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**Operations and Services
Dissemination Services NWSPD 10-17**

TEXT PRODUCT FORMATS AND CODES

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

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-1701, “Text Product Formats and Codes,” effective February 12, 2003, and recertified April 30, 2004. Major changes include:

- 1) Several new subsections have been added, concerning: 1.2 - text products in languages other than English; 1.3 - format of text examples; 2.3 - use of URLs and e-mail addresses; 3.8 - Valid Time Event Code (VTEC), 3.10 - time zone indicators; 4.3 - Segment Header Block; 5.2 - explicit time-of-day references; 5.5 - Call-to-Action (CTA) statements; 5.6 - coded latitude/longitude information; and 5.7 - coded time, motion, and location information.
- 2) As a result, several subsections (primarily in Sections 3 and 5) have been reordered, renamed, and/or renumbered.
- 3) Added Section 7, dealing with test and practice message wording.
- 4) Several tables have been added to the text to describe the formats of specific elements of text products.
- 5) The term “product purge time” has been replaced with “product expiration time”. See Section 3.9.2.
- 6) In Section 4.1, the NWS Communications Block (CI) is now known as the AWIPS Product Identifier.
- 7) Added Appendix A - Standardized Headline Instructions For Long Duration Products. This was adapted and expanded from NWSI 10-513 (*WFO Winter Weather Products Specification*) Appendix C, NWSI 10-515 (*WFO Non-Precipitation Weather Products Specification*) Appendix C, and an internal NWS document on editing standardized headlines.
- 8) Added Appendix B - Completed Examples.

(Signed)

October 28, 2010

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Date

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Text Product Formats and Codes

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1. Introduction. This instruction provides rules for formats and codes applicable to National Weather Service (NWS) World Meteorological Organization (WMO)-formatted text products intended for the public. Text product formats include communication header and trailer codes, geographic identifier and certain event codes and associated plain language identification, and the main informational text (narrative and any data). These text product formats are produced by the various Advanced Weather Interactive Processing System (AWIPS) formatters and other product generation systems. Excluded from the rules in this instruction are certain technically oriented text products including, but not limited to, those for aviation, forecast guidance, internal use, and summaries and reports that contain embedded data (see Section 2.4 for certain exceptions). Also excluded are text products in Extensible Markup Language (XML) or other markup languages.

This instruction is supplemented by on-line references as indicated in the text and by:

Interface Control Document (ICD) - "NWS 2000 - External Message Formats" on the Internet at: <http://www.nws.noaa.gov/nwws/listings2.htm>. Scroll down and click on "NWS Broadcast Message Formats." NWS stands for NOAA Weather Wire Service.

Completed examples showing the rules and formats described in this instruction (but generally without specific text) are in Appendix B and in NWS Instruction (NWSI) 10-1702, *Universal Geographic Code (UGC)*, which provides comprehensive details of UGC rules and formats. The UGC identifies the affected geographic area and is an aid in the automated delivery of NWS text products to users. A brief summary of the UGC rules is included in this instruction in Section 3.7. The Valid Time Event Code (VTEC) is used in conjunction with the UGC in certain products, to further aid that automated delivery. The VTEC identifies characteristics of the event, such as its status, type, tracking number, and beginning and ending times. Rules and examples of this code are provided in NWSI 10-1703, *Valid Time Event Code*, and are on the Internet at <http://www.nws.noaa.gov/om/vtec/>. A brief summary of the VTEC rules is included in this instruction in Section 3.8.

Section 1.3 below lists the format conventions used in this document and its Appendices. While Appendix B provides a sampling of typical text product formats, it cannot show all available formats. For formats, codes, and content to be used in each product category, see the respective Product Specification documents on the NWS Directives System website at <http://www.nws.noaa.gov/directives>. The NWSIs mentioned above are also on this website.

1.1 Mission Connection. The NWS mission to protect life and property is carried out by timely delivery through a variety of dissemination systems of warnings, watches, forecasts, and other relevant weather, flood, climate, and critical non-weather-related information under the "all hazards" concept (see definition in NWS Policy Directive (NWSPD) 10-17, *Dissemination Services*, on the Internet at the Directives website listed in Section 1). Correct use of product formats and codes is essential to ensure this delivery and to allow users to select, manipulate, and redistribute the information regardless of the dissemination method.

1.2 Text Products in Languages Other than English. This instruction covers official NWS text products written in American English. There may be local requirements or needs for official NWS text products to be prepared and disseminated in languages other than English. NWS Regions, National Centers, Weather Forecast Offices (WFOs), Weather Service Offices (WSOs), and/or River Forecast Centers (RFCs) that provide non-English text products will develop consistent standard translations of product header and text terminology in cooperation with the appropriate local, regional, national, or international user groups who require NWS text products in other languages.

1.3 Format of Text Examples. Table 1 below shows the conventions used for all text examples in this instruction and appendices.

Table 1. Format Conventions Used for Text Examples in this Instruction.		
Formatted element or group	How it appears	Sample
Actual ASCII text - as would appear in an NWS text product	upper case Courier New font	TORNADO
code groups - representing the precise number of alphanumeric characters that would appear in an NWS text product	lower case Courier New font	ddhmm
text placeholders - representing a variable number of alphanumeric characters that would appear in an NWS text product	lower case italicized Times New Roman font inside of brackets	<text>
printable punctuation and symbols , when first defined	Courier New font inside of parentheses	(\$\$)
all blank spaces within actual text or code groups, including each mandatory blank space in format header blocks	underscore in Courier New font	TORNADO_WARNING
ASCII control characters , including carriage return and line feed	lower case Courier New font inside of brackets	<cr>

2. Characters, Case, and Punctuation. Section 2.1 describes the standard rules, in accordance with the WMO Manual 386, *Manual on the Global Telecommunication System*. Sections 2.2 through 2.4 describe certain NWS permitted exceptions to the WMO manual.

(Information on obtaining WMO Manual 386 is on the Internet at <http://www.nws.noaa.gov/tg/wmodocs.html>.)

2.1 Characters, Case, and Punctuation for Narrative Text. Narrative text uses upper case and only the following punctuation marks in the text: the period (.); the three dot ellipsis (. . .); the forward slash (/); the dash (-); and the plus (+). Use of other characters may inhibit the proper dissemination or automated processing by certain users' systems.

The goal of the NWS is to move to mixed case letters with additional allowed punctuation in its text products, while maintaining current text rules in products that are under the purview of the WMO requirements listed in the document above or that are required under international or national agreements. Until such changes are officially announced via Public Information Statements, offices will abide by the rules in the paragraph above and in the following sections of this document.

2.2 Other Permitted Characters. Other permitted characters - only within the routinely coded part of specific products - are the "greater than" symbol (>) in the UGC (see NWSI 10-1702), the double dollar (\$\$), and the double ampersand (&&). The asterisk (*) is used in the bullet format of certain warning products (see Section 5.4 and Product Specification documents for details). An equal sign (=) is used as a delimiter to signal the end of discrete parts of certain products, as specified in Section 3.5.

2.3 Use of URLs and E-mail Addresses. Internet Universal Resource Locators (URLs) that use only characters permitted in Section 2.1 (e.g., www.spc.noaa.gov/climo/) are allowed in products, where appropriate. The special "at" symbol (@) associated with e-mail addresses also

is permitted, but use of e-mail addresses should be limited to administrative-type products and Public Information Statements (AWIPS Product Category PNS). These products are less likely to adversely affect dissemination of high priority information on certain users' systems. **URLs and e-mail addresses will not be used in short duration warning products.**

2.4 Special Circumstances. Certain primarily administrative, coded or tabular products are permitted to use upper and lower cases and normal punctuation marks, such as commas (,), colons (:), the asterisk (*), (<) and (>), etc. Examples include hydrological products that use the NWS Standard Hydrologic Exchange Format (SHEF) code, administrative-type products, PNSs, and State or Regional Weather Roundups (RWR, HRR, or HWR) and Temperature and Precipitation Tables (RTP).

Any NWS field office requests for variance from these exceptions require the approval of the Dissemination Services Manager in the Office of Climate, Water, and Weather Services.

3. Overall Product Format Rules. The following subsections provide communications information that apply to all format blocks in products intended for the general public.

3.1 Left Justification. All major blocks of the product will be left-justified. Exceptions may occur within the narrative portion of the content block of certain products, to offset or highlight particular information, as in the bullet format of short duration warnings or for certain tabular or coded data. This will be covered in the NWS Product Specification document for the product.

3.2 End-of-Line Characters. All lines of a message between the communications start-of-message and end-of-message should end in a three-character carriage return, carriage return, line feed (<cr><cr><lf>). The AWIPS formatters and message handling system should provide these automatically.

3.3 Length of Line. All lines of a message will be 69 characters or less. Note: This does not normally include the three-character end-of-line. However, when feasible, it is recommended this also include the end-of-line, leaving up to 66 characters per line for actual text.

3.4 Length of Product. When feasible, products should be kept under 15,000 characters. If a product exceeds 15,000 characters, it may be segmented for transmission either by AWIPS or by processing sites such as the AWIPS Network Control Facility or the NWS Telecommunications Gateway, in accordance with rules in WMO Manual 386. Product users' software should recombine segments according to their needs. Note: The end-of-report (see Section 3.5) can be used to help create a logical break point for segmentation.

