

**NATIONAL WEATHER SERVICE INSTRUCTION 10-314**

**SEPTEMBER 9, 2010**

**Operations and Services**

**MARINE AND COASTAL WEATHER SERVICE PROGRAM, NWSPD 10-3**

**MARINE WEATHER STATEMENTS**

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**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 August 22, 2008. This directive includes the following changes:

1. Section 2.2.1 was updated for WFO/WSO use of creation software.
2. Section 2.2.2 was updated to include use of MWS for tsunami and volcanic events. New examples.

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signed

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August 26, 2010

David B. Caldwell  
Director, Office of Climate,  
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Date

MARINE WEATHER STATEMENTS

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## NWSI 10-314 SEPTEMBER 9, 2010

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 Offices (WSOs) to cancel a Special Marine Warning (SMW) or provide the public with follow-up information to SMWs (reference NWSI 10-313, *Special Marine Warnings*).

2. Marine Weather Statement (product category MWS).

2.1 Mission Connection. MWSs 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. 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 cancel, update, or expire SMWs, or for non-severe convective events. WFOs 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. WSOs will use regionally approved software.

2.2.2 Issuance Criteria. WFOs and WSOs 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 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 are expected for 2 hours or less.

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: 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*.

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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.

Tsunami Events. WFOs may issue MWSs during tsunami events to provide information specifically relating to mariners.

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

Ashfall Advisories. In Alaska Region, and Pacific Region offices where VTEC is not used, issue the MWS for Ashfall Advisories.

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

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. WFOs and WSOs will issue MWSs to cancel all or portions of a SMW. NWS offices should issue MWSs for ongoing or imminent weather conditions less than warning criteria. 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 (ref: NWSI 10-313). 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 can be seen in Figure 1. The MWS 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) [If MWS is follow-up to SMW]  
(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. This list is mandatory if the MWS is issued to provide follow-up information to a Special Marine Warning.]  
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FORECASTER NAME (Optional)

Figure 1. MWS Format

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

**APPENDIX A - Examples of the Marine Weather Statement**

Examples of Marine Weather Statements (MWS):

**1. The MWS issued for weather conditions below SPECIAL MARINE WARNING criteria created by WarnGen:**

FZUS71 KBUF 191022  
MWSBUF

MARINE WEATHER STATEMENT  
NATIONAL WEATHER SERVICE BUFFALO NY  
621 AM EDT TUE OCT 19 2010

LOZ042-062-191115-  
621 AM EDT TUE OCT 19 2010

...STRONG THUNDERSTORMS OVER LAKE ONTARIO...

AT 619 AM EDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED THUNDERSTORMS...CAPABLE OF PRODUCING STRONG WINDS UP TO 30 KNOTS...LOCATED 5 NM NORTHWEST OF WILSON...MOVING NORTHEAST AT 40 KNOTS.

THE STRONG THUNDERSTORMS WILL BE NEAR... THIRTY-MILE POINT AT 630 AM EDT.

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

LAT...LON 4364 7853 4363 7838 4337 7847 4327 7908  
4351 7907 4352 7906 4354 7896 4365 7869  
4365 7854  
TIME...MOT...LOC 1021Z 212DEG 44KT 4342 7886

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**2. The informational MWS created with IFPS GHG:**

FZUS76 KLOX 032001  
MWSLOX

MARINE WEATHER STATEMENT  
NATIONAL WEATHER SERVICE LOS ANGELES/OXNARD CA  
1201 PM PST WED MAR 3 2010

PZZ650-655-032115-  
EAST SANTA BARBARA CHANNEL FROM PT. CONCEPTION TO PT. MUGU  
INCLUDING SANTA CRUZ AND ANACAPA ISLANDS-  
INNER WATERS FROM POINT MUGU TO SAN MATEO PT. CA INCLUDING SANTA  
CATALINA AND SANTA BARBARA ISLANDS-  
1201 PM PST WED MAR 3 2010

...GUSTY WINDS HAVE BEGUN TO SUBSIDE ACROSS THE INNER WATERS AND  
WIDESPREAD STRONG WINDS ARE NO LONGER EXPECTED...

