

Commandant United States Coast Guard 2100 Second Street, S.W. Washington, DC 20593-0001 (202) 426-1881

COMDTINST 3140.2D 3 DEC 1994

#### **COMMANDANT INSTRUCTION 3140.2D**

Subj: Marine Weather Observation and Reporting

- 1. <u>PURPOSE</u>. This Instruction sets forth the policy for observing and reporting weather information from Coast Guard cutters, and provides information for obtaining weather instruments and publications.
- 2. <u>DIRECTIVES AFFECTED</u>. Commandant Instruction 3140.2C is cancelled.
- 3. <u>PROGRAM OBJECTIVES</u>. This program is established to assist the National Weather Service (NWS) and the Naval Oceanography Command in collecting marine weather data to support public and national defense needs.
- 4. <u>DISCUSSION</u>. The National Weather Service has statutory responsibility for providing weather forecasts for public use. Under the authority of 14 USC 147, the Coast Guard cooperates with NWS by reporting marine weather observations. <u>These observations are often the only marine information available to weather forecasting facilities and, as such, are critical to accurate weather analysis and forecasting. Real time reports of observed marine weather conditions are used several times daily as part of the marine and land forecasting scheme. Completed logs are used for preparation of marine climatology atlases and various marine research activities. The U.S. Navy uses marine weather data to provide environmental forecasts and services in support of fleet operations. As part of those services, the Navy provides weather forecasts (WEAX) and Optimum Track Ship Routing (OTSR) to Coast Guard cutters upon request.</u>

### 5. PROCEDURES.

a. <u>Units Affected</u>. For purposes of this Instruction, cutters responsible for making marine weather observations are designated as Category One or Category Two as follows:

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- 5. a. (1) Category One: This category consists of all WAGB, WHEC, WMEC, and WLB class cutters with a radioman assigned and which have radioteletype or radiotelegraph capability.
  - (2) Category Two: This category consists of cutters of other classes which may be designated by area or district commanders to make weather reports.
  - b. <u>Observations and Transmission of Reports</u>.
    - (1) All cutters shall make and report weather observations at least four (4) times daily at 0000, 0600, 1200 and 1800 GMT when underway. Vessels in coastal waters (out to about 100 miles) should make weather reports at three hourly intervals starting at 0000 GMT. Where possible all reports should be transmitted on the report hour, or a few minutes before, to assure making the NWS computer model runs. Reporting times may be altered at the discretion of the operational commander to meet mission requirements or special requests of the Navy or the National Weather Service.
    - All cutters shall send weather reports by PRIORITY precedence message via radioteletype or radiotelegraph. Radiotelephone shall be used only when teletype or telegraph are not available. Weather reports may be sent in the World Meteorological Organization (WMO) ship synoptic code format (same as on NOAA Form 72-1A) over the radiotelephone by pronouncing the numbers of the code phonetically. Radio call sign should always precede the weather message, except when SPREP or STORM prefixes are used (see pp. 1-9 and 1-10 of National Weather Service Observing Handbook No. 1.) Reports shall not be transmitted when the commanding officer or other authority determines that transmission may compromise a mission such as law enforcement. However, it is important to resume reporting weather as soon as possible with most recent observations taking precedence over older ones.
    - (3) Category One cutters shall address weather observation messages to "OBS METEO WASH DC". Vessels using Navy weather forecast (WEAX) or Optimum Track Ship Routing (OTSR) services shall also include the servicing Naval Oceanography Command Center as an action addressee in order to provide updated position and weather input.
    - (4) Category One cutters engaged in certain operations should conceal their position or movements. In such cases, weather messages shall be sent "UNCLAS EFTO" to the appropriate AIG only. The National Weather Service does not have a capability for handling encrypted traffic. AIGs are as follows:
      - (a) AIG 7608 for ships operating in the North Pacific, South Pacific, Indian Ocean and all areas south of 60 degrees South. This AIG includes: FLENUMOCEANCEN Monterey CA NAVWESTOCEANCEN Pearl Harbor HI NAVOCEANCOMCEN Guam

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- 5. b. (4) (b) <u>AIG 7641</u> for ships operating in the North Atlantic, South Atlantic, Baltic Sea, Red Sea, Mediterranean Sea and areas north of 60 degrees North. This AIG includes: FLENUMOCEANCEN Monterey CA NAVEASTOCEANCEN Norfolk VA NAVOCEANCOMCEN Rota SP
  - (5) All cutters under Naval operational control shall transmit weather reports in accordance with Navy instructions and directives as specified in the appropriate operation order. Cutters shall record all weather observations made while under Naval OPCON on the designated NOAA form (see paragraph 5.c.) and mail completed forms to their servicing Port Meteorological Officer (PMO) on return to port (enclosure 3).

### c. Recording and Logging Procedures.

- (1) Category One and Category Two cutters shall record observed weather on NOAA Form 72-1 series (presently 72-1A) SHIP'S WEATHER OBSERVATIONS. Detailed instructions and coding information for this form are contained in the National Weather Service Observing Handbook No. 1 Marine Surface Weather Observations (NWSOH No.1) which may be obtained from the nearest Port Meteorological Office listed in enclosure (3). NOAA Form 72-4A WEATHER REPORT FOR IMMEDIATE RADIO TRANSMISSION is used to send the weather observations to the radio operator. Examples of these forms are contained in enclosure (1).
- (2) Weather observation forms (NOAA form 72-1 (series)) which contain one or more observations shall be mailed to the servicing Port Meteorological Officer (enclosure 3) at the end of each month or upon return to port if the deployment exceeds 30 days.

### d. Precision Instrument Allowance

(1) Category One cutters with a radioman assigned routinely or with a radioman assigned by the operational commander for an extended mission shall maintain a Navy class "C" basic meteorological allowance. The class "C" allowance is outlined in the NAVAIR ALLOWANCE LIST, METEOROLOGICAL EQUIPMENT FOR NAVY METEOROLOGICAL UNITS, SECTION L, NAVAIR 00-35QL-22; available from: Commanding Officer, Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120 This publication also specifies the procedures for obtaining the materials. Enclosure (2) lists the class "C" allowance and differentiates between the materials which are provided by the Navy and those which are procured from Coast Guard funds. The cutter's initial outfitting is chargeable to OG-46 allotments for Marine Science Activities support. Replenishment of allowance is the responsibility of the unit and should be charged to OG-30 accounts.

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- 5. d. (2) Instruments, such as barometers, shall be ordered by individual vessels. Assistance on installation and calibration may be obtained from the nearest PMO, or assistance may be obtained from the nearest Navy weather unit. Barometers shall be calibrated before the beginning of each deployment of over 20 days or every six months, or at any time there is a suspected malfunction in the instrument.
  - (3) Material listed on enclosure (2) which is provided by the Navy shall be returned to the Navy upon decommissioning of the vessel or change in allowance.
  - (4) Category Two cutters shall maintain the meteorological equipment specified in the appropriate cutter class allowance list. These allowance lists generally authorize sufficient instrumentation to allow routine weather observations.

#### 6. ACTION.

- a. <u>Commanding Officers of Category One cutters</u> shall maintain a Navy class "C" meteorological allowance and make observations and reports as required by this Instruction.
- b. <u>Commanding Officers of Category Two cutters</u> shall make and report weather observations in accordance with this Instruction when so directed by area or district commanders.

### c. Special Requests.

- (1) Commanding Officers of units which receive special requests from the National Weather Service are urged to comply to the extent that operations and resources permit.
- (2) All such requests shall be reported to the concerned area and district commanders for information purposes.
- (3) Any requests believed to be beyond the scope or intention of this instruction shall be forwarded with recommendations to the Commandant (G-OIO) via the cognizant Area and District Commander.

### d. Area and District Commanders shall:

- (1) Coordinate with appropriate NWS regional offices in designating special weather reporting requirements for cutters.
- (2) Provide assistance to cutters to maintain an effective program of marine weather reporting.

