

**NATIONAL WEATHER SERVICE INSTRUCTION 10-313
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Operations and Services

Marine And Coastal Weather Services, NWSPD 10-3

SPECIAL MARINE WARNINGS

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

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-313, Special Marine Warnings dated August 22, 2008. This directive includes the following changes:

1. New examples reflecting adjustments to the marine zone listings in Special Marine Warnings.
2. Adjusted format reflecting adjustments to the marine zone listings in Special Marine Warnings.
3. Sections 2.2.2, 2.2.6, and 2.3.4 were updated to allow those offices that don't use VTEC to use Special Marine Warnings to issue Ashfall Warnings with a new example of SMW for Ashfall Warning.

signed August 26, 2010
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Director, Office of Climate,
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SPECIAL MARINE WARNINGS

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1. Introduction. This procedural instruction provides detailed information on a product Weather Forecast Offices (WFOs) and Weather Service Offices (WSOs) issue concerning ongoing or imminent marine weather hazards. The Special Marine Warning (SMW) product provides the marine community with vital information to protect life and property.

2. Special Marine Warning (product category SMW; VTEC Significance/Phenomena: MA.W).

2.1 Mission Connection. The Special Marine Warning product is used to provide specific details that aid in the protection of life and property. WFO forecasters and WSO forecasters issue special marine warnings for their coastal marine zones or Great Lakes marine zones to provide advanced notice to mariners of potentially hazardous weather conditions. SMWs are not issued for Offshore or High Seas areas, except in designated areas along the East Coast.

2.2 Issuance Guidelines.

2.2.1 Creation Software. WFOs use the Advanced Weather Interactive Processing System (AWIPS) WarnGen Application to issue the Special Marine Warning (SMW) product. WSOs issue the SMW with regionally approved software.

2.2.2 Issuance Criteria. WFOs and WSOs should issue the Special Marine Warning product for short-duration (up to 2 hours) sustained marine thunderstorm winds or associated frequent gusts of 34 knots or greater; and/or hail 3/4 inch or more in diameter; and/or waterspouts. Forecasters should also issue the SMW for sustained non-convective short duration winds or associated frequent gusts of 34 knots or greater (gale force or stronger).

a. Where VTEC is not used in the SMW. In Alaska Region, and in Pacific Region where VTEC is not used, issue the SMW for Ashfall Warnings.

2.2.3 Issuance Time. The SMW product is non-scheduled and event-driven.

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

2.2.5 Universal Geographic Code (UGC). The Special Marine Warning product will contain marine-based zone UGC codes.

2.2.6 Product Expiration Time. The product expiration time should not exceed 2 hours beyond issuance time. A new SMW should be issued if the event is expected to continue past two hours beyond issuance time.

a. Where SMW is used for Ashfall Warnings. The product expiration time should not exceed 6 hours beyond issuance time. A new SMW should be issued if the event is expected to continue past six hours beyond issuance time.

2.3 Technical Description. The Special Marine Warning product will follow the format and content described in this section.

2.3.1 Mass News Disseminator Broadcast Line. The SMW product should include the broadcast line “BULLETIN - EAS ACTIVATION REQUESTED.” If a state does not require EAS activation for the SMW product, the broadcast line will read “BULLETIN - IMMEDIATE BROADCAST REQUESTED.” The term “BULLETIN” is used when information is sufficiently urgent to warrant breaking into a normal broadcast.

2.3.2 Mass News Disseminator (MND) Header. The SMW MND Header is “SPECIAL MARINE WARNING”.

2.3.3 Content. The SMW product will be issued in standard bullet format, as outlined in NWSI 10-1701, *Text Product Formats and Codes*.

Storm motion should be expressed in knots (kt). Wind speed will be expressed in knots (kt).

SMWs may be issued while a Small Craft Advisory (any type), Gale, Storm or Hurricane Force Wind Warning (not associated with a tropical cyclone warning) is in effect. When a tropical cyclone warning is in effect, SMWs should only be issued for waterspouts.

For events impacting both land and water, separate warnings will be issued. SMWs will not include any portion of adjacent land areas.

2.3.4 Call To Action Statement. The Tornado Watch number may be included in the Call to Action section of the SMW product when a Tornado Watch is in effect for the area. Where SMWs are issued for Ashfall Warnings mariners are encouraged to report ashfall and other volcanic impact encounters.

2.3.5. Format. The format of the SMW can be seen in Figure 1. The SMW is a non-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)
(AREAL UGC CODE[S])-(EXPIRATION TIME)-
(VTEC STRING)

BULLETIN - IMMEDIATE BROADCAST REQUESTED
SPECIAL MARINE WARNING
NATIONAL WEATHER SERVICE (CITY)(STATE)
(ISSUANCE TIME) AM/PM (LOCAL TIME ZONE)(DAY)(DATE)

THE NATIONAL WEATHER SERVICE HAS ISSUED A

- SPECIAL MARINE WARNING FOR...(MARINE FORECAST AREA AFFECTED) (when multiple zones are covered, may list only the location points at the far end of the combined zones, and eliminate the intermediate points) (should list the zones in the numerical order of the UGC codes)
- UNTIL (ENDING EFFECTIVE TIME)
- AT (TIME)...(DESCRIPTION OF STORM EVENT, MOVEMENT) IMPACT ON LOCATIONS, etc.)
- PATHCAST (Optional; include if storm impacts are not mentioned for affected locations/landmarks in the above section/bullet.)