3.5 End-of-Report Characters. For products containing discrete observations, reports or Terminal Aerodrome Forecasts, there will be an equal sign (=) at the end of the last word or line of each discrete part as described in the Product Specification documents. The equal sign is followed immediately by an end-of-line. Note: If text products exceed the 15,000 character message limit (see Section 3.4), the = character can also be used to break them into discrete parts during message transmission.

3.6 Blank Lines. There are a number of places where a blank line (only <cr><cr><lf> with no printable characters) should occur to separate major format blocks and other distinctive lines of information as a visual aid for easier reading.

- a. Between the AWIPS Product Identifier (Section 4.1) and the Mass News Disseminator (MND) Block (Section 4.2);
- b. between the MND Block and the product content block (Section 5); specifically following the MND Block to separate any headline(s) or any “reason for the corrected/updated/amended line” (see Section 4.2.2) from the rest of the MND block;
- c. after the segment header block (Section 4.3) in a segmented product;
- d. before and after any double ampersand (&&) to separate differing types of information (see Section 5.3);
- e. before and after the double dollar (\$\$) (see Section 5.4 and NWSI 10-1702, Section 4); and
- f. before and after any Call-to-Action markers (see Section 5.5).

3.7 Universal Geographic Code (UGC). The purposes of the UGC are to specify (1) the affected geographic area of the event, typically by state, county, or parish (the “C” form of UGC, see Section 4.3.3), or unique NWS zone (land and/or marine - the “Z” form of UGC): and (2) the product expiration time. The only exception to (1) above is to define the weather synopsis of certain marine products (see NWSI 10-302, *Marine and Coastal Services Areas of Responsibility*). To use NWS information and codes, such as the UGC and VTEC, effectively, it is important to understand the definitions in Sections 3.9.1 and 3.9.2 below. Depending on the class of the product as defined in Product Specification documents, the UGC is placed within the product in one of two ways:

- a. For non-segmented products, UGC will appear on the line immediately after the AWIPS Product Identifier with no intervening blank line or plain language geographic names, but followed immediately by any VTEC string(s) if required (see Section 4.1); or
- b. For segmented products (normally multi-segments within one product header, i.e., under one AWIPS Product Identifier - see Section 3.9.1.b below), UGC will appear at the beginning of each segment’s narrative text, followed by (if required): any VTEC string(s); plain language geographic names, including optional two-letter state IDs as needed for clarity (see examples in Section 4.3.5); and a repeat of the issuance date/time line. See Section 4.3 for more information on segmented products. Note that the first segment (and its UGC) will immediately follow the MND Block and a blank line (see Section 4.2).

See NWSI 10-1702 for a complete discussion of the rules and formats of the UGC.

3.8 Valid Time Event Code (VTEC). The VTEC is used in event-driven NWS text products (primarily hydrometeorological watches, warnings, and advisories) as an aid in product parsing by users. The purpose of the VTEC is to identify the what and when of an event, specifically:

whether the event is operational, experimental, or a test; the action being performed on the event with the product issuance; the issuing office; the event phenomenon and significance level; the event tracking number; and the event beginning and ending times. Additional hydrologic VTEC information is included for many flood events.

For both segmented and non-segmented products, the VTEC (when used) will appear on the line(s) immediately following each UGC string.

See NWSI 10-1703 for a complete discussion of the rules and formats of the VTEC.

3.9 Events, Segments, and Products.

3.9.1 Definitions. To use text product formats and codes properly, it is important to understand the distinction between an “event,” a “segment,” and a “product.”

- a. **Event:** A specific combination of phenomenon (e.g., type of weather or flood) and level of significance (e.g., Watch, Warning, Advisory). Common examples of events include Tornado Warning, Winter Storm Watch, Wind Advisory, Flood Warning, and Special Marine Warning. See NWSI 10-1703 for a list of hydrometeorological phenomena and significance levels.
- b. **Segment:** Each segment (of a segmented product) consists of routine or event-driven weather, hydrologic, marine or other information that uniquely applies to a geographic area.* The area typically includes one or more counties or NWS land or marine zones. The segment format includes the UGC string, and as may be appropriate: any VTEC; any UGC-associated plain language geographic names (not included in non-segmented products); and a repeat of the Date/Time line. Note that while in certain cases a segmented product may contain only a single segment, the segmented formatting rules still apply.

* An exception: Certain hydrologic products that cover large areas or have multiple forecast points within the same county or zone may have segments describing differing events for the same geographic area. See NWSI 10-922, *Weather Forecast Office Hydrologic Products Specification*, for more information.

- c. **Product:** The entire segmented or non-segmented message issued to the public under a single MND header, which may include information on one or more events.

Note that the product for a short duration event (typically non-segmented) generally has the same title as the name of the event itself, e.g., Tornado Warning. Many long duration Watch/Warning/Advisory (W/W/A) products, however, can include more than one type of event and therefore have a different title than the event names included in them, e.g., Winter Storm Warnings, Watches and Advisories (WSW) is the product title and can include a variety of winter events,

such as a Winter Storm Warning and/or a Freezing Rain Advisory.

For example, if “heat” is the phenomenon and “advisory” is the significance level, then a “Heat Advisory” is the event and the public receives the information by the Non-Precipitation Weather (NPW) product.

Similarly, a Blizzard Warning and a Lake Effect Snow Advisory are each events. The public receives the information for either event (or both, if they are occurring within the same geographical area [i.e., zone or county]) in a WSW product. If each event were for a different geographic area, then the WSW would be issued with two segments.

3.9.2 Product Expiration Time versus Event Ending Time.

- a. **Product Expiration Time:** Also known as the product purge time. Found at the end of the UGC string for an event, it is the time at which the product or product segment should no longer be used. For ongoing events that are expected to last beyond the product expiration time, users can expect to receive an updated product by that time.
- b. **Event Ending Time:** It is the time when the event is no longer valid for a given area (i.e., when the W/W/A conditions are no longer expected to occur). This time will be found within the narrative part of the product and, in coded format, in the last group of the Primary- or P-VTEC string for products containing VTEC. For most W/W/A products that are valid for less than six hours, the Event Ending Time will often be the same as the Product Expiration Time. For events valid “Until Further Notice,” either where the ending time cannot yet be specified (as with very long duration flooding) or is defined as open-ended (as with tropical cyclones), the P-VTEC Event Ending Time will be coded as zeros. See NWSI 10-1703 and individual Product Specifications for further details.

3.10 Time Zone Indicators. Time zone indicators `<tz>` will be used in NWS text products in the following situations:

- a. After the explicit time(s) given in the Issuance Date/Time Line of MND and Segment header blocks. See Sections 4.2.4 and 4.3.4.
- b. In product headlines when explicit beginning or ending times are given. See Appendix A, Section 1.1.
- c. After all explicit times in the body of short duration warnings.
- d. Whenever explicit times from two or more different time zones are mentioned in the same product segment.
- e. Elsewhere, when required by the governing Product Specification.

Time zone indicators may be used in other situations when they would make the time reference more clear to those using the product.

Time zone indicators will take the form

<time>_AM_<tz> or <time>_PM_<tz> or <time>_UTC

where

<time> refers to the specific hour, and minutes when included; and
 <tz> refers to the time zone indicator, which is listed in Table 2.

Table 2. Time Zone Names and Indicators <tz> used in NWS Text Products.				
Time Zone Name	Standard		Daylight (if used)	
	Indicator	Difference from UTC, in hours	Indicator	Difference from UTC, in hours
Coordinated Universal Time	UTC ¹			
Atlantic	AST	UTC-4		
Eastern	EST	UTC-5	EDT	UTC-4
Central	CST	UTC-6	CDT	UTC-5
Mountain	MST	UTC-7	MDT	UTC-6
Pacific	PST	UTC-8	PDT	UTC-7
Alaska	AKST ²	UTC-9	AKDT ²	UTC-8
Hawaii	HST	UTC-10		
Samoa	SST	UTC-11		
Chamarro (Guam and the Northern Marianas)	CHST ³	UTC+10		
Notes:				
1 - The time zone indicator Z may appear in lieu of UTC in the body of certain national and international products that span multiple time zones.				
2 - Until software is upgraded, offices may continue to use AST for “Alaska Standard Time” and ADT for “Alaska Daylight Time.”				
3 - Until software is upgraded, offices may continue to use either GUAM LST for “Guam Local Standard Time” or LST for “Local Standard Time.”				

See Section 5.2 and Appendix A, Section 1.2 for special rules regarding the use of **NOON** and **MIDNIGHT** in text and in long duration product headlines, respectively.

3.10.1 Multiple Time Zones Within W/W/A Products. Multiple time zone indicators should be avoided in watch, warning, and advisory (W/W/A) products (including follow-up statements), in order to prevent misunderstanding by users of the products. This is especially true when dealing with short duration warnings that mention specific times when the weather hazard will arrive at various locations (i.e., pathcast). However, since the county warning areas of some WFOs span multiple time zones, this is not always possible.

