR 500MB HT/VORTICITY PROG	120/576	0000	C
------/2200	48HR 850MB TEMP/WIND & 700MB VERTICAL P-VELOCITY PROG	120/576	1200	C
1019/-------	SEA ICE CONDITION ANAL(2)/48HR & 168 HR PROGS(3)	120/576	LATEST	L/L'
------/2220	72HR 500MB HT/VORTICITY PROG	120/576	1200	C
1040/-------	24HR SURFACE PROG	120/576	0000	C
------/2240	72HR 850MB TEMP/WIND & 700MB VERT P-VELOCITY PROG	120/576	1200	C
------/2300	24HR/48HR 850MB STREAM LINES PROG	120/576	1200	H
1111/------	10-DAY MEAN SEA SURFACE TEMP/CURRENT PROG (4)	120/576		J
	10-DAY MEAN SEA SURFACE TEMP (5)	120/576		J
	SEA SURFACE CURRENT (6)	120/576		K
	SUB-SURFACE TEMP AT 100M (7)	120/576		K'
	10-DAY MEAN SEA SURFACE TEMP, CURRENT PROG (8)	120/576		P
------/2320	850MB/200MB STREAM LINES ANALYSIS	120/576	1200	H
1130/------	10-DAY MEAN SEA SURFACE TEMP ANOMALY (4)	120/576		J'
	10-DAY MEAN SEA SURFACE TEMP ANOMALY PROG(8)	120/576		J
------/2340	24HR/48HR 200MB STREAM LINES PROG	120/576	1200	H

NOTES:(1) IN CASE OF TROPICAL CYCLONE
(2) ON TUESDAY AND FRIDAY.
(3) ON WEDNESDAY AND SATURDAY.
(4) ON 2ND, 12TH AND 22ND.
(5) ON 4TH, 14TH AND 24TH.
(6) ON 6TH, 10TH, 16TH, 20TH, 26TH, AND 30TH (MARCH 1ST IF LEAP YEAR).
(7) ON THE 7TH, 17TH AND 27TH OF EACH MONTH.
(8) ON THE 9TH, 19TH, AND 29TH (ON FEB 28TH IF NOT LEAP YEAR).
(9) ON 20TH AN 21ST.
(10) ALTERNATING BLACK & WHITE SIGNALS WITH FREQUENCY OF 300Hz ARE TRANSMITTED FOR 10 SECONDS FOLLOWED BY PHASING SIGNALS TRANSMITTED FOR 30 SECONDS PRIOR TO CHART TRANSMISSION. STOP SIGNALS WILL BE TRANSMITTED FOR 15 SECONDS AT THE END OF EACH CHART.

MAP AREAS:

A' - 1:25,000,000	38N	086E,	51N	177E,	12N	111E,	17N	157E
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
D - 1:43,000,000	03S	065E,	11N	032W,	01S	132E,	15N	125W
D' - 1:63,000,000	14S	005E,	14S	085W,	16S	097E,	16S	177W
E - 1:30,000,000	30N	091E	43N	169E,	07N	154E	02N	113E
H - 1:35,000,000	60N	080E	60N	160W,	20S	080E	20S	160W
J - 1:15,000,000	53N	115E,	53N	180,	EQ	115E,	EQ	180
J' - 1:22,000,000	53N	115E,	53N	180,	EQ	115E,	EQ	180
K - 1:15,000,000	60N	100E,	60N	180,	EQ	100E,	EQ	180
K' - 1:08,000,000	51N	120E,	51N	180,	18N	120E,	18N	180
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

TOKYO 1, JAPAN

O - 1:43,000,000	36N	010E,	24N	170W,	10N	063E,	04N	144E
P - 1:54,000,000	70N	090E,	70N	070W,	70S	090E,	70S	070W
X - 1:10,000,000	46N	107E,	43N	160E,	18N	118E,	17N	147E
X' - 1:43,000,000	48N	093E,	55N	176E,	16N	120E,	18N	155E

(INFORMATION DATED 09/1998) http://www.kishou.go.jp/pub/jmh.html

TOKYO 2, JAPAN

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
JMJ	3365 kHz	CONTINUOUS	F3C	5 KW
JMJ2	5405 kHz	CONTINUOUS	F3C	5 KW
JMJ3	9438 kHz	CONTINUOUS	F3C	5 KW
JMJ4	14692.5 kHz	CONTINUOUS	F3C	5 KW
JMJ5	18441.2 kHz	CONTINUOUS	F3C	5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0013/1213	24HR FL 390 WIND/TEMP PROG	120/576	12/00	I
0032/1232	24HR FL 300 WIND/TEMP PROG	120/576	12/00	I
0051/1251	24HR 500MB HT/VORTICITY PROG	120/576	12/00	C
0110/1310	24HR 850MB TEMP/WIND & 700MB VERT P-VELOCITY PROGS	120/576	12/00	C
0129/1329	24HR SURFACE PRESSURE/PRECIP PROG	120/576	12/00	C
0148/------	MANUAL AMENDMENTS (AS NECESSARY)	120/576		
0200/------	TEST CHART	120/576		
0223/------	RETRANSMISSION OF 2052	120/576	1200	M
0735/1935	250MB ANALYSIS	120/576	12/00	Q
0754/1954	200MB ANALYSIS WITH TROPOPAUSE	120/576	12/00	Q
0814/2014	24HR 500MB PROG	120/576	12/00	Q
0833/2033	24HR 250MB PROG	120/576	12/00	Q
0852/2052	24HR SIGNIFICANT WEATHER PROG	120/576	12/00	M
0911/2111	24HR SIGNIFICANT WEATHER PROG	120/576	12/00	N
1000/2200	24HR FL 340 WIND/TEMP PROG	120/576	12/00	F
1038/2238	24HR FL 300 WIND/TEMP PROG	120/576	12/00	F
1057/2257	24HR FL 340 WIND/TEMP PROG	12 0/576	12/00	G
1116/2316	24HR FL 390 WIND/TEMP PROG	120/576	12/00	G
1135/2335	24HR FL 300 WIND/TEMP PROG	120/576	12/00	G
1154/2354	24HR FL 340 WIND/TEMP PROG	120/576	12/00	I

MAP AREAS:

C - 1:20,000,000	27N	062E,	51N	152W,	05S	106E,	02N	160E
F - 1:25,000,000	48N	106E,	48N	118W,	48S	106E,	48S	118W
G - 1:25,000,000	36N	024W,	22N	163E,	03S	041E,	07S	106E
I - 1:25,000,000	21N	113E,	37N	051W,	06S	172E,	EQ	121W
M - 1:25,000,000	70N	095E,	70N	165W,	10S	095E,	10S	165W
N - 1:25,000,000	65N	110E,	65N	115W,	10S	110E,	10S	115W
Q - 1:25,000,000	29N	045E,	29N	123W,	04S	107E,	04S	175E

NOTES: 1. ALTERNATING BLACK & WHITE SIGNALS WITH FREQUENCY OF 300Hz ARE TRANSMITTED FOR 10 SECONDS FOLLOWED BY PHASING SIGNALS TRANSMITTED FOR 30 SECONDS PRIOR TO TRANSMISSION OF EACH CHART. STOP SIGNALS WILL BE TRANSMITTED FOR 15 SECONDS AT THE END OF EACH CHART.

(INFORMATION DATED 12/1999) http://www.kishou.go.jp/pub/jmj.html

TAIPEI, REPUBLIC OF CHINA

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER
BMF	4616	kHz		F3C	10 KW
	5250	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
0010/------	GFS 72HR 850MB EQUATORIAL BELT WIND PROG	120/576	1200	
0025/-------	GFS 72HR 200MB EQUATORIAL BELT WIND PROG	120/576	1200	
0050/-------	BROADCAST SCHEDULE	120/576		
0120/1320	GMS SATELLITE IMAGE	120/576	00/12	
0200/1400	TYPHOON WARNINGS (ENGLISH & CHINESE)	120/576	00/12	
0300/1500	FISHERY WEATHER FORECAST (IN CHINESE)	120/576	00/12	
0350/1550	SURFACE ANALYSIS WITH PLOTTED DATA	120/576	00/12	
0425/------	24HR SURFACE PROG	120/576	0000	
0450/-------	TEST CHART	120/576		
0500/1700	TYPHOON WARNING (ENGLISH & CHINESE)	120/576	03/15	
0525/1725	850MB ANALYSIS WITH PLOTTED DATA	120/576	00/12	
0540/1740	700MB ANALYSIS WITH PLOTTED DATA	120/576	00/12	
0555/1755	500MB ANALYSIS WITH PLOTTED DATA	120/576	00/12	
0610/1810	300MB ANALYSIS WITH PLOTTED DATA	120/756	00/12	
0625/1825	RFS SURFACE PRESSURE ANALYSIS /RFS 500MB HEIGHT ANALYSIS	120/576	00/12	
0640/1840	RFS 12HR SURFACE PROG/RFS 12HR 500MB PROG	120/576	12/00	
0655/1855	RFS 24HR SURFACE PROG/RFS 24HR 500MB PROG	120/576	00/12	
0708/1908	RFS 36HR SURFACE PROG/RFS 24HR 500MB PROG	120/576	12/00	
0720/1920	GMS SATELLITE IMAGE	120/576	06/18	
0735/1935	RFS 48HR SURFACE PROG/RFS 48HR 500MB PROG	120/576	00/12	
0745/1945	GFS 850MB EQUATORIAL BELT WIND ANALYSIS	120/576	00/12	
0800/2000	TYPHOON WARNINGS (ENGLISH & CHINESE)	120/576	06/18	
0825/2025	GFS 12HR 850MB EQUATORIAL BELT WIND PROG	120/576	12/00	
0840/2040	GFS 48HR 850MB EQUATORIAL BELT WIND PROG	120/576	00/12	
0900/2100	FISHERY WEATHER FORECAST (IN CHINESE)	120/576	06/18	
0935/------	WAVE ANALYSIS	120/576	0000	
------/2135	GFS 72HR SURFACE PROG	120/576	1200	
0950/2150	SURFACE ANALYSIS WITH PLOTTED DATA	120/576	06/18	
------/2210	GFS 72HR 500MB PROG	120/576	1200	
1015-------	24HR WAVE PROG	120/576	0000	
1030/2230	GFS 200MB EQUATORIAL BELT WIND ANALYSIS	120/576	00/12	
1045/2245	GFS 24HR 200MB EQUATORIAL BELT WIND PROG	120/576	00/12	
1100/2300	TYPHOON WARNING (ENGLISH & CHINESE)	120/576	09/21	
1125/2325	GFS 48HR 200MB EQUATORIAL BELT WIND PROG	120/576	00/12	
------/2340	GFS 96HR SURFACE PROG	120/576	1200	
------/2355	GFS 96HR 500MB PROG	120/576	1200	

MAP AREA: 48N 060E, 48N 172W, EQ 099E, EQ 154E

(INFORMATION DATED 02/1999) http://marine.cwb.gov.tw/CWBMMC/BMF-E.html

SEOUL, REPUBLIC OF KOREA

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER
HLL2	5385	kHz	CONTINUOUS	F3C	3 KW
HLL2	5857.5	kHz	CONTINUOUS	F3C	3 KW
HLL2	7433.5	kHz	CONTINUOUS	F3C	3 KW
HLL2	9165	kHz	CONTINUOUS	F3C	3 KW
HLL2	13570	kHz	CONTINUOUS	F3C	3 KW

SEOUL, REPUBLIC OF KOREA

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	LOCAL WEATHER ADVISORY/WARNING REPORT (KOREAN)	120/576		
0020/1220	LOCAL WEATHER ADVISORY/WARNING REPORT (KOREAN)	120/576	00/12	
0032/-------	LIGHTHOUSE WEATHER OBSERVATION REPORT (KOREAN)	120/576	0000	
0046/1246	WEATHER OBSERVATION REPORT FOR FISHERY (KOREAN)	120/576	00/12	
0120/-------	MANUAL AMENDMENTS	120/576		
0140/1340	SURFACE ANALYSIS	120/576	00/12	
0200/1400	TYPHOON WARNING AND FORECAST (1)(KOREAN)	120/576	00/12	
0300/------	KOREAN PENINSULA MONTHLY WEATHER FORECAST (2)(KOREAN)	120/576		
-------/1500	LOCAL WEATHER ADVISORY/WARNING REPORT (KOREAN)	120/576		
0320/1520	SEA-SHORE WEATHER OBSERVATION REPORT (KOREAN)	120/576	03/15	
0332/-------	LIGHTHOUSE WEATHER OBSERVATION REPORT (KOREAN)	120/576	0300	
0346/1546	WEATHER OBSERVATION REPORT FOR FISHERY (KOREAN)	120/576	03/15	
0415/-------	KOREAN PENINSULA WEEKLY WEATHER FORECAST (KOREAN)	120/576		
0440/1640	SURFACE ANALYSIS	120/576	03/15	
0455/1655	850MB ANALYSIS	120/576	00/12	
0507/1707	700MB ANALYSIS	120/576	00/12	
0519/1719	500MB ANALYSIS	120/576	00/12	
0600/1800	LOCAL WEATHER ADVISORY/WARNING REPORT (KOREAN)	120/576		
0620/1820	SEA-SHORE WEATHER OBSERVATION REPORT (KOREAN)	120/576	0618	
0632/-------	LIGHTHOUSE WEATHER OBSERVATION REPORT (KOREAN)	120/576	0600	
0646/1846	WEATHER OBSERVATION REPORT FOR FISHERY (KOREAN)	120/576	06/18	
0700/1900	SATILLITE IMAGERY	120/576	0530/1730	
0712/-------	SST OBSERVATION CHART OF NEAR KOREAN PENINSULA AREA	120/576		
0740/1940	SURFACE ANALYSIS	120/576	06/18	
0800/2000	TYPHOON WARNING AND 12HR/24HR FORECASTS (1) (KOREAN)	120/576	06/18	
0821/2021	12HR SEA WAVE HT & WIND FORECAST OF NEAR KOREAN PENINSULA	120/576	00/12	
0834/2034	24HR SEA WAVE HT & WIND FORECAST OF NEAR KOREAN PENINSULA	120/576	00/12	
0847/2047	36HR SEA WAVE HT & WIND FORECAST OF NEAR KOREAN PENINSULA	120/576	00/12	
0900/2100	SEA WEATHER FORECAST OVER NEAR KOREAN PENINSULA (KOREAN)	120/576	0830/2030	
0920/2120	SEA-SHORE WEATHER OBSERVATION REPORT (KOREAN)	120/576	09/21	
0932/2132	LIGHTHOUSE WEATHER OBSERVATION REPORT (KOREAN)	120/576	09/21	
0946/2146	WEATHER OBSERVATION REPORT FOR FISHERY (KOREAN)	120/576	09/12	
1012/2212	WEATHER FORECAST FOR SHIP ROUTE (KOREAN)	120/576	0830/2030	
------/2227	LIGHTHOUSE WEATHER OBSERVATION REPORT (3) (KOREAN)	120/576	2200	
1040/2240	SURFACE ANALYSIS	120/576	09/21	

NOTES:
1. IN CASE OF TYPHOON.
2. BROADCAST AT THE END OF THE MONTH.
3. nOVEMBER TO APRIL.
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.

