

**NATIONAL WEATHER SERVICE INSTRUCTION 10-314
FEBRUARY 20, 2017**

**Operations and Services
Marine, Tropical, and Tsunami Services Branch 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 October 24, 2014. Changes made to reflect the NWS Headquarters reorganization effective April 1, 2015. This Instruction includes the following changes:

1. Updated examples in Appendix A.

Signed

2/6/2017

Andrew D. Stern

Date

Director

Analyze, Forecast and Support Office

MARINE WEATHER STATEMENTS
Table of Contents

1	Introduction.....	3
2	Marine Weather Statement (MWS)	3
2.1	Mission Connection	3
2.2	Issuance Guidelines	3
2.2.1	Creation Software	3
2.2.2	Issuance Criteria)	3
2.2.3	Issuance Time	4
2.2.4	Valid Time	4
2.2.5	Universal Geographic Code (UGC).....	4
2.2.6	Product Expiration Time.....	4
2.3	Technical Description	4
2.3.1	Mass News Disseminator (MND) Broadcast Line	5
2.3.2	MND Header.....	5
2.3.3	Content.....	5
2.3.4	Format.....	5
2.4	Updates, Amendments and Corrections.....	6
Appendix		
A.	Examples of Marine Weather Statements.....	A-1

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, and; 2) to 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, *Special Marine Warnings*).

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 Marine Weather Message (MWW) for a Freezing Spray Advisory. This option is intended for areas where freezing spray is a rare event.

Ashfall Advisories. In Alaska 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 KAKQ 220053
MWSAKQ

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE WAKEFIELD VA
853 PM EDT TUE JUN 21 2016

ANZ652-654-220145-
853 PM EDT TUE JUN 21 2016

...A STRONG THUNDERSTORM APPROACHING THE COASTAL WATERS...

THE AREAS AFFECTED INCLUDE...

COASTAL WATERS FROM CHINCOTEAGUE TO PARRAMORE ISLAND VA OUT 20
NM...

COASTAL WATERS FROM PARRAMORE ISLAND TO CAPE CHARLES LIGHT VA
OUT 20 NM...

AT 852 PM EDT...DOPPLER RADAR INDICATED A STRONG
THUNDERSTORM...CAPABLE OF PRODUCING WINDS TO AROUND 30 KNOTS. THIS
THUNDERSTORM WAS LOCATED NEAR WACHAPREAGUE INLET...MOVING EAST
AT 35 KNOTS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

MARINERS CAN EXPECT GUSTY WINDS TO AROUND 30 KNOTS...LOCALLY
HIGHER WAVES...AND LIGHTNING STRIKES. BOATERS SHOULD SEEK SAFE
HARBOR IMMEDIATELY UNTIL THIS STORM PASSES.

&&

LAT...LON 3765 7510 3760 7516 3756 7526 3745 7529
3737 7533 3743 7574 3766 7582 3766 7581
3771 7584 3784 7497

\$\$

2 The MWS issued for Non-Severe Long Term Events

FZUS76 KLOX 180535
MWSLOX

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE LOS ANGELES/OXNARD CA
1035 PM PDT FRI JUN 17 2016

PZZ645-670-673-676-181300-
POINT PIEDRAS BLANCAS TO POINT SAL WESTWARD OUT TO 10 NM-
POINT PIEDRAS BLANCAS TO POINT SAL FROM 10 TO 60 NM-
WATERS FROM PT. SAL TO SANTA CRUZ ISLAND CA AND WESTWARD 60 NM
INCLUDING SAN MIGUEL AND SANTA ROSA ISLANDS-
OUTER WATERS FROM SANTA CRUZ ISLAND TO SAN CLEMENTE ISLAND TO
60 NM OFFSHORE INCLUDING SAN NICOLAS AND SANTA BARBARA ISLANDS-
1035 PM PDT FRI JUN 17 2016

...DENSE FOG ACROSS THE OUTER AND NORTHERN NEARSHORE WATERS
THROUGH SATURDAY MORNING...

DENSE FOG WITH VISIBILITY 1 NM OR LESS WILL BECOME WIDESPREAD
TONIGHT WITH VISIBILITY 1 NM OR LESS. IF YOU EXPERIENCE RESTRICTED
VISIBILITY PLEASE FOLLOW USCG RULE CONDUCT OF VESSELS IN
RESTRICTED VISIBILITY.