The following rules will apply to all WFO W/W/A products as well as NWS National Center W/W/A products that span multiple time zones and are issued using local time zones (and not UTC):

- a. If a W/W/A product segment or a non-segmented W/W/A product is confined to a single time zone, multiple time zones should not be mentioned in the body of the

text or in any headline, even if the issuing office is in a different time zone. For consistency, the Segment Header Issuance Date/Time Line (in segmented products) and/or the MND Issuance Date/Time Line (in both segmented and non-segmented products) should reference the same time zone used in the body of the segment and/or product.

- b. If a W/W/A product segment or a non-segmented W/W/A product encompasses multiple time zones, whenever a specific time is mentioned in the body of the text or in any headline, the other time zone(s) will appear immediately after that time and a space, and surrounded by forward slashes, in the format:

`<time>_xM_<tz1>_ / <time>_xM_<tz2> /`

where

`<time>` - specific hour, and minutes when included
xM - **AM** or **PM**
`<tz1>` and `<tz2>` - time zone indicators, as shown in Table 2

- c. If a W/W/A product segment encompasses multiple time zones, the Segment Header Issuance Date/Time Line (in segmented products) will either use both (in the case of two) time zones in the following format

`<time>_xM_<tz1>_day_mon_<dd>_year_ / <time>_xM_<tz2>_day_mon_<dd>_year /`

where

`<time>` - specific hour, and minutes when included
xM - **AM** or **PM**
`<tz1>` and `<tz2>` - time zone indicators, as shown in Table 2
day - three letter abbreviation of the day of the week
mon - three letter abbreviation of the month
`<dd>` - one- or two-digit date, without any leading zeros
year - four digit year
`/` - separator

or else use only the time zone in effect at the issuing office (when the product segment includes two or more time zones).

- d. If a W/W/A product (segmented or non-segmented) encompasses multiple time zones, the MND Issuance Date/Time Line should use the time zone in effect at the issuing office.

These rules are summarized in Table 3.

Table 3. Use of Multiple Time Zones in W/W/A Products. This table shows how specific time references should be handled in both segmented and non-segmented Watch, Warning, Advisory (W/W/A) products.

	Segmented						Non-Segmented		
	segment body	Segment headline	segment header	overview body	overview headline	MND date/time line	product body	product headline	MND date/time line
Single time zone in segment Single time zone in product	segment	segment	segment	product	product	product	product	product	product
Single time zone in segment Multiple time zones in product	segment	segment	segment	all	all	office			
Multiple time zones in segment Multiple time zones in product	all	all	both or office	all	all	office	all	all	office

KEY:
segment - the time zone of the geographic area covered by the product segment
product - the time zone of the geographic area covered by the product
all - all of the time zones of the geographic area covered by the product or product segment
both - both of the two time zones of the geographic area covered by the product or product segment
office - the time zone at the location of the issuing office

4. Product Header Blocks. This section provides information on the construction and appearance of the specific format blocks of text products. Appendix B presents completed generic examples of formats (generally without specific text information), including an information key for each example.

4.1 AWIPS Product Identifier. The following subsections provide the rules for each line of the AWIPS Product Identifier. The AWIPS Product Identifier begins all products and consists of:

- a. a start-of-message code (Section 4.1.1),
- b. the WMO abbreviated heading (Section 4.1.2), and
- c. the AWIPS Identifier (AI) (Section 4.1.3).

See Section 4.1.4 for examples of AWIPS Product Identifiers. They are also included in every example in Appendix B.

The AWIPS Product Identifier uniquely identifies the specific product, the area to which it applies, the originating office, and the product issuance time. AWIPS produces these fields automatically from information derived from operator input.

Note: In non-segmented products, any UGC string would occur immediately after the AWIPS Product Identifier without any intervening blank line; and any VTEC string(s) would be placed on line(s) immediately below the UGC. The UGC and VTEC are not part of the AWIPS Product Identifier, however.

For explanations, examples, product lists, and details on the structure of the AWIPS Product Identifier, see the Office of the Chief Information Officer (OCIO) document:

“NWS Communications Header Policy Document.” It can be found at the OCIO’s Telecommunications Operations Center Internet site at:
<http://www.nws.noaa.gov/tg/awips.html>.

In addition, other communications codes, such as for amended or corrected products, can be found at this site.

4.1.1 Start-of-Message Code. This is sometimes called the Communications Header.

Note: All complete product examples in this document will use the double pound sign (##) to indicate the start-of-message code. These codes may be visible on certain user devices, but are not visible on AWIPS. See communications documents for specific dissemination systems’ printable and non-printable start-of-message codes. They are available on the Internet at: <http://www.nws.noaa.gov/tg> or, specifically for the NWS, on the Internet site mentioned in Section 1.

4.1.2 WMO Abbreviated Heading. The format for the WMO abbreviated heading is described in Table 4.

Table 4. Format of the WMO Abbreviated Heading.	
The WMO abbreviated heading is in the form: ttaaai_cccc_ddhmm_bbb	
where:	
Code Group	Meaning
ttaaai	data type/location, defined in WMO Manual 386, where: tt two letters, signifying Data type and/or Form Designators aa two letters, signifying Geographical and/or Data Type and/or Time Designators; ii two numbers, used to differentiate two or more bulletins with the same code, or from the same area or center. ii = 01 to 19 for global distribution ii = 20 to 39 for regional or interregional distribution ii = 40 to 89 for national or bilaterally agreed distribution ii = 90 to 99 reserved
cccc	International 4-letter identifier of issuing office, e.g., KLWX for WFO Sterling, Virginia
ddhmm	product issuance date/time in UTC, where: dd day of the month, including any leading zero hh hour, including any leading zero mm minute, including any leading zero

<p>bbb (used as appropriate)</p>	<p>designator has two purposes: (1) to differentiate between the original transmission of a product and any retransmissions due to: amendments or updates; corrections; product delays; or multiple products of the same type within the same minute; all of which would otherwise have identical WMO headings; and (2) to identify the reason for the retransmission, as shown immediately below.</p> <p style="padding-left: 40px;">If amended or updated, bbb = AAx</p> <p style="padding-left: 40px;">If corrected, bbb = CCx</p> <p style="padding-left: 40px;">If delayed, or if the particular WMO header with that issuance time (i.e., the same hour and minute) has already been used, bbb = RRx</p> <p>In all cases, x = A, B, C . . . X, i.e., AAA = first amendment or update to the same product; CCB = second correction to the issuance of the same product, etc., through X if needed. After X, Z should be used for each additional case. More information on using the bbb group is in Section 4.2.2.</p>
---	--

4.1.3 AWIPS Identifier (AI). Table 5 describes the format of the AI.

Table 5. Format of the AWIPS Identifier.	
The AI is in the form:	
nnnxxx	
where:	
Code Group	Meaning
nnn	specific product category (will be three characters)
xxx	three-character NWS Location Identifier (NWSLI) that gives the originating office or the area designator. This xxx field will contain 3 characters. If only one or two characters are printable, the field will be left justified with the trailing spaces added.

4.1.4 Examples of AWIPS Product Identifiers.

- a. Zone Forecast Product (ZFP) issued by WFO Baltimore/Washington (KLWX) on February 11, 2007 at 0924 UTC. Note that the month and year do NOT appear in the AWIPS Product Identifier. They will be determined from the MND Header Block (Section 4.2) or Segment Header Block (Section 4.3), if included.

```
##                               (appropriate start-of-message communications code)
FPUS51_KLWX_110924             (WMO abbreviated heading)
ZFPLWX                          (AI)
```

- b. Corrected Public Severe Thunderstorm Watch Notification Message (SEL) for Watch Number 240 issued by the NWS Storm Prediction Center (KWNS) in Norman Oklahoma on April 26, 2008. The original product was issued at 0434 UTC, and the first correction was sent at a later time that would be reflected in any MND or segment header block. Note the two spaces at the end of the AI (shown as a long continuous dash below) to make it six characters long.

```
##
WWUS20 KWNS 270434 CCA
SEL0__
```

4.2 Mass News Disseminator (MND) Header Block. The following subsections provide the rules for each line of the MND header block. The MND header block consists of:

- a. a broadcast instruction line (as appropriate, Section 4.2.1),
- b. a product type line (Section 4.2.2),
- c. an issuing office line (Section 4.2.3), and
- d. an issuance date/time line (Section 4.2.4).

See Section 4.2.5 for examples of MND header blocks. MND header blocks are also included in every example in Appendix B.

4.2.1 Broadcast Instruction Line (as appropriate). Many potentially life-threatening warning, watch or other hazard products contain a broadcast instruction line, to indicate to broadcasters and other users the importance of the message. The broadcast instruction line may be included in products originated by the NWS as well as in non-weather-related emergency messages relayed by the NWS at the request of the external authorizing government agency. The broadcast instruction line in NWS products typically includes one of the following phrases, in descending order of urgency:

- BULLETIN_-_EAS_ACTIVATION_REQUESTED
- BULLETIN_-_IMMEDIATE_BROADCAST_REQUESTED
- URGENT_-_IMMEDIATE_BROADCAST_REQUESTED
- URGENT_-_WINTER_WEATHER_MESSAGE
- URGENT_-_WEATHER_MESSAGE

Note that the use of the phrases `EAS_ACTIVATION_REQUESTED` or `IMMEDIATE_BROADCAST_REQUESTED` is at the discretion of state and local Emergency Alert System (EAS) plans, and that the space dash space (`_ _`) separates `BULLETIN` or `URGENT` from any other instructions in that line.