(INFORMATION DATED 02/1999) http://www.kma.go.kr/faxeng.htm

BANGKOK, THAILAND

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
HSW64	7395 kHz		F3C	3 KW
HSW61	17520 kHz		F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0150	TEST CHART	120/576		
0200	SURFACE ANALYSIS	120/576	1800	A
0220	RADAR OBSERVATIONS	120/576	0200	A
0320	RADAR OBSERVATIONS	120/576	0300	A

BANGKOK, THAILAND

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0400	NEPHANALYSIS	120/576	0000	A
0420	RADAR OBSERVATIONS	120/576	0400	A
0440	SURFACE ANALYSIS	120/576	0000	A
0520	RADAR OBSERVATIONS	120/576	0500	A
0540	850MB ANALYSIS	120/576	0000	A
0600	700MB ANALYSIS	120/576	0000	A
0620	RADAR OBSERVATIONS	120/576	0600	A
0640	500MB ANALYSIS	120/576	0000	A
0720	RADAR OBSERVATIONS	120/576	0700	A
0820	RADAR OBSERVATIONS	120/576	0800	A
0920	RADAR OBSERVATIONS	120/576	0900	A
1020	RADAR OBSERVATIONS	120/576	1000	A
1100	SURFACE ANALYSIS	120/576	0600	A
1120	RADAR OBSERVATIONS	120/576	1100	A
1220	RADAR OBSERVATIONS	120/576	1200	A
1320	RADAR OBSERVATIONS	120/576	1300	A
1400	NEPHANALYSIS	120/576	1200	A
1700	SURFACE ANALYSIS	120/576	1200	A
2300	SURFACE ANALYSIS	120/576	1800	A

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

(INFORMATION DATED 07/1991)

TASHKENT 1, UZBEKISTAN

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
RBV70	3690	kHz	1300-0130	F3C	
RPJ78	4365	kHz	CONTINUOUS	F3C	
RBV78	5890	kHz	CONTINUOUS	F3C	
RBX72	7570	kHz	0130-1300	F3C	
RCH72	9340	kHz	CONTINUOUS	F3C	
RBV76	14982.5	kHz	CONTINUOUS	F3C	

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
------/1215	NEPHANALYSIS	90/576	------	A*
0110/------	RADAR DATA	90/576	0000	E
0130/1325	18HR SIGNIFICANT WEATHER PROG	60/576	06/18	D
0155/1355	SURFACE ANALYSIS	60/576	00/12	B
0255/1455	SURFACE ANALYSIS	60/576	00/12	A
0345/1540	700MB ANALYSIS	90/576	00/12	A
------/1615	400MB ANALYSIS	90/576	1200	A
0420/------	NEPHANALYSIS	90/576	------	A
0450/------	300MB ANALYSIS	120/576	0000	A
------/1655	SURFACE ANALYSIS	60/576	1500	B
0515/------	850MB ANALYSIS	90/576	0000	A
------/1745	500/1000MB ANALYSIS	90/576	1200	A
0625/1850	36HR 500MB PROG	120/288	12/00	C
0633/------	36HR 850MB/700MB/500MB VERTICAL MOTION PROGS	90/576	1200	C
0650/------	RADAR DATA	90/576	0600	E
------/1905	PRECIPITATION AND MAX TEMPS	60/576	1500	K
0720/------	400MB ANALYSIS	90/576	0000	A
0755/1930	SURFACE ANALYSIS	60/576	06/18	B
------/2020	SURFACE ANALYSIS	60/576	1800	A
0845/------	50MB ANALYSIS	90/576	0600	A
------/2105	36HR 850MB/700MB/500MB VERTICAL MOTION PROGS	90/576	0000	C
0930/2122	TROPOPAUSE ANALYSIS	90/576	00/12	A

TASHKENT 1, UZBEKISTAN

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
------/2200	RADAR DATA	90/576	2100	E
1005/------	500/1000MB ANALYSIS	90/576	0000	A
1055/2255	SURFACE ANALYSIS	60/576	09/21	B
------/2345	24HR 850MB/700MB/500MB VERTICAL MOTION PROGS	90/576	1200	C

NOTE: DESCRIPTIONS OF MAP AREAS ARE LISTED IN PROGRAM 2..

(INFORMATION DATED 09/1990)

TASHKENT 2, UZBEKISTAN

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER
RBX70	3280	kHz	CONTINUOUS	F3C	
RBX71	5285	kHz	CONTINUOUS	F3C	
RIJ75	8083	kHz	1400-0200	F3C	
RCH73	9150	kHz	CONTINUOUS	F3C	
ROM5	13947	kHz	0200-1400	F3C	

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0030/------	BROADCAST SCHEDULE	90/576		
0050/1250	RADAR DATA	90/576	00/12	E
0130/	18HR SIGNIFICANT WEATHER PROG	60/576	06/18	H
-------/1330	PREBARIC CHART	60/576	1800	H
0258/------	48HR 500MB PROG	90/576	0000	C
0315/1515	300MB ANALYSIS	90/576	00/12	A
0350/1550	RADAR DATA	90/576	03/15	E
0410/1605	500MB ANALYSIS	90/576	00/12	A
-------/1640	850MB ANALYSIS	90/576	1200	A
0500/------	SURFACE ANALYSIS	60/576	0300	B
0550/1720	200MB ANALYSIS	90/576	00/12	A
-------/1755	100MB ANALYSIS	90/576	1200	A
0625/------	PRECIPITATION/TEMPERATURE EXTREMES	90/576	1200	A
0640/------	400MB ANALYSIS	90/576	0000	A
-------/1905	RADAR DATA	90/576	1800	E
0715/------	100MB ANALYSIS	90/576	0000	A
0750/1930	15HR 300MB/SIGNIFICANT WEATHER PROG	90/576	15/03	H
-------/2 015	MAX WIND ANALYSIS	90/576	1200	D*
0830/------	500MB ANALYSIS	60/576	0600	A
0915/2105	MAX WIND ANALYSIS	90/576	00/18	A/D*
-------/2122	700MB ANALYSIS	90 /576	1800	D*
-------/2139	500MB ANALYSIS	90/576	1800	D*
0950/------	RADAR DATA	90/576	0900	E
-------/2155	400MB ANALYSIS	90/576	1800	D*
-------/2212	300MB ANALYSIS	90/576	1800	D*
1140/2320	12HR 300MB/SIGNIFICANT WEATHER PROGS	90/576	18/00	H

MAP AREAS:										
	A - 1:15,000,000	45N	037W,	43N	125E,	16N	011E,	15N	078E
	A* - 1:15,000,000	57N	005W,	27N	123E,	14N	030E,	02N	088E
	B - 1:05,000,000	45N	030E,	49N	081E,	26N	040E,	28N	077E
	C - 1:15,000,000	53N	006W,	48N	095E,	25N	026E,	22N	072E
	D - 1:15,000,000	56N	021W,	58N	108E,	30N	016E,	31N	072E
	D* - 1:15,000,000	70N	008W,	47N	118E,	34N	029E,	24N	082E
	H - 1:15,000,000	56N	021E,	58N	108E,	30N	016E,	31N	072E
	K - 1:07,500,000	47N	038E,	49N	079E,	30N	046E,	31N	174E

(INFORMATION DATED 07/1997)

SOUTH AMERICA

MARAMBIO, ARGENTINA

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER	
LSB	2401	kHz		F3C	10	KW
LSB	4807	kHz		F3C	10	KW
LSB	9951	kHz		F3C	10	KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0025	SURFACE ANALYSIS	120/576	1800	SH
0325	SURFACE ANALYSIS	120/576	0000	SH
1225	SURFACE ANALYSIS	120/576	0600	SH
1525	SURFACE ANALYSIS	120/576	1200	SH

NOTE: ONLY INFORMATION AVALABLE

INFORMATION DATED 09/1996

PUERTO BELGRANA, ARGENTINA

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER
LOR	5705	kHz		F3C	
	12672	kHz		F3C	

NO INFORMATION ABOUT THIS BROADCAST IS AVAILABLE OTHER THAN IT IS BEING TRANSMITTED BY THE ARGENTINE NAVY. THE CONTENTS OF THIS BROADCAST ARE IN SPANISH.

(INFORMATION DATED 07/1997)

RIO DE JANEIRO, BRAZIL

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER	
PWZ-33	12660	kHz	0745/1745	F3C	1	KW
PWZ-33	17140	kHz	0745/1745	F3C	1	KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0745	TEST CHART	120/576		
0750	SEA SURFACE TEMPERATURE-CLIMAT AVERAGE DATA	120/576		A
0800	SURFACE ANALYSIS	120/576	0000	A
1745	TEST CHART	120/576		
1750	SEA SURFACE TEMPERATURE-CLIMAT AVERAGE DATA	120/576		A
1800	SURFACE ANALYSIS	120/576	1200	A

MAP AREA: A: 1:20,000,000 30N 085W, 30N 005E, 48S 085W, 48S 005E

INFORMATION DATED 02/1998

NORTH AMERICA

HALIFAX, NOVA SCOTIA, CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
CFH	122.5 kHz	CONTINUOUS	F3C	
	4271 kHz	CONTINUOUS	F3C	
	6496.4 kHz	CONTINUOUS	F3C	
	10536 kHz	CONTINUOUS	F3C	
	13510 kHz	CONTINUOUS	F3C	

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0001/------	ICE CHART (LABRADOR - IF AVAILABLE)	120/576	LATEST	
-------/1201	4-DAY PROG	120/576	LATEST	
-------/1301	5-DAY PROG	120/576	LATEST	
0201/1401	18HR SIGNIFICANT WEATHER PROG	120/576	12/00	
0301/------	TEST CHART (2)	120/576		
-------/1501	500MB ANALYSIS	120/576	1200	
0321/1522	SURFACE ANALYSIS	120/576	00/12	
0401/------	500MB ANALYSIS	120/576	00/---	
-------/1601	850MB ANALYSIS	120/576	1200	
0501/1701	24HR SURFACE PROG	120/576	00/12	
0520/------	TEST CHART (SUN/TUE/SAT)	120/576		
	BROADCAST SCHEDULE (MON/WED/FRI)	120/576		
0601/1801	18HR SIGNIFICANT WEATHER DEPICTION PROG	120/576	18/06	
0620/------	SURFACE ANALYSIS	120/576	0000	
-------/1820	18HR/24HR 850MB PROG	120/576	06/12	
-------/1901	36HR SURFACE PROG	120/576	0000	
0703/1920	12HR SIGNIFICANT WAVE PROG	120/576	12/00	
0722/1939	24HR SIGNIFICANT WAVE PROG	120/576	00/12	
0741/------	36HR SURFACE PROG	120/576	1200	
0801/2001	36HR SIGNIFICANT WAVE PROG	120/576	12/00	
0820/------	NFLD SST (WED & SAT), NS SST (SUN & THU)	120/576	LATEST	
	NFLD OFA (MON & FRI), NS OFA (TUE)	120/576	LATEST	
-------/2019	NFLD SST (MON, WED, SAT), NS SST (TUE, THU, FRI, SUN)	120/576	LATEST	
0901/------	SURFACE ANALYSIS	120/576	0600	
-------/2101	NFLD OFA (MON, WED, SAT), NS OFA (TUE, THU, FRI, SUN)	120/576	LATEST	
-------/2123	SURFACE ANALYSIS	120/576	1800	
1001/------	18HR/24HR 850MB HT/TEMP/WIND PROG	120/576	18/00	
-------/2201	ICE CHART (NEWFOUNDLAND - IF AVAILABLE)	120/576	LATEST	
1101/------	3-DAY PROG	120/576	LATEST	
-------/2301	ICE CHART - GULF OF ST. LAWRENCE (IF AVAILABLE)	120/576	LATEST	

NOTES:

1. ICE CHARTS FOR THE GULF OF ST. LAWRENCE, LABRADOR, HUDSON STRAIT AND EASTERN ARCTIC ARE PREPARED BY THE CANADIAN ICE SERVICE (OTTAWA) AND ARE BROADCAST ACCORDING YO SEASON. ONE ICE CHART IS BROADCAST WITHIN THE ALLOTTED TIME FROM HALIFAX (CFH), HOWEVER, ONE ICE CHART MAY BE BROADCAST WITHIN THE ALLOTTED TIME FROM IQALUIT, FROBISHER BAY (VFF) AND RESOLUTE (VFR) ON 3253 kHz AND 7710 kHz.

2. BROADCAST TIME MAY ALSO BE USED TO REPEAT OTHER CHARTS OR SPECIAL CHARTS AS REQUIRED.

(INFORMATION DATED 09/1998)

IQALUIT, N.W.T., CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
VFF	3251.1 kHz USB	1 JUL-15 OCT	J3C	5 KW
VFF	7708.1 kHz USB	1 JUL-15 OCT	J3C	5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0300/------	24HR ICE PROG (AREAS 5, 6, 7)	120/576		
-------/2000	ICE ANALYSIS (AREAS 1, 2, 3, 4, 5, 6, 7)	120/576		
0900/2200	SURFACE ANALYSIS & 18 HR PROG	120/576	06/18	A
0936/------	ICE ANALYSIS (AREAS 1, 2, 3, 4, 5, 6, 7)	120/576		

IQALUIT, N.W.T., CANADA

MAP AREA: 1. HUDSON BAY (SOUTH) 2. HUDSON BAY (NORTH)
3. HUDSON STRAIT 4. FOXE BASIN
5. LABRADOR COAST 6. DAVIS STRAIT
7. BAFFIN BAY

NOTE: THE AREAS INCLUDED IN THE BROADCASTS VARY WITH ICE CONDITIONS AND MARINE ACTIVITY. ALL CHARTS AVAILABLE CAN BE TRANSMITTED ON REQUEST.

(INFORMATION DATED 10/1997)

RESOLUTE, N.W.T., CANADA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
VFR	3251.1 kHz	1 JUL-15 OCT	J3C	5 KW
VFR	7708.1 kHz	1 JUL-15 OCT	J3C	5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
1200	SURFACE ANALYSIS & 18HR PROG	120/576	06/00	
1236	ICE ANALYSIS (AREAS 7, 8, 9, 10, 11, 12)	120/576		
2300	SURFACE ANALYSIS & 18HR PROG	120/576	18/12	
2336	ICE ANALYSIS (AREAS 7, 8, 9, 10, 11, 12)	120/576		

MAP AREAS: 7. BAFFIN BAY 8. APPROACHES TO RESOLUTE 9.EUREKA SOUND
10. PARRY CHANNEL 11. QYENN MAUDE/PRINCE REGENT
12. AMUNDSEN GULF 13. ALASKAN COAST 13. BERING STRAIT

(INFORMATION DATED 10/1997)

ELMENDORF AFB, ALASKA, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
	2280 kHz		F3C	10 KW
	3394 kHz	1200-2400	F3C	10 KW
	5095 kHz	0000-1200	F3C	10 KW
	7398 kHz	1200-2400	F3C	10 KW
	10665 kHz	0000-1200	F3C	10 KW
	15805 kHz		F3C	10 KW
	19332 kHz		F3C	10 KW

NOTES:1. CONTENT OF THIS BROADCAST IS DICTATED BY THE NEEDS OF THE U.S. AIR FORCE.
2. DUE TO MILITARY REQUIREMENTS, THIS BROADCAST IS AT TIME ENCRIPTED.
3. THIS BROADCAST IS DESIGNED AS A CONTINGENCY AND EXERCISE COMMUNICATION SYSTEM.
4. THIS BROADCAST PROVIDES, WHEN OPERATIONAL, A CONTINUOUS AND SIMULTANEOUS BROADCAST OF WEATHER FACSIMILE AND ALPHANUMERIC DATA. FACSIMILE DATA IS TRANSMITTED ON UPPER SIDEBAND AND ALPHANUMERIC DATA IS TRANSMITTED ON LOWER SIDEBAND.

