

**NATIONAL WEATHER SERVICE INSTRUCTION 10-313  
AUGUST 28, 2019**

**Operations and Services  
Marine, Tropical, and Tsunami Services Branch, NWSPD 10-3  
SPECIAL MARINE WARNINGS**

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

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**OPR:** W/AFS26 (D. Wright)  
**Type of Issuance:** Routine

**Certified by:** W/AFS26 (A. Allen)

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**SUMMARY OF REVISIONS:** This directive supersedes NWSI 10-313, "*Special Marine Warnings*," dated February 16, 2017. This directive includes the following changes:

1. Changed OPR.
2. Updated Figure 1 for mixed case.
3. Updated examples in Appendix A for mixed case.

Signed

8/14/2019

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Date

**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 Office (WSO) Pago Pago 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; Valid Time Event Code (VTEC) Significance / Phenomena MA.W)**

**2.1 Mission Connection.** The SMW product is used to provide specific details that aid in the protection of life and property. WFO forecasters and WSO Pago Pago forecasters issue polygon-based special marine warnings within their marine areas of responsibility 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 SMW product. WSO Pago Pago issues the SMW with regionally approved software.

**2.2.2 Issuance Criteria.** WFOs and WSO Pago Pago should issue the SMW product for short-duration (2 hours or less) sustained marine thunderstorm winds or associated frequent gusts of 34 knots (KT) 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 KT or greater (gale force or stronger).

- a. Where VTEC is not used in the Alaska and Pacific Regions, 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 SMW 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 SMW product will follow the format and content described in this section.

**2.3.1 Mass News Disseminator (MND) Broadcast Line.** The SMW product should include the broadcast line “BULLETIN - EAS ACTIVATION REQUESTED”. If a state does not require Emergency Alert System (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 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 NWS Instruction (NWSI) 10-1701, *Text Product Formats and Codes*.

Storm motion and wind speed should be expressed in knots (KT).

SMWs may be issued while a Small Craft Advisory, 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 Precautionary/Preparedness Actions.** If a Tornado Watch is in effect for the area, the Tornado Watch number may be included in this section of the SMW product. 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 (ASCII), Extensible Markup Language (XML), Wireless Markup Language (WML) and HyperText Markup Language (HTML).

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(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)
Time AM/PM TIME_ZONE Day_of_week Mon DD YYYY
The National Weather Service in (WFO Location) 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)

HAZARD...

SOURCE...

IMPACT...

*Locations, may reference marine and coastal land points, etc.)

PRECAUTIONARY/PREPAREDNESS ACTIONS...

&&

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. Special Marine Warnings may include
special tags after the && to provide better definition, similar to other short term warnings.]
$$

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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 WSO Pago Pago will reissue a SMW 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 KLWX 231800  
SMWLWX  
ANZ532-533-540-541-231900-  
/O.NEW.KLWX.MA.W.0001.180123T1800Z-180123T1900Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED  
Special Marine Warning  
National Weather Service Baltimore MD/Washington DC  
100 PM EST Tue Jan 23 2018

The National Weather Service in Sterling Virginia has issued a

- \* Special Marine Warning for...  
Chesapeake Bay from North Beach to Drum Point MD...  
Chesapeake Bay from Sandy Point to North Beach MD...  
Choptank River to Cambridge MD and the Little Choptank River...  
Eastern Bay...
- \* Until 200 PM EST
- \* At 1259 PM EST, showers capable of producing waterspouts and hail were located along a line extending from near Knapps Narrows Bridge to 6 nm southeast of Chesapeake Beach to 8 nm west of Broomes Island, moving east at 30 knots.

HAZARD...Waterspouts and large hail.

SOURCE...Radar indicated.

IMPACT...Waterspouts can create locally hazardous seas. Boaters in small craft could be thrown overboard by suddenly higher winds and waves capsizing their vessel. Large hail can result in structural damage.

- \* Locations impacted include...  
Choptank River...  
Miles River...  
Blackwalnut Point...  
Dares Beach...  
James Island...  
Poplar Island...  
Calvert Cliffs...  
Tilghman Island...  
and Taylors Island.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Move to safe harbor immediately as gusty winds and high waves are expected.

Seek safe shelter, mariners can expect gusty winds and increasing waves.

Waterspouts can easily overturn boats and create locally hazardous

seas. Seek safe harbor immediately.

&&

LAT...LON 3863 7629 3857 7631 3851 7621 3843 7645  
3861 7654 3879 7647 3886 7620 3879 7619  
3882 7630 3868 7635 3867 7634 3875 7632  
3878 7629 3871 7627 3877 7624 3875 7624  
3867 7620 3860 7605  
TIME...MOT...LOC 1759Z 250DEG 29KT 3872 7638 3858 7648 3847 7672

WATERSPOUT...POSSIBLE

HAIL...0.75in

WIND...<34KT

\$\$

WHUS52 KMFL 102214  
SMWMFL  
AMZ630-651-671-102315-  
/O.NEW.KMFL.MA.W.0018.180410T2214Z-180410T2315Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED

Special Marine Warning

National Weather Service Miami FL

614 PM EDT Tue Apr 10 2018

The National Weather Service in Miami has issued a

\* Special Marine Warning for...

Biscayne Bay...

Coastal waters from Deerfield Beach to Ocean Reef FL out 20 NM...

Waters from Deerfield Beach to Ocean Reef FL from 20 to 60 NM

excluding the territorial waters of Bahamas...

\* Until 715 PM EDT.

\* At 614 PM EDT, severe thunderstorms capable of producing waterspouts were located along a line extending from 13 nm east of Surfside to 8 nm southeast of Miami Beach, moving east at 15 knots.

HAZARD...Waterspouts and wind gusts 34 knots or greater.

SOURCE...Radar.

IMPACT...Waterspouts can easily overturn boats and create locally hazardous seas. Small craft could be damaged in briefly higher winds and suddenly higher waves.

\* Locations impacted include...

Virginia Key, Key Biscayne, Miami Beach and Cape Florida.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Thunderstorms can produce sudden waterspouts. Waterspouts can easily overturn boats and create locally hazardous seas. Seek safe harbor

immediately.

Report severe weather to the Coast Guard or the National Weather Service. You can also share your report with NWS Miami on Facebook and Twitter.

&&

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

WHAK58 PAFC 301440  
SMWAFc  
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 Semisopchnoi volcano is in progress.

The Alaska volcano observatory reports strong seismicity indicative of an explosive eruption at Semisopchnoi 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](http://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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