BEFORE SETTING OFF AND WHILE UNDERWAY ALWAYS LISTEN TO NOAA
WEATHER RADIO FOR THE LATEST WARNINGS AND FORECASTS.

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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:

FZUS71 KPHI 220105
MWSPHI

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE MOUNT HOLLY NJ
905 PM EDT TUE JUN 21 2016

ANZ455-475-220145-
/O.CON.KPHI.MA.W.0051.000000T0000Z-160622T0145Z/
905 PM EDT TUE JUN 21 2016

...A SPECIAL MARINE WARNING REMAINS IN EFFECT UNTIL 945 PM EDT...

FOR THE FOLLOWING AREAS...
COASTAL WATERS FROM CAPE HENLOPEN TO FENWICK ISLAND DE OUT 20 NM...
WATERS FROM CAPE MAY NJ TO FENWICK ISLAND DE OUT 20 TO 40 NM...

AT 903 PM EDT...STRONG THUNDERSTORMS WERE LOCATED ALONG A LINE
EXTENDING FROM 15 NM NORTHEAST OF CHICKEN BONE TO 6 NM NORTHEAST
OF 10 NM SE FENWICK ISLAND...MOVING EAST AT 25 KNOTS.

HAZARD...WIND GUSTS 34 KNOTS OR GREATER.

SOURCE...RADAR INDICATED.

IMPACT...SMALL CRAFT COULD BE DAMAGED IN BRIEFLY HIGHER WINDS AND
SUDDENLY HIGHER WAVES.

LOCATIONS IMPACTED INCLUDE...
DELAWARE LIGHTSHIP BUOY 44009.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

MOVE TO SAFE HARBOR UNTIL HAZARDOUS WEATHER PASSES.

FREQUENT LIGHTNING IS OCCURRING WITH THESE STORMS. IF CAUGHT ON THE
OPEN WATER STAY BELOW DECK IF POSSIBLE...KEEP AWAY FROM
UNGROUNDING METAL OBJECTS.

&&

LAT...LON 3841 7489 3861 7419 3861 7418 3855 7422
3851 7426 3834 7427 3822 7431 3822 7432
TIME...MOT...LOC 0103Z 288DEG 27KT 3846 7427 3837 7478

HAIL...0.00IN
WIND...>34KTS

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MWS used to cancel a SMW:

FZUS73 KAPX 201532
MWSAPX

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE GAYLORD MI
1132 AM EDT MON JUN 20 2016

LHZ348-349-362-363-201542-
/O.CAN.KAPX.MA.W.0007.000000T0000Z-160620T1615Z/
1132 AM EDT MON JUN 20 2016

...THE SPECIAL MARINE WARNING IS CANCELLED...

THE AFFECTED AREAS WERE...

NEARSHORE AND OPEN WATERS OF LAKE HURON FROM PRESQUE ISLE LIGHT TO
ALABASTER...

THE THUNDERSTORMS HAVE WEAKENED AND NO LONGER POSE A SIGNIFICANT
THREAT TO BOATERS.

LAT...LON 4460 8337 4473 8336 4485 8339 4490 8350
4498 8354 4503 8353 4508 8246 4448 8233
TIME...MOT...LOC 1530Z 271DEG 46KT 4487 8301 4471 8322

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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

\$\$

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:

FZUS73 KMQT 200823
MWSMQT

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE MARQUETTE MI
423 AM EDT MON JUN 20 2016

LSZ250-200833-
/O.EXP.KMQT.MA.W.0016.000000T0000Z-160620T0830Z/
423 AM EDT MON JUN 20 2016

...THE SPECIAL MARINE WARNING WILL EXPIRE AT 430 AM EDT...

THE AFFECTED AREAS WERE...
MUNISING TO GRAND MARAIS MI...

THE SHOWER HAS MOVED OUT OF THE AREA AND NO LONGER POSES A SIGNIFICANT THREAT TO BOATERS.

LAT...LON 4663 8617 4655 8639 4647 8650 4646 8654
4663 8652 4664 8644 4666 8636 4676 8618
4676 8614 4674 8608 4676 8599 4663 8599
TIME...MOT...LOC 0820Z 248DEG 59KT 4666 8607

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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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