(INFORMATION DATED 10/1991)

KODIAK, ALASKA, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
NOJ	2052 kHz	CONTINUOUS	F3C	
	4298 kHz	CONTINUOUS	F3C	
	8459 kHz	CONTINUOUS	F3C	

KODIAK, ALASKA, U.S.A.

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0400/1800	TEST PATTERN	120/576		
0404/1804	SURFACE ANALYSIS (ALASKA)	120/576	00/12	
0425/1825	COASTAL MARINE FORECAST TABLES (ALASKA)	120/576	LATEST	
0438/-------	3,4,5 DAY SURFACE PROG	120/576	LATEST	
--------/1838	FAX SCHEDULE (MON, WED & FRI)	120/576		
1000/2200	TEST PATTERN	120/576		
1004/2204	SURFACE ANALYSIS (ALASKA)	120/576	06/18	
1025/2225	36HR SURFACE PROG (ALASKA)	120/576	12/00	
1037/-------	5-DAY SEA ICE PROG	120/576	LATEST	
--------/2237	18HR SIGNIFICANT WAVE PROG	120/576	1200	
1049/-------	SEA SURFACE TEMP	120/576	LATEST	
--------/2249	SEA ICE ANALYSIS	120/576	LATEST	

NOTES: 1. THIS BROADCAST ORIGINATES FROM THE NATIONAL WEATHER SERVICE. COMMENTS AND SUGGESTIONS SHOULD BE DIRECTED TO:

OFFICIAL IN CHARGE
NATIONAL WEATHER SERVICE/NOAA
600 SANDY HOOK ST, SUITE 1
KODIAK, AK 99615-6814
PH: (907) 487-2102/FAX: (907) 487-9730

(INFORMATION DATED 06/1997) http://weather.noaa.gov/fax/alaska.shtml

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

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER	
NMC	4346	kHz	NIGHT	F3C	10	KW
	8682	kHz	CONTINUOUS	F3C	10	KW
	12730	kHz	CONTINUOUS	F3C	10	KW
	17151.2	kHz	CONTINUOUS	F3C	10	KW
	22527	kHz	DAY	F3C	10	KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-------/1415	TEST PATTERN	120/576		
-------/1418	96HR 500MB PROG	120/576	0000	1
-------/1428	96HR SURFACE PROG	120/576	0000	1
-------/1438	SATELLITE IMAGE	120/576	LATEST	5
0245/------	TEST PATTERN	120/576		
0248/1449	SATELLITE IMAGE	120/576	LATEST	7/6
0259/------	SATELLITE IMAGE	120/576	LATEST	5
0310/1500	SEA STATE ANALYSIS	120/576	00/12	1/8
-------/1510	WIND/SEAS ANALYSIS	120/576	1200	4
0320/1520	SURFACE ANALYSIS (PART 1 NE PACIFIC)	120/576	00/12	2
0333/1533	SURFACE ANALYSIS (PART 2 NW PACIFIC)	120/576	00/12	3
0345/1545	500MB ANALYSIS	120/576	00/12	1
0355/1555	SURFACE ANALYSIS (PART 1) (REBROADCAST OF 0320/1520)	120/576	00/12	2
0408/1608	SURFACE ANALYSIS (PART 2) (REBROADCAST OF 0333/1533)	120/576	00/12	3
0800/2000	TEST PATTERN	120/576		
0808/2008	24HR SURFACE PROG	120/576	00/12	8
0818/2018	24HR WIND/SEAS PROG	120/576	00/12	8
0828/2028	48HR 500MB PROG	120/576	00/12	1
0838/2038	48HR SURFACE PROG	120/576	00/12	1
0848/2048	48HR WIND/WAVE PROG	120/576	00/12	1
0858/2058	48HR WAVE PERIOD PROG	120/576	00/12	1
0908/2108	SATELLITE IMAGE	120/576	06/18	7/5
0919/2119	SURFACE ANALYSIS (PART 1 NE PACIFIC)	120/576	06/18	2
0932/2132	SURFACE ANALYSIS (PART 2 NW PACIFIC)	120/576	06/18	3
0944/------	SATELLITE IMAGE	120/576	0600	5
-------/2144	WIND/SEAS ANALYSIS	120/576	1800	4
0955/2154	SURFACE ANALYSIS (PART 1) (REBROADCAST OF 0919/2119)	120/576	06/18	2
1008/2207	SURFACE ANALYSIS (PART 2) (REBROADCAST OF 0932/2132)	120/576	06/18	3
1100/2300	TEST PATTERN	120/576		

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

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
1104/------	BROADCAST SCHEDULE (PART 1)	120/576		
-------/2304	SST ANALYSIS	120/576	LATEST	9
-------/2314	SST ANALYSIS	120/576	LATEST	6
1115/------	BROADCAST SCHEDULE (PART 2)	120/576		
-------/2324	BROADCAST SCHEDULE (PART 1)	120/576		
1126/------	REQUEST FOR COMMENTS	120/576		
-------/2335	BROADCAST SCHEDULE (PART 2)	120/576		
1137/------	PRODUCT NOTICE BULLETIN	120/576		
1148/------	SST ANALYSIS (REBROADCAST OF 2304)	120/576	LATEST	9
1158/------	SST ANALYSIS (REBROADCAST OF 2314)	120/576	LATEST	6

MAP AREAS:
1. 20N - 70N, 115W - 135E
2. 20N - 70N, 115W - 175W
3. 20N - 70N, 175W - 135E
4. 20S - 30N, EAST OF 160W
5. 05N - 60N, WEST OF 100W
6. 23N - 42N, EAST OF 136W
7. 05N - 55N, EAST OF 130W
8. 25N - 60N, EAST OF 155W
9. 40N - 53N, EAST OF 136W

NOTES:
1. CARRIER FREQUENCY IS 1.9 kHz BELOW THE ASSIGNED FREQUENCY.
2. COMMENTS AND SUGGESTIONS CONCERNING THIS BROADCAST 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: (310) 763-8294 X7401/FAX: (301) 763-8085
EMAIL: David.Feit@noaa.gov

(INFORMATION DATED 11/1999) http://weather.noaa.gov/fax/ptreyes.shtml

NEW ORLEANS, LOUISIANA, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
NMG	4317.9 kHz	CONTINUOUS	F3C	10 KW
	8503.9 kHz	CONTINUOUS	F3C	10 KW
	12789.9 kHz	CONTINUOUS	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	TROPICAL SURFACE ANALYSIS	120/576	18/06	1
0030/1230	24/36HR WIND/SEAS FORECAST (2 CHARTS)	120/576	00/12&12/00	2
0050/1250	HIGH SEAS FORECAST (IN ENGLISH)	120/576	22/10	5
0115/1315	0/12HR WIND/SEAS FORECAST (2 CHARTS)	120/576	00/12&12/00	2
0135/1335	U.S. SURFACE ANALYSIS	120/576	18/06	3
0150/1350	GOES-8 IR TROPICAL SATELLITE IMAGE	120/576	2345/1145	4
0205/1405	REQUEST FOR COMMENTS/PRODUCT NOTICE BULLETIN	120/576		
0600/1800	TROPICAL SURFACE ANALYSIS	120/576	00/12	1
0630/1830	BROADCAST SCHEDULE	120/576		
0650/1850	HIGH SEAS FORECAST (IN ENGLISH)	120/576	04/16	5
0715/1915	0/12 WIND/SEAS FORECAST (2 CHARTS)	120/576	06/18&18/06	2
0735/1935	U.S. SURFACE ANALYSIS	120/576	00/12	3
0750/1950	GOES-8 IR TROPICAL SATELLITE IMAGE	120/576	0545/1745	4
0805/2005	REBROADCAST OF 0030/1230	120/576	00/12&12/00	2

NOTES:
1. SINGLE SIDEBAND USERS SHOULD TUNE 1.9 Hz BELOW THE LISTED 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:

NEW ORLEANS, LOUISIANA, U.S.A.

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

MAP AREAS: 1. 05S-35N, 0-120W
2. 10N-30N, 55W-100W
3. 15N-50N, 65W-125W
4. 12S-44N, 28W-112W
5. 07N-31N, 35W-98W (AREA COVERED BY TEXT FORECASTS)

(INFORMATION DATED 09/1998) http://weather.noaa.gov/fax/gulf.shtml

BOSTON, MASSACHUSETTS, U.S.A.

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
NMF	4235 kHz	0230z-1015z	F3C	10 KW
	6340.5 kHz	CONTINUOUS	F3C	10 KW
	9110 kHz	CONTINUOUS	F3C	10 KW
	12750 kHz	1430z-2215z	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0230/1430	TEST PATTERN	120/576		
0233/1433	PRELIMINARY SURFACE ANALYSIS	120/576	00/12	1
0243/------	BROADCAST SCHEDULE (PART 1)	120/576		
-------/1443	96HR SURFACE PROG	120/576	0000	4
-------/1453	96HR SURFACE PROG	120/576	0000	4
0254/------	BROADCAST SCHEDULE (PART 2)	120/576		
0305/------	REQUEST FOR COMMENTS	120/576		
-------/1503	SATELLITE IMAGE	120/576	1200	5
0315/1515	SEA STATE ANALYSIS	120/576	00/12	1
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	SURFACE ANALYSIS (PART 1) (REBROADCAST OF 0325/1525)	120/576	00/12	2
0415/1736	SURFACE ANALYSIS (PART 2) (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
-------/1810	ICE CHARTS	120/576	LATEST	
-------/1900	TEST PATTERN	120/576		
-------/1905	BROADCAST SCHEDULE (PART 1)	120/576		
-------/1920	BROADCAST SCHEDULE (PART 2)	120/576		
-------/1935	REQUEST FOR COMMENTS	120/576		
0745/1945	TEST PATTERN/PRODUCT NOTICE BULLETIN	120/576		
0755/1955	PRELIMINARY SURFACE ANALYSIS	120/576	06/18	1
0805/2005	24HR SURFACE PROG	120/576	00/12	1
0815/2015	24HR WIND/SEAS PROG	120/576	00/12	1
0825/2025	24HR 500MB PROG	120/576	00/12	1
0835/2035	36HR 500MB PROG	120/576	12/00	4
0845/2045	48HR 500MB PROG	120/576	00/12	4
0855/2055	48HR SURFACE PROG	120/576	00/12	4
0905/2105	48HR WIND/WAVE PROG	120/576	00/12	4
0905/2105	48HR WAVE PERIOD PROG	120/576	00/12	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	SURFACE ANALYSIS (PART 1) (REBROADCAST OF 0925/2125)	120/576	06/18	2
1015/2215	SURFACE ANALYSIS (PART 2) (REBROADCAST OF 0938/2138)	120/576	06/18	3

BOSTON, MASSACHUSETTS, U.S.A.

MAP AREAS
1. 28N-52N, 45W-85W
2. 15N-65N, 10E-45W
3. 15N-65N, 40W-95W
4. 15N-65N, 10E-95W
5. 20N-55N, 55W-95W
6. EQ-60N, 40W-130W

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) 763-8294 X7401/FAX: (301) 763-8085
EMAIL: David.Feit@noaa.gov

(INFORMATION DATED 06/1999) http://weather.noaa.gov/fax/marsh.shtml

OFFUTT AFB/ELKHORN, NEBRASKA, U.S.A.

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER
	3231	kHz		F3C	10 KW
	5096	kHz	0000-1200	F3C	10 KW
	6904	kHz	0000-1200	F3C	10 KW
	10576	kHz	1200-2400	F3C	10 KW
	11120	kHz	1200-2400	F3C	10 KW
	15681	kHz		F3C	10 KW
	19325	kHz		F3C	10 KW

NOTES:
1. CONTENT OF THIS BROADCAST IS DICTATED BY THE NEEDS OF THE U.S. AIR FORCE.
2. DUE TO MILITARY REQUIREMENTS, THIS BROADCAST IS AT TIME ENCRIPTED.
3. THIS BROADCAST IS DESIGNED AS A CONTINGENCY AND EXERCISE COMMUNICATION SYSTEM.
4. THIS BROADCAST PROVIDES, WHEN OPERATIONAL, A CONTINUOUS AND SIMULTANEOUS BROADCAST OF WEATHER FACSIMILE AND ALPHANUMERIC DATA. FACSIMILE DATA IS TRANSMITTED ON UPPER SIDEBAND AND ALPHANUMERIC DATA IS TRANSMITTED ON LOWER SIDEBAND.

