

***NATIONAL WEATHER SERVICE INSTRUCTION 10-314
OCTOBER 24, 2014***

***Operations and Services
Marine and Coastal Weather Services, NWSPD 10-3***

MARINE WEATHER STATEMENTS

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>.

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-314, Marine Weather Statements, dated December 17, 2012. This Instruction includes the following changes:

1. Updated most of the examples in Appendix A.
2. Added “Marine Weather Statements may include special tags after the && to provide better definition, similar to other short term statements.” See format box (Figure 1) in section 2.3.4.

Signed

October 10, 2014

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Acting Director, Office of Climate,
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Date

MARINE WEATHER STATEMENTS
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1 Introduction. This procedural instruction provides detailed information on the Marine Weather Statement (MWS) product issued by National Weather Service (NWS) Weather Forecast Offices (WFOs) and Weather Service Office (WSO) Pago Pago to cancel a Special Marine Warning (SMW) or provide the public with follow-up information to SMWs (reference NWS Instruction (NWSI) 10-313, *Special Marine Warnings*). This instruction also provides information on general purpose usage of the MWS (see section 2.2.2).

2 Marine Weather Statement (product category MWS)

2.1 Mission Connection. MWSs are used in two distinct ways: 1) To provide the public with detailed marine weather information describing non-severe, but potentially hazardous, conditions and information for a variety of conditions not covered by warnings or routine forecasts. 2) MWSs also provide follow-up information to a SMW including cancellation of all or part of the SMW.

2.2 Issuance Guidelines

2.2.1 Creation Software. WFOs use the Advanced Weather Interactive Processing System (AWIPS) WarnGen application to issue MWSs to cancel, update, or expire SMWs, or for non-severe convective events. In addition, WFOs may use the AWIPS Interactive Forecast Preparation System (IFPS) Graphical Hazards Generation (GHG) application to create MWSs for long term events and short term non-severe events.

2.2.2 Issuance Criteria. WFOs and WSO Pago Pago will issue MWSs to provide notification when a SMW will expire or has expired, to cancel all or portions of an SMW, or to provide updates to the SMW. The MWS will use the Valid Time Event Code (VTEC) phenomena and significance code, MA.W when issued to follow-up the SMW.

Each NWS office having coastal waters or Great Lakes forecast responsibility (reference NWSI 10-302, *Marine and Coastal Services Area of Responsibility*) will issue MWSs as necessary. MWSs are not issued for the offshore or high seas areas.

Non-Severe, Short-term Wind Events: Forecasters may issue MWSs to describe short duration, non-severe, but potentially hazardous conditions, in which sustained winds or gusts to 33 knots (KT) are expected for 2 hours or less. WFOs use WarnGen to generate MWS for sustained winds or gusts to 33 KT.

Non-Severe, Long-term Events: Forecasters may issue MWSs to provide details on significant conditions that affect marine operations prevailing for periods exceeding 2 hours. For example: dense fog, hazardous materials spills; volcanic impacts, trends for increasing and / or decreasing wind and wave/seas conditions; or to advise for the potential development of warning conditions. Headlines for events may be manually inserted to describe the conditions associated with non-severe long-term events. For hazardous weather events see NWSI 10-315, *Marine Weather Message*.

Forecasters may issue MWSs during coastal or lakeshore flood events to provide information specifically relating to mariners. WFOs may also issue MWSs to alert mariners of significant weather features expected in the 3 to 5 day forecast period.

Funnel Clouds. Offices should issue MWSs to report funnel clouds either forecast by the office or reported to the office by external sources. If supporting data is sufficient and confidence is high, offices may wish to consider issuance of a Special Marine Warning (reference NWSI 10-313).

Tsunami Events. WFOs may issue MWSs during tsunami events to provide information specifically relating to mariners, e.g., strong currents in bays and harbors.

Marine Debris. WFOs may issue MWSs for marine debris including from tsunamis.

Ice Changes. WFOs should issue MWSs to inform mariners of weather events likely to impact the formation or destruction of sea ice or Great Lake ice.

Freezing Spray Advisories. Forecasters may issue a MWS to direct users to the MWW for a Freezing Spray Advisory. This option is intended for areas where freezing spray is a rare event.

Ashfall Advisories. In Alaska Region, and Pacific Region offices where marine VTEC is not used, issue the MWS for Ashfall Advisories or to describe heightened states of volcanic unrest.

