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Operations and Services

Marine And Coastal Weather Services, NWSPD 10-3

SPECIAL MARINE WARNINGS

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-313, dated July 5, 2006. This directive includes the following changes:

- 1. New examples reflecting the Storm Based Warning formats.
- 2. Add Storm Based Warning tracking line to Special Marine Warnings. See Figure 1 and Appendix A.

Date

signed August 8, 2008

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SPECIAL MARINE WARNINGS

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- 1. <u>Introduction</u>. 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. <u>Special Marine Warning (product category SMW; VTEC Significance/Phenomena: MA.W).</u>
- 2.1 <u>Mission Connection</u>. 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 <u>Issuance Guidelines</u>.
- 2.2.1 <u>Creation Software</u>. 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 <u>Issuance Criteria</u>. WFOs and WSOs should issue the Special Marine Warning product for short-duration (up to 2 hours) sustained marine thunderstorm winds or associated 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 non-convective short duration winds of 34 knots or greater (gale force or stronger).
- 2.2.3 Issuance Time. The SMW product is non-scheduled and event-driven.
- 2.2.4 <u>Valid Time</u>. The SMW product is valid from the time of issuance until the expiration time.
- 2.2.5 <u>Universal Geographic Code (UGC)</u>. The Special Marine Warning product will contain <u>marine-based</u> zone UGC codes.
- 2.2.6 <u>Product Expiration Time</u>. 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.
- 2.3 <u>Technical Description</u>. The Special Marine Warning product will follow the format and content described in this section.
- 2.3.1 <u>Mass News Disseminator Broadcast Line</u>. 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 <u>Mass News Disseminator (MND) Header</u>. The SMW MND Header is "SPECIAL MARINE WARNING".
- 2.3.3 <u>Content</u>. 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 <u>Call To Action Statement.</u> 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.
- 2.3.5. <u>Format</u>. 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)
- 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 <u>Updates, Amendments and Corrections</u>. 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:

WHUS52 KKEY 271336 SMWKEY GMZ053-054-073-074-271430-/O.NEW.KKEY.MA.W.0051.080227T1334Z-080227T1430Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED SPECIAL MARINE WARNING NATIONAL WEATHER SERVICE KEY WEST FL 834 AM EST WED FEB 27 2008

THE NATIONAL WEATHER SERVICE IN KEY WEST HAS ISSUED A

* SPECIAL MARINE WARNING FOR...

WATERS FROM THE WEST END OF THE 7 MILE BRIDGE TO KEY WEST FROM 20 TO 60 NM...

WATERS FROM CRAIG KEY TO THE WEST END OF THE 7 MILE BRIDGE FROM 20 TO 60 NM OUT...

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

COASTAL WATERS FROM CRAIG KEY TO THE WEST END OF THE 7 MILE BRIDGE OUT 20 NM...

* UNTIL 930 AM EST

* AT 832 AM EST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A LINE OF THUNDERSTORMS...PRODUCING STRONG WINDS OVER 35 KNOTS FROM 11 NAUTICAL MILES SOUTH OF LOOE KEY LIGHT TO 38 NAUTICAL MILES SOUTH OF AMERICAN SHOAL LIGHT...MOVING EAST AT 25 TO 30 KNOTS.

MARINERS CAN EXPECT GUSTY WINDS IN EXCESS OF 35 KNOTS...ROUGH SEAS... DANGEROUS LIGHTNING...AND POOR VISIBILITY IN HEAVY RAIN. BOATERS SHOULD SEEK SAFE HARBOR IMMEDIATELY...UNTIL THREATENING WEATHER HAS PASSED.

LAT...LON 2452 8070 2382 8057 2382 8135 2445 8147 TIME...MOT...LOC 1334Z 271DEG 29KT 2436 8135 2392 8126

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SMWMQT LSZ248-249-190115-/O.NEW.KMQT.MA.W.0132.071019T0018Z-071019T0115Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED SPECIAL MARINE WARNING NATIONAL WEATHER SERVICE MARQUETTE MI 818 PM EDT THU OCT 18 2007

THE NATIONAL WEATHER SERVICE IN MARQUETTE HAS ISSUED A

* SPECIAL MARINE WARNING FOR...
NEARSHORE WATERS OF LAKE SUPERIOR FROM
HURON ISLANDS TO MARQUETTE MI...
MARQUETTE TO MUNISING MI...

- * UNTIL 915 PM EDT
- * AT 815 PM EDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A SEVERE THUNDERSTORM 19 MILES SOUTH OF MARQUETTE. THE STORM WAS MOVING NORTH AT 35 KNOTS. THIS STORM IS CAPABLE OF PRODUCING LARGE HAIL AND WINDS IN EXCESS OF 35 KNOTS.
- * THE SEVERE THUNDERSTORM WILL BE NEAR... SHOT POINT AROUND 840 PM EDT...

BOATERS SHOULD IMMEDIATELY MOVE AWAY FROM THE PATH OF THIS STORM. ROUGH SEAS...FREQUENT LIGHTNING AND HEAVY RAIN WILL ALSO OCCUR. PUT ON YOUR LIFE JACKET. BOATS IN PORT SHOULD NOT VENTURE OUT UNTIL THE STORM HAS PASSED.

LAT...LON 4660 8725 4658 8724 4659 8720 4657 8711 4648 8716 4648 8727 4649 8736 4652 8741 4657 8741 4661 8747 4665 8745
TIME...MOT...LOC 0018Z 194DEG 38KT 4631 8744

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SMWMHX AMZ156-158-262000-/O.NEW.KMHX.MA.W.0007.080226T1857Z-080226T2000Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED SPECIAL MARINE WARNING NATIONAL WEATHER SERVICE NEWPORT/MOREHEAD CITY NC 159 PM EST TUE FEB 26 2008

THE NATIONAL WEATHER SERVICE IN NEWPORT HAS ISSUED A

* SPECIAL MARINE WARNING FOR...
COASTAL WATERS FROM CAPE LOOKOUT TO SURF CITY NC OUT 20 NM...
COASTAL WATERS FROM OCRACOKE INLET TO CAPE LOOKOUT NC OUT 20 NM...
INCLUDING BEAUFORT INLET...BOGUE INLET...CAPE LOOKOUT...AR315...BIG
TEN FATHOM...HARKERS ISLAND AND THE KNUCKLE BUOY...

- * UNTIL 300 PM EST
- * AT 156 PM EST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A LINE OF THUNDERSTORMS...PRODUCING STRONG WINDS OVER 35 KNOTS FROM BOGUE INLET TO AR355...OR FROM BOGUE INLET TO 14 MILES SOUTH OF NEW RIVER INLET...MOVING EAST AT 30 KNOTS.
- * THESE STRONG THUNDERSTORMS WILL BE OVER NORTHWEST PLACES BY 220 PM EST OVER BIG TEN FATHOM BY 225 PM EST 6 MILES SOUTH OF THE KNUCKLE BUOY BY 230 PM EST

MARINERS CAN EXPECT GUSTY WINDS...HIGH WAVES...DANGEROUS LIGHTNING...

AND HEAVY RAINS. BOATERS SHOULD SEEK SAFE HARBOR IMMEDIATELY...UNTIL THIS STORM PASSES.

LAT...LON 3494 7591 3435 7646 3433 7677 3436 7684 3430 7734 3436 7741 3465 7721 3478 7666 3476 7664 3480 7655 3474 7654 3481 7651 3483 7642 3480 7639 3485 7631 TIME...MOT...LOC 1857Z 297DEG 65KT 3463 7709 3432 7729

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