(INFORMATION DATED 01/1998)

PACIFIC OCEAN BASIN

DARWIN, AUSTRALIA

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER	
AXI 32	5755	kHz	0900-2300	F3C	10	KW
AXI 33	7535	kHz	0900-2300	F3C	10	KW
AXI ??	10555	kHz	CONTINUOUS	F3C	10	KW
AXI 35	15615	kHz	2300-0900	F3C	10	KW
AXI 37	18060	kHz	2300-0900	F3C	10	KW

MELBOURNE, AUSTRALIA

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER	
AXM 31	2628	kHz	CONTINUOUS	F3C	10	KW
AXM 32	5100	kHz	CONTINUOUS	F3C	10	KW
AXM 34	11030	kHz	CONTINUOUS	F3C	10	KW
AXM 35	13920	kHz	CONTINUOUS	F3C	10	KW
AXM 37	20469	kHz	CONTINUOUS	F3C	10	KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
------/1200	36HR SURFACE PROG (MSL)	120/576	1200	AUST
0015/1215	BROADCAST SCHEDULE (2 PARTS)	120/576		
0045/-------	INFORMATION NOTICE	120/576		
------/1245	36HR INDIAN OCEAN SURFACE PROG (MSL)	120/576	1200	IO
0100/-------	IPS RECOMMENDED FREQUENCIES FOR AXM	120/576		
------/1300	18HR AUSTRALIAN REGIONAL SIGNIFICANT WEATHER PROG	120/576	0600	RSW
------/1315	48HR PACIFIC OCEAN COMBINED WAVES PROG	120/576	0000	SWP
0130/-------	IPS RECOMMENDED FREQUENCIES FOR AXI	120/576		
------/1330	48HR INDIAN OCEAN COMBINED WAVES PROG	120/576	0000	IO
------/1345	SOUTH PACIFIC SEA SURFACE TEMPS (WEEKLY)	120/576	LATEST	SWP
0200/-------	24HR SURFACE PROG (MSL)	120/576	0000	AUST
------/1400	INDIAN OCEAN SEA SURFACE TEMPS (WEEKLY)	120/576	LATEST	IO
0215/-------	18HR AUSTRALIA REGION SIGNIFICANT WEATHER PROG	120/576	1800	RSW
0230/-------	CURRENT WARNINGS SUMMARY	120/576	LATEST	H
0245/1430	SURFACE ANALYSIS (MSL)	120/576	00/12	AUST
------/1445	CURRENT WARNINGS SUMMARY	120/576	LATEST	H
0300/1500	500MB ANALYSIS	120/576	00/12	AUST
------/1515	36HR SURFACE PROG (MSL)	120/576	1200	AUST
0330/1530	18HR DARWIN TROPICS SIGNIFICANT WEATHER PROG	120/576	18/06	D
0400/1600	24HR 500MB PROG	120/576	00/12	AUST
0430/-------	S.E. AUSTRALIA SEA SURFACE ISOTHERMS (WEEKLY)	120/576	LATEST	SEAUST
0445/-------	S.E. AUSTRALIA 250 METER ISOTHERMS (WEEKLY)	120/576	LATEST	SEAUST
0500/-------	S.W. AUSTRALIA SEA SURFACE ISOTHERMS (WEEKLY)	120/576	LATEST	SWAUST
0600/1800	GRADIENT LEVEL WIND ANAL PART A	120/576	00/12	A
0623/1823	GRADIENT LEVEL WIND ANAL PART B	120/576	00/12	B
0645/-------	SURFACE ANALYSIS (MSL)	120/576	0000	C
0715/1900	18HR AUSTRALIAN REGION SIGNIFICANT WEATHER PROG	120/576	00/12	RSW
0730/1915	INDIAN OCEAN SURFACE ANALYSIS (MSL)	120/576	00/12	IO
0745/1930	24HR WIND WAVES HT (M) PROG	120/576	00/12	AUST
0800/1945	24HR SWELL WAVES HT (M) PROG	120/576	00/12	AUST
------/2000	SOUTH PACIFIC SURFACE ANALYSIS (MSL)	120/576	1200	SWP
0815/-------	CURRENT WARNINGS SUMMARY	120/576	LATEST	H
------/2015	SURFACE ANALYSIS (MSL)	120/576	1800	AUST
0830/-------	SOUTHWEST PACIFIC SURFACE ANALYSIS (MSL)	120/576	0000	SWP
0845/-------	SURFACE ANALYSIS (MSL)	120/576	0600	AUST
------/2045	CURRENT WARNINGS SUMMARY	120/576	LATEST	
0903/2100	250MB STREAMLINE ANALYSIS	120/576	00/12	C
0923/2120	500MB STREAMLINE ANALYSIS	120.576	00/12	C
0941/2140	700MB STREAMLINE ANALYSIS	120/576	00/12	C
1000/2200	18HR DARWIN TROPICS SIGNIFICANT WEATHER PROG	120/576	00/12	D
1030/2230	48HR SOUTHERN HEMISPHERE 500MB PROG	120/576	00/12	SH
1045/2245	48HR SOUTHERN HEMISPHERE SURFACE PROG (MSL)	120/576	00/12	SH
1115/2303	SOUTHERN HEMISPHERE 500MB ANALYSIS	120/576	00/12	SH
1130/-------	SEA SURFACE TEMP ANALYSIS (WEEKLY)	120/576	LATEST	E
------/2330	36HR SURFACE PROG (MSL)	120/576	0000	AUST
------/2345	48HR INDIAN OCEAN SURFACE PROG (MSL)	120/576	1200	IO

DARWIN & MELBOURNE, AUSTRALIA

NOTES: 1. NORMAL RECEPTION AREA IS 25N -25S, 75E -180 FROM DARWIN, AND SOUTHWARDS OF 10N, BETWEEN 70E & 150W FROM MELBOURNE.
2. SCANNING IS NOW COMPUTER GENERATED.
3. TO ENHANCE THE READABILITY OF THE BROADCAST SCHEDULE, ISSUED TWICE DAILY AT 0015 AND 1215 UTC., THE SCHEDULE IS NOW BROADCAST IN TWO PARTS. PRODUCTS ISSUED BETWEEN 0000 AND 1200 UTC ARE IN PART 1 AND PRODUCTS ISSUED BETWEEN 1215 AND 2345 UTC ARE ON PART 2. PART 2 IS BROADCAST IMMEDIATELY FOLLOWING THE END OF PART 1.
4. ALL WEEKLY OCEANOGRAPHIC PRODUCTS, SUCH AS SEA SURFACE TEMPERATURE CHARTS, WHICH WERE BROADCAST ONLY ONE DAY A WEEK, ARE NOW BROADCAST EVERY DAY. HOWEVER, NOTE THE CHARTS ARE ONLY UPDATED ONCE A WEEK, BUT BROADCAST EVERY DAY UNTIL A NEW CHART IS AVAILABLE TO REPLACE THE OLD CHART.
5. FOR FURTHER INFORMATION CONTACT:

MR. BRUCE SUMNER
BUREAU OF METEOROLOGY
ATTN: SRRT
GPO BOX 1289K
MELBOURNE VIC 3001
AUSTRALIA
PH: (613) 9669 4349
FAX: (613) 9662 1223

MAP AREAS:

A:		30N - 35S, 120E - 180
B:		30N - 35S, 070E - 130E
C:		30N - 35S, 070E - 180
D:		43S 110E, 34S 155E, 34N 142E, 29N 096E
E:		23N - 23S, 100E - 170E
H:		25N - 25S, 080E - 180
AUST:	LAMBERT	10S 090E, 50S 080E, 10S 170E, 50S 180
SEAUST-	MERCATOR	31S - 40S, 148E - 156E
SWAUST	MERCATOR	25S - 37S, 110E - 120E
RSW -	MERCATOR	0S - 50S, 100E - 180
IO -	POLAR	10S - 90S, EQ - 090E - 180
SWP -	POLAR	20S - 90S, 150E - 180 - 90W
SH -	POLAR	10S - 90S, ALL LONGITUDES

(INFORMATION DATED 09/1996) http://www.bom.gov.au/other/rad_sch/axm_sched.shtml

WELLINGTON, NEW ZEALAND

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
ZKLF	5807 kHz	CONTINUOUS	F3C	5 KW
	9459 kHz	CONTINUOUS	F3C	5 KW
	13550.5 kHz	CONTINUOUS	F3C	5 KW
	16340.1 kHz	CONTINUOUS	F3C	5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0300/1500	SURFACE ANALYSIS (MSL)	120/576	00/12	TNZ
0315/1515	SURFACE ANALYSIS (MSL)	120/576	00/12	SWP
0430/1630	BROADCAST SCHEDULE	120/576		
0900/2030	SURFACE ANALYSIS (MSL)	120/576	06/18	TNZ
1030/2300	SURFACE ANALYSIS (MSL)	120/576	00/12	SPC
-------/2345	30HR SURFACE PROG (MSL)	120/576	0000	SWP

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

(INFORMATION DATED 06/1998) http://www.met.co.nz/home/products/radiofax.html

GUAM, ANDERSON AFB, M.I.

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
	4943	kHz		F3C	10 KW
	6919	kHz		F3C	10 KW
	7708.5	kHz		F3C	10 KW
	13385	kHz		F3C	10 KW
	14397	kHz		F3C	10 KW
	17526	kHz		F3C	10 KW
	20380	kHz		F3C	10 KW

NOTES:

1. CONTENT OF THIS BROADCAST IS DICTATED BY THE NEEDS OF THE U.S. AIR FORCE.
2. DUE TO MILITARY REQUIREMENTS, THIS BROADCAST IS PERIODICALLY ENCRIPTED.
3. THIS BROADCAST IS DESIGNED AS A CONTINGENCY AND EXERCISE COMMUNICATION SYSTEM.
4. THIS BROADCAST PROVIDES, WHEN OPERATIONAL, A CONTINUOUS AND SIMULTANEOUS BROADCAST OF WEATHER FACSIMILE AND ALPHANUMERIC DATA. FACSIMILE DATA IS TRANSMITTED ON UPPER SIDEBAND AND ALPHANUMERIC DATA IS TRANSMITTED ON LOWER SIDEBAND.

(INFORMATION DATED 10/1991)

HONOLULU, HAWAII, U.S.A.

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER
KVM70	9982.5	kHz	0533-1930	F3C	10 KW
	11090	kHz	CONTINUOUS	F3C	10 KW
	16135	kHz	CONTINUOUS	F3C	10 KW
	23331.5	kHz	2350-0236	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
2350/1150	TEST-ID-SCHEDULE-GENERAL NOTICE	120/576		
0005/1205	PACIFIC SURFACE ANALYSIS	120/576	18/06	B
0030/1230	SATELLITE IMAGE (IR)	120/576	LATEST	FD
0045/1245	SATELLITE IMAGE (IR)	120/576	LATEST	EP
0105/1305	TROPICAL SURFACE ANALYSIS	120/576	18/06	C
0128/1328	48HR SURFACE FORECAST	120/576	12/00	C
0150/1350	48HR 500MB/VORTICITY FORECAST	120/576	00/12	F
0212/------	24HR WIND/STREAM FORECAST	120/576	0000	D
0236/------	48HR WIND/STREAM FORECAST	120/576	0000	D
------/1412	24HR OCEAN WINDS/SIG WAVE HT FORECAST	120/576	0000	E
------/1428	48HR OCEAN WINDS/SIG WAVE HT FORECAST	120/576	0000	E
0533/1733	TEST-ID-SYMBOLS-GENERAL NOTICE	120/576		
0545/1745	SIGNIFICANT CLOUD FEATURES	120/576	00/12	A
0605/1805	PACIFIC SURFACE ANALYSIS	120/576	00/12	B
0630/1830	SATELLITE IMAGE (IR)	120/576	LATEST	FD
0645/1845	SATELLITE IMAGE (IR)	120/576	LATEST	EP
0705/1905	TROPICAL SURFACE ANALYSIS	120/576	00/12	C
0730/1930	PACIFIC OCEAN SEA SURFACE TEMPS	120/576		NPA

MAP AREAS:
- A - 50N - 30S, 110W - 160E
- B - 50N - 30S, 110W - 130E
- C - 60N - 55S, 055W - 070E
- D - 50N - 30S, 100W - 120E
- E - 60N - 35S, 110W - 130E
- F - 50N - 25S, 120W - 120E
- EP - EQUATORIAL PACIFIC
- FD - FULL DISK
- NPA - NORTH PACIFIC AREA

HONOLULU, HAWAII, USA

(1)TROPICAL STREAM-FUNCTION ANALYSIS AND THE WIND/STREAM-FUNCTION FORECAST CHARTS DISPLAY 1000 MILLIBAR STREAM FUNCTION LINES. FOR SPEEDS IN KNOTS FOR ALL LATITUDES DIVIDE 50 BY THE SPACING BETWEEN THE STREAM FUNCTION LINES EXPRESSED IN DEGREES OF LATITUDE. THESE CHARTS, COMPUTER-GENERATED, ARE PARTICULARLY USEFUL IN THE TROPICS, WHERE THE ISOBARIC SPACING AND WIND-SPEED RELATIONSHIPS BECOME LESS MEANINGFUL. ARROWS ON THE STREAM-FUNCTION ANALYSIS CHARTS DEPICT VELOCITIES IN KNOTS OF THE TOPS OF LOWER CLOUDS DERIVED FROM SUCCESSIVE OBSERVATIONS BY SATELLITE. CAUTION - THESE CHARTS, BEING COMPUTER GENERATED, MAY NOT PROPERLY DELINEATE SMALL, THOUGH INTENSE, SYSTEMS IN DATA-SPARSE AREAS. NOTES ARE MANUALLY ADDED TO DIRECT ATTENTION TO SUCH SYSTEMS WHEN PRESENT.

(2)PACIFIC SURFACE ISOBARIC ANALYSIS CHARTS, MANUALLY ANALYZED AT THE WEATHER SERVICE FORECAST OFFICE/CENTRAL PACIFIC HURRICANE CENTER, HONOLULU DEPICT THE ISOBARIC (PRESSURE) FIELD NORTH OF 15 NORTH AND STREAM LINES SOUTH OF 15 NORTH; SPACING BETWEEN STREAM LINES IS NOT INDICATIVE OF WIND SPEEDS.

(3)THE 48-HOUR ISOBARIC SURFACE/THICKNESS FORECAST CHARTS DEPICT LINES OF EQUAL EQUAL PRESSURE IN MILLIBARS (SOLID LINES) AND, CHIEFLY OF INTEREST TO METEOROLOGISTS, 1000-TO-500 MILLIBAR THICKNESSES (DASHED LINES).

(4)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

(5) THE 48-HOUR 500 MILLIBAR CHARTS DISPLAY 500 MILLIBAR HEIGHTS (SOLID LINES) AND VORTICITY LINES (DASHED LINES.)

(6) THE SATELLITE IMAGES ARE INFRARED CLOUD PICTURES TRANSMITTED IN REAL TIME AS THEY ARE BEING SCANNED BY SATELLITE.

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

(8) BROADCAST MAY BE PERFORMED CONTINUOUSLY ON FOUR LISTED FREQUENCIES WHEN RESOURSES ARE AVAILABLE.

(9) YOU MAY ADDRESS COMMENTS ABOUT THIS BROADCAST TO:

Meteorologist In Charge
National Weather Service
2525 Correa Rd.
Honolulu, HI 96822
PHONE: (808) 973-5286/FAX: (808) 973-5271
E-Mail david.meek@noaa.gov

(INFORMATION DATED 08/17/99)tdr http://weather.noaa.gov/fax/hawaii.shtml

EUROPE

SKAMLEBAEK, DENMARK

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER
OXT (1)	5850	kHz	0028-1005	F3C	20 KW
	9360	kHz	0003-0025		
			1008-1215	F3C	20 KW
			1243-1305		
			1828-1850		
	13855	kHz	1218-1240		
			1308-1330	F3C	20 KW
			1803-1825		
	17510	kHz	1333-1355	F3C	20 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0003(2)	ICE CHART #2 (OR #1)	120/576		
0028	ICE CHART #2 (OR #1)	120/576		
0943	ICE CHART #1	120/576		
1008	ICE CHART #1	120/576		
1153	ICE CHART #1	120/576		
1218	ICE CHART #1	120/576		
1243	ICE CHART #2 (OR#1)	120/576		
1308	ICE CHART #2 (OR #1)	120/576		
1333	ICE CHART #2 (OR #1)	120/576		
1803	ICE CHART #1	120/576		
1828	ICE CHART #1	120/576		

NOTES :(1) CALL SIGN IS TRANSMITTED FOR A PERIOD OF 2 MINUTES IMMEDIATELY PRIOR TO CHART TRANSMISSION.
(2) EITHER ONE OF CHART #2 IS TRANSMITTED IF AVAILABLE, OTHERWISE CHART #1 IS TRANSMITTED.
(3) CHART #1 COVERS THE SOUTHERN TIP OF GREENLAND. CHART #2 IS A SECTION, WHICH MAY COVER ANY AREA NORTH OF 62 DEGREES NORTH ACCORDING TO NEED AND TIME OF YEAR EITHER ON WEST OR EAST COAST OF GREENLAND.