2.2.3 Issuance Time. The MWS is a non-scheduled, event-driven product issued by WFOs and WSO Pago Pago.

2.2.4 Valid Time. The MWS is valid from the time of issuance until the expiration time.

2.2.5 Universal Geographic Code (UGC). The MWS will contain marine-based zone UGC codes.

2.2.6 Product Expiration Time. The product expiration time is not more than 15 minutes after the warning or expiration time of SMWs; and not more than 12 hours after the time of issuance for other events described in the issuance criteria section.

2.3 Technical Description. The MWS will follow the format and content described in this section.

2.3.1 Mass News Disseminator (MND) Broadcast Line. None.

2.3.2 MND Header. The MWS MND Header is “MARINE WEATHER STATEMENT”.

2.3.3 Content. Offices should use headlines to highlight important information related to the issuance of MWSs. MWSs will follow the format described in section 2.3.4.

2.3.4 Format. The format of the MWS (VTEC version) can be seen in Figure 1. The format of the MWS (non-VTEC version) can be seen in Figure 2. The MWS (both versions) is a segmented product. Please reference NWSI 10-1702, *Universal Geographic Code (UGC)*, for additional information on product segmentation. For detailed VTEC information, please reference NWSI 10-1703, *Valid Time Event Code (VTEC)*. For more detailed product format information consult NWSI 10-1701, *Text Product Formats and Codes*.

This product is available in industry standard encoding and languages, and may include, but not be limited to, American Standard Code for Information Interchange, Extensible Markup Language, Wireless Markup Language and HyperText Markup Language.

(WMO HEADER)(UTC ISSUANCE DATE TIME)
 (AWIPS ID)

MARINE WEATHER STATEMENT
 NATIONAL WEATHER SERVICE (CITY)(STATE)
 (ISSUANCE TIME) AM/PM (LOCAL TIME ZONE) (DAY) (DATE)

(AREAL UGC CODE[S])-(EXPIRATION TIME)-
 (VTEC STRING)
 (ISSUANCE TIME) AM/PM (LOCAL TIME ZONE) (DAY) (DATE)

...HEADLINE...

NARRATIVE TEXT.
 && (optional)
 LAT...LON
 TIME...MOT...LOC

(Marine Weather Statements may include special tags after the && to provide better definition, similar to other short term statements).
 \$\$
 FORECASTER NAME (Optional)

Figure 1. MWS Format VTEC Version

(WMO HEADER)(UTC ISSUANCE DATE TIME)
(AWIPS ID)

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE (CITY)(STATE)
(ISSUANCE TIME) AM/PM (LOCAL TIME ZONE) (DAY) (DATE)

(AREAL UGC CODE[S])-(EXPIRATION TIME)-
(MARINE ZONE NAMES [If MWS is created by GHG])
(ISSUANCE TIME) AM/PM (LOCAL TIME ZONE) (DAY) (DATE)

...HEADLINE (If Needed)...

NARRATIVE TEXT.LAT...LON
TIME...MOT...LOC

[If MWS is created by WarnGen, list of latitude / longitude points outlining the forecaster-drawn polygon in WarnGen and time, movement, and location of event being tracked]
\$\$
FORECASTER NAME (Optional)

Figure 2. MWS Format non-VTEC Version

2.4 Updates, Amendments and Corrections. The MWS should be updated or corrected as needed.

APPENDIX A – Examples of the Marine Weather Statement

1 The MWS issued for Non-Severe Short Term Wind Events

FZUS71 KOKX 301103
MWSOKX

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE NEW YORK NY
703 AM EDT SUN MAR 30 2014

ANZ330-340-350-301200-
703 AM EDT SUN MAR 30 2014

...HEAVY GUSTY SHOWERS OVER THE WATERS EAST OF SHINNECOCK INLET AND THE MOUTH OF THE CONNECTICUT RIVER...

AT 657 AM EDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A LINE OF HEAVY SHOWERS CAPABLE OF PRODUCING WIND GUSTS UP TO 30 KNOTS...FROM 16 NM SOUTH OF SHELTER ISLAND TO 11 NM SOUTHEAST OF MONTAUK SHOAL...OR FROM 9 NM EAST OF SHINNECOCK INLET TO 11 NM SOUTHEAST OF MONTAUK SHOAL...MOVING NORTH AT 30 KT.

