

NATIONAL WEATHER SERVICE INSTRUCTION 10-314

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Operations and Services

MARINE AND COASTAL WEATHER SERVICE PROGRAM, NWSPD 10-3

MARINE WEATHER STATEMENTS

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-314, dated July 5, 2006. This directive includes the following changes:

1. New examples reflecting Storm Based Warning formats for Marine Weather Statements (MWS) used with Special Marine Warnings (SMW).
2. Add Storm Based Warning tracking line to MWSs used with SMWs. See Figure 1.
3. Modify the purposes of the MWS to accommodate the new Marine Weather Message (MWW) product (see NWSI 10-315, *Marine Weather Message*).

signed

August 8, 2008

David B. Caldwell

Date

Director, Office of Climate,

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MARINE WEATHER STATEMENTS

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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. Contiguous U.S. (CONUS) 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. OCONUS WFOs and 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, 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.

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

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 Statement 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. 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.]
\$\$
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 FRI OCT 19 2007

LOZ042-062-191115-
621 AM EDT FRI OCT 19 2007

...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

\$\$

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 MON MAR 3 2008

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 MON MAR 3 2008

...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.

\$\$

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 MON MAR 3 2008

GMZ335-031930-
/O.CON.KHGX.MA.W.0015.000000T0000Z-080303T1930Z/
1259 PM CST MON MAR 3 2008

...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

\$\$

MWS used to cancel a SMW:

FZUS72 KCHS 262040
MWSCHS

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE CHARLESTON SC
339 PM EST TUE FEB 26 2008

AMZ352-354-262049-
/O.CAN.KCHS.MA.W.0012.000000T0000Z-080226T2130Z/
339 PM EST TUE FEB 26 2008

...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 WED FEB 27 2008

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 WED FEB 27 2008

...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

\$\$

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 WED FEB 27 2008

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

FOR THE FOLLOWING AREAS...

NWSI 10-314 AUGUST 22, 2008

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

\$\$

MWS used to expire the SMW:

FZUS73 KIWX 172018
MWSIWX

MARINE WEATHER STATEMENT
NATIONAL WEATHER SERVICE NORTHERN INDIANA
316 PM EST SUN FEB 17 2008

LMZ043-046-061-172026-
/O.EXP.KIWX.MA.W.0002.000000T0000Z-080217T2015Z/
316 PM EST SUN FEB 17 2008

...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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