(INFORMATION DATED 06/1993) http://www.dmi.dk/vejr/gron/iskort.html

GRENGEL, GERMANY

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
DHJ51	2342	kHz	0600-1800		
DHJ51	4570	kHz	1800-0600		

THIS BROADCAST IS A MILITARY BROADCAST AND GENERALLY FOR AVIATION PURPOSES AND WILL NOT BE LISTED AT THIS TIME. MOST CHARTS ARE TRANSMITTED AT 120/576, HOWEVER, A FEW ARE SENT AT 120/288 .

(INFORMATION DATED 02/96)

HAMBURG/PINNEBERG, GERMANY

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
DDH3	3855	kHz	0600-2300	F1C	.8 KW
DDK3	7880	kHz	CONTINUOUS	F1C	20 KW
DDK6	13882.5	kHz	CONTINUOUS	F1C	20 KW

HAMBURG/PINNEBERG, GERMANY

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-------/1520	BALTIC SEA ICE CONDITIONS	120/576	0900	
-------/1540	BALTIC SEA ICE CONDITIONS	120/576	0900	
0430/1600	SURFACE ANALYSIS	120/576	00/12	
0512/-------	30HR SURFACE PROG	120/576	1800	
0525/-------	SURFACE ANALYSIS WITH ARROWS SHOWING MOVEMENT OF PRESSURE SYSTEMS, TROPICAL STORMS, SIGNIFICANT WEATHER AND ICE	120/576	0000	
0546/-------	TROPICAL STORM INFORMATION (SEASON ONLY)	120/576	0300	
0559/-------	12HR/24HR 500MB HT, TEMP/SURFACE PRESSURE PROGS	120/576	12/00	
-------/1800	SURFACE ANALYSIS WITH ARROWS SHOWING MOVEMENT OF PRESSURE SYSTEMS, TROPICAL STORMS, SIGNIFICANT WEATHER AND ICE	120/576	1200	
0612/-------	12HR/24HR 850MB TEMP/700MB RH PROGS (EMV)	120/576	12/00	
0625/-------	36HR/48HR 500MB HT, TEMP/SURFACE PRESSURE PROGS	120/576	12/00	
-------/1821	TROPICAL STORM INFORMATION (SEASON ONLY)	120/576	1500	
-------/1834	24HR SURFACE ANALYSIS	120/576	1200	
0638/-------	36HR/48HR 24HR 850MB TEMP/700MB RH PROGS	120/576	12/00	
-------/1847	REBROADCAST 0730Z	120/576	0000	
0651/-------	60HR/72HR 500MB /TEMP	120/576	12/00	
-------/1900	REBROADCST 0804Z	120/576	0000	
0704/------	60HR/72HR 850MB TEMP/700MB RH PROGS	120/576	12/00	
-------1915	SEA ICE OBSERVATIONS	120/576	0000	
0717/-------	REBROADCAST 0512Z	120/576	1800	
0730/-------	48HR SURFACE PROG	120/576	0000	
0743/-------	REBROADCAST 0525Z	120/576	0000	
0804/-------	72HR SURFACE PROG	120/576	0000	
0817/-------	96HR SURFACE PROG	120/576	0000	
0930/2100	ICE CONDITIONS NORTH-WEST ATLANTIC	120/576	00/12	
-------/2115	ICE CONDITION BALTIC SEA	120/576	1500	
-------/2137	48HR WAVE PROG	120/576	1200	
0945/-------	NORTH SEA SEA SURFACE TEMP ANALYSIS(2)	120/576	0000	
1007/-------	WEST BALTIC SEA OR WEST ATLANTIC ICE CONDITIONS	120/576	0000	
1029/-------	48HR WAVE PROG	120/576	0000	
1050/2200	SURFACE ANALYSIS	120/576	06/18	
1111/------	BROADCAST SCHEDULE	120/576		
1132/------	TEST CHART	120/576		

(INFORMATION DATED (01/05/00) http://www.dwd.de/services/gfsf/e_faxpln.html

ATHENS, GREECE

CALL SIGN	FREQUENCY	TIMES	EMISSION	POWER
SJV4	4481 kHz		F3C	1.5 KW
SVJ4	8105 kHz		F3C	1.5 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	1200	B
0933	WAVE HEIGHT PROG (H+36)	120/576	1200	B
0945	WAVE HEIGHT PROG (H+42)	120/576	1200	B
0957	WAVE HEIGHT PROG (H+48)	120/576	1200	B
1009	WAVE HEIGHT PROG (H+30)	120/576	1200	C
1021	WAVE HEIGHT PROG (H+36)	120/576	1200	C
1033	WAVE HEIGHT PROG (H+42)	120/576	1200	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 (01/1999)

ROME, ITALY

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
IMB51	4777.5	kHz	CONTINUOUS	F3C	5 KW
IMB55	8146.6	kHz	CONTINUOUS	F3C	5 KW
IMB56	13597.4	kHz	CONTINUOUS	F3C	5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-------/1200	SURFACE ANALYSIS - ITALY	120/576	0900	I
0055/1255	24HR FL390 WIND/TEMP / FL300 WIND/TEMP PROGS (1)	120/576	12/00	M
0117/1317	24HR FL340 WIND/TEMP PROG (1)	120/576	12/00	M
0129/1329	24HR FL240 WIND/TEMP / FL180 WIND/TEMP PROGS (1)	120/576	12/00	M
0151/1351	24HR FL100 WIND/TEMP / FL50 WIND/TEMP PROGS (1)	120/576	12/00	M
0248/1448	24HR TROPOPAUSE/MAX WIND PROG FL100-450 (1)	120/576	12/00	M
0345/1555	24HR SIG WEATHER/TROPOPAUSE/MAX WIND PROGS (2)	120/576	12/00	B1
0400/------	3HR PRESSURE CHANGE/500MB ANALYSIS	120/576	0000	D/B
-------/1610	SURFACE ANALYSIS - ITALY	120/576	1500	I
0415/------	SURFACE ANALYSIS (SUMMER TIME ONLY)	120/576	0000	B1
0425/------	850MB ANAL/FREEZING LEVEL ANAL	120/576	0000	B
-------/1630	24HR LOW LEVEL SIGNIFICANT WEATHER PROG	120/576	0000	I1
0437/------	SURFACE ANALYSIS - ITALY	120/576	0300	I
-------/1645	SURFACE ANALYSIS - ITALY	120/576	1200	B1
0457/------	SURFACE ANALYSIS (6)	120/576	0000	B1
-------/1700	3HR PRESSURE CHANGE/500MB ANALYSIS	120/576	1200	B
0522/1730	200MB ANALYSIS/TROPOPAUSE-MAX WIND	120/576	00/12	B
0535/------	12HR LOW LEVEL SIGNIFICANT WEATHER PROG	120/576	12/C-	I1
-------/1810	FREEZING LEVEL ANAL/850MB ANALYSIS	120/576	1200	B
0655/1855	18HR FL390 WIND/TEMP / FL300 WIND TEMP PROGS (1)	120/576	18/06	M
0717/1917	18HR FL340 WIND/TEMP PROG (1)	120/576	18/06	M
0729/1929	18HR FL240 WIND/TEMP / FL180 WIND/TEMP PROGS (1)	120/576	18/06	M
0751/1951	18HR FL100 WIND/TEMP / FL50 WIND TEMP PROGS (1)	120/576	18/06	M
0813/------	TEST CHART	120/576		
0848/------	18HR TROPOPAUSE/MAX WIND (1)	120/576	1800	M
0859/------	48HR 500MB PROG	120/576	0000	E
0906/------	72HR 500MB PROG	120/576	0000	E
0913/------	96HR 500MB PROG	120/576	0000	E
0920/------	120HR 500MB PROG	120576	0000	E
0927/------	144HR 500MB PROG	120/576	0000	E
1000/------	18HR SIGNIFICANT WEATHER PROG (2)	120/576	1800	B1
-------/2200	TEST CHART	120/576		
1030/------	24HR SURFACE PROG/3HR PRESSURE CHANGE	120/576	0600	B/D
-------/2230	18HR MEDITERRANEAN SEA STATE PROG	120/576	1200	S
1045/------	SURFACE ANALYSIS - ITALY	120/576	0600	B1
-------/2240	18HR LOW LEVEL SIGNIFICANT WEATHER PROG	120/576	00/12	I1
-------/2252	SURFACE ANALYSIS - ITALY	120/576	2100	I
-------/2312	SURFACE ANALYSIS	120/576	1800	B1
-------/2322	24HR SURFACE PROG/3HR PRESSURE CHANGE	120/576	1800	B/D
-------/2335	18HR SIG WX/TROPOPAUSE/MAX WIND PROG	120/576	0600	B1
1140/------	18HR LOW LEVEL SIGNIFICANT WEATHER PROG	120/576	1800	I1
1153/------	18HR MEDITERRANEAN SEA STATE PROG	120/576	0000	S

NOTES:(1) REBROADCAST OF OFFENBACH (EDZW) TRANSMISSIONS.
(2) TRANSMITTED ONLY IF OFFENBACH CHART (0345/0848/1555/2335) IS MISSING.
(3) REBROADCAST OF BRACKNELL (EGRR/EGLL) TRANSMISSIONS.
(4) CHARTS IN PICTORIAL FORM OF WASHINGTON (KWBC) FORECASTS.
(5) CHARTS IN PICTORIAL FORM OF ECMWF READING FORECASTS.
(6) REPLACES 0415/------ SURFACE ANALYSIS DURING STANDARD TIME.

MAP AREAS:

A - 1:20,000,000	48N	145W,	32N	068E,	24N	069W,	15N	010E
B - 1:20,000,000	52N	031W,	45N	061E,	24N	010W,	21N	037E
B1- 1:15,000,000	52N	031W,	45N	061E,	24N	010W,	21N	037E
D - 1:15,000,000	49N	025W,	49N	045E,	28N	010W,	28N	030E
E - 1:40,000,000	54N	090W,	54N	090E,	17N	027W,	17N	027E
I - 1:02,500,000	48N	005E,	48N	019E,	35N	005E,	35N	019E
I1 - 1:04,000,000	50N	005E,	50N	020E,	35N	005E,	35N	020E
M - 1:15,000,000	51N	046W,	56N	060E,	25N	017W,	27N	033E
S - 1:10,000,000	45N	006W,	41N	039E,	29N	001W,	26N	031E

MOSCOW, RUSSIA

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
	3830 kHz		F3C	
	5008 kHz		F3C	
	6987 kHz		F3C	
	7695 kHZ		F3C	
RCC76	10980 kHz		F3C	
	12961 kHz		F3C	
RDD78	11617 kHz		F3C	

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0003/-------	18HR SIGNIFICANT WEATHER PROG BELOW 400MB	120/576	1200	Q
------/1210	24HR 300MB PROG	120/576	0000	R
0016/-------	18HR 400MB PROG	120/576	1200	M
------/1225	24HR SIGNIFICANT WEATHER PROG	120/576	0000	R
0029/-------	30HR 200MB PROG	120/576	1200	R
-------/1240	18HR SIGNIFICANT WEATHER PROG ABOVE 400MB	120/576	0000	M
0044/-------	30HR 250MB PROG	120/576	1200	R
------/1253	18HR 300MB PROG	120/576	1800	R
0059/-------	30HR 300MB PROG	120/576	1200	R
------/1306	18HR SIGNIFICANT WEATHER PROG BELOW 400MB	120/576	0000	Q
0114/-------	30HR SIGNIFICANT WEATHER PROG	120/576	1200	R
------/1320	18HR 400MB PROG	120/576	1800	M
0129/-------	500MB ANALYSIS	120/576	1200	N
0151/1333	300MB ANALYSIS	120/576	12/00	N
-------/1355	500MB ANALYSIS	120/576	0000	N
0215/1417	SURFACE ANALYSIS	90/576	00/12	U
0245/1447	TROPOPAUSE ANALYSIS	120/576	00/12	U
0307/1509	850MB ANALYSIS	90/576	00/12	U
0337/1539	500MB ANALYSIS	90/576	00/12	U
0407/1609	1000/500MB THICKNESS ANALYSIS	90/576	00/12	U
0437/1639	SURFACE ANALYSIS	90/576	03/15	P
0513/1715	400MB ANALYSIS	90/576	00/12	U
0543/-------	24HR SURFACE PROG	120/288	0000	U
------/1745	NEPHANAL & 24HR PROG	120/576	1200	M
0555/-------	24HR/36HR 700MB PROG	120/288	00/12	U
------/1805	24HR SURFACE PROG	120/288	0000	U
0607/-------	24HR/36HR 500MB PROG	120/288	00/12	U
------/1817	30HR 200MB PROG	120/576	0600	R
0619/-------	12HR SIGNIFICANT WEATHER PROG ABOVE 400MB	120/576	1200	M
0631/-------	12HR 300MB PROG	120/576	1200	M
------/1832	30HR 250MB PROG	120/576	0600	R
0644/-------	NEPHANAL & 24HR CLOUD PROG	120/576	0000	M
------/1847	30HR 300MB PROG	120/576	0600	R
------/1902	30HR SIGNIFICANT WEATHER PROG	120/576	0600	R
0704/-------	MAX WIND ANALYSIS	120/576	0000	U
0726/1917	12HR SIGNIFICANT WEATHER PROG ABOVE 400MB	120/576	00/12	Q/M
------/1930	12HR 300MB PROG	120/576	0000	M
0739/-------	12HR 400MB PROG	120/576	1200	M
------/1943	12HR SIGNIFICANT WEATHER PROG BELOW 400MB	120/576	1200	Q
0752/-------	SURFACE ANALYSIS	90/576	0000	N
------/1956	12HR 400MB PROG	120/576	1200	M
------/2009	MAX WIND ANALYSIS	120/576	1200	U
0822/-------	SURFACE ANALYSIS	90/576	0600	U
------/2031	SURFACE ANALYSIS	90/576	1800	U
0852/-------	200MB ANALYSIS	90/576	0000	U
------/2101	SURFACE ANALYSIS	90/576	1200	N
0922/-------	24HR/36HR 850MB PROG	120/576	00/12	U
------/2131	200MB ANALYSIS	90/576	1200	U
0934/-------	36HR SURFACE PROG	120/288	0000	U
0946/-------	1000MB & 500MB ANALYSIS	90/576	1200	X
------/2201	24HR 200MB PROG	120/576	1200	R
1013/-------	48HR/72HR/96HR/120HR/144HR SURFACE GRID DATA	90/576	1200	X
------/2216	24HR 250MB PROG	120/576	1200	R

MOSCOW, RUSSIA

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
------/2231	24HR 300MB PROG	120/576	1200	R
1040/2246	SURFACE ANALYSIS	90/576	09/21	P
1116/-------	TECHNICAL STOP			
------/2322	24HR SIGNIFICANT WEATHER PROG	120/576	1200	R
------/2337	18HR SIGNIFICANT WEATHER PROIG ABOVE 400MB	120/576	1200	M
1140/------	24HR 200MB PROG	120/576	0000	R
------/2350	18HR 300MB PROG	120/576	0600	M
1155/-------	24HR 250MB PROG	120/576	0000	R