THESE HEAVY SHOWERS WILL BE NEAR...
NAPEAGUE BAY...MONTAUK SHOAL AND MONTAUK POINT AT 720 AM.
SHELTER ISLAND AND GARDINERS ISLAND AT 725 AM.
GARDINERS BAY AT 730 AM.
WESTERN BLOCK ISLAND SOUND AT 735 AM.
PLUM ISLAND AND ORIENT POINT AT 740 AM.
THE RACE AT 745 AM.

MARINERS CAN EXPECT GUSTY WINDS UP TO 30 KNOTS...LOCALLY HIGHER WAVES...HEAVY DOWNPOURS. BOATERS SHOULD SEEK SAFE HARBOR IMMEDIATELY.

LAT...LON 4132 7207 4134 7190 4136 7188 4136 7187
4107 7185 4083 7166 4074 7240 4088 7238
4099 7206 4099 7209 4099 7210 4106 7215
4099 7235 4100 7236 4128 7231 4137 7219
4132 7209 4151 7208

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2 The MWS issued for Non-Severe Long Term Events

FZUS72 KCHS 292206
MWSCHS

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE CHARLESTON SC
606 PM EDT SAT MAR 29 2014

AMZ330-292330-
CHARLESTON HARBOR-
606 PM EDT SAT MAR 29 2014

...DENSE SEA FOG MAY BRIEFLY AFFECT THE CHARLESTON HARBOR THROUGH
730 PM...

SATELLITE AND SURFACE OBSERVATIONS INDICATE THE WESTERN EDGE OF A
LARGE BANK OF SEA FOG LOCATED OVER THE ATLANTIC WILL BRUSH
PORTIONS OF THE CHARLESTON HARBOR THROUGH 730 PM. VISIBILITIES MAY
DROP AS LOW AS 1/2 MILE AT TIMES...ESPECIALLY NEAR THE HARBOR
ENTRANCE. MARINERS SHOULD BE ALERT FOR DETERIORATING CONDITIONS IN
THE HARBOR AND BE PREPARED FOR REDUCED VISIBILITIES. THE RISK FOR FOG
WILL END SHORTLY AFTER 730 PM AS WINDS TURN SOUTHWEST AND
EVENTUALLY WEST AS A COLD FRONT APPROACHES.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

MARINERS ARE URGED TO NAVIGATE WITH EXTREME CARE. IF YOU MUST
NAVIGATE IN THESE CONDITIONS...PROCEED WITH CAUTION. USE PROPER FOG
SIGNALS...INCLUDING FOG HORNS. MAKE SURE ALL NAVIGATIONAL RUNNING
LIGHTS ARE ON.

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3 MWSs created by WarnGen used to update a Special Marine Warning (SMW), cancel a SMW, cancel part of a SMW, and expire a SMW

MWS used to update a SMW:

FZUS74 KMOB 291006
MWSMOB

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE MOBILE AL
506 AM CDT SAT MAR 29 2014

GMZ670-675-291115-
/O.CON.KMOB.MA.W.0028.000000T0000Z-140329T1115Z/
506 AM CDT SAT MAR 29 2014

...A SPECIAL MARINE WARNING REMAINS IN EFFECT UNTIL 615 AM CDT...

FOR THE FOLLOWING AREAS...

WATERS FROM PENSACOLA FL TO PASCAGOULA MS FROM 20 TO 60 NM...
WATERS FROM DESTIN TO PENSACOLA FL FROM 20 TO 60 NM...

AT 503 AM CDT...A LINE OF THUNDERSTORMS PRODUCING SEVERE WINDS IN EXCESS OF 50 KNOTS WAS LOCATED FROM 38 NM SOUTH OF GULF SHORES BEACH TO 49 NM SOUTH OF FAREWELL BUOY...MOVING EAST AT 45 KNOTS.

EXPECT STRONG GUSTY WINDS...HAIL...HIGH WAVES...DANGEROUS LIGHTNING AND HEAVY RAINS. SEEK SAFE HARBOR IMMEDIATELY.

THUNDERSTORMS CAN PRODUCE SUDDEN WATERSPOUTS WHICH CAN EASILY OVERTURN BOATS. IF A WATERSPOUT IS SPOTTED...MOVE AT A 90 DEGREE ANGLE FROM ITS APPARENT MOVEMENT AND SEEK SAFE HARBOR IMMEDIATELY.