The use of `BULLETIN` and `URGENT` follows the convention established by the print and electronic media. These terms signify levels of dissemination urgency. The NWS uses only `BULLETIN` and `URGENT` in weather-related messages, but other instructions may be used at the request of the external authorizing government agency in non-weather-related emergency messages. The complete list of broadcast instructions for non-weather-related messages is given in Table 6.

Broadcast Instruction	Use of Instruction
FLASH _ _	only for world changing events, such as a Presidential assassination
BULLETIN _ _	when the information is sufficiently urgent to warrant breaking into the normal broadcast
URGENT _ _	when the information may wait until a “stop-set” (break in the broadcast routine)
REGULAR _ _	when the information should be broadcast at regular news times
HOLD _ _	not broadcast at this time; may be upgraded or updated with a higher priority later

4.2.2 **Product Type Line.** This MND line contains the name of the specific product being issued, e.g., `ZONE_FORECAST`, `STATE_WEATHER_ROUNDUP`, `TROPICAL_CYCLONE_DISCUSSION`, `SPECIAL_MARINE_WARNING`, `FLOOD_WARNING`. The Product Type Line should be limited to one line (an exception is given in the first note in Table 7 below) and should be used consistently, according to individual Product Specification documents. The only permitted punctuation mark is the ellipsis (. . .), which is used with the additional terms in Table 7 below.

Table 7 lists additional terms that may be included in the Product Type Line. The first five will appear at the end of the Product Type Line, while `TEST` and `EXPERIMENTAL` will appear in different locations in the Product Type Line. (Any other additional terms are defined in appropriate NWS Product Specification documents.)

The WMO abbreviated header is discussed in Section 4.1.2. Additional information on test and practice wording is discussed in Section 7.

Situation	Product Type Line Format	BBB Field	Issuance Time included in the:		For an example see
			WMO abbreviated heading	MND date-time line	
Updated or Amended	<code><product name> . . . UPDATED</code> or <code><product name> . . . AMENDED</code>	AAx	original	current	Appendix B Example 4
Corrected	<code><product name> . . . CORRECTED</code>	CCx	original	current	Appendix B Example 5
Corrected Update	<code><product name> . . . CORRECTED UPDATE</code>	CCx	original	current	Section 4.2.5.b
Resent (retransmitted)	<code><product name> . . . RESENT</code>	none	original	original	Section 4.2.5.c
Delayed	<code><product name> . . . DELAYED</code>	RRx	original	current	
Test or Practice	TEST . . . <code><product name></code> . . . TEST	none	current	current	Appendix B Example 3
Experimental	EXPERIMENTAL . . . <code><product name></code>	none	current	current	

Notes:

- In rare instances, especially when including one of the additional terms listed above, the Product Type Line may be too long to fit on one line. In such a case, the additional text will appear, left-justified, on the next line. See Section 4.2.5, Example e.

- It is optional, but serves the product user well, to provide a brief reason for the action using the appropriate term above, typically in one line, and left justified. This “reason-for-the-action” line should always begin with CORRECTED, UPDATED or AMENDED, etc., as indicated in respective Product Specification documents. Insert a blank line before and after this “reason” line, to make it more visible from the rest of the content block. Do **NOT** begin or end this line with an ellipsis so that the line is not used as a standard headline to trigger media display (see Section 5.1). Placement of the “reason” line should occur after the MND block and a blank line in non-segmented products, and after the segment header block (see Section 4.3) and a blank line (before the text) of any appropriate segments within a segmented product (see Appendix B and NWSI 10-1702 for more details). For example:

UPDATED_WIND_SPEED_AND_DIRECTION_FOR_THIS_AFTERNOON

- See Table 4 for an additional use of the RRx BBB field that does not involve additional terms in the Product Type Line.

4.2.3 Issuing Office Line. For field offices, this MND line contains the words NATIONAL_WEATHER_SERVICE followed by the issuing office’s city <city> (or other regionally approved name) and state. Use the standard U.S. Postal Service two-letter state abbreviation ss. National Centers should use the acronym NWS followed by the National Center’s name and <city>_ss. The issuing office information should be on one line.

Examples of field office line:

(1) NATIONAL_WEATHER_SERVICE_BOISE_ID

(2) NATIONAL_WEATHER_SERVICE_KANSAS_CITY/PLEASANT_HILL_MO

Examples of National Center line:

(1) NWS_HYDROMETEOROLOGICAL_PREDICTION_CENTER_CAMP_SPRINGS_MD

(2) NWS_STORM_PREDICTION_CENTER_NORMAN_OK

4.2.3.1 Multiple Issuing Office Lines. There are a few instances when a product or product segment will include two issuing office lines in a single MND header block.

- a. When a product is issued by a backup office, two “issuing office” lines are included in the MND header block. The first includes the office with the primary responsibility (which cannot issue the product) as described above; the second line begins with ISSUED_BY immediately followed by the backup office name. (The AWIPS Product Identifier is that of the primary office.) The following format is used:

NATIONAL_WEATHER_SERVICE_<city>_ss	(primary office)
ISSUED_BY_NATIONAL_WEATHER_SERVICE_<city>_ss	(backup office)

- b. When a non-weather-related emergency message is originated by an external

agency, but disseminated by an NWS office, two “issuing office” lines are included in the MND header block. The first includes the external agency information; the second line begins with RELAYED_BY immediately followed by the NWS office name. The following format is used:

```
<external_agency>_<city/county/or state name>_SS
RELAYED_BY_NATIONAL_WEATHER_SERVICE_<city>_SS
```

See Section 4.2.5, Example d below.

4.2.4 Issuance Date/Time Line. The format of the MND Issuance Date/Time Line is shown in Table 8.

Table 8. Format of the MND Issuance Date/Time Line.	
The MND Issuance Date/Time line is in the form:	
<hhmm>_xM_<tz>_day_mon_<dd>_year	
or	
<hhmm>_UTC_day_mon_<dd>_year	
where:	
Code Group	Meaning
<hhmm>	Issuance time in hours and minutes. The minutes digits are required. When local time is used, leading zeros are not used (e.g., 9:00 a.m. is formatted as 900_AM). For certain national products, UTC may be used. UTC times will be expressed as four digits (e.g., 0900.UTC).
xM	For local time, either AM or PM . Noon is expressed as 1200_PM , while midnight is expressed as 1200_AM . Not used with UTC .
<tz>	Time zone indicator. See Table 2.
day	Three letter abbreviation of the day of the week, i.e., SUN, MON, TUE, WED, THU, FRI, SAT .
mon	Three letter abbreviation of the month, i.e., JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC .
<dd>	Date. Leading zeros are not used.
year	Year, expressed in four digits.

4.2.5 Examples of MND Blocks. Following are examples of MND header blocks. An identification key of each MND line is included with the first example.

a. Test Warning product including Broadcast Instruction Line.

```
BULLETIN_-_EAS_ACTIVATION_REQUESTED      (Broadcast instruction)
TEST...TORNADO_WARNING...TEST            (Product type)
NATIONAL_WEATHER_SERVICE_ABERDEEN_SD      (Issuing office)
654_PM_CDT_THU_APR_24_2008               (Issuance date/time - local time)
```

b. Corrected Update product.

AREA_FORECAST_DISCUSSION...CORRECTED_UPDATE
NATIONAL_WEATHER_SERVICE_GRAND_RAPIDS_MI
345_PM_EDT_THU_MAY_1_2008

c. Resent product.

PUBLIC_INFORMATION_STATEMENT...RESENT
NATIONAL_WEATHER_SERVICE_JACKSON_KY
500_AM_EDT_WED_AUG_27_2008

d. Product originated by an external agency.

BULLETIN_-_EAS_ACTIVATION_REQUESTED
FIRE_WARNING
TEXAS_EMERGENCY_MANAGEMENT_AGENCY_LUBBOCK_TX
RELAYED_BY_NATIONAL_WEATHER_SERVICE_LUBBOCK_TX
402_PM_CST_MON_JAN_28_2008

e. Product type line too long to fit on one line.

ZONE_FORECAST_PRODUCT_FOR_CENTRAL_SOUTH_CAROLINA_AND_EAST_
CENTRAL_GEORGIA...UPDATED
NATIONAL_WEATHER_SERVICE_COLUMBIA_SC
518_AM_EDT_TUE_SEP_30_2008

f. National Center product with date/time line in UTC.

LATIN_AMERICAN_TEMP_AND_WEATHER_TABLE
NWS_TELECOMMUNICATION_OPERATIONS_CENTER_SILVER_SPRING_MD
0000_UTC_SUN_JUN_1_2008

4.3 Segment Header Block. Segmented products will contain a segment header block, which defines the valid area, valid time period, and in some cases valid event(s) described in that particular product segment. A segment header block consists of:

- a. a UGC string (Section 4.3.1),
- b. VTEC string(s) (as appropriate, Section 4.3.2),
- c. UGC associated plain language names (as appropriate, Section 4.3.3), and
- d. an issuing date/time line (as appropriate, Section 4.3.4).