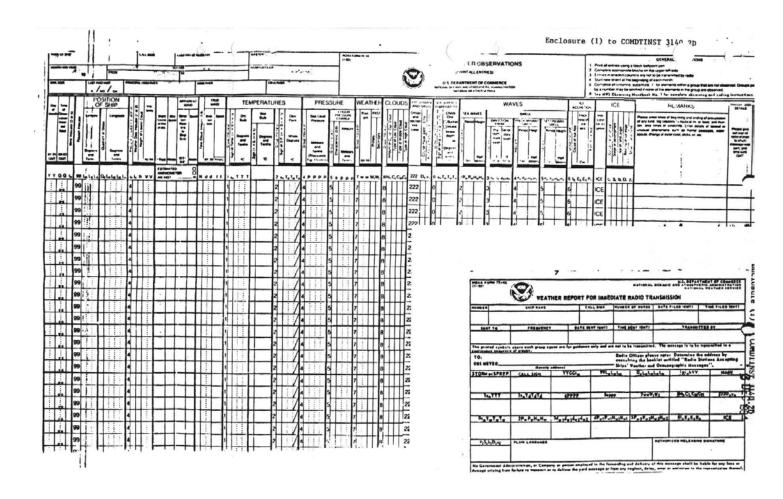
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- 7. FORMS AVAILABILITY AND ASSISTANCE. All cutters may obtain assistance in ordering forms, manuals, maintenance and calibration of equipment and any questions on meteorological training and procedures from the PMO; the nearest Naval Oceanography Command Center/Facility or from any Navy Weather Unit. Areas of responsibility of the Naval Oceanography Command Centers are given in enclosure (4). The Navy maintains a Meteorological and Oceanographic Equipment Program (MOEP) through which commands may receive assistance in equipment repair. MOEP areas of responsibility are shown in enclosure (5). Requests for MOEP assistance shall be submitted to the servicing Naval Oceanography Command Center/ Facility. In cases where the PMO or MOEP is unable to provide technical assistance, requests for technical service to repair, maintain or calibrate instruments should be addressed to Commandant (G-EOE) via the district and area, and contain the following information:
  - a. Nomenclature of equipment for which assistance is requested.
  - b. Specific nature of technical difficulty.
  - c. Availability of spare parts and test equipment; if required.
  - d. PMO and/or MOEP unable to provide assistance.

/s/ N.C. VENZKE Chief, Office of Operations

Encl: (1) NOAA Forms 72-1A and 72-4A; examples

- (2) Class "C" Meteorological Allowance
- (3) National Weather Service Port Meteorological Officers
- (4) Naval Oceanography Command Center Areas of Responsibility
- (5) MOEP Areas of Responsibility



# CLASS "C" METEOROLOGICAL MATERIAL (From NAVAIR 00-35QL-22 Rev. August 1979)

1. Class "C: allowance items  $\underline{\text{not}}$  requiring U.S. Coast Guard reimbursement initially or upon replenishment.

				UNIT OF
a.	FSN 2RH6660005929002HX (NOTE: Furnished	NOMENCLATURE Wind Measuring Set-Portable,	QUANTITY 1	ISSUE EA
	on a one-for-one replenishment basis)	AN/PMQ-3(), complete with carrying case, spare vane tail and detector. WT 15.0 CU 2.0		
b.	2RH6685006003777HX (NOTE: Furnished on a one-for-one replenishment basis)	Barometer-Precision Anerold ML-448/UM, Mounting Base not included, WT 7.3 CU 1.0	1	EA
С.	0108500015000	Pub-International Cloud Atlas. Abridged NW 50-1D-509	1	EA
d.	0108500016500	Chart, Cloud Code NW 50-1G-521	1	EA
f.	0108500034500	Publication, Density Altitude Computer Technical Manual	1	EA
е.	0108500028010	Publication-Weather Radar Observations NW50-IP-2	1	EA
g.	0108500039000	Pub-Aneroid Barometer Navy Aero 1936, overhaul instructions AN 50-30FR-11	1	EA
h.	0108500047000	Publication, Aerological Calculators, Computers and Evaluators, Operation and care of	1	EA
i.	0108500049500	Publication, Electric Psychrometer ML-450A/MU operation, service and overhaul instructions NW 50-30 FR-529	1	EA

# CLASS "C" METEOROLOGICAL MATERIAL (From NAVAIR 00-35QL-22 Rev. August 1979) (con't.)

				UNIT OF
j.	FSW 0108500050000	NOMENCLATURE Publication, Electric Psychrometer ML-450A/UM operation instructions with psychrometric charts NW 50-30 FR-530	QUANTITY 1	ISSUE EA
k.	0I08500057500	Publication, Anerold Barometer, ML-448/UM, operation and maintenance instructions. Bendix NW 50-30ML 448-501	1	EA
1.	0108500058000	Pub-Aneroid Barometer, ML-448/ UM, overhaul instructions Bendix NW 50-30 ML 448 502	1	EA
m.	0108500058500	Pub-Aneroid Barometer ML-448/UM, Illustrated Parts Breakdown. Bendix NW 50-30ML 448-503	1	EA
n.	0108500093500	Pub-Mariners Worldwide Climatic Guide to Tropical Storms at Sea NA 50-1C-61	1	EA
0.	0108000076500	Pub-AN/PMQ-3C Wind Measuring Set, operation and service instructions NA 50-30PMQ3C-1	1	EA
p.	0108000106530	Pub-Section L Meteorological Allowances NA 00-35 QL-22	1	EA
q.	1101080006020	Form-Ship Weather Obs Sheet	2	HD
r.	0101080314005	Form-Navy AIREP Flight log NOM 3140/1	2	PD

# CLASS "C" METEOROLOGICAL MATERIAL (From NAVAIR 00-35QL-22 Rev. August 1979) (con't.)

				UNIT OF
s.	FSN 0I01080314040	NOMENCLATURE Form-Surface Weather Obs. (Ship) NWSC 3140/8	QUANTITY 2	ISSUE PD
t.	0101080314045	Form-NAVWEASERVCOM Ship Code Card NWSC 3140/9	1	EA
u.	0106911200100	Pub-ASW Oceanographic Support Product Manual, Vol. 1 DIRNAV- OCEANMETINST C3160.4	1	EA
V.	010691120Q200	Pub-ASW Oceanographic Support Product Manual Vol. 2 (Confidential) DIRNAVOCEANMETINST C3160.4	1	EA

# CLASS "C" METEOROLOGICAL MATERIAL (From NAVAIR 00-35QL-22 August 1979) (con't)

2. Class "C" allowance items  $\underline{\text{requiring}}$  U.S. Coast Guard reimbursement both initially and upon replenishment.

-				UNIT OF	UNIT	TOTAL
a.	FSN 9Y 61350012001020	NOMENCLATURE Battery, Dry C 11, Size D, for ML-450A/UM Electric Psychrometer	QUANTITY As required	ISSUE PG	COST \$3.22	COST \$ 3.22
b.	9G6240002465060	Lamp Electric Psychrometer F/W ML-450A/UM	1	EA	\$ .42	\$ .42
С.	9G 6685005154219	Tube-Thermometer replacement, Minus 20 to plus 120 Deg. F. WT 0.3 cu 0.1	As required	EA	\$6.00	\$ 6.00
d.	1RM6685005154220HX	Thermometer-Standard Air Minus 20 to plus 120 Deg F Mounted on stainless steel back WT 0.05 cu 0.1	6	EA	\$9.00	\$54.00
е.	1RM6605005534645 HX	Computer-True Wind, CP-264/U for computing true wind direction and speed while underway. WT 0.5 cu 0.	3	EA	\$9.80	\$29.40
f.	9G 6685005624440	Handle, Sling Psychrometer	1	EA	\$3.07	\$ 3.07
g.	9Z 5355005763551	Cursor-Psychrometric Computer for CP-165A/UM WT 0.1 cu 0.01	1	EA	\$24.29	\$24.29
h.	9G 6685005908759	Psychrometer-Electric ML-450A/UM, portable, complete with case and spare tube set, powered by 3 size D batteries which are not included. WT 4.0 cu 1.0	1	EA	\$95.23	\$95.23

# CLASS "C" METEOROLOGICAL MATERIAL (From NAVAIR 00-35QL-22 August 1979) (con't)

				UNIT		
i.	FSN 9G 6685005913824	NOMENCLATURE Tube Set, Psycrometer, Matche thermometers for ML-450A/UM, straight type tube. WT 0.5 cu 0.1	QUANTITY As required	OF ISSUE SE	UNIT COST \$20.00	TOTAL COST \$20.00
j.	1н 7530000977971	Paper-Facsimile recorder F/W ALDEN 519 6 per Box 04855-A2- 19MTEA	As required	HD	\$48.00	\$48.00
k.	9G 6685006027209	Computer-Psychrometric Cp-165A/UM, circular plastic slide rule WT 0.5 cu 0.5	1	EA	\$24.00	\$24.00
1.	9G 9390006637004	Wicking-Muslin, 3 inch length, for use with sling psychrometer 50 per box	1	BX	\$ .21	\$ .21
m.	9G 6660006753399	Base-Anerold Barometer Mounting for ML-448/UM WT 3.0 cu 1.0	1	EA	\$58.85	\$58.85
n.	9D 8465006826854	Goggles, Darkness Adaptation	As required	PR	\$ 2.07	\$ 2.07
0.	9G 6660007401790	Air Intake-Plastic replacement, for Electric Psychrometer ML -450A/UM	As required	EA	\$ 3.40	\$ 3.40
p.	9G 6660009838752	Psychrometer	1	EA	\$13.56	\$13.56
q.	9G 6660009550872	Computer-Density Altitude CP-718/UM WT 0.3 cu 0.2	1	EA	\$ 8.97	\$ 8.97

# CLASS "C" METEOROLOGICAL MATERIAL (From NAVAIR 00-35QL-22 August 1979) (con't)

				UNIT		
	FSN	NOMENCLATURE	OUANTITY	OF ISSUE	UNIT COST	TOTAL COST
r.	9G 4140006105169	Fan, ML-450A/UM Axial WT 0.30 cu 0.01	As required	EA	\$17.23	\$17.23
s.	IRM6660008016393	Indicator-Wind Portable, 2 scales	1	EA	\$10.50	\$10.50

### NATIONAL WEATHER SERVICE PORT METEOROLOGICAL OFFICERS

The Port Meteorological Officers visit ships enlisted in the Voluntary Observing Ship (VOS) Program.