LAT...LON 2945 8789 2968 8758 2970 8651 2938 8653
2939 8667 2921 8797
TIME...MOT...LOC 1006Z 270DEG 47KT 2962 8754 2945 8762
2933 8782

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MWS used to cancel a SMW:

FZUS72 KMLB 292313
MWSMLB

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE MELBOURNE FL
713 PM EDT SAT MAR 29 2014

AMZ555-292321-
/O.CAN.KMLB.MA.W.0028.000000T0000Z-140329T2330Z/
713 PM EDT SAT MAR 29 2014

...SPECIAL MARINE WARNING CANCELLED...

THE THUNDERSTORMS THAT PROMPTED THE WARNING HAVE WEAKENED AND PUSHED FARTHER OUT TO SEA. THEY ARE NO LONGER CAPABLE OF PRODUCING STRONG OR SEVERE WIND GUSTS OVER THE NEARSHORE WATERS BETWEEN SEBASTIAN INLET AND JUPITER INLET.

AGAIN...THE SPECIAL MARINE WARNING HAS BEEN CANCELLED.

LAT...LON 2698 8009 2719 8020 2742 8029 2745 8028
2744 8029 2783 8045 2789 8010 2698 7974
TIME...MOT...LOC 2311Z 256DEG 32KT 2734 7950

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MWS used to cancel part of a SMW:

FZUS74 KLIX 290858
MWSLIX

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE NEW ORLEANS LA
358 AM CDT SAT MAR 29 2014

GMZ532-536-538-555-557-290907-
/O.CAN.KLIX.MA.W.0045.000000T0000Z-140329T0915Z/
358 AM CDT SAT MAR 29 2014

...SPECIAL MARINE WARNING CANCELLED...

THE AFFECTED AREAS WERE...
COASTAL WATERS FROM PASCAGOULA MISSISSIPPI TO STAKE ISLAND OUT 20
NM OVER GULF OF MEXICO WATERS...
MISSISSIPPI SOUND OVER GULF OF MEXICO WATERS...
CHANDELEUR SOUND OVER GULF OF MEXICO WATERS...
BRETON SOUND OVER GULF OF MEXICO WATERS...
COASTAL WATERS FROM BOOTHVILLE LA TO SOUTHWEST PASS OF THE
MISSISSIPPI RIVER OUT 20 NM OVER GULF OF MEXICO WATERS...INCLUDING
CHANDELEUR SOUND AND HORN ISLAND...

LAT...LON 2939 8864 2953 8856 2964 8849 2971 8846
2983 8839 2988 8831 2965 8819 2933 8819
TIME...MOT...LOC 0857Z 265DEG 47KT 2958 8837

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GMZ577-290915-
/O.CON.KLIX.MA.W.0045.000000T0000Z-140329T0915Z/
358 AM CDT SAT MAR 29 2014

...A SPECIAL MARINE WARNING REMAINS IN EFFECT UNTIL 415 AM CDT...

FOR THE FOLLOWING AREA...
COASTAL WATERS FROM PASCAGOULA MISSISSIPPI TO STAKE ISLAND
LOUISIANA OUT 20 TO 60 NM OVER GULF OF MEXICO WATERS...

AT 352 AM CDT...NATIONAL WEATHER SERVICE METEOROLOGISTS CONTINUED
TO DETECT A THUNDERSTORM...PRODUCING STRONG WINDS 34 KNOTS OR
GREATER OVER COASTAL WATERS ABOUT 37 NM SOUTHEAST OF CHANDELEUR
SOUND...MOVING EAST AT 45 KNOTS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

MARINERS CAN EXPECT GUSTY WINDS...HIGH WAVES...DANGEROUS LIGHTNING...AND HEAVY RAINS. BOATERS SHOULD SEEK SAFE HARBOR IMMEDIATELY...UNTIL THIS STORM PASSES.

&&

LAT...LON 2939 8864 2953 8856 2964 8849 2971 8846
2983 8839 2988 8831 2965 8819 2933 8819
TIME...MOT...LOC 0857Z 265DEG 47KT 2958 8837

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MWS used to expire the SMW:

FZUS74 KMOB 291117
MWSMOB

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE MOBILE AL
617 AM CDT SAT MAR 29 2014

GMZ675-291127-
/O.EXP.KMOB.MA.W.0028.000000T0000Z-140329T1115Z/
617 AM CDT SAT MAR 29 2014

...SPECIAL MARINE WARNING HAS BEEN ALLOWED TO EXPIRE...