Refer to the appropriate Product Specification to get the requirements for individual products. See Section 4.3.5 for examples of segment header blocks. They are also included in the segmented examples (4, 5, and 6) in Appendix B.

4.3.1 UGC String. The UGC string will be the first line(s) of the product segment. See NWSI 10-1702 for a complete discussion on the rules and formats of the UGC. Refer to the relevant Product Specification document for the type of UGC (zone or county based) used in a given product type.

4.3.2 VTEC String(s) (as appropriate). VTEC string(s) normally appear in event-driven hydrometeorological products (warnings, watches, advisories, and some statements). The

VTEC, when it appears in a product, will always be located on the line(s) immediately following the UGC string. See NWSI 10-1703 for a complete discussion on the rules and formats of the VTEC, as well as links to tables listing the specific product types that will contain it.

4.3.3 UGC Associated Plain Language Names (as appropriate). The plain language names, when included, will consist of either the zone name(s) or county, parish, and/or independent city name(s), depending on whether the Z or C form of UGC is used in the product. The names will be separated by a hyphen (-). In either case, the two letter state postal code abbreviation may be appended (after a space) if multiple states are referenced in the product or if the same zone/county name appears in multiple states in the area. Refer to the appropriate Product Specification documents for the rules and requirements for a given product type.

Additionally, individual cities located in the zone(s) or county(s) of the product segment may be mentioned beginning on the line following the last line of zone or county names, and will begin with the leading phrase “INCLUDING_THE_CITIES_OF . . .” (or the phrase “INCLUDING_THE_CITY_OF . . .” for a single city). Multiple city names will be separated by an ellipsis (. . .). The city names may have the two letter state postal codes appended to them (after a space).

Examples of plain language names are in Section 4.3.5 and in Examples 4 and 5 in Appendix B.

4.3.4 Issuance Date/Time Line (as appropriate). The content of the segment header block issuance date/time line, when included, normally will be the same as in the MND block issuance date/time line. Refer to Section 4.2.4 for more information.

A difference may occur when the product segment covers multiple time zones. In such a case, the segment header block issuance date/time line may include up to two different time zones, in the format:

```
<hhmm>_xM_<tz1>_day_mon_<dd>_year_ / <hhmm>_xM_<tz2>_day_mon_<dd>_year /
```

where the data elements are the same as in Table 8, except that <tz1> refers to the first time zone indicator and <tz2> refers to the second time zone indicator. No more than two time zones should be included in the segment header block issuance date/time line. If there are more than two time zones covered by a product segment, the single time zone of the location of the issuing office should be used.

4.3.5 Examples of Segment Header Blocks. Here are examples showing some of the variations of information included in segment header blocks. An identification key of each section is included with the first example.

- a. Complete Segment Header Block. This long duration W/W/A product (Flood Watch) contains UGC, two VTEC strings (the second being H-VTEC [hydrologic]), long lists of plain language zone and city names, and a date-time line with two time zones.

INZ076>079-083-084-089>092-KYZ023>043-045>049-053>057- (UGC)
 061>067-070>078-081-082-130930-
 /O.CON.KLMK.FA.A.0001.000000T0000Z-070115T0900Z/ (VTEC)
 /00000.0.ER.000000T0000Z.000000T0000Z.000000T0000Z.OO/
 ORANGE_IN-WASHINGTON_IN-SCOTT_IN-JEFFERSON_IN-DUBOIS_IN- (zones)
 CRAWFORD_IN-PERRY_IN-HARRISON_IN-FLOYD_IN-CLARK_IN-HANCOCK_KY-
 BRECKINRIDGE_KY-MEADE_KY-OHIO_KY-GRAYSON_KY-HARDIN_KY-BULLITT_KY-
 JEFFERSON_KY-OLDHAM_KY-TRIMBLE_KY-HENRY_KY-SHELBY_KY-FRANKLIN_KY-
 SCOTT_KY-HARRISON_KY-SPENCER_KY-ANDERSON_KY-WOODFORD_KY-
 FAYETTE_KY-BOURBON_KY-NICHOLAS_KY-NELSON_KY-WASHINGTON_KY-
 MERCER_KY-JESSAMINE_KY-CLARK_KY-LARUE_KY-MARION_KY-BOYLE_KY-
 GARRARD_KY-MADISON_KY-BUTLER_KY-EDMONSON_KY-HART_KY-GREEN_KY-
 TAYLOR_KY-CASEY_KY-LINCOLN_KY-LOGAN_KY-WARREN_KY-SIMPSON_KY-
 ALLEN_KY-BARREN_KY-MONROE_KY-METCALFE_KY-ADAIR_KY-RUSSELL_KY-
 CUMBERLAND_KY-CLINTON_KY-
 INCLUDING_THE_CITIES_OF...PAOLI...SALEM...SCOTTSBURG... (cities)
 MADISON...JASPER...MARENGO...TELL_CITY...CORYDON...NEW_ALBANY...
 JEFFERSONVILLE...HAWESVILLE...HARDINSBURG...BRANDENBURG...
 BEAVER_DAM...LEITCHFIELD...ELIZABETHTOWN...FORT_KNOX...
 MOUNT_WASHINGTON...SHEPHERDSVILLE...LOUISVILLE...LA_GRANGE...
 BEDFORD...NEW_CASTLE...SHELBYVILLE...FRANKFORT...GEORGETOWN...
 CYNTHIANA...TAYLORSVILLE...LAWRENCEBURG...VERSAILLES...
 LEXINGTON...PARIS...CARLISLE...BARDSTOWN...SPRINGFIELD...
 HARRODSBURG...NICHOLASVILLE...WINCHESTER...HODGENVILLE...
 LEBANON...DANVILLE...LANCASTER...RICHMOND...MORGANTOWN...
 BROWNSVILLE...MUNFORDVILLE...GREENSBURG...CAMPBELLSVILLE...
 LIBERTY...STANFORD...RUSSELLVILLE...BOWLING_GREEN...FRANKLIN...
 SCOTTSVILLE...GLASGOW...TOMPKINSVILLE...EDMONTON...COLUMBIA...
 JAMESTOWN...BURKESVILLE...ALBANY
 953_PM_EST_FRI_JAN_12_2007_/853_PM_CST_FRI_JAN_12_2007/ (date-time)

- b. Complete Block, but Without Plain Language City Names. The segment header block for this short duration warning follow-up statement includes UGC and VTEC strings, plain language zone names (but not city names), and a date-time line.

TXC101-345-091525-
 /O.CAN.KLUB.SV.W.0004.000000T0000Z-080409T1530Z/
 MOTLEY_TX-COTTLE_TX-
 1015_AM_CDT_WED_APR_9_2008

- c. UGC, Plain Language Zone and City Names and Date-Time Line, but no VTEC. The segment header block from this Zone Forecast product does not contain VTEC, but uses the INCLUDING_THE_CITIES_OF line with plain language city names.

MEZ002-200600-
 NORTHEAST_AROOSTOOK-
 INCLUDING_THE_CITIES_OF...PRESQUE_ISLE...CARIBOU...VAN_BUREN...
 MARS_HILL
 1156_AM_EDT_MON_MAY_19_2008

- d. UGC, VTEC, and Date-Time Line Only. This segment header block from a National Hurricane Center Tropical Cyclone VTEC (TCV) product contains UGC, two VTEC strings, and the date/time line. The place names are included in

the body of the segment.

```
LAZ051-TXZ215-130900-  
/O.CAN.KNHC.TR.W.1009.000000T0000Z-000000T0000Z/  
/O.NEW.KNHC.HU.W.1009.070913T0515Z-000000T0000Z/  
1215_AM_CDT_THU_SEP_13_2007
```

- e. UGC and Date-Time Line Only. This segment header from the Synopsis of a Coastal Waters Forecast contains just UGC and a date/time line.

```
PZZ100-252245-  
905_AM_PDT_SUN_MAY_25_2008
```

- f. UGC and VTEC only. The segment header block from this Watch Outline Update (WOU) product, issued by the NWS Storm Prediction Center, contains only UGC and VTEC. The plain language place names are included in the body of the segment, so are not included in the segment header block.

```
TNC017-023-033-039-045-047-053-069-071-075-077-079-095-097-109-  
113-131-157-167-183-060600-  
/O.NEW.KWNS.TO.A.0037.080205T2110Z-080206T0600Z/
```

5. Product Content Block. The product content block, or product body, is the main informational part of any non-segmented or segmented product and occurs after the MND block and a blank line and before the communications trailer code.

The content block for each segment within a segmented product is defined as containing the following items generally in this order:

- a. the Segment Header Block (see Section 4.3) that includes:
 - (1) the UGC string;
 - (2) any VTEC string(s), as appropriate;
 - (3) any UGC associated plain language names, as appropriate;
 - (4) issuance date/time line, as appropriate;
- b. all text information (defined as a subset of the Product Content Block), which includes the following:
 - (1) any headlines and/or other plain language headline-type information, such as a “reason for the update” line or a synopsis occurring before the main narrative and/or data;
 - (2) any narrative and/or data provided in the product and described in the respective Product Specification documents;
- c. the optional double ampersand && (see Section 5.4);
- d. Call-to-Action statement(s) and markers, when required (see Section 5.5);
- e. latitude-longitude information, when required (see Section 5.6);
- f. time-motion-location markers, when required (see Section 5.7);
- g. the double dollar \$\$ (see Section 5.8);
- h. and the equal sign = , when required (see Section 2.2).