- They (1) check and calibrate barometers and other meteorological instruments aboard ships.
  - (2) assist captains and mates with problems regarding weather observations, preparation of weather maps at sea, and interpretation of forecasts, conduct observer training, and
  - (3) supply meteorological manuals and forms to ships.

In addition, they provide some meteorological equipment to ships enrolled in the Voluntary Observing Ship (VOS) Program.

### Sources of Marine Information and Forecasts

Ships in the NWS Voluntary Observing Ship Program are entered into a data bank which puts each ship on the mailing list for the <u>Mariners Weather Log</u>, a quarterly magazine on marine weather; quarterly distribution of <u>Pilot Charts</u> for the appropriate ocean, and the weekly <u>Notice to Mariners</u> so that navigational charts may be kept up to date.

On the initial outfitting of a newly recruited vessel, they receive:

- 1. <u>National Weather Service Observing Handbook No. 1</u>, <u>Marine Surface Weather Observations</u>
- 2. Radio Stations Accepting Ship's Weather and Oceanographic Observations
- 3. Selected Worldwide Marine Weather Broadcasts
- 4. Ship's Code Card for encoding/decoding weather reports
- 5. All of the necessary forms and pre-addressed envelopes to the servicing PMO
- 6. Various Defense Mapping Agency and Naval Oceanographic Command forms and publications
- 7. Sea water temperature thermometer and dip for measuring surface water temperature.
- 8. True wind plotting board and calculator for calculating true wind speed and direction from a moving vessel.

#### ADDRESSES OF NATIONAL WEATHER SERVICE PORT METEOROLOGICAL OFFICES ATLANTIC PORTS

Mr. Robert Baskerville, PMO National Weather Service, NOAA

National Weather Service, NOAA 30 Rockefeller Plaza New York, New York 10112 212-399-5569 (FTS 662-5569)

Mr. Anthony Rippo, PMO 2005 T Custom House 300 South Ferry Street Terminal Island, California 90 213-548-2539 (FTS 796-2539)

Mr. Joseph Takach, PMO National Weather Service, NOAA GULF OF MEXICO PORTS

Building 51 Newark International Airport Newark, New Jersey 07114 201-624-0890 (FTS 341-6188)

Mr. Earle Ray Brown, Jr., PMO National Weather Service, NOAA Norfolk International Airport Norfolk, Virginia 23518 804-441-6326 (FTS 827-6326)

Mr. Peter Connors, PMO National Weather Service, NOAA 1600 Port Boulevard Miami, Florida 33132 305-358-6027

Mr. Richard Rasmussen, PMO National Weather Service, NOAA Hopkins International Airport Jacksonville International Airport Cleveland, Ohio 44135 Box 18367 Jacksonville, Florida 32229 904-757-1370

#### PACIFIC PORTS

Mr. Donald Olson, PMO National Weather service, NOAA 7600 Sand Point Way, N.E. BIN C15700 Seattle, Washington 98115 206-527-6100 (FTS 446-6100)

Mr. James Mullick, PMO National Weather Service, NOAA Metro Oakland International Airport P. O. Box 6249 Oakland, California 94614 415-273-6257 (FTS 536-6257)

Port Meteorological Office National Weather Service, NOAA 1120 Old Spanish Trail Slidell, Louisiana 70458

504-649-0429 (FTS 682-6891)

Mr. Julius Soileau, PMO National Weather Service, NOAA Route 6, Box 1048

Alvin, Texas 77511 713-228-2527 (FTS 526-5834)

#### GREAT LAKES PORTS

Mr. George Smith, PMO National Weather Service, NOAA 216-267-0069 (FTS 293-4949)

#### REPUBLIC OF PANAMA

Mr. Robert Melrose, PMO National Weather Service, NOAA Box 1301 APO Miami, Florida 34005 (Local: Ft. Davis, Republic of Panama Telephone 43-1565)

NATIONAL WEATHER SERVICE

Mr. Jerome W. Nickerson Marine Observations Program Lead National Weather Service, NOAA 8060 13th Street Silver Spring, Maryland 20910 301-427-7724

Note: PMO list updated in each Mariners' Weather Log

#### OTHER NATIONAL WEATHER SERVICE MARINE FACILITIES

The following National Weather Service offices will provide a marine weather briefing and a barometer check by telephone. They will also comply with, or relay, requests for forms or services to the closest Port Meteorological Officer.

#### ATLANTIC COASTAL AREA

National Weather Service Office Federal Building P.O. Box 3563 Portland, ME 04104 207-773-0352 (FTS 8-833-3552)

International Airport Box 19367 Jacksonville, FL 32229 904-757-1370 (FTS 8-946-3620)

National Weather Service Office

National Weather Service Forecast Office Logan International Airport East Boston, MA 02128 617-567-4670 (FTS 8-223-1354)

National Weather Service Office 4245 Southern Blvd. West Palm Beach, FL 33406 305-694-3633 (FTS 8-350-7229)

#### CARIBBEAN AREA

National Weather Service Office Ignor I. Sikorsky Municipal Airport Stratford, CT 06497 203-379-4328 (FTS 8-643-4898)

National Weather Service Forecast Office Isla Verde International Airport San Juan, PR 00913 809-791-0376

National Weather Service Forecast Office Federal Bldg., Room 9258 600 Arch Street Philadelphia, PA 19106

GULF COAST AREA

215-365-2170 National Weather Service Office National Weather Service Office Federal Building, Room 312 2301 First Street Ft. Myers, FL 33901 913-332-4220

Baltimore-Washington International Airport Baltimore, MD 21240 301-922-2177

National Weather Service Office 1409 24 Street, S.E.

Ruskin, FL 33570 813-645-2323 (FTS 8-826-2271)

National Weather Service Office RFD 6, Box 50 Wilmington, NC 28405 919-763-8331 (FTS 8-763-4975)

National Weather Service Office P.O. Box 4116 Pensacola, FL 32506 904-455-6211 (FTS 9-496-5276)

National Weather Service Office International Airport Charleston, SC 29411 803-744-0303 (FTS 8-677-4395)

National Weather Service Office P.O. Box 8903 Mobile, AL 70807 205-694-6625

National Weather Service Office P.O. Box 7207 Savannah, Ga 31408 912-964-1507 (FTS 8-248-4445)

National Weather Service Office Ryan Airport Baton Rouge, La 70807 504-357-9743 (FTS 8-697-0303)

National Weather Service Office National Weather Service P.O. Box 5423 Lake Charles, LA 70606 318-477-5285 (FTS 8-687-7220)

National Weather Service Office International Airport R.R. #2, Box 900 Corpus Christi, TX 78410 512-289-0898 (FTS 8-734-3337) National Weather Service Office Brownsville, TX 78520 512-542-2438 (FTS 8-734-8217)

#### PACIFIC COASTAL AREA

National Weather Service Officer Lindbergh Field 2980 Pacific Highway San Diego, CA 92101 714-293-5678 (FTS 8-895-5678)

National Weather Service Office P.O. Box 1447 Eureka, CA 95501 707-443-6484 or 707-442-2171

National Weather Service Office Route 1 Box 941 Warrenton, OR 97146 503-861-2722

National Weather Service Forecast Office 5420 N.E. Marine Drive Portland, OR 97218 503-281-2618 (FTS 8-423-2340)

#### ALASKAN AREA

National Weather Service Office Box 5113, Star Route 5 Juneau, AK 99801 907-586-7491

National Weather Service Office Box 427 Valdez, AK 99686 907-835-4505

Forecast Office Box 27, 701 C Street Anchorage, AK 99513 907-271-5105

National Weather Service Box 37 Kodiak, AK 99619 907-487-2102 or 907-486-3694 PACIFIC AREA