THE AFFECTED AREA WAS...
WATERS FROM DESTIN TO PENSACOLA FL FROM 20 TO 60 NM...

AT 615 AM CDT...THE STORM THAT PROMPTED THE WARNING HAS MOVED OUT OF THE AREA...THUS THE SPECIAL MARINE WARNING HAS BEEN ALLOWED TO EXPIRE.

LAT...LON 2950 8707 2960 8652 2938 8653 2939 8667
2933 8712
TIME...MOT...LOC 1056Z 277DEG 39KT 2939 8695

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MWS issued for volcanic impacts:

FZAK78 PAFC 302330
MWSAFC

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE ANCHORAGE AK
330 PM ADT FRI MAR 30 2007

PKZ171-310530-
UNALASKA BAY-
330 PM ADT FRI MAR 30 2007

...INCREASED EARTHQUAKE ACTIVITY AT MAKUSHIN VOLCANO...

THE ALASKA VOLCANO OBSERVATORY REPORTS THAT EARTHQUAKE ACTIVITY AT MAKUSHIN VOLCANO HAS INCREASED IN THE LAST 24 HOURS. AN ERUPTION COULD OCCUR AT ANY TIME PRODUCING ASH CLOUDS...ASHFALL...AND MUD FLOWS THAT COULD REACH THE COAST.

THIS STATEMENT MEANS THAT CURRENTLY THE VOLCANO IS SHOWING SIGNS OF UNREST. MARINERS ARE UNLIKELY TO BE AFFECTED BUT IT IS A DYNAMIC SITUATION AND CIRCUMSTANCES CAN CHANGE WITH LITTLE NOTICE.

PLEASE REPORT ANY OBSERVATIONS OF POSSIBLE VOLCANIC ACTIVITY TO THE ALASKA VOLCANO OBSERVATORY AT 907-786-7497. ADDITIONAL INFORMATION IS AVAILABLE AT /USE LOWER CASE LETTERS/ WWW.AVO.ALASKA.EDU.

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MWS issued for Ashfall Advisory:

Note: Where the MWW is issued Ashfall Warnings are carried in the MWW (see NWSI 10-315).

FZAK78 PAFC 302330
MWSAFC

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE ANCHORAGE AK
330 PM ADT FRI MAR 30 2007

PKZ130-140-141-310530-
BARREN ISLANDS AND KAMISHAK BAY WATERS-COOK INLET NORTH OF
KAMISHAK BAY AND ENGLISH BAY-KACHEMAK BAY-

330 PM ADT FRI MAR 30 2007

...ASHFALL ADVISORY IN EFFECT FOR LIGHT ASHFALL EXPECTED UNTIL 4 PM ADT THIS AFTERNOON IN COOK INLET...THE BARREN ISLANDS...KAMISHAK BAY...AND KACHEMAK BAY...

AUGUSTINE VOLCANO ERUPTED AT ABOUT 800 AM ADT. THE INTENSITY OF RECENT EXPLOSIONS AT AUGUSTINE VOLCANO SUGGEST THAT FAST MOVING AVALANCHES OF HOT DEBRIS MAY HAVE BEEN GENERATED. THESE AVALANCHES CAN REACH THE SHORELINE OF THE ISLAND AND CONTINUE OFFSHORE. VESSELS IN THE VICINITY OF THE ISLAND SHOULD EXERCISE EXTREME CAUTION. IN ADDITION FLOATING RAFTS OF PUMICE IN COOK INLET MAY OCCUR AS WELL AS VOLCANIC ASHFALL.

AN ASHFALL ADVISORY MEANS THAT THE VOLCANO IS UNDERGOING A MINOR ERUPTION AND THERE IS THE POTENTIAL THAT MARINERS COULD BE AFFECTED BY A LIMITED HAZARD EXTENT SUCH AS LESS THAN 1/4 INCH OF ASHFALL...PUMICE RAFTS...OR SOME FLOATING DEBRIS.

PLEASE REPORT ANY OBSERVATIONS TO THE ALASKA VOLCANO OBSERVATORY AT 907-786-7497. ADDITIONAL INFORMATION IS AVAILABLE AT /USE LOWER CASE LETTERS/ WWW.AVO.ALASKA.EDU.

THIS SITUATION CONTINUES TO BE MONITORED CLOSELY AND NEW STATEMENTS WILL BE ISSUED AS NECESSARY.

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