Non-segmented products will contain all the same items, except for the explicit Segment Header Block. Any UGC or VTEC strings would appear immediately below the AWIPS Product Identifier (see Section 4.1).

Content will vary according to the individual product or class of products as described in the respective Product Specification documents.

5.1 Headlines. One or more headlines, as appropriate, may begin the narrative/data part of the product content block. This would be after the Segment Header Block in a segmented product, and after the MND in a non-segmented product. Each headline will be on a separate line (or lines) and be preceded and followed by an ellipsis. When including multiple headlines, the most important event should be listed first, unless the Product Specification document specifies otherwise. Second and subsequent lines of headlines will be left-justified.

Headlines should normally include the “what” and “when” (or time inference) of the event. The “where” should only be included if the headline does not apply to the entire area of the segment or product. A blank line will separate any headline(s) from the rest of the content block. Example (1) uses one headline. Example (2) uses two headlines, with the more important event listed first. Example (3) limits the hazard to a certain part of the UGC-defined product or segment area.

Examples:

- (1) . . .WINTER_STORM_WATCH_REMAINS_IN_EFFECT_FROM_THURSDAY_EVENING_THROUGH_FRIDAY_AFTERNOON. . .
- (2) . . .WINTER_STORM_WARNING_IN_EFFECT_UNTIL_11_PM_MST_TONIGHT. . .
 . . .WIND_CHILL_ADVISORY_NOW_IN_EFFECT_UNTIL_11_PM_MST_FRIDAY_NIGHT. . .
- (3) . . .WINTER_WEATHER_ADVISORY_IN_EFFECT_FROM_MIDNIGHT_TONIGHT_TO_2_PM_PST_TUESDAY_ABOVE_3500_FEET. . .

See Appendix A for standardized headline instructions for long duration products. Refer to individual Product Specification documents for details of headlines used in other products.

5.2 Explicit Time-of-Day References in Text. When explicit times of day are referenced in product text, the following rules will apply:

- a. The explicit time of day will be expressed in the general format:

<hhmm>_xM_<tz> or **<hhmm>_UTC**

where

<hhmm> hours and minutes. Leading zeros in the hour should be dropped, and times in whole hours need not include the minutes, unless other non-whole hour times are mentioned elsewhere in the text or headline(s) of the product.

xM either **AM** or **PM**. See below for special rules regarding **NOON** and **MIDNIGHT**. Not used with **UTC**.

<tz> optional time zone indicator. See values for **<tz>** in Table 2. The time zone indicator need not be mentioned unless:

- (1) the product is a short duration warning (where it is always required); or
- (2) more than one time zone is mentioned in the product segment or non-segmented product (see Section 3.10.1); or
- (3) not including the time zone indicator might cause confusion or misunderstanding by users of the product.

- b. A calendar day time phrase (e.g., **THIS_MORNING**, **MONDAY_EVENING**) may follow if it clarifies.
- c. Use **NOON**, followed by the day of the week (or **TODAY**), rather than **12_PM**.
- d. Use **MIDNIGHT**, followed by **<day of week>_NIGHT** or **TONIGHT**, rather than **12_AM**.

See also Appendix A, Section 1.2 for specific rules regarding explicit time-of-day terms in headlines of long duration products.

5.3 Bullet Format. Selected NWS text products (primarily short duration warnings), as stipulated in Product Specification documents, use the bullet format to highlight key parts of the text. Following are general rules for use of the bullet format:

- a. Use an asterisk (*) at the left-justified margin position to start the first line of each bullet.
- b. For the first line of a given bullet, place one space ‘_’ between the asterisk and the start of text. For subsequent lines in the bullet, indent two spaces ‘__’ from the left margin.
- c. The length limit for the text that follows a bullet (i.e., number of characters or lines) is given in Product Specification documents.
- d. Bullet text should be kept as brief as possible.

5.4 Content-Type Separator Code (Double Ampersand [&&] - Optional). The **&&** code optionally may be used (one or more times) to separate differing kinds of information within the content block of a non-segmented product, or within any segment(s) of a segmented product. The **&&** also may be used in a product that does not include the UGC string. Individual

Product Specification documents will describe the use of the && within a given product type.

Note: The && should be on its own line, left justified, and followed immediately by an end of line (<cr><cr><lf>). A blank line (see Section 3.6) should precede and follow the && before other information is presented, for ease of reading.

5.5 Call-to-Action (CTA) Statement. The CTA is the part of a hazard message that prompts the public to respond with appropriate action, in effect completing the hazard message. A CTA statement may provide actionable or awareness information for any hazard event including those not addressed by a watch, warning or advisory. For example, a CTA may be included in an event cancellation or expiration statement, a Short Term Forecast, or other appropriate product. (The Short Term Forecast will not have CTA markers as described in Section 5.5.1.) The CTA should:

- tell users what can be done to prevent, avoid or minimize the danger and prompt users to put their severe or adverse weather plans into action;
- reflect the degree of danger posed by the particular event;
- convey as much useful information as possible and be as specific as possible, while also being as brief as possible;
- convey a sense of emergency and urgency that relates to the potential impact of the hazard or event;
- in long duration events, provide a definition of the active watch, warning or advisory.

Writers of watch, warning, advisory and follow-up statement products should be concise and clear; especially for watches and warnings that are broadcast automatically on NOAA Weather Radio (NWR) using Specific Area Message Encoding (SAME) and on the Emergency Alert System (EAS). The length of the audio broadcast is limited (FCC and NWS specifications) to two minutes, including tones. The NWR broadcast management system and EAS decoders will truncate any audio message longer than two minutes.

5.5.1 CTA Markers. Certain NWS text products, primarily W/W/A products, will include CTA markers to identify the beginning and end of the CTA statement(s). The format of the CTA markers is shown in Table 9. This practice enables specialized use of CTAs by Partners and other users, and enables NWS production of alert messages in Common Alerting Protocol (CAP). If a CTA consists of more than one sentence, or there is more than one statement, all sentences and paragraphs will be consecutive with only one CTA "beginning" marker and one CTA "ending" marker. The markers will be inserted automatically in NWS W/W/A text by the product generation software.

Table 9. Format of the CTA Markers.

The CTA Markers take the following form:

(blank line)

PRECAUTIONARY/PREPAREDNESS_ACTIONS...

(blank line)

<single- or multi-line text content of call-to-action, instructions, etc.>

(blank line, if additional calls-to-action follow)

<additional call-to-action, instructions, etc., if needed>

(blank line)

&&

(blank line)

Note. The PRECAUTIONARY/PREPAREDNESS_ACTIONS... and && character strings are the CTA "beginning" and "ending" markers, respectively. They will be left justified with no other printable characters on the same line of text.

5.5.2 CTA and CTA Marker Usage. The CTA and associated markers will be inserted into each product segment or only in the Overview/Synopsis section of the product, but not in both in a single WMO-formatted text product. There will be only one set of CTA markers in a given product segment or Overview/Synopsis section, even if multiple CTAs are used.

If there is no CTA in a W/W/A product, CTA markers are not included in the product. This occurs most frequently with cancellation or expiration follow-up statements.

Individual Product Specification documents will describe the use of the CTA and the location of the CTA and CTA markers within a given product class or product type.

5.5.3 Examples of CTAs.

- a. Multiple CTAs from a long duration Fire Weather Red Flag Warning product.
One of the CTAs is the definition of the hazard.

PRECAUTIONARY/PREPAREDNESS_ACTIONS...

A_RED_FLAG_WARNING_MEANS_THAT_CRITICAL_FIRE_WEATHER_CONDITIONS_ARE
EITHER_OCCURRING...OR_WILL_OCCUR_WITHIN_24_HOURS.

PLEASE_REFER_TO_THE_LOCAL_BURN_PERMITTING_AUTHORITIES_ON_WHETHER
YOU_MAY_BURN_OUTDOORS._IF_YOU_DO_BURN_OUTSIDE...USE_EXTREME
CAUTION.

PLEASE_ADVISE_THE_APPROPRIATE_OFFICIALS_OR_FIRE_CREWS_IN_THE_FIELD
OF_THIS_RED_FLAG_WARNING.

&&

- b. From the Overview/Synopsis Section of a Flood Warning Product. The format of the CTA markers is the same as when the markers appear in a product segment.

PRECAUTIONARY/PREPAREDNESS_ACTIONS...

NEVER_DRIVE_VEHICLES_THROUGH_FLOODED_AREAS. THE WATER MAY BE TOO DEEP TO ALLOW SAFE PASSAGE. NEVER ALLOW CHILDREN TO PLAY IN OR NEAR FLOOD WATERS. STAY TUNED TO NOAA WEATHER RADIO OR LOCAL MEDIA FOR FURTHER STATEMENTS AND UPDATED FORECASTS.