MAP AREAS:

M	-	1:15,000,000	56N	018W,	58N	108E,	30N	016W,	32N		072E
N	-	1:30,000,000	03N	097W,	03S	027W,	EQ	142E,		05S	077E
P	-	1:05,000,000	67N	002E,	42N	028E,	74N	061E,		44N	055E
Q	-	1:07,500,000	61N	010E,	43N	022E,	61N	071E,		43N	059E
R	-	1:30,000,000	39N	066W,	08N	014E,	18N	149E,		02S	088E
U	-	1:20,000,000	32N	051W,	15N	014E,	32N	167E,		16N	103E
X	-	1:30,000,000	NORTHERN HEMISPHERE 90N - 20N								

(INFORMATION DATED 11/1996)

MURMANSK, RUSSIA

CALL SIGN	FREQUENCIES		TIMES	EMISSION	POWER
RBW 41	5336	kHz		F3C	
	6445.5	kHz	CONTINUOUS	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	60/576		
2000	ICEBERG PROGNOSIS	120/576		

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

A	-1:05,000,000	67N	032W,	53N	004W,	72N	074E,	51N	047E
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 10/96)

ANKARA, TURKEY

CALL SIGNS	FREQUENCIES		TIMES	EMISSION	POWER
YMA20	3377	kHz	1610-0500	F3C	5 KW
YMA20	6790	kHz	0500-1610	F3C	5 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-------/1240	SURFACE ANALYSIS	90/576	0900	A
0330/-------	24HR/36HR 500MB PROGS	90/576	1200	A
0430/1610	SURFACE ANALYSIS	90/576	00/12	A
0500/-------	TEST CHART	90/576		

ANKARA, TURKEY

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-------/1710	24HR SIGNIFICANT WEATHER PROG	90/576	1200	A
0610/1840	SURFACE ANALYSIS	90/576	03/15	A
0640/1910	500MB ANALYSIS	90/576	00/12	A
0710/-------	300MB ANALYSIS	90/576	0000	A
0740/-------	24HR SIGNIFICANT WEATHER PROG	90/576	0000	A
-------/1940	200MB ANALYSIS	90/576	1200	A
0810/-------	24HR 700MB PROG	90/576	0000	A
-------/2015	300MB ANALYSIS	90/576	1200	A
0840/-------	24HR 300MB PROG	90/576	0000	A
0910/-------	48HR/72HR 500MB PROG	90/576	1200	A
0940/2152	SURFACE ANALYSIS	90/576	0600	A
1010/-------	TROPOPAUSE PROG	90/576	0000	A
1040/-------	MAX WIND ANALYSIS	90/576	0000	A

MAP AREA: A- 1:10,000,000 54N 013W, 53N 076E, 18N 007E, 17N 055E

(INFORMATION DATED 07/1991)

BRACKNELL, UNITED KINGDOM

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
GFA	2618.5 kHz	1800-0600	F3C	10 KW
GFA	4610 kHz	CONTINUOUS	F3C	10 KW
GFA	8040 kHz	CONTINUOUS	F3C	10 KW
GFA	14436 kHz	CONTINUOUS	F3C	10 KW
GFA	18261 kHz	0600-1800	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000/1200	24HR UPPER AIR PROG (FL 340)	120/576	12/00	P17
0012/1212	24HR UPPER AIR PROG (FL 300)	120/576	12/00	P17
0024/1224	24HR UPPER AIR PROG (FL 390)	120/576	12/00	P17
0036/1236	24HR UPPER AIR PROG (FL 180)	120/576	12/00	P17
0048/1248	24HR UPPER AIR PROG (FL 390)	120/576	12/00	N47
0100/1300	24HR UPPER AIR PROG (FL 340)	120/576	12/00	N47
0112/1312	24HR UPPER AIR PROG (FL 300)	120/576	12/00	N47
0124/1324	24HR UPPER AIR PROG (FL 240)	120/576	12/00	N47
0136/1336	24HR UPPER AIR PROG (FL 180)	120/576	12/00	N47
0148/1348	24HR UPPER AIR PROG (FL 100)	120/576	12/00	N47
0200/1400	24HR UPPER AIR PROG (FL 50)	120/576	1200	N47
0212/-------	24HR UPPER AIR PROG (FL 240)	120/576	1200	
-------/1412	SEA TEMP ANALYSIS FOR THE BRITISH ISLES	120/288		
0224/1424	24HR SIGNIFICANT WEATHER PROG	120/576	12/00	P
0236/1436	24HR SIGNIFICANT WEATHER PROG	120/576	12/00	O
0248/1448	24HR SIGNIFICANT WEATHER PROG	120/576	12/00	
0300/-------	PLAIN LANGUAGE WAFS AMENDMENTS	120/576		
0305/1500	24HR UPPER AIR PROG (FL 300)	120/576	12/00	Q272
0317/1512	24HR UPPER AIR PROG (FL 390)	120/576	12/00	Q272
0329/1524	24HR UPPER AIR PROG (FL 340)	120/576	12/00	Q272
-------/1536	PLAIN LANGUAGE WAFS AMENDMENTS	120/576		
0341/1541	SURFACE ANALYSIS	120/288	00/12	F
0347/1547	24HR SIGNIFICANT WEATHER PROG	120/576	12/00	R
-------/1602	SEA ICE ANALYSIS	120/576		E
-------/1622	GENERAL NOTICES	120/576		
0431/-------	500MB ANALYSIS	120/288	0000	F
0440/1641	24HR SURFACE PROG	120/288	00/12	F
0508/-------	100MB ANALYSIS	120/288	0000	F
-------/1708	500MB ANALYSIS	120/288	1200	F

BRACKNELL, UNITED KINGDOM

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0518/1718	18HR UPPER AIR PROG (FL 50)	120/576	18/06	N47
0530/1730	18HR UPPER AIR PROG (FL 340)	120/576	18/06	O18
0542/1742	18HR UPPER AIR PROG (FL 300)	120/576	18/06	O18
0554/1754	18HR UPPER AIR PROG (FL 390)	120/576	18/06	O18
0606/1806	18HR UPPER AIR PROG (FL 340)	120/576	18/06	P17
0618/1818	18HR UPPER AIR PROG (FL 300)	120/576	18/06	P17
0630/1830	18HR UPPER AIR PROG (FL 390)	120/576	18/06	P17
0642/1842	18HR UPPER AIR PROG (FL 180)	120/576	18/06	P17
0654/1900	18HR UPPER AIR PROG (FL 390)	120/576	18/06	N47
0706/1912	18HR UPPER AIR PROG (FL 340)	120/576	18/06	N47
0718/1924	18HR UPPER AIR PROG (FL 300)	120/576	18/06	N47
0730/1936	18HR UPPER AIR PROG (FL 240)	120/576	18/06	N47
0742/1948	18HR UPPER AIR PROG (FL 180)	120/576	18/06	N47
0754/2000	18HR UPPER AIR PROG (FL 100)	120/576	18/06	N47
0806/-------	48HR SURFACE PROG/1000-500MB THICKNESS PROG	120/288	0000	C
0812/-------	72HR SURFACE PROG/1000-500MB THICKNESS PROG	120/576	0000	C
-------/2012	SEA/SWELL ANALYSIS	120/288	1200	G59
-------/2018	24HR SEA/SWELL PROG	120/288	1200	G59
0818/-------	NORTHERN HEMISPHERE SURFACE ANALYSIS	120/288	0000	D
0824/2024	18HR SIGNIFICANT WEATHER PROG	120/576	18/06	P
0836/2036	18HR SIGNIFICANT WEATHER PROG	120/576	18/06	O
0848/2048	18HR SIGNIFICANT WEATHER PROG	120/576	18/06	
0900/-------	18HR UPPER AIR PROG (FL 340)	120/576	1800	Q272
-------/2100	18HR SIGNIFICANT WEATHER PROG	120/576	0600	R
0912/2115	18HR UPPER AIR PROG (FL 300)	120/576	18/06	Q272
0924/-------	PLAIN LANGUAGE WAFS AMENDMENTS	120/576		
0929/-------	SEA/SWELL ANALYSIS	120/288	0000	G59
0935/-------	24HR SEA/SWELL PROG	120/288	0000	G59
0941/2141	SURFACE ANALYSIS	120/288	06/18	F
0947/-------	18HR UPPER AIR PROG (FL 390)	120/576	18/06	Q272
-------/2147	PLAIN LANGUAGE WAFS AMENDMENTS	120/576		
1000/-------	24HR 500MB PROG	120/288	0000	C
1010/2152	48HR SEA/SWELL PROG	120/288	00/12	G59
-------/2158	18HR UPPER AIR PROG (FL 390)	120/576	0600	Q272
-------/2210	18HR UPPER AIR PROG (FL 340)	120/576	0600	Q272
1016/-------	18HR SIGNIFICANT WEATHER PROG	120/576	1800	R
-------/2222	48HR SURFACE PROG/1000-500MB THICKNESS PROG	120/288	1200	C
-------/2230	72HR SURFACE PROG/1000-500MB THICKNESS PROG	120/288	1200	C
1031/-------	NORTH ATLANTIC INFERENCE	120/576		
1042/2241	24HR SURFACE PROG	120/288	06/18	F
1107/-------	96HR SURFACE PROG	120/576	0000	C
1113/-------	120HR SURFACE PROG	120/288	0000	C
1124/2251	24HR UPPER AIR PROG (FL 340)	120/576	00/12	O18
1136/2303	24HR UPPER AIR PROG (FL 300)	120/576	00/12	O18
1148/2315	24HR UPPER AIR PROG (FL 390)	120/576	00/12	O18
-------/2333	96HR SURFACE PROG	120/576	1200	C
-------/2340	120HR SURFACE PROG	120/288	1200	C

MAP AREAS:

C	-	1:30,000,000	42N	090W,	66N	090E,	20N	040W,	30N	020E
D	-	1:30,000.000	29N	158W,	29N	063E,	08N	085W,	08N	005W
E	-	1:10,000,000	57N	096W,	71N	071E,	38N	048W,	46N	013E
F	-	1:20,000,000	69N	111W,	37N	050E,	34N	055W,	19N	010E
G	-	1:20,000,000	38N	114W,	60N	032E,	19N	077W,	30N	009W
N	-	1:17,000,000	55N	055W,	53N	065E,	25N	020W,	25N	035E
O	-	1:36,000,000	32N	022W,	22N	150E,	03S	034E,	06S	102E
P17	-	1:37,000,000	29N	146W,	25N	055E,	06N	083W,	07N	005W
Q	-	MERCATOR	15N	106W,	66N	022E,	64S	050W,	10S	078E
R	-	MERCATOR	70N	023W,	70N	073E,	38S	023W,	38S	073E

INFORMATION DATED 06/1998

NORTHWOOD, UNITED KINGDOM

CALL SIGNS	FREQUENCIES	TIMES	EMISSION	POWER
GYA	3652 kHz	CONTINUOUS	F3C	10 KW
GYA	4307 kHz	CONTINUOUS	F3C	10 KW
GYA	6452.5 kHz	CONTINUOUS	F3C	10 KW
GYA	8331.5 kHz	CONTINUOUS	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
-------/1210	GENERAL MET	120/576	0600	
-------/1230	SHIPS SAFETY	120/576		
-------/1300	SEA SURFACE TEMP ANALYSIS	120/576		
-------/1350	SPECIAL/OC DATA CHART	120/576		
-------/1425	SCXA TAFS	120/576	LATEST	
0230/-------	BROADCAST SCHEDULE	120/576		
0320/1500	GENERAL MET	120/576	00/12	
-------/1530	BROADCAST SCHEDULE	120/576		
0400/1545	SURFACE ANALYSIS	120/576	00/12	
-------/1640	GALE SUMMARY	120/576		
0520/-------	TERMIMAL FORECASTS	120/576	LATEST	
0540/1710	SELECTED RADIOSONDE OBS	120/576	00/12	
-------/1730	SHIPS SAFETY (REPEAT OF 1230)	120/576	LATEST	
0600/-------	GALE SUMMARY	120/576	0000	
0620/-------	TERMINAL FORECASTS	120/576	LATEST	
0650/1800	GENERAL MET (REPEAT OF 0320/1500)	120/576	00/12	
0730/1900	24HR PROGS	120/576	00/12	
-------/1950	GALE SUMMARY	120/576		
1040/2050	ROUTING/SIG WINDS PROG	120/576	00/12	
-------/2120	GENERAL MET	120/576	1800	
1130/-------	GALE SUMMARY	120/576		
-------/2330	GENERAL MET (REPEAT OF 2120)	120/576	1800	

MAP AREA: 1:10,000,000 77N 084W, 65N 049E, 32N 044W, 28N 001W

(INFORMATION DATED 06/1998)

ANTARTICA

CASEY, ANTARCTICA

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
VLM	7470 kHz	CONTINUOUS	F3C	1 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0000	48HR MSL PROG	120/576	1200	
0020	48HR SURFACE WIND PROG	120/576	1200	
0040	48HR TOTAL WAVE HT PROG	120/576	1200	
0100	60HR MSL PROG	120/576	0000	
0200	72HR MSL PROG	120/576	1200	
0700	BROADCAST SCHEDULE	120/576		
0800	SURFACE ANALYSIS (MANUAL)	120/576	0000	
1000	24HR MSL PROG	120/576	0000	
1020	24HR SURFACE WIND PROG	120/576	0000	
1040	24HR TOTAL WAVE HT PROG	120/576	0000	
1100	36HR MSL PROG	120/576	1200	
1120	36HR SURFACE WIND PROG	120/576	1200	
1140	36HR TOTAL WAVE HT PROG	120/576	1200	
1200	48HR MSL PROG	120/576	0000	
1220	48HR SURFACE WIND PROG	120/576	0000	
1240	48HR TOTAL WAVE HT PROG	120/576	0000	
1300	60HR MSL PROG	120/576	1200	
1320	72HR MSL PROG	120/576	0000	
1900	SEA SURFACE TEMPS	120/576	WEEKLY	
2000	SURFACE ANALYSIS (MANUAL)	120/576	1200	
2200	24HR MSL PROG	120/576	1200	
2220	24HR SURFACE WIND PROG	120/576	1200	
2240	24HR TOTAL WAVE HT PROG	120/576	1200	
2300	36HR MSL PROG	120/576	0000	
2320	36HR SURFACE WIND PROG	120/576	0000	
2340	36HR TOTAL WAVE HT PROG	120/576	0000	

NOTES: COMMENTS OR SUGGESTIONS MAY BE FORWARDED TO:
STEVE PENDLEBURY
GPO BOX 727G
HOBART, AUSTRALIA

(INFORMATION DATED 04/1998) http://www.bom.gov.au/other/rad_sch/vlm_sched.shtml

CENTRO METEOROLOGICO ANTARTICO

CALL SIGN	FREQUENCIES	TIMES	EMISSION	POWER
LSB	2401 kHz	CONTINUOUS	F3C	10 KW
LSB	4807 kHz	CONTINUOUS	F3C	10 KW
LSB	9951 kHz	CONTINUOUS	F3C	10 KW

TIME	CONTENTS OF TRANSMISSION	RPM/IOC	VALID TIME	MAP AREA
0025/1225	SURFACE ANALYSIS	120/576	21/09	A
0325/1525	SURFACE ANALYSIS	120/576	00/12	A

MAP AREA: POLOR PROJECTION WHICH COVERS ALL OF SOUTH AMERICA.
NOTES: OPERATED BY ARGENTINA

(INFORMATION DATED 01/1996)

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.