THE BUOY REPORTS AND NEARBY LAND STATIONS ALL SHOW A DECREASING  
TREND IN WIND SPEEDS AND WIDESPREAD GUSTY OFFSHORE WINDS ARE NO  
LONGER EXPECTED TO AFFECT THE COASTAL WATERS. LOCAL GUSTS TO 25  
KNOTS ARE STILL POSSIBLE FOR THE NEXT COUPLE OF HOURS.

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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 KHGX 031859  
MWSHGX

MARINE WEATHER STATEMENT  
NATIONAL WEATHER SERVICE HOUSTON/GALVESTON TX  
1259 PM CST WED MAR 3 2010

GMZ335-031930-  
/O.CON.KHGX.MA.W.0015.000000T0000Z-080303T1930Z/  
1259 PM CST WED MAR 3 2010

...A SPECIAL MARINE WARNING CONTINUES UNTIL 130 PM CST...  
FOR THE FOLLOWING AREA...  
GALVESTON BAY...

AT 1257 PM CST...NATIONAL WEATHER SERVICE DOPPLER RADAR CONTINUED TO  
INDICATE A LINE OF THUNDERSTORMS...PRODUCING STRONG WINDS OVER 35  
KNOTS FROM 13 MILES NORTHEAST OF BEACH CITY TO 8 MILES SOUTH OF  
SEABROOK...MOVING EAST AT 25 MPH.

PREPARE FOR GUSTY WINDS...HIGH WAVES...DANGEROUS LIGHTNING AND  
HEAVY RAIN. SMALL CRAFT SHOULD SEEK SAFE SHELTER IMMEDIATELY.

A SEVERE THUNDERSTORM WATCH REMAINS IN EFFECT UNTIL 100 PM CST  
MONDAY AFTERNOON FOR SOUTHEAST TEXAS.

REPORT SEVERE WEATHER TO THE COAST GUARD OR NEAREST LAW  
ENFORCEMENT AGENCY. THEY WILL RELAY YOUR REPORT TO THE NATIONAL  
WEATHER SERVICE OFFICE.

LAT...LON 2976 9503 2967 9490 2978 9483 2981 9476  
2978 9469 2954 9479 2957 9454 2954 9450  
2934 9490 2950 9490 2953 9502 2967 9502  
2977 9512 2981 9511 2982 9506  
TIME...MOT...LOC 1859Z 261DEG 22KT 2987 9469 2947 9496

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**MWS used to cancel a SMW:**

FZUS72 KCHS 262040  
MWSCHS

MARINE WEATHER STATEMENT  
NATIONAL WEATHER SERVICE CHARLESTON SC  
339 PM EST FRI FEB 26 2010

AMZ352-354-262049-  
/O.CAN.KCHS.MA.W.0012.000000T0000Z-080226T2130Z/  
339 PM EST FRI FEB 26 2010

...SPECIAL MARINE WARNING CANCELLED FOR THE FOLLOWING AREAS...  
COASTAL WATERS FROM EDISTO BEACH SC TO SAVANNAH GA OUT 20 NM...  
COASTAL WATERS FROM SAVANNAH GA TO ALTAMAHA SOUND GA OUT 20  
NM...  
INCLUDING GRAYS REEF NATIONAL MARINE SANCTUARY...

AT 337 PM EST...RADAR INDICATED THAT THE THUNDERSTORMS THAT  
PROMPTED THE WARNING HAD MOVED OUT OF THE WARNED AREA...THUS THE  
SPECIAL MARINE WARNING HAS BEEN CANCELED.

CONTINUE TO MONITOR NOAA WEATHER RADIO AND COAST GUARD  
BROADCASTS FOR THE LATEST FORECASTS...WARNINGS AND STATEMENTS  
FROM THE NATIONAL WEATHER SERVICE OFFICE IN CHARLESTON.