&&

c. CTA from a short duration Tornado Warning.

PRECAUTIONARY/PREPAREDNESS_ACTIONS...

THIS IS AN EXTREMELY DANGEROUS AND LIFE THREATENING SITUATION. A LARGE TORNADO HAS BEEN CONFIRMED. IF YOU ARE IN THE PATH OF THIS DESTRUCTIVE TORNADO... TAKE COVER IMMEDIATELY IN A BASEMENT OR OTHER UNDERGROUND SHELTER AND GET UNDER SOMETHING STURDY.

&&

5.6 Coded Latitude/Longitude Information (as appropriate). Certain NWS text products, primarily short duration warnings, will include coded latitude/longitude (or lat/lon) information that identifies the valid area or the area of concern of the product or product segment. There are two different formats currently in use with the LAT...LON marker, one by WFOs (shown in Table 10a) and the other from National Centers (shown in Table 10b).

Table 10a. Format of coded latitude/longitude information in WFO text products.	
The latitude/longitude information is in the form:	
LAT...LON_lata_<longa>_latb_<longb>_latc_<longc> (etc.)	
where:	
Code Group	Meaning
LAT...LON	code indicating the start of the latitude/longitude information
lata_<longa> latb_<longb> latc_<longc>	coded pairs identifying the latitude and longitude of a single point, in degrees and hundredths. Longitudes of less than 100 degrees will have four digits. East or West longitude is understood by the local office; however, if a given product straddles 180 degrees longitude, those points west of 180 degrees will be given as if they were west longitude; i.e., 179.00 E would be coded as 18100 .
Notes:	
<ul style="list-style-type: none"> - The points will proceed either clockwise or counterclockwise, defining a polygon. - At a minimum, three points (i.e., lat/lon pairs) will be included. - The maximum number of points included will be 20. - Normally there will be four points given per line of text, as needed. - The last point connects back to the first point. 	

Table 10b. Format of coded latitude/longitude information in National Center WFO text products.

The latitude/longitude information is in the form:

LAT...LON<sp>latalona_latblonb_latclonc (etc.)

where:

Code Group	Meaning
LAT...LON	code indicating the start of the latitude/longitude information
<sp>	one or more spaces
latalona latblonb latclonc	coded pairs identifying the latitude (four digits) and longitude (four digits) of a single point, in degrees and hundredths. Longitudes of greater than 100 degrees will drop the leading 1; i.e., 105.22 W would be coded as 0522 .

Notes:

- The points will proceed either clockwise or counterclockwise, defining a polygon.
- At a minimum, three points (i.e., lat/lon pairs) will be included.
- Normally there will be six points given per line of text, as needed.
- The last point either connects back to the first point or is a repeat of the first point.

Refer to the appropriate Product Specification to determine whether or not a particular product requires coded latitude/longitude information.

Here are examples of coded latitude/longitude information:

- a. WFO product with a multi-line latitude/longitude data with a warning area that straddles 100 degrees west longitude.

```
LAT...LON_4896_10015_4789_10017_4787_9995_4842_9987
      4842_9955_4897_9958
```

The warning encompasses the area bounded by 48.96 N 100.15 W, 47.89 N 100.17 W, 47.87 N 99.95W, 48.42 N 99.87 W, 48.42 N 99.55 W, and 48.97 N 99.58 W.

- b. WFO product with a warning area in East longitude (from WFO Guam). Since WFO Guam's warning area is entirely in East longitude, the longitude numbers are coded with the absolute value.

```
LAT...LON_1360_14509_1371_14495_1348_14463_1325_14492
```

This warning encompasses the area bounded by 13.60 N 145.09 E, 13.71 N 144.95 E, 13.48 N 144.63 E and 13.25 N 144.92 E.

- c. National Center watch product describing an area west of 100 degrees West longitude. The leading 'one' is left off of the longitude numbers.

LAT...LON_46680254_49089563_47069563_44650254

This watch encompasses the area bounded by 46.68 N 102.54 W, 49.08 N 95.63 W, 47.06 N 95.63 W, and 44.65 N 102.54 W.

There are other examples of WFO-issued LAT...LON data in the products in Appendix B (see Examples 2, 3 and 6).

5.7 Coded Time, Motion, and Location Information (as appropriate). NWS text products containing coded latitude/longitude information may also include coded time, motion, and location information that identifies the position and motion of an event being tracked at a given time. When used, the coded time, motion, and location information will appear in the line immediately below the coded latitude/longitude information discussed in Section 5.6. The format is shown in Table 11.

Table 11. Format of coded time, motion, and location information.	
The time, motion, and location information is in the form:	
TIME...MOT...LOC_hhmmZ_dirDEG_<sp>KT_lata_<longa> (etc.)	
where:	
Code Group	Meaning
TIME...MOT...LOC	code indicating the start of the time, motion, and location information.
hhmm	the four-digit UTC time when the motion and location were measured, appended by the code Z .
dir	three-digit direction the event is moving from, in degrees from 000 to 360 , appended by the code DEG . A motion of less than 0.5 knots may have a non-zero direction.
<sp>	speed of movement of the event, in knots from 0 to 99 (without a leading zero), appended by the code KT . If the speed is less than 0.5 knots, it will be rounded down to zero.
lata_<longa>	coded pair(s) identifying the latitude and longitude of a single point (in the case of one pair) or a line (if more than one pair is used), in degrees and hundredths. Longitudes of less than 100 degrees will have four digits. East or West longitude is understood by the local office; however, if a given product straddles 180 degrees longitude, those points west of 180 degrees will be given as if they were west longitude; i.e., 179.00 E would be coded as 18100 .

Refer to the appropriate Product Specification to determine whether or not a particular product requires coded time, motion, and location information.

Here are examples of coded time, motion, and location information:

- a. Time, motion, and location information, showing the leading zeroes used in the coded time and direction of motion, but not in the coded speed.

TIME...MOT...LOC_0128Z_004DEG_9KT_3480_10318

- b. Nearly stationary cell, with a coded motion of zero knots. Note that the direction is non-zero.

TIME...MOT...LOC_1959Z_254DEG_0KT_3253_11464

- c. Time, motion, and location group for a line, with the two latitude/longitude pairs.

TIME...MOT...LOC_2113Z_345DEG_4KT_2760_8211_2724_8198

There are other examples of TIME...MOT...LOC data in the products in Appendix B (see Examples 2, 3 and 6).

5.8 End of Product or Product Segment Code (Double Dollar [\$\$]). **The double dollar (\$\$) is used to end the Content Block of a non-segmented product and to end the Content Block of each segment of a segmented product.** This includes those products that do not use the UGC.

Note: The \$\$ should be on its own line, left justified, and followed immediately by an end of line (<cr><cr><lf>). A blank line should precede and follow the \$\$ (if other information is presented after it).

6. End of Product.

6.1 Forecaster Identifier (optional). Forecasters may affix their initials or some other form of identifier at the end of the product content block, after the \$\$ and an optional blank line. Providing this optional identification in the various NWS products depends on guidelines in the appropriate Product Specification document.

6.2 Communications Trailer. This is the communications end-of-message code. It may be visible on certain user devices, but not on AWIPS.

Note: All complete product examples in this document will use the double asterisk (**) to indicate a communications end-of-message code. These codes are not visible on AWIPS. See communications documents for specific dissemination systems' printable and non-printable end-of-message codes. They are available on the Internet at: <http://www.nws.noaa.gov/tg> or, specifically for the NWS, on the website mentioned in Section 1.

7. Test and Practice Message Wording. The use of standardized language in test or practice NWS text products is very important. The inadvertent dissemination of test or practice products without proper test language, especially short duration warning products and non-weather emergency messages, can cause unnecessary confusion and panic with the public, emergency managers, NWS Partners and other users. The multiple and often automated dissemination paths can make any errant product immediately visible to a large audience.

Test and practice products are messages generated for: the purpose of evaluation; practice; the conduct of a communications test; or the conduct of a weather drill or test - regardless of any

intention of transmitting the product. Test and practice messages may be modeled after operational products or experimental products, but content will not suggest or reflect real-time environmental conditions or events. Test and practice messages or products include, but are not limited to, messages created on AWIPS or AWIPS-related equipment for:

- a. internal office drills
- b. external drills held in conjunction with partners and other users
- c. office training or practice sessions
- d. software installation and configuration sessions

In short, assume any message or product created on AWIPS or AWIPS-related equipment will be read and/or heard by the public.

7.1 Test Messages. All test messages will be worded in a professional manner and include the items in the following sections. These items should be added into the message automatically when produced by the NWS baseline product generation software. See Appendix B, Section 2.3 (Example 3) for an example of a test short duration warning complete with the appropriate test language.

7.1.1 VTEC String. All test products containing VTEC will use the T fixed identifier signifying a Test Product (see NWSI 10-1703 Section 2.1.1 for more information).

7.1.2 MND Header Block. All test products will include the MND wording specified in the Test row of Table 7.

7.1.3 Headlines.

- a. Boilerplate. The following boilerplate headline will appear after the MND header and after each occurrence of the segment header:

. . .THIS_MESSAGE_IS_FOR_TEST_PURPOSES_ONLY. . .