The **Marine Product Dissemination Information 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. The webpage may be found at:

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

The majority of National Weather Service (NWS) forecasts and warnings may be found under the **NWS webpage** (http://www.nws.noaa.gov/index.html). Of specific interest to mariners are the **NWS Marine Product Listing and Schedule** (http://www.nws.noaa.gov/om/marine/forecast.htm) and **Marine Charts (radiofax)** (http://weather.noaa.gov/fax/marine.shtml) webpages. A listing of marine forecasts by zone may be found at **Current Marine Products** (http://weather.noaa.gov/weather/marine/marine.html**)**. Information on 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. Satellite imagery may be found on the **GOES** (http://www.goes.noaa.gov/) webpage.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. Marine weather data may also be obtained via the Internet using **EMWIN** (http://www.nws.noaa.gov/om/marine/faq.htm) . Model guidance products used by marine forecasters is available from the **Ocean Modeling Branch** (http://polar.wwb.noaa.gov/) .

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 webpage** (http://www.ndbc.noaa.gov/). This data is also available from the **Tallahassee Forecast Office** (http://www.nws.fsu.edu/buoy/) in a slightly different presentation.

All NWS marine forecasts rely heavily on the Voluntary Observing Ship (VOS) program (http://www.vos.noaa.gov/) for obtaining meteorological observations. Ship observations may be found on the **Tallahassee Forecast Office**(http://www.nws.fsu.edu/buoy/) **Penn State** http://www.ems.psu.edu/cgi-bin/wx/offshore.cgi) and **Oceanweather** (http://www.oceanweather.com/data/index.html)**,** and Great Lakes Ship Locations (http://reef.atmos.colostate.edu/drummond/) webpages.

The **U.S. Coast Guard Maritime Telecommunications Information webpage** (http://www.navcen.uscg.mil/marcomms/) contains an excellent description of marine communication systems.

MARINE WEBPAGES

There are also many other Internet sites of interest to the mariner. Use one of 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.

INTERNET ACCESS for MARINERS

Currently, Internet at sea can be problematic unless you stay within cellular telephone range of shore. Internet access using cellular technology is technically challenging and potentially frustrating as well. Low cost wireless Internet services such as those provided by **GoAmerica** (http://www.goamerica.net/) and **Metricom** (http://www.metricom.com/) are beginning to become available, however, these provide little maritime coverage. Satellite services including **Inmarsat**,(http://www.inmarsat.org/) **MSAT**,(http://www.tmi.ca/) **Skycell**, (http://www.skycell.com/) **Boatracs**, (http://www.boatracs.com/), **Orbcomm** (http://www.orbcomm.com/) and **MTN** (http://www.icgcom.com/satellite/)are available, however, costs can be significantly greater. Visit the **U.S. Coast Guard R&D Center** (http://comms.rdc.uscg.mil/links.htm) for an excellent description of present and future satellite systems which also contains links to company websites. 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. Low cost, worldwide, access to the World Wide Web via satellite should be available to the mariner in the next five to ten years.

E-mail access is available offshore if you have an HF marine radio from companies such as **Sailmail**, (http://www.sailmail.com/), **Seamail**, (http://www.seamail.org/), **PinOak**, (http://www.pinoak.com/) **Globe Wireless** (http://www.globewireless.com) and the **Mobile Marine Radio Network (WLO)** (http://www.wloradio.com). E-mail can be accomplished at no cost using **amateur radio** (http://www.nws.noaa.gov/om/marine/ham.htm)

NATIONAL WEATHER SERVICE PRODUCTS AVAILABLE VIA E-MAIL (FTPMAIL)

National Weather Service radiofax charts broadcast by U.S. Coast Guard from Boston, New Orleans and Pt. Reyes, California are now available via e-mail. *Marine text products are also available.* 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 three hours, 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 (6 KBytes).

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

The FTPMAIL Ahelp@, command and product index files are included in Appendix B of this document for convenience. Be certain to occasionally download these files to make certain you have the latest versions available.

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.

NATIONAL WEATHER SERVICE INTERNET SITES

See these sites for further links

NWS Homepage	http://www.nws.noaa.gov
NWS Marine Product Dissemination Information	http://www.nws.noaa.gov/om/marine/home.htm
NWS Marine Text Products	http://www.nws.noaa.gov/om/marine/forecast.htm
NWS Marine Radiofax Products	http://www.nws.noaa.gov/fax/marine.shtml
NWS Voluntary Observing Ship Program	http://www.vos.noaa.gov
AMVER/SEAS Homepage	http://seas.nos.noaa.gov/seas/

U.S. NAVY AND OTHER WEATHER INTERNET SITES

See these sites for further links

Naval Oceanographic Office	http://www.navo.navy.mil
Navy Fleet Numerical	http://www.fnmoc.navy.mil
Navy, Atlantic Product Support Homepage	http://www.nlmoc.navy.mil/home1.shtml
International Ice patrol	http://www.rdc.uscg.mil/iippages/home.html
National Ice Center	http://www.natice.noaa.gov
WMO Homepage	http://www.wmo.ch
USCG Maritime Telecommunications	http://www.navcen.uscg.mil/marcomms

FTPMAIL

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:
*
*               Clifford.Fridlind@noaa.gov   301-713-0882 x 122
*               Timothy.Rulon@noaa.gov       301-713-1677 x 128
*
*****************************************************************
```

**** NEW USERS....See notes on CAPITALIZATION *****

CORRECT CAPITALIZATION FOR COMMANDS, DIRECTORY AND FILE NAMES IS CRITICAL

weather.noaa.gov is the only valid FTP site for this server

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 three hours, however, performance may vary widely and receipt cannot be guaranteed.

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 weather.noaa.gov internet server is accessible using the FTPMAIL server.

To use FTPMAIL, the user sends a small script file via e-mail to NWS requesting the desired file(s). An error message will be returned if the script file is in error.

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. See your system administrator if you have any questions on this topic.

Files sizes for NWS radiofax graphic files average 35KB. 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 The latest versions of Web browsers often include a TIFF viewer.

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

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

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

Example scripts are:

```
help
```

Connect to default site (weather.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 (weather.noaa.gov) and send back the chart file PWAE98.TIF to e-mail address of requestor

NOTE: Capitalization is critical for this server. Chart file names in the fax subdirectory are CAPITALIZED. The fax subdirectory is UN-CAPITALIZED.

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

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

```
open
cd fax
get ftpcmd.txt      (List of FTPMAIL commands)
get rfaxtif.txt     (TIFF suggestions)
get rfaxatl.txt     (Atlantic radiofax file directory)
get rfaxpac.txt     (Pacific radiofax file directory)
get rfaxmex.txt     (Gulf of Mexico radiofax file directory)
get marine1.txt     (Highseas,offshore text file directory)
get marine2.txt     (Hurricane text file directory)
get akice.txt       (Alaskan Ice and SST file directory)
get uiuclist.txt    (UIUC hurricane listserver instructions)
quit

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

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

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.  We are working to develop
a version of FTPMAIL which parses these control characters.

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 mariine",
cd "test" 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 queueing for retry queue/097095.69568"
Your request will be resubmitted automatically and your requested file(s)
should be received within several hours.

************************************************************


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 Dissemination
http://www.nws.noaa.gov/om/marine/forecast.htm   NWS Marine Text Products
http://www.nws.noaa.gov/data.html#mar            NWS Marine & Satellite
http://weather.noaa.gov/fax/marine.shtml         NWS Radiofax Webpage
http://www.ncep.noaa.gov/MPC                     NWS Marine Prediction Center

Author: Timothy Rulon, Office of Meteorology,
        National Weather Service
        Last Modified January 20, 2000
        Document URL: http://weather.noaa.gov/pub/fax/ftpmail.txt
                      ftp://weather.noaa.gov/fax/ftpmail.txt
```

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the Western Atlantic Ocean

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. These charts may be found in directory: ftp://weather.noaa.gov/fax or http://weather.noaa.gov/pub/fax

WIND/SEAS CHARTS	FILE NAME
12Z Sea State Analysis, 10E-95W Northern Hemisphere;	PJAA99.TIF
00Z Sea State Analysis, 45W-85W Northern Hemisphere;	PWAA88.TIF
12Z Sea State Analysis, 45W-85W Northern Hemisphere;	PWAA89.TIF
Sea State Analysis, (Most Current)	PWAA90.TIF
24HR Wind/Wave Chart VT00Z Forecast 45W-85W N. Hemisphere;	PWAE98.TIF
24HR Wind/Wave Chart VT12Z Forecast 45W-85W 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
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 45W-85W Northern Hemisphere;	PPAE00.TIF
24HR Surface Chart VT12Z Forecast 45W-85W 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 VT00Z Forecast 10E-95W Northern Hemisphere;	PWAM99.TIF

UPPER AIR CHARTS

00Z 500MB Surface Chart Analysis 45W-85W Northern Hemisphere;	PPAA50.TIF
12Z 500MB Surface Chart Analysis 45W-85W Northern Hemisphere;	PPAA51.TIF
500MB Surface Chart Analysis (Most Current);	PPAA10.TIF
24HR 500MB Chart VT00Z Forecast 45W-85W Northern Hemisphere;	PPAE50.TIF
24HR 500MB Chart VT12Z Forecast 45W-85W Northern Hemisphere;	PPAE51.TIF
24HR 500MB Chart Forecast (Most Current);	PPAE11.TIF
36HR 500MB Chart VT00Z Forecast 45W-85W Northern Hemisphere;	PPAG50.TIF
36HR 500MB Chart VT12Z Forecast 45W-85W Northern Hemisphere;	PPAG51.TIF
36HR 500MB Chart Forecast (Most Current);	PPAG11.TIF
48HR 500MB Chart VT00Z Forecast 45W-85W Northern Hemisphere;	PPAI50.TIF
48HR 500MB Chart VT12Z Forecast 45W-85W Northern Hemisphere;	PPAI51.TIF
48HR 500MB Chart Forecast (Most Current);	PPAI10.TIF
96HR 500MB Chart VT00Z Forecast 45W-85W Northern Hemisphere;	PPAM50.TIF

SATELLITE IMAGERY

00Z GOES Infrared	evnt00.jpg
06Z GOES Infrared	evnt06.jpg
12Z GOES Infrared	evnt12.jpg
18Z GOES Infrared	evnt18.jpg
GOES Infrared (Most Current);	evnt99.jpg

ICE CHARTS

Ice Chart (When Available)	PIEA88.TIF

(Ice chart normally not available on this server 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;	rfaxatl.txt

Author: Timothy Rulon, Office of Meteorology, National Weather Service
Last Modified November 16, 1999
Document URL: http://weather.noaa.gov/pub/fax/rfaxatl.txt
ftp://weather.noaa.gov/fax/rfaxatl.txt

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the Eastern Pacific Ocean

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

Assigned frequencies 4346, 8682, 12730, 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. These charts may be found in directory: ftp://weather.noaa.gov/fax or http://weather.noaa.gov/pub/fax

WIND/SEAS CHARTS	FILE NAME
00Z Sea State Analysis 115W-155W Northern Hemisphere;	PWBA88.TIF
12Z Sea State Analysis 115W-135E Northern Hemisphere;	PWBA89.TIF
Sea State Analysis (Most Current)	PWBA90.TIF
12Z Wind/Wave Analysis 80W-160W N. Hemisphere;	PJBA88.TIF
18Z Wind/Wave Analysis 80W-160W N. Hemisphere;	PJBA89.TIF
Wind/Wave Analysis (Most Current);	PJBA90.TIF
24HR Wind/Wave Forecast VT00Z Forecast 115W-155W N. Hemisphere;	PWBE98.TIF
24HR Wind/Wave Forecast VT12Z Forecast 115W-155W N. Hemisphere;	PWBE99.TIF
24HR Wind/Wave Forecast (Most Current);	PWBE10.TIF
48HR Wind/Wave Forecast VT00Z 115W-135E N. Hemisphere;	PJBI98.TIF
48HR Wind/Wave Forecast VT12Z 115W-135E N. Hemisphere;	PJBI99.TIF
48HR Wind Wave Forecast (Most Current);	PJBI10.TIF
48HR Wind/Wave Forecast VT00Z 115W-135E N. Hemisphere;	PJBI88.TIF
48HR Wind Wave Forecast VT12Z 115W-135E N. Hemisphere;	PJBI89.TIF
48HR Wind Wave Forecast (Most Current);	PJBI20.TIF

SURFACE CHARTS	
00Z Surface Chart Analysis 115W-175W N. Hemisphere (Part 1);	PYBA01.TIF
00Z Surface Chart Analysis 175W-135E N. Hemisphere (Part 2);	PYBA02.TIF
06Z Surface Chart Analysis 115W-175W N. Hemisphere (Part 1);	PYBA03.TIF
06Z Surface Chart Analysis 175W-135E N. Hemisphere (Part 2);	PYBA04.TIF
12Z Surface Chart Analysis 115W-175W N. Hemisphere (Part 1);	PYBA05.TIF
12Z Surface Chart Analysis 175W-135E N. Hemisphere (Part 2);	PYBA06.TIF
18Z Surface Chart Analysis 115W-175W N. Hemisphere (Part 1);	PYBA07.TIF
18Z Surface Chart Analysis 175W-135E N. Hemisphere (Part 2);	PYBA08.TIF
Surface Chart Analysis, Part 1 (Most Current);	PYBA11.TIF
Surface Chart Analysis, Part 2 (Most Current);	PYBA12.TIF
24HR Surface Chart VT00Z Forecast 115W-155W N. Hemisphere;	PPBE00.TIF
24HR Surface Chart VT12Z Forecast 115W-155W N. Hemisphere;	PPBE01.TIF
24HR Surface Chart Forecast (Most Current);	PPBE10.TIF
48HR Surface Chart VT00Z Forecast 115W-135E N. Hemisphere;	PWBI98.TIF
48HR Surface Chart VT12Z Forecast 115W-135E N. Hemisphere;	PWBI99.TIF
48HR Surface Chart Forecast (Most Current);	PWBI10.TIF
96HR Surface Chart VT00Z Forecast 115W-135E N. Hemisphere;	PWBM99.TIF

UPPER AIR CHARTS

00Z 500 MB Analysis 115W-135E Northern Hemisphere;	PPBA50.TIF
12Z 500 MB Analysis 115W-135E Northern Hemisphere;	PPBA51.TIF
500 MB Analysis (Most Current);	PPBA10.TIF
48HR 500 MB Chart VT00Z Forecast 115W-135E Northern Hemisphere;	PPBI50.TIF
48HR 500 MB Chart VT12Z Forecast 115W-135E Northern Hemisphere;	PPBI51.TIF
500 MB Chart Forecast (Most Current);	PPBI10.TIF
96HR 500 MB Chart VT00Z Forecast 115W-135E Northern Hemisphere;	PPBM50.TIF

SEA SURFACE TEMPERATURES

Pacific SST Chart 115W-135W;	PTBA88.TIF
Pacific SST Chart 105W-130W;	PTBA89.TIF

SATELLITE IMAGERY

00Z GOES Infrared	evpn00.jpg
01Z GOES Infrared	evpn01.jpg
06Z GOES Infrared	evpn06.jpg
07Z GOES Infrared	evpn07.jpg
12Z GOES Infrared	evpn12.jpg
13Z GOES Infrared	evpn13.jpg
18Z GOES Infrared	evpn18.jpg
19Z GOES Infrared	evpn19.jpg
GOES Infrared (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;	rfaxpac.txt

Author: Timothy Rulon, Office of Meteorology, National Weather Service
Last Modified Tuesday, November 16, 1999
Document URL: http://weather.noaa.gov/pub/fax/rfaxpac.txt
ftp://weather.noaa.gov/fax/rfaxpac.txt

NATIONAL WEATHER SERVICE RADIOFAX PRODUCTS
for the Gulf of Mexico and Tropical Atlantic

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

Assigned frequencies 4317.9, 8503.9 12789.9 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://weather.noaa.gov/fax

WIND/SEAS CHARTS	FILE NAME
00/12HR Wind/Seas Forecast (2 Charts) VT00/12Z;	PYEA96.TIF
00/12HR Wind/Seas Forecast (2 Charts) VT06/18Z;	PYEA97.TIF
00/12HR Wind/Seas Forecast (2 Charts) VT12/00Z;	PYEA98.TIF
00/12HR Wind/Seas Forecast (2 Charts) VT18/06Z;	PYEA99.TIF
00/12HR Wind/Seas Forecast (Most Current);	PYEA10.TIF
24/36HR Wind/Seas Forecast (2 Charts) VT00/12Z;	PWED98.TIF
24/36HR Wind/Seas Forecast (2 Charts) VT12/00Z;	PWED99.TIF
24/36HR Wind/Seas Forecast (Most Current);	PWED10.TIF
SURFACE CHARTS	
U.S. Surface Chart Analysis at 00Z Continental U.S.;	PYAA98.TIF
U.S. Surface Chart Analysis at 06Z Continental U.S.;	PYAA97.TIF
U.S. Surface Chart Analysis at 12Z Continental U.S.;	PYAA99.TIF
U.S. Surface Chart Analysis at 18Z Continental U.S.;	PYAA96.TIF
U.S. Surface Chart Analysis (Most Current);	PYAA20.TIF
Tropical Surface Chart Analysis at 00Z;	PYEA86.TIF
Tropical Surface Chart Analysis at 06Z;	PYEA87.TIF
Tropical Surface Chart Analysis at 12Z;	PYEA85.TIF
Tropical Surface Chart Analysis at 18Z;	PYEA88.TIF
Tropical Surface Chart Analysis (Most Current);	PYEA11.TIF
HIGH SEAS FORECASTS	
04Z High Seas Forecast 0-90W Tropical Belt, TEXT DOCUMENT;	PLEA86.TIF
10Z High Seas Forecast 0-90W Tropical Belt, TEXT DOCUMENT;	PLEA87.TIF
16Z High Seas Forecast 0-90W Tropical Belt, TEXT DOCUMENT;	PLEA89.TIF
22Z High Seas Forecast 0-90W Tropical Belt, TEXT DOCUMENT;	PLEA88.TIF
High Seas Forecast (Most Current);	PLEA10.TIF
SATELLITE IMAGERY	
0645Z GOES Tropical Infrared	evst06.jpg
1145Z GOES Tropical Infrared	evst12.jpg
1745Z GOES Tropical Infrared	evst18.jpg
2345Z GOES Tropical Infrared	evst00.jpg
GOES Tropical Infrared (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
Internet File Names (Gulf of Mexico)	rfaxmex.txt

Author: Timothy Rulon, Office of Meteorology, National Weather Service
Last Modified Tuesday, February 09, 1999
Document URL: http://weather.noaa.gov/pub/fax/rfaxmex.txt

NATIONAL WEATHER SERVICE MARINE TEXT PRODUCTS
HURRICANE PRODUCTS
(This document under construction)

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@weather.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@weather.noaa.gov
Subject Line:           Put anything you like
Body:                   help
```