CALL TO ACTION STATEMENT

LAT...LON
TIME...MOT...LOC
[Mandatory list of latitude/longitude points outlining the forecaster-drawn polygon in WarnGen and time, location, and movement of event being tracked.]
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Figure 1. Special Marine Warning (SMW) Format

2.4 Updates, Amendments and Corrections. Updates and amendments are not applicable. WFOs and WSOs will reissue a Special Marine Warning for significant grammatical errors, or format errors in marine zones already covered by a warning. WFOs and WSOs will issue a Marine Weather Statement, as described in NWSI 10-314, to provide the public with follow-up information or to cancel all or part of an SMW.

APPENDIX A - Examples of Special Marine Warnings:

WHUS51 KBUF 031856
SMWBUF
LOZ042>045-062>065-032100-
/O.NEW.KBUF.MA.W.0130.091103T1856Z-091103T2100Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED
SPECIAL MARINE WARNING
NATIONAL WEATHER SERVICE BUFFALO NY
156 PM EST TUE NOV 3 2009

THE NATIONAL WEATHER SERVICE HAS ISSUED A

* SPECIAL MARINE WARNING FOR...
LAKE ONTARIO FROM NIAGARA RIVER TO THE ST. LAWRENCE RIVER

* UNTIL 400 PM EST

* AT 152 PM EST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A
BROKEN LINE OF SHOWERS EXTENDING ACROSS MUCH OF LAKE ONTARIO FROM
NEAR OLCOTT TO 14 MILES SOUTHEAST OF POINT PETRE...MOVING EAST AT 25
KNOTS. CONDITIONS ARE FAVORABLE FOR THE DEVELOPMENT OF
WATERSPOUTS IN AND NEAR THESE SHOWERS. EARLIER THIS AFTERNOON
SEVERAL WATERSPOUTS WERE REPORTED ON LAKE ERIE...AND SIMILAR
CONDITIONS ARE EXPECTED ON LAKE ONTARIO.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

ALL MARINE INTERESTS SHOULD REMAIN ALERT AND SMALL BOATS TAKE
SHELTER IMMEDIATELY. WATERSPOUTS ARE MOST LIKELY IN AND NEAR
SHOWERS. IF A WATERSPOUT IS SIGHTED...SEEK SAFE HARBOR IMMEDIATELY.
WATERSPOUTS CAN QUICKLY CAPSIZE SMALL CRAFT.

&&

LAT...LON 4338 7872 4336 7796 4333 7776 4325 7762
4324 7751 4327 7700 4321 7692 4329 7691
4327 7682 4332 7670 4352 7641 4352 7623
4356 7617 4366 7615 4388 7627 4385 7652
4384 7663 4363 7679 4364 7843 4357 7859
TIME...MOT...LOC 1854Z 283DEG 20KT 4336 7718

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WHUS54 KLIX 050226

SMWLIX
GMZ555-575-050330-
/O.NEW.KLIX.MA.W.0011.100205T0226Z-100205T0330Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED
SPECIAL MARINE WARNING
NATIONAL WEATHER SERVICE NEW ORLEANS LA
826 PM CST THU FEB 4 2010

THE NATIONAL WEATHER SERVICE IN NEW ORLEANS HAS ISSUED A

* SPECIAL MARINE WARNING FOR...
WATERS FROM PASCAGOULA MS TO THE SOUTHWEST PASS OF THE MISSISSIPPI
RIVER FROM 20 TO 60 NM OVER GULF OF MEXICO WATERS...
COASTAL WATERS FROM PASCAGOULA MS TO THE SOUTHWEST PASS OF THE
MISSISSIPPI RIVER OUT 20 NM OVER GULF OF MEXICO WATERS...

* UNTIL 930 PM CST

* AT 824 PM CST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A
LINE OF THUNDERSTORMS...PRODUCING STRONG WINDS 34 KNOTS OR GREATER
FROM 18 NM SOUTH OF HORN ISLAND TO 25 NM EAST OF PILOTTOWN...MOVING
NORTHEAST AT 30 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. THUNDERSTORMS CAN PRODUCE SUDDEN WATERSPOUTS.
WATERSPOUTS CAN EASILY OVERTURN BOATS AND CREATE LOCALLY
HAZARDOUS SEAS. SEEK SAFE HARBOR IMMEDIATELY.
&&

LAT...LON 2919 8799 2906 8889 3019 8861 3021 8837 2988 8831
TIME...MOT...LOC 0226Z 223DEG 30KT 2997 8847 2917 8872

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WHUS52 KCHS 052034
SMWCHS
AMZ352-354-370-374-052130-
/O.NEW.KCHS.MA.W.0006.100205T2034Z-100205T2130Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED
SPECIAL MARINE WARNING
NATIONAL WEATHER SERVICE CHARLESTON SC
334 PM EST FRI FEB 5 2010

THE NATIONAL WEATHER SERVICE IN CHARLESTON HAS ISSUED A

* SPECIAL MARINE WARNING FOR...