National Weather Service Meteorological Observatory

Route 8 Agana, Guam Marianas Islands 96910 355-5924

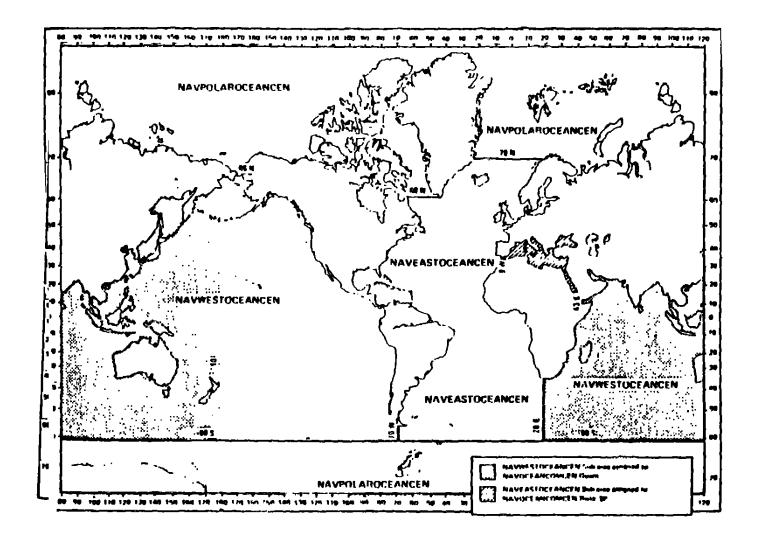
National Weather Service Forecast Office Honolulu International Airport Honolulu, HI 96813

808-836-1831

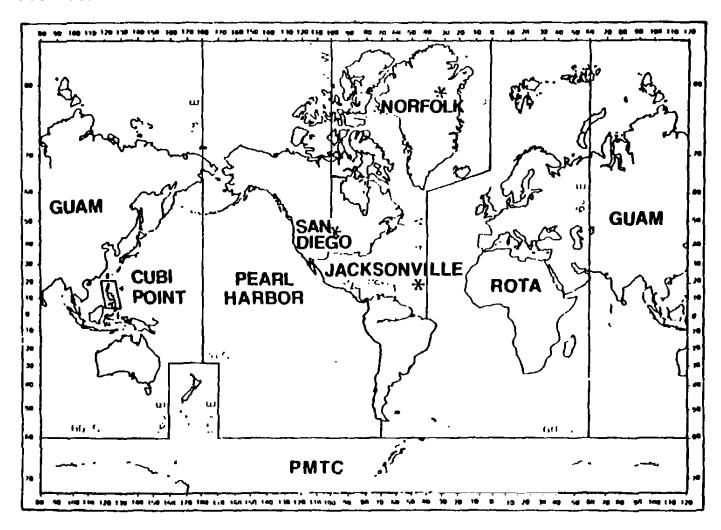
National Weather Service Pacific Region Headquarters 300 Ala Moana Blvd., Rm. 4410

Honolulu, HI 96813 808-546-5688

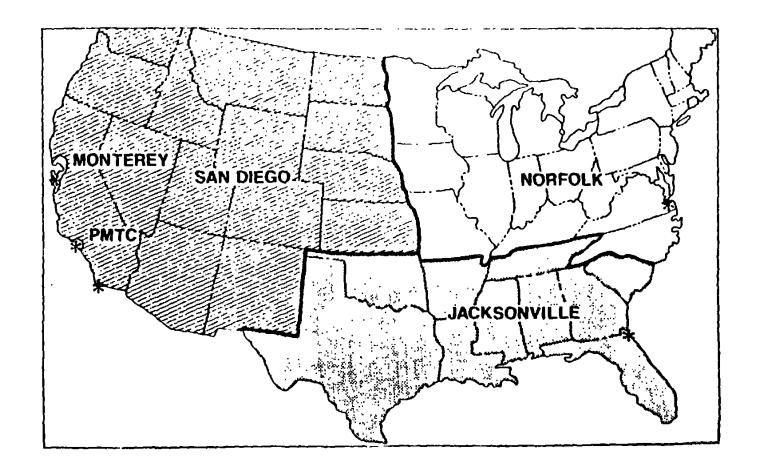
# Enclosure (4) to COMDTINST 3140.2D 15 JUL 1980



# Enclosure (5) to COMDTINST 3140.2D 15 JUL 1980



# Enclosure (5) to COMDTINST 3140.2D 3 DEC 1984





Commandant United States Coast Guard 2100 Second Street, S.W. Washington, DC 20593-0001 (202) 267-1450

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#### **COMMANDANT INSTRUCTION 3140.3D**

Subj: Coastal Weather Program

- 1. <u>PURPOSE</u>. To set forth policy for <u>weather observation</u>, <u>reporting</u>, and <u>dissemination</u> from Coast Guard shore units and offshore light stations; and, to direct the coordination with the National Weather Service (NWS) for these activities.
- 2. DIRECTIVES AFFECTED. Commandant Instruction 3140.3C is canceled.
- 3. <u>PROGRAM OBJECTIVES</u>. To support the National Weather Service in conducting its federally-mandated weather forecasting and dissemination program by:
  - a. Designating those stations and units required to report weather observations.
  - b. Ensuring that weather reports are made in the suitable format as prescribed by the NWS.
  - c. Ensuring that uniform and <u>timely</u> communication procedures and methods are used to convey this information to the NWS.
  - d. Providing procedures for units not participating in a <u>regular</u> weather reporting program which may be required to make weather observations in support of NWS special programs.
- 4. <u>POLICY</u>. Title 14 Section 147 of the U.S. Code authorizes the Commandant to procure, maintain, and make available facilities and assistance for observing, investigating, and communicating weather phenomena and for disseminating weather data, forecasts and warnings in cooperation with the Director of the National Weather Service. To this end the Commandant supports a program to ensure the high quality and quantity of weather observations for NWS marine weather forecasts. The Coast Guard, as a user, depends upon high quality forecasts for our missions in the marine environment.

### 5. DISCUSSION.

- a. The National Weather Service has statutory responsibility for providing weather information to the public. The Coast Guard cooperates with the NWS in discharging this responsibility by collecting and providing raw weather and sea data to NWS, and by disseminating NWS's weather forecasts through radio broadcasts and visual warning displays.
- b. Frequently, Coast Guard coastal stations and units are the only source of weather observations in certain coastal regions of the U.S. These observations become critical in developing accurate marine weather forecasts. Careful weather observations and accurate and timely relay of the data are essential components of the weather forecasting process.
- c. The loss of weather information from Coast Guard Light Stations due to automation has created gaps in the coverage provided by the national marine weather reporting network. Automated meteorological equipment is being added to certain Coast Guard Light Stations by the NWS to fill this void.
- d. The importance of meteorological observation reports to weather forecasting should not be underestimated. These reports have a significant role as the data base for operating the weather forecasting models as well as for determining regional variations in meteorological conditions over time.

#### 6. WEATHER OBSERVATION PROGRAM.

- a. All Coast Guard operational shore units, unless specifically exempted by the cognizant district commander, shall record weather observations in accordance with this instruction. Seasonal stations shall make observations only during operational periods. (Any units which secure from watchstanding at night and are required to take observations, shall take observations only at those times an active watch is maintained.)
- b. All weather observations shall normally be recorded on NOAA Form 72-5a, MARINE COASTAL WEATHER LOG-COASTAL STATION. (Instructions for the proper preparation of Form 72-5a are contained with each pad.)
- c. The NWS may request certain units, subject to approval by the district commander, to make detailed aeronautical observations in support of special forecast and warning service programs (primarily in the Seventeenth Coast Guard District). Stations making aeronautical observations will use NWS Form MF 1-10C, SURFACE WEATHER OBSERVATION.
- d. NWS-OG arrangements for designating additional reporting stations, or for making more complete and detailed observations, will be left to the discretion of district commanders.

6. e. Coast Guard units required to take observations on the forms noted above shall observe and record weather conditions at the meteorological synoptic hours: 0000Z, 0300Z, 0600Z, 0900Z, 1200Z, 1500Z, 1800Z, and 2100Z. Supplemental or alternate observation times may be prescribed by special local agreement.

### 7. WEATHER REPORTING PROGRAM.

- a. District commanders have designated certain Coast Guard units as <u>weather reporting units</u>. These units have been assigned three letter identifiers by the FAA. Reporting units will transmit data entries from their NOAA Form 72-5a to their collection points, using the assigned station identifier codes.
- b. <u>Timely reporting of data is critical</u> and delivery of the data collected should be made at once by the swiftest means available in a standardized format. In order to ensure this, specific communication and format procedures are provided in enclosure (2).
- c. Enclosure (3) lists several conditions which will necessitate a special report to be made. The heading "Special Report" will be used to denote these reports to the collection point. "Special Reports" are to be transmitted immediately and should not be delayed.
- d. Coast Guard communications/radio stations shall accept weather messages for the National Weather Service from any reporting unit (government or non-government). (This does not preclude any Coast Guard unit from accepting weather information from any source.)