ATLANTIC HURRICANE PRODUCTS

These files may be found in directory:
ftp://weather.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 Updates	TBD
Tropical Cyclone Positions	TBD
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://weather.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 Updates	/weather/update.txt
Tropical Cyclone Positions	TBD
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://weather.noaa.gov/data/hurricane_products/central_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 Updates	/weather/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.

Author: Timothy Rulon, Office of Meteorology,
National Weather Service
Last Modified Friday Mar 31, 1999
Document URL: http://weather.noaa.gov/pub/fax/marine2.txt

NATIONAL WEATHER SERVICE MARINE TEXT PRODUCTS

HIGHSEAS and OFFSHORE PRODUCTS
(This document under construction)

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@weather.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
                        cd /data
                        cd forecasts
                        cd marine
                        cd offshore
                        get california_waters.txt
                        get gulf_of_mexico.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@weather.noaa.gov
Subject Line:            Put anything you like
Body:                    help
```

HIGH SEAS FORECASTS

These files may be found in directory:
ftp://weather.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

OFFSHORE FORECASTS

These files may be found in directory:
ftp://weather.noaa.gov/data/forecasts/marine/offshore/

PRODUCT DESCRIPTION	FILE NAME
New England Offshore*	new_england_shelf.txt
Mid-Atlantic Offshore*	w_central_n_atlantic_shelf.txt
Caribbean Offshore*	caribbean-sw_n_atlantic.txt
Gulf of Mexico Offshore*	gulf_of_mexico.txt

Washington-Oregon Offshore*	washington-oregon.txt
California Offshore*	california_waters.txt
Hawaii Offshore*	hawaiian_waters.txt

* Offshore forecasts temporarily unavailable via FTPMAIL
beginning NOV 20, 1998. We hope to have this situation corrected in the near future. These files can be downloaded in segments. Download the above files for instructions.

Author: Timothy Rulon, Office of Meteorology,
National Weather Service
Last Modified Friday Mar 26, 1999
Document URL: http://weather.noaa.gov/pub/fax/marine1.txt

NATIONAL WEATHER SERVICE MARINE TEXT PRODUCTS
ALASKAN ICE PRODUCTS

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@weather.noaa.gov
Subject Line:           Put anything you like
Body:                   open
                        cd fax
                        get COOKICE.GIF
                        get ICE.GIF
                        get ICEF.GIF
                        get SST.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@weather.noaa.gov
Subject Line:            Put anything you like
Body:                    help
```

ALASKAN ICE PRODUCTS

These files may be found in directory:
ftp://weather.noaa.gov/fax

PRODUCT DESCRIPTION	FILE NAME
Cook Inlet, Alaska Sea Ice Analysis	COOKICE.GIF
Alaska Sea Ice Analysis	ICE.GIF
Alaska 5 Day Sea Ice Forecast	ICEF.GIF
Alaska Sea Surface Temperature Analysis	SST.GIF
List of File Names (This file)	akice.txt

Author: Timothy Rulon, Office of Meteorology,
National Weather Service
Last Modified Friday January 20, 2000
Document URL: http://weather.noaa.gov/pub/fax/akice.txt
ftp://weather.noaa.gov/fax/akice.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 version of AMVER/SEAS is in the process of development.

For Information on SEAS contact:
Your nearest U.S. Port Meteorological Officer or SEAS representative listed in the Appendix.

For Information on AMVER contact:
Rick Kenney 1-212-668-7762
e-mail: rkenney@batteryny.uscg.mil

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

USEFUL MARINE WEATHER PUBLICATIONS

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

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

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

OTHER PUBLICATIONS OF VALUE TO THE MARINER

Mariner's Weather Log Magazine - $12.00/3 issues/yr ($15.00 foreign)[3]
Selected Marine Worldwide Weather Broadcasts (9/92)[3,5]
NWS Observing Handbook NO.1 (4/99)[6]
Worldwide Marine Radiofacsimile Broadcast Schedules (1/00)[4]
NOAA Weather Radio Brochure (NOAA/PA 94070, 3/97) Free[2]
NOAA Weather Radio Handout (NOAA/PA 94061, 3/97) Free[2]
A Mariners Guide to Marine Weather Services (NOAA/PA 92056) Free[2]
Safe Boating Weather Tips (NOAA/PA 94058, 6/98) Free[2]
NIMA Publication 117 "Radio Navigational Aids" (1997) $18.50[1]
American Practical Navigator (Bowdich) Publication 9 - $24.25[1]
Pilot Chart Atlas - $29.75/Ocean Area, 5 areas[1]
Sailing Directions - $21.25/volume, 42 volumes[1]
Summary of Notice to Mariners Corrections - $18.50[1]
The Future in Marine Radio Communications - GMDSS (1998) Free[9]
Maritime Navigational Safety Information Sources, (9/94) $8[7]
Maritime Radio Users Handbook (1992) $12[7]
The British Admiralty List of Signals[8]
- Volume 1 Coast Radio Stations (2 parts)
- Volume 2 Radio Navigational Aids
- Volume 3 Radio Weather Services & Navigational Warnings (2 Parts)
- Volume 4 Meteorological Observation Stations
- Volume 5 Global Maritime Distress and Safety Systems
- Volume 6 Port Operations & Pilot Services (2 parts)
- Volume 7 Vessel Traffic Systems & Reporting Points (2 parts)
- Volume 8 Satellite Navigation Systems

Directory of Private Weather Services - Free[10]
TSUNAMI The Great Waves - Free [11]
International SafetyNET Manual, 1994; IMO-908E[12]
NAVTEX Manual, 1994; IMO-951E[12]
GMDSS Handbook, 1995 (Includes GMDSS Master Plan); IMO-970E[12]
SOLAS Consolidated Edition, 1997; IMO-110E[12]

1. Distribution Division (N/ACC3)
   National Ocean Service
   6501 Lafayette Avenue
   Riverdale, MD 20737-1199
   (301)-436-6990
   (800)-638-8975
   (301)-436-6829 FAX
   http://chartmaker.ncd.noaa.gov/ocs/text/mcd-5.html
   or your local chart agent:
   http://chartmaker.ncd.noaa.gov/ocs/text/states.html

2. Available Internet: Via http://www.nws.noaa.gov/om/public.htm
   Or from your local National Weather Service Forecast Office.

3. Superintendent of Documents
   P.O. Box 371954
   Pittsburgh, PA 15250-7954
   (202)-512-2250
   (202)-512-1800 FAX
   http://www.gpo.gov
   http://www.nws.noaa.gov/om/mwl/mwl.htm
   (Distributed free to ships in VOS program)

4. (Printed copies available only to ships participating in U.S. VOS program)
   web version http://www.nws.noaa.gov/om/marine/home.htm
   Tim Rulon, NOAA
   National Weather Service W/OM12
   1325 East-West Highway
   Silver Spring, MD 20910
   1-301-713-1677 x128
   1-301-713-1598 (fax)
   timothy.rulon@noaa.gov
   marine.weather@noaa.gov
   http://www.nws.noaa.gov/om/marine/home.htm

5. Joint Publication of National Weather Service and Naval Oceanography Command
   Currently out of date, out of print.
   Tim Rulon, NOAA
   National Weather Service W/OM12
   1325 East-West Highway
   Silver Spring, MD 20910
   1-301-713-1677 x128
   1-301-713-1598 (fax)
   timothy.rulon@noaa.gov
   marine.weather@noaa.gov
   http://www.nws.noaa.gov/om/marine/home.htm

6. (Available only to ships participating in U.S. VOS program)
   National Weather Service
   VOS Program Manager W/OM12
   1325 East West Highway
   Silver Spring, MD 20910
   (301)-713-1677 x129
   vincent.zegowitz@noaa.gov
   http://www.vos.noaa.gov

7. Radio Technical Commission for Maritime Services (RTCM)
   1800 Diagonal Rd. , Suite 600
   Alexandria, VA 22314-2840
   (703)-684-4481
   (703)-836-4229 (FAX)
   (New revisions in process)

8. UK Hydrographic Office
   Admiralty Way, Tauton, Somerset
   TA1 2DNm United Kingdom
   +44(0) 1823 337900 x3333
   +44(0) 1823 323753 FAX
   info@hydro.gov.uk
   http://www.hydroweb.demon.co.uk/home.htm
   http://www.hydroweb.demon.co.uk/distributor.htm

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

10. National Weather Service
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(1) - 162.550 mHz (2) - 162.400 mHz (3) - 162.475 MHz (4) - 162.425

Location	Freq
ALABAMA	
Mobile	1
ALASKA	
Anchorage	1
Cordova	1
Homer	2
Juneau	1
Ketchikan	1
Kodiak	1
Nome	1
Petersburg	1
Seward	1
Sitka	1
Valdez	1
Wrangell	2
Yakutat	2
CALIFORNIA	
Eureka	2
Los Angeles	1
Monterey	2
Point Arena	2
Sacramento	2
San Diego	2
San Francisco	1
San Luis Obispo	1
Santa Barbara	2
CONNECTICUT	
New London	1
DELAWARE	
Lewes	1
FLORIDA	
Daytona Beach	2
Fort Myers	3
Jacksonville	1
Key West	2
Melbourne	1
Miami	1
Panama City	1
Pensacola	2
Tampa	1
West Palm Beach	3
GEORGIA	
Savannah	2

Location	Freq
HAWAII	
Hilo	1
Honolulu	1
Waimanalo	2
ILLINOIS	
Chicago	1
LOUISIANA	
Baton Rouge	2
Buras	3
Lake Charles	2
Morgan City	3
New Orleans	1
MAINE	
Portland	1
MARYLAND	
Baltimore	2
Salisbury	3
MASSACHUSETTS	
Boston	3
Hyannis	1
MICHIGAN	
Alpena	1
Detroit	1
Marguette	1
Sault Ste Marie	1
Traverse City	2
MINNESOTA	
Duluth	1
MISSISSIPPI	
Gulfport	2
NEW JERSEY	
Atlantic City	2
NEW YORK	
Albany	1
Buffalo	1
New York City	1
Riverhead	3
Rochester	2
NORTH CAROLINA	
Cape Hatteras	3

Location	Freq
NORTH CAROLINA	
New Bern	2
Wilmington	1
OHIO	
Cleveland	1
Sandusky	2
Toledo	1
OREGON	
Astoria	2
Brookings	1
Coos Bay	2
Newport	1
Portland	2
PENNSYLVANIA	
Erie	2
Philadelphia	3
PUERTO RICO	
San Juan	2
SOUTH CAROLINA	
Beaufort	3
Charleston	1
Myrtle Beach	2
TEXAS	
Bay City	4
Beaumont	3
Brownsville	1
Corpus Christi	1
Galveston	1
Houston	2
Victoria	2
VIRGINIA	
Heathsville	2
Norfolk	1
Richmond	3
WASHINGTON	
Neah Bay	1
Seattle	1
WISCONSIN	
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