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...

WATERS FROM SAVANNAH GA TO ALTAMAHA SOUND GA EXTENDING FROM 20
TO 60 NM...

WATERS FROM SOUTH SANTEE RIVER SC TO SAVANNAH GA EXTENDING FROM
20 NM TO 40 NM...

* UNTIL 430 PM EST

* AT 333 PM EST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A
LINE OF THUNDERSTORMS CAPABLE OF PRODUCING WINDS IN EXCESS OF 35
KNOTS... FROM 11 NM NORTH OF CALIBOGUE SOUND TO 6 NM SOUTHWEST OF
ALTAMAHA SOUND...OR FROM 8 NM NORTHWEST OF HILTON HEAD ISLAND TO 6
NM SOUTHWEST OF ALTAMAHA SOUND...MOVING EAST AT 55 KT.

* SOME LOCATIONS IN THE WARNING INCLUDE BUT ARE NOT LIMITED TO
CALIBOGUE SOUND...SAPELO BUOY S...CAT BUOY...DUA BUOY...ALT BUOY...
BUOY KC...HILTON HEAD REEF...CCA BUOY...FRIPP ISLAND...DRH BUOY...
BUOY J...BEAUFORT 45 FEET REEF...BUOY L...FRIPP ISLAND WRECK...
FRIPP ISLAND REEF...BETSY ROSS REEF...HUNTING ISLAND REEF AND THE
LEDGE.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

PREPARE FOR STRONG WIND GUSTS AND SUDDEN WIND SHIFTS...STEEP AND
RAPIDLY BUILDING WAVES...DANGEROUS LIGHTNING AND POOR VISIBILITY IN
HEAVY RAIN AND BLOWING SPRAY. BE SURE ALL PASSENGERS ARE WEARING
APPROVED PERSONAL FLOATATION DEVICES. TURN ON BILGE PUMPS.

&&

LAT...LON 3130 8131 3181 8106 3200 8086 3206 8094

3215 8074 3227 8064 3232 8051 3215 7958

3207 7961 3198 7974 3194 7989 3172 8015

3156 7983 3149 7989 3141 8003 3110 8028
TIME...MOT...LOC 2034Z 282DEG 55KT 3228 8082 3174 8097 3124 8135

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

WHAK58 PAFC 301440
SMW AFC
PKZ176-302040-

BULLETIN - IMMEDIATE BROADCAST REQUESTED
SPECIAL MARINE WARNING
NATIONAL WEATHER SERVICE ANCHORAGE AK
640 AM ADT FRI MAR 30 2007

...THE NATIONAL WEATHER SERVICE IN ANCHORAGE HAS ISSUED AN ASHFALL WARNING FOR VOLCANIC ASH AND OTHER HAZARDS IN THE WESTERN ALEUTIANS...

A SUBMARINE ERUPTION OF SEMISOPOCHNOI VOLCANO IS IN PROGRESS.

THE ALASKA VOLCANO OBSERVATORY REPORTS STRONG SEISMICITY INDICATIVE OF AN EXPLOSIVE ERUPTION AT SEMISOPOCHNOI ISLAND IN THE WESTERN ALEUTIANS. SATELLITE ANALYSIS INDICATES A VENT JUST OFFSHORE OF SUGARLOAF HEAD ON THE SOUTH POINT OF THE ISLAND. ASHFALL IS OCCURRING SOUTH AND SOUTHEAST OF THE ISLAND. VESSELS SHOULD AVOID THE IMMEDIATE AREA AND BE ALERT FOR FLOATING PUMICE.

AN ASHFALL WARNING MEANS THAT THE VOLCANO IS UNDERGOING A MAJOR ERUPTION. IT IS VERY LIKELY THAT MARINERS WILL BE AFFECTED BY VOLCANIC HAZARDS IN THE WARNING AREAS SUCH AS SIGNIFICANT DEBRIS...ASHFALL 1/4 INCH OR GREATER...LAVA...OR LAHAR AND DEBRIS FLOWS.

ADDITIONAL INFORMATION IS AVAILABLE AT /USE LOWER CASE LETTERS/
WWW.AVO.ALASKA.EDU.

ASH IS AN EYE AND RESPIRATORY IRRITANT AND IS ABRASIVE. THOSE WITH RESPIRATORY SENSITIVITIES SHOULD TAKE EXTRA PRECAUTIONS TO MINIMIZE EXPOSURE. PROTECT ELECTRONICS AND COVER AIR INTAKES IF ASHFALL IS EXPECTED OR CONFIRMED. REMOVE ASH FROM SURFACES WITH WATER IF POSSIBLE TO PREVENT EXCESSIVE ACCUMULATION.

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