### 8. DISPOSITION OF COMPLETED WEATHER LOGS.

a. <u>Non-reporting units</u> (i.e., <u>without</u> real time transmission requirements) should mail completed forms at the end of each quarter (three months) to:

National Climatic Data Center Federal Building Asheville, North Carolina 28801-2696 Attn: Archival Services Branch

Preaddressed envelopes may be ordered from the CG Supply Center, Brooklyn, New York using National Stock Number 7530-00-F02-3770.

- b. <u>Reporting units</u> (i.e., units <u>with</u> real time transmission requirements) will mail completed forms each month to their National Weather Service monitoring office (enclosure (1)). Preaddressed envelopes will be provided by that office.
- c. <u>Records Storage</u>: It is not necessary to retain copies of completed forms on board any unit. The National Climatic Data Center Archives constitute an official public records depository and all completed weather log forms are stored there.

8. c. (cont'd) Requests for <u>historical</u> weather information, collected under this program, shall be referred to the National Climatic Data Center.

# 9. WEATHER DISSEMINATION PROGRAM.

- a. Radio Dissemination. The Commandant supports a broadcast program which provides weather information tailored to the marine environment, in both coastal and high seas areas. Weather and other environmental information in areas of high danger and/or high boating concentrations are particularly important. Scheduled marine information broadcasts will be provided as directed in the Radio Frequency Plan, COMDTINST 2400.1D and may include other marine information. Unscheduled special weather warnings special, small craft, gale, storm, and hurricane will be broadcast immediately upon receipt from the National Weather Service. Stations authorized by NWS to initiate visual weather warnings based upon local observations shall also make unscheduled radio transmissions as prescribed in enclosure (4).
- b. <u>Visual Dissemination</u>. District commanders, in cooperation with National Weather Service regional directors, will designate those Coast Guard facilities required to display coastal warning signals. To provide for prompt reaction to hazardous conditions that are officially observed but not yet forecasted, selected display stations have been authorized by the National Weather Service to initiate visual advisories. Enclosure (5) provides instructions to participating Coast Guard units.

### c. Solicitations for Weather Information

- (1) On occasion, Coast Guard facilities receive direct requests for updated weather forecasts. The recipient of the call shall respond in a courteous and helpful manner. The caller should be advised that the Coast Guard does not prepare or issue weather forecasts, and that the latest weather information may be obtained from NOAA Weather Radio. The recipient of the call should offer to read the caller the latest NWS forecast. Qualified forecasters at Coast Guard Air Stations may provide weather forecasts to search and rescue and marine environmental response participants in cases under Coast Guard control in which commercial or other government ships or aircraft are actively involved (cf. Coast Guard Regulations M5000.3A, para 4-1-29 thru 4-1-32).
- (2) Coast Guard units may provide information regarding existing weather or sea conditions. In supplying locally observed conditions the exact location, time and source of the observation should be given. It should be clearly stated what weather elements, if any, are estimated.

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- 9. c. (2) (cont'd) A suggested format would be: "The weather conditions at the Coast Guard Light Station Bear Island at 6:00 pm local time are partly cloudy and raining with an estimated visibility of 8 miles. The temperature is 75 degrees Fahrenheit and the barometer reads 29.92 inches. The seas are estimated to be 2-4 feet and the wind is estimated to be 15 kts from the SW."
  - (3) Requests for other information, such as tidal states, may also be received. These requests should be accommodated if the information is known. Otherwise, the caller should be <u>courteously</u> informed that the Coast Guard does not normally have this information, and should be directed to a more appropriate source (e.g., Port Meteorological Officer).
- 10. <u>REQUESTS FOR INSTALLATION OF NWS EQUIPMENT</u>. Periodically the Coast Guard receives requests from NWS to equip light stations, offshore structures, and stations with automated remote sensing meteorological equipment. The following procedure shall be followed:

#### a. <u>Requests</u>.

- (1) All requests from the National Weather Service will be forwarded to the appropriate district commander for review and approval.
- (2) Requests should contain at minimum a tentative installation date, the type of equipment to be installed and the name and telephone number of the National Weather Service project manager.
- (3) Approved requests will be returned for implementation. Local liaison will then be authorized.

#### b. Installation.

- (1) The U.S. Coast Guard will provide:
  - (a) Information on the existing equipment configurations, power supplies, space availability, and environmental conditions.
  - (b) Transportation to and from the site location. Installation should be arranged to coincide with routine servicing visits.
  - (c) Welding and other technical services necessary for the installation of the meteorological equipment.
- (2) The National Weather Service will provide:
  - (a) All electronics, test equipment and cabling necessary for installation.
  - (b) Technical representatives to assist and provide services for the installation of the equipment.

### 10. c. Maintenance.

- (1) The U.S. Coast Guard will provide:
  - (a) Transportation to and from the site location for routine or repair visits, normally to coincide with regular servicing visits. No commitment to respond to system failures on an urgent or demand basis is implied.
- (2) The National Weather Service shall:
  - (a) Provide for all equipment and personnel necessary to maintain and repair installed equipment.
  - (b) Provide for data to be automatically relayed without Coast Guard handling.

### 11. ACTION.

- a. Area and district commanders, commanders of maintenance and logistics commands, and unit commanding officers shall comply with the contents of this instruction.
- b. District commanders shall:
  - (1) Implement the above policy to the extent that resources permit.
  - (2) Designate certain Coast Guard units as weather reporting units.
  - (3) Ensure that communication and formatting procedures, as prescribed in enclosure (2), are properly observed and observations rapidly conveyed by the district weather reporting units.
  - (4) Shall, upon receipt of this instruction, review the current list of coastal units, enclosure (6), and report corrections, additions and deletions to COMDT (G-OIO) indicating which are reporting and which are non-reporting units as defined in paragraphs 6 and 7 of this instruction. List should include number of observations per day and times, and the three letter code. Also if it is day/night working display.
  - (5) Shall submit timely reports of change in weather reporting units and coastal warning display stations (RCS-G-OIO-2155) to Commandant (G-OIO), with copy to National Weather Service (W/050141X2), NOAA, Silver Spring, MD, 20910. Reports of new stations should include latitude and longitude, the number of observations per day and times, and/or the type of display (day, day/night, etc.). NWS will provide the three letter identifier.

- 11. c. Unit commanding officers and officers-in-charge of reporting, observing and display stations shall: (1) Comply with applicable portions of this instruction.
  - c. Ensure all weather observation forms are properly filled out and submitted as directed.

### 12. REPORTS AND FORMS.

- a. Non-reporting units can obtain NOAA Form 72-5a, MARINE COASTAL WEATHER LOG COASTAL STATION, from the Coast Guard Supply Center Brooklyn. (National stock number 7530-00-F02-1880; unit of issue: pad of 50 sheets.)
- b. Reporting units will receive NOAA Form 72-5a from the local NWS officer monitoring that unit.
- c. Stations providing special observations on NWS Form MF 1-10C, SURFACE WEATHER OBSERVATIONS, will receive them from the National Weather Service office monitoring that station's weather records.

/s/ CLYDE E. ROBBINS Chief, Office of Operations

Encl:

- (1) Liaison with National Weather Service
- (2) Communications and Format Procedures
- (3) Instructions on Special Weather Reports
- (4) Instructions for Radio Dissemination Program
- (5) Instructions for Visual Dissemination Display Program
- (6) Current List of Coastal Units

Enclosure (1) to COMDTINST 3140.3D 13 JAN 1988

#### LIAISON WITH NATIONAL WEATHER SERVICE

Required publications, manuals, forms, and corrections thereto, will be furnished by the NWS direct to the reporting unit. In addition, the NWS has agreed to visit each Coast Guard reporting unit on a mutually agreed, scheduled basis to provide instrument calibration and technical guidance. If a unit is not visited by NWS personnel within any 12 month period, the commanding officer or officer-incharge of the unit concerned shall inform the Commandant (G-OIO), the district commander, and the National Weather Service Headquarters Marine Observations Program Office, at the address listed below:

**NWS** Headquarters

Marine Observation Program Leader National Weather Service, NOAA 8060 13th Street Silver Spring, MD 20910 (301) 472-7724 (FTS 427-7724)

2. National Weather Service Regional Offices and Port Meteorological Officers that will assist Coast Guard units are listed below:

#### ADDRESSES OF NATIONAL WEATHER SERVICE REGIONAL OFFICES

**NWS** Eastern Region 585 Stewart Avenue Garden City, NY 11530

FTS 649-5431

NWS Southern Region 819 Taylor Street Fort Worth, TX 76102

FTS 334-2655

601 E. 12th St.

**NWS Central Region** Kansas City, MO 64106 FTS 758-3226

NWS Western Region WFW4 Federal Building, Box 11188 Salt Lake City, UT 84147 FTS 588-5138

NWS Alaska Region WFA12 701 C St., Box 20 Anchorage, AK 99513 (907) 271-5121

NWS Pacific Region WFP12 Prince Kuhio Federal Building Room 4110, P.O. Box 50027 Honolulu, HI 96850 (808) 546-5688

# ADDRESSES OF NATIONAL WEATHER SERVICE PORT METEROROLOGICAL OFFICERS

#### Atlantic Area

National Weather Service, NOAA 30 Rockefeller Plaza New York, NY 10112 (212) 399-5569 (FTS 662-5569)

National Weather Service, NOAA Building 51, Newark Airport Newark, NJ 07114 (201) 624-8098 (FTS 341-6188)

Enclosure (1) to COMDTINST 3140.3D 13 JAN 1988

National Weather Service, NOAA Norfolk International Airport Norfolk, VA 23518 (804) 441-6326 (FTS 827-6326) National Weather Service, NOAA 1600 Port Boulevard Miami, FL 33132 (305) 358-6027

National Weather Service, NOAA Jacksonville International Airport Box 18367 Jacksonville, FL 32229

Great Lakes Area

National Weather Service, NOAA Cleveland Hopkins International Airport Cleveland, OH 44135 (216) 267-0069 (FTS 942-4949) National Weather Service, NOAA O'Hare Office Bldg. 2, Rm 610 10600 West Higgins Road Rosemont, IL 60018 FTS 353-4680/353-2455

### Gulf Area

National Weather Service, NOAA 1120 Old Spanish Trail Slidell, LA 70458 (504) 589-2808 (FTS 682-6891)

National Weather Service, NOAA Route 6, Box 1048 Alvin, TX 77511 (713) 331=3752 (FTS 526-5834)

#### Pacific Area

National Weather Service, NOAA 7600 Sand Point Way, N.E. Bin C15700 Seattle, WA 98115 (206) 526-6100 (FTS 392-6100) National Weather Service, NOAA Government Island Building 3 Alameda, CA 94501 (415) 273-6257 (FTS 536-6257)

National Weather Service, NOAA 2005 T Custom House 300 South Ferry Street Terminal Island, CA 90731-7415

Panama Canal Zone
National Weather Se

National Weather Service, NOAA Box 1301 APO Miami 34005 (Local: Ft. Davis, Republic of Panama) 46-7205

Enclosure (2) to COMDTINST 3140.3D 13 JAN 1988

### COMMUNICATIONS AND FORMAT PROCEDURES

- 1. In order to promote uniformity from station to station and to allow entry into the DOD weather service computer, all weather messages sent from Coast Guard units under this program shall use the standardized message format described below. The information is to be taken from NOAA Form 72-5a, using the same abbreviations and numbers as found on the form.
- 2. Weather messages will be in a columnar format with specified spacings. Each message will always contain the five slash marks "/" in the positions indicated below even if the parameter contained between two slashes is missing. When the visibility is less than one mile, it will be reported to the nearest 1/4 mile using a slash between the two numbers. In this case there will be six slash marks in the message. All visibilities, wind speeds, sea and air temperatures, sea heights and periods will be at least two digits. If the number is less than 10, precede it with a zero (0). All temperatures will be reported in degrees Fahrenheit.
- 3. This message format is as follows:
  - a. ID WXVSB /WIND/WAVE/SEA/AIR/PRES REMARKS STATION NAME

Example:

9B5 CYR03 /NNE07/0605/54/64/BEAR ISLAND LS

This report is from Bear Island Light Station (9B5). The sky condition is cloudy (CY). The present weather is rain (R) with a visibility of three miles (03). The wind is north northeast (NNE) at seven knots (07). The sea has a height of six feet (06) and a period of five seconds (05). The sea water temperature is fifty-four degrees Fahrenheit (54) and the air temperature is sixty-four degrees fahrenheit (64). Pressure information is not available at this station and there are no remarks, but the final slash "/" must be included following the air temperature. Pressure would be reported after the final slash in the same format as noted on Form 72-5a, i.e., only four digits (1013 if millibars or 3014 if inches, for example). The last entry on each message will be the station name.

4. The spacing for each column will be:

ID Station location identifier, four spaces. The last space in this column will always

be blank.

WXVSB Sky condition, present weather and visibility, eight spaces.

/WIND Wind direction and speed, five spaces following the first slash.

/WAVE Wave height and period, four spaces following the second slash.

# Enclosure (2) to COMDTINST 3140.3D 13 JAN 1988

/SEA Sea temperature, three spaces following the third slash.

/AIR Air temperature, three spaces following the fourth slash.

/PRES Entered after final slash, if available.

REMARKS Entered after final slash, if available.

STATION NAME Entered after all data entries.

Available data are entered in each column starting with the first space. Any blank spaces will follow after the data entry. Spaces are not required to separate information within the same column.

5. While individual stations or districts may be using different methods of delivering reports to the WS, the observations are generally collected from the various stations by the group commanders utilizing radio, teletype or telephone. They are then sent to the district communications center via teletype which consolidates the reports for transmission to the NWS office. The bulletin heading to be used on the report sent to the NWS should be in the following format:

SXUSS (ICAO Location Identifier of District) (Date-time Group)

There should be no "Z" following the date-time group. The bulletin heading is then followed by the Message Format Line and the consolidated station reports, as shown in this example from the First Coast Guard District.

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SUXSB KBOS 271200
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ID WXVSB /WIND /WAVE/SEA/AIR/PRES REMARKS STATION NAME 9B5 CYR02 /NEO8 /0105/82 /79 /3000 BEAR ISLAND LIGHT OB9 PC07 /NE03 /CALM/ /74 /3014 GOAT ISLAND LIGHT 14B C10 /NW15 / /76 /3017G20 DUCK ISLAND LS 21B CH05 / / / /MT DESERT LS

# Enclosure (3) to COMDTINST 3140.3D 13 JAN 1988

# INSTRUCTIONS ON SPECIAL WEATHER REPORTS IMPORTANT !! SEND A SPECIAL WEATHER REPORT BETWEEN SCHEDULED REPORTS IF:

- WIND\* (1) The wind speed doubles to 25 knots or higher,
  - (2) Increases to 34 knots (gale force) or higher and gale warnings are not in effect, or
  - (3) Increases to 47 knots or higher and storm warnings are not in effect.

VISIBILITY . . . . The prevailing visibility lowers to 1/2 mile or less from 2 miles or greater.

WAVES . . . . . If open water wave conditions, inlet or bar conditions become hazardous to boats.

PRESSURE . . . . The Barometer falls 12/100ths inch of mercury or more over a 2 hour period.

\*NOTE: Winds refer to average winds speeds.

Enclosure (4) to COMDTINST 3140.3D 13 JAN 1988

### INSTRUCTIONS FOR RADIO DISSEMINATION PROGRAM

- 1. Weather information supplied by the National Weather Service (NWS) shall be included in the Weather and Marine Information Broadcasts from Coast Guard stations on frequencies designated by the Commandant for this purpose. Warnings affecting small boats shall be given the widest dissemination and need not be confined to those stations designated to make regular broadcasts. The district commander is authorized to take such additional action as deemed necessary to ensure widest dissemination of information during severe weather conditions, particularly by designating additional broadcasts on VHF-FM, which has a limited range. Weather forecasts and advisories included in the broadcasts shall be limited to official information furnished by the Weather Service and shall identify the source (i.e., NWS) of the information.
- 2. Locally observed weather conditions, or conditions reported to the Coast Guard from external sources, which present a hazard to marine traffic should be broadcast at unscheduled times by a means commensurate with the area of the hazard. For example, the sighting of a water spout in coastal waters would necessitate a VHF-FM broadcast similar to this: "At 1800 local, a water spout was reported to the Coast Guard approximately 20 miles east of the New Smyrna Beach, Florida."
- 3. Stations authorized to initiate small craft visual warning displays based upon locally observed weather shall also make unscheduled radio transmissions by broadcasting alerts on 2182 KHz and 156.8 MHz (CH-16), and then shifting to 2670 KHz and 157.1 MHz (CH-22), at such times as they initiate small craft advisories. The transmission shall state that small craft displays are in effect for the local area based upon observed weather conditions. Wind and sea conditions observed shall be included in the transmission.
- 4. The Coast Guard and National Weather Service have agreed that all weather and warning messages originated by the NWS for further dissemination by the Coast Guard shall contain brief instructions as to the action desired. These instructions shall be incorporated in the heading by the originating NWS office. Arrangements for obtaining the weather information to be broadcast shall be made locally between the district commander and the cognizant NWS Region.
- 5. All information disseminated by radiotelephone, radiotelegraph, radioteletype, or facsimile shall be broadcast in accordance with the requirements of the Coast Guard Telecommunications Manual COMDTINST M2000.3A and additional local instructions promulgated by the district commander.
- 6. District commanders shall encourage an increased number of regularly scheduled broadcasts of marine weather by commercial broadcast stations wherever possible.