LAT...LON 3199 8069 3244 8029 3229 7999 3219 8015  
3211 8020 3202 8030 3199 8039 3194 8048  
3175 8062 3178 8083  
TIME...MOT...LOC 2039Z 282DEG 41KT 3231 7982 3170 8036

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**MWS used to cancel part of a SMW:**

FZUS72 KKEY 271136  
MWSKEY

MARINE WEATHER STATEMENT  
NATIONAL WEATHER SERVICE KEY WEST FL  
634 AM EST SAT FEB 27 2010

GMZ075-271144-  
/O.CAN.KKEY.MA.W.0050.000000T0000Z-080227T1200Z/  
WATERS FROM KEY WEST TO 20 NM WEST OF DRY TORTUGAS NORTH OUT 20 NM  
AND SOUTH OUT 60 NM GM-  
634 AM EST SAT FEB 27 2010

...SPECIAL MARINE WARNING CANCELED...

THE AFFECTED AREA WAS...  
WATERS FROM KEY WEST TO 20 NM WEST OF DRY TORTUGAS NORTH OUT 20 NM  
AND SOUTH OUT 60 NM...

THE THUNDERSTORMS EARLIER PRODUCING STRONG WINDS HAVE WEAKENED  
AND MOVED EAST OF THE AREA. WIND GUSTS IN EXCESS OF 35 KNOTS ARE NO  
LONGER EXPECTED IN THE VERY SHORT TERM. THEREFORE...THE SPECIAL  
MARINE WARNING IN EFFECT FOR THE WATERS WEST OF KEY WEST HAS BEEN  
CANCELLED. STAY TUNED TO NOAA WEATHER RADIO FOR ADDITIONAL  
WEATHER INFORMATION OR ANY ADDITIONAL WARNINGS SHOULD THIS AREA  
STRENGTHEN AGAIN.

LAT...LON 2424 8178 2477 8182 2495 8156 2450 8124  
TIME...MOT...LOC 1134Z 253DEG 29KT 2450 8173

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GMZ032-054-271200-  
/O.CON.KKEY.MA.W.0050.000000T0000Z-080227T1200Z/  
GULF SIDE OF THE LOWER KEYS OUT 20 NM GM-  
COASTAL WATERS FROM THE WEST END OF THE 7 MILE BRIDGE TO KEY WEST  
OUT 20 NM GM-  
634 AM EST SAT FEB 27 2010

...A SPECIAL MARINE WARNING REMAINS IN EFFECT UNTIL 700 AM EST...

FOR THE FOLLOWING AREAS...

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COASTAL WATERS FROM THE WEST END OF THE 7 MILE BRIDGE TO KEY WEST  
OUT 20 NM...  
GULF SIDE OF THE LOWER KEYS OUT 20 NM...

NATIONAL WEATHER SERVICE DOPPLER RADAR CONTINUED TO INDICATE AN  
AREA OF THUNDERSTORMS...CAPABLE OF PRODUCING STRONG WINDS OVER 35  
KNOTS IN THE VICINITY OF KEY WEST...MOVING EAST AT 25 KNOTS.

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

LAT...LON 2424 8178 2477 8182 2495 8156 2450 8124  
TIME...MOT...LOC 1134Z 253DEG 29KT 2450 8173

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**MWS used to expire the SMW:**

FZUS73 KIWX 172018  
MWSIWX

MARINE WEATHER STATEMENT  
NATIONAL WEATHER SERVICE NORTHERN INDIANA  
316 PM EST WED FEB 17 2010

LMZ043-046-061-172026-  
/O.EXP.KIWX.MA.W.0002.000000T0000Z-080217T2015Z/  
316 PM EST WED FEB 17 2010

...THE SPECIAL MARINE WARNING THAT WAS IN EFFECT FOR THE NEARSHORE  
WATERS OF LAKE MICHIGAN FROM MICHIGAN CITY TO NEW BUFFALO...NEW  
BUFFALO TO ST JOSEPH AND OPEN WATERS FROM MICHIGAN CITY TO ST.  
JOSEPH  
HAS BEEN ALLOWED TO EXPIRE...

THE STORM THAT PROMPTED THE SPECIAL MARINE WARNING HAS MOVED OUT  
OF THE AREA. THEREFORE THE WARNING HAS BEEN ALLOWED TO EXPIRE.

LAT...LON 4181 8697 4213 8673 4213 8661 4210 8651  
4201 8656 4197 8657 4192 8660 4186 8667  
4173 8691 4180 8697  
TIME...MOT...LOC 1927Z 219DEG 51KT 4168 8701

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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](http://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](http://WWW.AVO.ALASKA.EDU).

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

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