Enclosure (5) to COMDTINST 3140.3D 13 JAN 1988

#### INSTRUCTIONS FOR COASTAL WARNING DISPLAY PROGRAM

- 1. National Weather Service (NWS) Operations Manual Section 10.3, which is attached, describes National Weather Service policy on coastal warning display stations and delegation of authority to the Coast Guard, under certain specified conditions, to initiate small craft displays. The following additional information is furnished to amplify the NWS instructions:
  - a. Coastal warning signals shall be hoisted, changed, and taken in only upon receipt of NWS information from the district commander or the National Weather Service except at those units specifically authorized to initiate small craft displays. They shall be hoisted, changed and taken in promptly at the time indicated in the message. They are <u>not</u> to be taken in automatically at the end of a 24 hour period.
  - b. The time of receipt of coastal warning information and the time of displaying, changing, and taking in storm warnings shall be logged in the same manner as for aids to navigation.
  - c. Any interference with the unit's capability to display coastal warning signals shall be reported promptly to the monitoring NWS office and to the district commander.
  - d. Night coastal warning signals shall not be displayed by any Coast Guard vessel.
  - e. Units not specifically designated as display stations shall not display coastal warning signals.
- 2. When information is received by a district commander from the monitoring NWS office or from a designated coastal marine signal display station, either Coast Guard or civilian, that a station is established, moved, changed from day to both day and night, or vice versa, permanently or temporarily discontinued, resuming display after being inoperative, or changing its name, the district commander shall issue an appropriate local Notice to Mariners and take such other action as may be indicated.
- 3. The National Weather Service will furnish to each participating Coast Guard district commander with copy to COMDT (G-OIO), annually, a list of marine visual display stations. Upon receipt, each district commander will arrange for a list of stations within his district to be published in the local Notice to Mariners.
- 4. Questions regarding maintenance of display poles and lights, or for supplies for this program should be directed to the local NWS Regional office.

13 JAN 1988 Enclosure (5) to COMDTINST 3140.3D

# NSW OPERATIONS MANUAL SECTION 10.3 MARINE SERVICES FOR COASTAL, OFFSHORE, AND HIGH SEAS (D-51)

- 14. <u>Coastal Warning Display (CWD) Program</u>. Marine weather dissemination originated with the CWD program in the late 1800's. In recent years NWR (NOAA Weather Radio) has become the recommended dissemination mode, but CWD's still serve local needs at about 200 locations around the country. Although of limited range and informational value, the Coast Guard and organized boating groups strongly recommend their continuance. A high percentage of CWD's are operated by the Coast Guard or state and local government (State Parks, Harbor Masters, etc.).
- 14.1 <u>Program Management.</u> CWD sites are supervised by the WSFO's/WSO's and managed by Regional Headquarters under Marine and Applied Service Branch (W/OM12) cognizance. Any action affecting CWD sites shall be noted on WS Form B-53 Marine Warning Display Station Record by the Regional Headquarters.
- 14.2 <u>Operation</u>. The display person shall be requested to promptly raise and lower the signals upon notification by the NWS and encouraged to receive notification via NOAA Weather Radio. Telephone notification is the least reliable and should be considered only as a last resort.

Personnel at display sites shall be instructed to notify the supervising NWS office immediately when the CWD becomes inoperative. An appropriate Local Notice to Mariners (LNTM) shall be issued if displays cannot be resumed. A LNTM shall be filed for any changes in CWD operation including establishment, disestablishment, physical relocation, inoperative or restored to operation, change in day or night display status, etc. Local Notice to Mariners information shall be sent by the supervising NWS office to the U.S. Coast Guard District Commander for both publication and broadcast.

Examples: FOR LOCAL NOTICE TO MARINERS, COASTAL WARNING DISPLAY STATION FOR DAY DISPLAYS ONLY ALL YEAR CASINO PIER GULFPORT FLORIDA MOVED TO GULFPORT YACHT BASIN LATITUDE 27 DEGREES 44.0 MINUTES NORTH LONGITUDE 83 DEGREES 41.0 MINUTES WEST 17 APRIL 1985.

FOR LOCAL NOTICE TO MARINERS, COASTAL WARNING DISPLAY STATION FOR DAY AND NIGHT DISPLAYS AT CITY PARK, FORT MONROE, VA., BECAME INOPERATIVE 6 OCT 1985.

FOR LOCAL NOTICE TO MARINERS. COASTAL WARNING DISPLAY STATION FOR DAY DISPLAYS ONLY AT BR NECK, MD., DISCONTINUED 10 AUG 1985.

14.3 <u>Authority of Coast Guard to Initiate Local Small Craft Advisories.</u>
In order to provide for a more prompt reaction to hazardous conditions that are observed, but not yet in the forecast, qualified Coast Guard personnel may hoist small craft pennants and/or activate lights when existing wind or wave conditions reach the criteria established for small craft advisories. This authority is subject to the following conditions:

- a. An NWS office must be immediately notified by telephone of the advisory and of the existing wind and wave conditions.
- b. Upon notification by the Coast Guard, the WSFO/WSO with warning responsibility shall promptly issue a Small Craft Advisory or Special Marine Warning and revise, as necessary, the existing forecasts to reflect these reported local conditions.
- 14.4 <u>Annual List of Display Stations</u>. A list of CWD's shall be updated annually by each region on or before April 1. Copies shall be distributed as follows:
  - a. Marine and Applied Services Branch W/OM12.
  - b. Appropriate Coast Guard District for publication in Local Notice to Mariners.
  - c. COMDT (G-OIO) U.S. Coast Guard Headquarters,
  - d. Washington, D.C. d. Nautical Data Unit N/CG2222 for nautical chart entry.
  - e. Coast Pilot Section N/CG223 for referencing in Coast Pilot series. WSOM Issuance 86-4 6-1-86

WSOM ISSUANCE 86-4 6-1-86

# Enclosure (6) to COMDTINST 3140.3D 13 JAN 1988

DIST	ID	NAME	LAT	LONG	#-DAILY-OBS	OBS-SCHED
1	29B	Boston Lt.	4219N	7053W	5	note 8
1	45B	Brant Pt. Sta.	4117N	7005W	8	note 1
1	30B	Cape Cod Canal Sta.	4147N	7030W	8	note 1
1	67B	Castle Hill Sta.	4128N	7122W	8	note 1
1	31B	Chatham Sta.	4140N	6957W	8	note 1
1	34N	Eaton's Neck Sta.	4057n	7324W	8	note 1
1	45N	Fire Island Sta.	4031N	7326W	8	note 1
1	34B	Gloucester Sta.	4235N	7040W	5	note 8
1	OB9	Goat Island Lt. Sta.		7024W	5	note 5
1	26B	Isles of Shoals Lt. Sta.		7037W	8	note 1
1	N11	Long Island Sound GROUP	4116N	7254W	8	note 1
1	18B	Manana Island FSS	4346N	6920W	8	note 1
1	54N	Manasquan Inlet Sta.	4006N	7401W	8	note 1
1	32B	Menemsha Sta.	4121N	7046W	8	note 1
1	35B	Merrimac River Sta.	4249N	7052W	8	note 1
1	48N	Montauk Sta.	4101N	7558W	8	note 1
1	49N	Moriches Sta.	4047N	7245W	8	note 1
1	18N	New London Ledge Lt.	4118N	7205W	8	note 1
1	96B	Owls Head Lt. Sta.	4405N	6902W	5	note 5
1	PJI	Point Judith Sta.	4122N	7129W	3	note 1
1	2B8	Portland Head Lt. Sta.		7012W	5	note 5
1	25B	Portsmouth Harbor Sta.		7043W	8	note 1
1	36B	Provincetown Sta.	4204N	7010W	8	note 1
1	50N	Rockaway Sta.	4034N	7353W	8	note 1
1	56N	Sandy Hook Sta.	4028N	7401W	8	note 1
1	51N	Snort Beach Sta.	4035N	7333W	8	note 1
1	24B	West Quoddy Head Lt. Sta.	4449N	6657W	5	note 5
5	55N	Atlantic City Sta.	3923N	7425W	8	note 1
5	78N	Barnegat Sta.	3946N	7406W	8	note 1
5	W51	Cape Charles Sta.		7600W	8	note 1
5	62W	Cape Henry Lt. Sta.		7600W	6	note 4
5	N91	Cape May GROUP	3857N	7453W	8	note 1
5	66W	Cove Point Lt. Sta.	3823N	7623W	6	note 4
5	W06		3759N	7552W	3	note 9
5	OW8	Eastern Shore GROUP	3751N	7525W	8	note 1
5 5	61N	Indian River Inlet Sta.	383/N	7504W	8	note 1
J	63W	Milford Haven Sta.		7619W	8	note 1
5	78W	Oak Island Sta.	3353N	7801W	8	note 1
5 5	W30	Ocean City Sta.	3820N	7505W	8	note 1
5 5	45W	Ocracoke Sta.	3507N	7559W	8	note 1
5 5	79W	Oregon Inlet Sta.	3546N	7531W	8	note 1
5	64W 67W	Parramore Beach Sta. Stillpond Sta.	3732N 3920N	7537W 7606W	8 8	note 1
5		-				note 1
5	3W4 65W	Swansboro Sta. Thomas Point Lt. Sta.	N 3854N	W 7626W	8 8	note 1
5			3411N			note 1
7	1W9 X91	Egmont Key Lt. Sta.	2736N	7749W 8246W	8 8	note 1 note 1
7	X89	Fort Myers Sta.	2730N 2627N	8157W	8	note 1
7	X82	Fort Pierce Sta.	2027N 2728N	8018W	8	note 1
7	X84	Islamorada Sta.	2726N 2754N	8035W	8	note 1
7	X81	Lake Worth Inlet Sta.	2734N 2646N	8003W	8	note 1
7	X88	Marathon Sta.	2443N	8107W	8	note 1
7	MJ1	St. Simons Sta.	3108N	8122W	8	note 1
7	IJ2	Tybee Sta.	3201N	8051W	8	note 1
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8	1300	Destin Sta.	N	W	8	note 1
8	8R8	Freeport Sta.	2857N	9518W	8	note 1
8	0110	Gulfport Sta.	N	W	8	note 1
8		New Canal Sta.	N	W	8	note 1, 16
8		Pascogoula Sta.	N	W	8	note 1
8	9R1	Port Aransas Sta.	2750N	9704W	8	note 1, 16
8	9R3	Port Isabel Sta.	2604N	9710W	8	note 1
8	8R9	Port O'Conner Sta.	2826N	9626W	8	note 1
9	6B3	Alexandria Bay Sta.	2020N N	7020W	12	note 1
9	20G	Ashtabula Lt. Sta.	4155N	8048W	12	note 2
9	31G	Belle Isle Sta.	4133N 4220N	8258W	12	note 2
9	19G	Buffalo BASE	4220N 4253N	7853W	12	note 2
9	Y09	Charlevoix Sta.	4233N N	7633W W	12	note 2
				9205W	12	
9	30Y	Duluth Sta.	4646N			note 2
9	25G	Erie Sta.	4207N	8005W	12	note 2
9	14C	Frankfort Sta.	4438N	8615W	12	note 2
9	27Y	Grand Marais Sta.	N	W	12	note 2
9	16C	Kenosha Sta.	4235N	8745W	12	note 2
9	27G	Lorain Sta.	4128N	8211W	12	note 2
9	17C	Ludington Lt. Sta.	4357N	8628W	12	note 2
9	21G	Marblehead Lt. Sta.	4133N	8244W	12	note 2
9	34Y	Marquette Lt. Sta.	4633N	8723W	12	note 2
9	18C	Michigan City Sta.	4143N	8654W	12	note 2, 17
9	15C	Milwaukee BASE	4301N	8757W	12	note 2, 17
9	19C	Muskegon Lt. Sta.	4314N	8620W	12	note 2, 17
9	13G	Niagara Sta.	4316N	7904W	12	note 2
9	28G	Oswego Sta.	4328N	7631W	12	note 2
9	33G	Port Huron Sta.	4300N	8225W	12	note 2
9	32Y	Portage Sta.	4714N	8838W	12	note 2
9	26G	Rochester Lt. Sta.	4315N	7736W	12	note 2
9	30G	Saginaw River Sta.	4338N	8351W	12	note 2
9	44Y	Sault Ste. Marie ANT	4630N	8420W	12	note 2, 17
9	21C	Sheboygan Sta.	4345N	8742W	12	note 2, 17
9	41Y	St. Clair Shores Sta.	4228N	8226W	12	note 2
9	38Y	St. Ignace Sta.	4551N	8443W	12	note 2
9	20C	St. Joseph Sta.	4207N	8629W	12	note 2
9	OY2	Sturgeon Bay Sta.	N	W	12	note 2
9	39Y	Tawas Pt. Lt. Sta.	4415N	8326W	12	note 2, 17
9	24G	Toledo Sta.	4142N	8327W	12	note 2
9	C58	Two Rivers Sta.	N	W	12	note 2
11	91Q	Angel Island/Point Blunt	3751N	12225W	8	note 1
11	92Q	Bodega Bay Sta.	3319N	12303W	8	note 1
11	88Q	Humbolt Bay Sta.	4046N	12414W	8	note 1
11	67Q	Lake Tahoe Sta.	3911N	12007W	8	note 1
11	93Q	Pigeon Pt. Lt.	7311N	12224W	8	note 1
11	99Q	Port Chicago	3802N	12202W	8	note 1
11	94Q	Pt. Bonita Lt	3749N	12232W	8	note 1
11	87Q	Pt. Piedras Blancas	3540N	12117W	8	note 1
11	95Q	Pt. Pinos Lt.	3638N		8	note 1
11	98Q	Rio Vista Sta.	3809N	12142W	8	note 1
11	L82	Teriminal Island	3344N	11816W	8	note 1
13	91S	Alki Point Lt. Sta.	N	W	0	note 15
13	82S	Cape Disappointment Sta.		12403W	6	note 4
13	P47	Chetco River Sta.	N	W W	6	note 3
13	83S	Coos Bay Sta	4321N	12420W	6	note 3
13	84S	Grays Harbor Sta	4655N	12406W	6	note 4
13	98S	Mukilteo Lt. Sta	4757N	12218W	6	note 4
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# Enclosure (6) to COMDTINST 3140.3D 13 JAN 1988

11	8S7	Neah Bay Sta	N	M	6	note 4
11	99S	Point Robinson Lt. Sta	4723N	12222W	3	note10
11	NOW	Port Angeles Group	4808N	12324W	6	note 4
11	97S	Pt. No Point Lt. Sta	4755N	12232W	3	note10
11	87S	Quillayute River Sta	4754N	12438W	6	note 4
11	85S	Siuslaw River Sta	4400N	12407W	6	note 3
11	88S	Tillamook Bay Sta	4534N	12355W	5	note 7
11	90S	Umpqua River Sta	4341N	12410W	6	note 3
11	43S	West Point Lt. Sta	4740N	12226W	6	note 4
11	95S	Yaquina Bay Sta	4438N	12404W	6	note 3
11	1Z2	Upola Point LORSTA	2015N	15553W	3	note11
3	FIV	Five Finger Lt. Sta.	5716N	13337W	10	note12
3	KPC	Port Clarence LORSTA	6515N	16652W	7	note13
3	Z12	Tok LORSTA	N	W	5	note

Not	e #	Abs So	chedule	es (ali	l time:	s ZULU	)						
1	=	0000,	0300,	0600,	0900,	1200,		1800,	2100				
2	=	0000,	0200,	0400,	0600,	0800,	1000,	1200,	1400,	1600,	1800,	2000,	2200
3	=	0000,	0300,	0600,	1500,	1800,	2100						
4	=	0000,	0300,	1200,	1500,	1800,	2100						
5	=	0000,	1200,	1500,	1500,	1800,	2100						
6	=	1200,	1400,	1600,	1800,	2000							
7	=	0000,	0300,	1500,	1800,	2100							
8	=	1200,	1500,	1800,	2100								
9	=	1500,	1800,	2100									
10	=	0000,	1800,	2100									
11	=	0000,	0600,	1800									
12	=	0000,	0500,	0800,	1100,	1400,	1500,	1700,	1900,	2000,	2300		
13	=	0000,	0200,	0400,	1600,	1800,	2000,	2200					
14	=	0600,	0900,	1200,	1500,	1800,	2000						
15	=	ON CAI	LL										
16	=	NON-RI	EPORTII	NG									
17	=	SEA WA	ATER TI	EMP.									
18	=	0000,	0600,	0900,	1200,	1500,	1800,	2100					