A single sentence may be added at the end of the headline to address specific test or training goals.

- b. Actual. Should an actual headline appear in the product, as often occurs in long-duration W/W/As, it will appear after the boilerplate headline above, and begin and end with the word TEST. For example:

. . .THIS_MESSAGE_IS_FOR_TEST_PURPOSES_ONLY. . .
. . .TEST_BLIZZARD_WARNING_IN_EFFECT_UNTIL_11_AM_MDT_THIS
MORNING_TEST. . .

7.1.4 Free Text, including Bullets.

- a. The sentence THIS_IS_A_TEST_MESSAGE. will appear in the body of the

message, at the beginning of the text of each line preceded by a blank line (but after a leading bullet (i.e., asterisk, *) or leading period (.), if present), with some exceptions. The exceptions are:

- (1) Any line beginning with an ellipsis (. . .).
 - (2) Any line containing the opening Call-to-Action marker (see Section 5.5), or coded latitude/longitude or time, motion, and location information (see Sections 5.6 and 5.7).
 - (3) In a bullet-formatted product, a line beginning with UNTIL.
 - (4) In a bullet-formatted product, a line beginning with FOR_THE_FOLLOWING.
 - (5) In a bullet-formatted product, the next line of text that follows the line ending with the text *<phenomenon>*_WARNING_FOR , FOR_THE_FOLLOWING, or FOR_THE_FOLLOWING_LOCATIONS.
 - (6) In a bullet-formatted product, the next line of text that follows the text line THE_NATIONAL_WEATHER_SERVICE_IN_<city>_HAS_ISSUED_A (see rule c below)
- b. In a bullet-formatted product, the next line of text that follows the text line THE_NATIONAL_WEATHER_SERVICE_IN_<city>_HAS_ISSUED_A, will have the single word TEST added at the beginning of the text.
- c. The following boilerplate sentences will appear at the end of each segment immediately before the double dollar (\$\$), or immediately before the LAT. . . LON data, if present (but will not be included in the overview section of products that have one):

THIS_IS_A_TEST_MESSAGE._DO_NOT_TAKE_ACTION_BASED_ON_THIS_TEST_MESSAGE.

However, WFOs may substitute different language in the second sentence above (e.g., DO_NOT_TAKE_ACTION <etc>) when they are running a severe weather drill. In such a case, they may want the intended audience of the product (either of the written text or NOAA Weather Radio audio broadcast) to take specific actions based on the Test Warning. These actions will be pre-coordinated with the appropriate Emergency Manager(s) and/or user group(s) (e.g., school districts).

7.2 Practice Messages. Text produced while in practice mode will contain the same test wording as text produced in test mode.

7.3 Recovery After an Inadvertent Test or Practice Message is Sent. If a test or practice message is sent without the proper test wording, the following steps will be taken by the issuing office:

- a. The errant product will be cancelled/retracted immediately using the follow-up

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product prescribed in the Product Specification document of the errant product. The follow-up product will be issued for the same geographic area as the errant product. If the errant product included VTEC event(s), the VTEC event(s) will be cancelled in the follow-up product.

- b. The follow-up product will state that the errant product was issued in error and, if the errant product was a watch, warning, advisory, or statement, that no significant weather or hazardous event is expected.
- c. The office will file a For the Record report according to the instructions in NWSI 10-1603, *Significant Event Reporting*, and the *Hydrometeorology Duty Officer Manual*.

Appendix A - Standardized Headline Instructions For Long Duration Products

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1. Introduction. NWS product generation software is set up to provide standardized wording for the headlines used in many long duration mostly event-driven text product classes. The headlines should be produced automatically by the software, using the parameters defined by the forecaster. This appendix provides standardized headline formatting rules for the following classes:

- a. Winter Storm Watch/Warning/Advisory (WSW)
- b. Non-Precipitation Watch/Warning/Advisory (NPW)
- c. Fire Weather Watch and Red Flag Warning (RFW)
- d. Areal Flood Watch or Flash Flood Watch (FFA)
- e. Coastal/Lakeshore flood products (CFW) containing watch, warning, and/or advisory headlines.
- f. Coastal Waters Forecast (CWF) containing watch, warning, and/or advisory headlines.
- g. Nearshore Forecast (NSH) containing watch, warning, and/or advisory headlines.
- h. Marine Weather Message (MWW)
- I. Hurricane Local Statement (HLS)

Product classes not listed here are not required to use standardized headlines unless otherwise directed to in Product Specification documents.

Standardized headline formatting rules for long duration warning and advisories are given in Section 2 and for long duration watches in Section 4. Special formatting requirements for some routine marine forecasts (Coastal Waters Forecast and Nearshore Forecast) are listed in Section 3. Special formatting requirements for some hydrologic and coastal/lakeshore watch products are listed in Section 5. Guidelines on editing the standardized headline wording are given in Section 6.

1.1 Time Zone Indicators. Long duration warning and advisory headlines (and some watch headlines, see Section 5) will include a time zone indicator after the explicit time. If two times are listed, then place the time zone indicator only after the second time listed. However, see the special case below. See also Section 3.10.1 in the main body of this document for rules governing multiple time zones.

Example:

```
...EXCESSIVE_HEAT_WARNING_IN_EFFECT_FROM_1_PM_THIS_AFTERNOON_TO_8_PM
EST_THIS_EVENING...
```

1.1.1 Special Case: Headline Valid Period Spans the Switch to or from Daylight Time. If the valid period of the headline spans the time when Daylight Time either begins or ends (e.g., it begins in Standard Time and ends in Daylight Time), **and both the explicit beginning and ending times are included in the headline**, then both time zone indicators will be used.

Example:

```
...WIND_CHILL_WARNING_IN_EFFECT_FROM_MIDNIGHT_CST_TO_7_PM_CDT_SUNDAY...
```

1.2 Uniform Format for Explicit Time-of-Day Terms. The explicit time of day will be expressed in the general format **<hhmm>_AM/PM_<tz>**, in accordance with the main body of this document. Note: Follow time zone indicator rules in Section 1.1.

- a. In the **<hhmm>** field, the minutes digits are required and rounded to the nearest 15 minutes. However, leading and trailing zeroes are not used (e.g., use **9_PM** instead of **0900_PM**).
- b. Use **NOON_<tz>_TODAY** in place of **12_PM_<tz>_THIS_AFTERNOON**.
Use **NOON_<tz>_<day>** in place of **12_PM_<tz>_<day>**.
- c. Use **MIDNIGHT_<tz>_TONIGHT** instead of **12_AM_<tz>_<day+1>**.
Use **MIDNIGHT_<tz>_<day+1>_NIGHT** instead of **12_AM_<tz>_<day+2>_NIGHT**.

Example: Ashfall Advisory

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 AM EST Wednesday	12 PM EST Wednesday	12 AM EST Thursday

```
...ASHFALL_ADVISORY_IN_EFFECT_FROM_NOON_TODAY_TO_MIDNIGHT_EST_
WEDNESDAY_NIGHT...
```

2. Long Duration Warnings and Advisories.

2.1 Order of Elements. The long duration warning and advisory headline will include the following elements in the order shown:

- a. Leading ellipsis (. . .)
- b. Valid warning or advisory product name (see appropriate product specification)
- c. Event action phrase (Table A-1)
- d. Event beginning date and time (when applicable - Section 2.4)
- e. Event ending date and time (when applicable - Section 2.4)
- f. Trailing ellipsis (. . .)

Exceptions: When necessary (e.g., in mountainous terrain), areal descriptive terms, elevation indicators, or reasons for the warning/advisory are permitted after the ending day and time phrase and before the trailing ellipsis, or for better readability placed immediately after the warning or advisory product name (see Sections 6.3 and 6.5).

2.2. Event Action Phrases. The long duration headline event action phrase corresponds to the VTEC action code used for the segment. Only the event action phrases shown in Table A-1 will be used in long duration headlines.

2.3 Headline Examples.

- a. Initial issuance:
 . . .BLIZZARD_WARNING_IN_EFFECT_FROM_7_AM_THIS_MORNING_TO_11_AM_EST_WEDNESDAY. . .
- b. Update:
 . . .BLIZZARD_WARNING_REMAINS_IN_EFFECT_UNTIL_11_AM_EST_WEDNESDAY. . .
- c. Extended event ending time:
 . . .BLIZZARD_WARNING_NOW_IN_EFFECT_UNTIL_5_PM_EST_WEDNESDAY. . .
- d. Shortened event ending time:
 . . .BLIZZARD_WARNING_NOW_IN_EFFECT_UNTIL_8_AM_EST_WEDNESDAY. . .
- e. Cancelled prior to event ending time/date:
 . . .BLIZZARD_WARNING_IS_CANCELLED. . .
- f. Expiration statement prior to event ending time:
 . . .BLIZZARD_WARNING_WILL_EXPIRE_AT_4_PM_EST_THIS_AFTERNOON. . .
- g. Expiration statement after event ending time to clear products (event ending time + 30 minutes):
 . . .BLIZZARD_WARNING_HAS_EXPIRED. . .

Table A-1. Event action phrases for warning and advisory headlines.			
VTEC Action Code	Description	Required Event Action Phrase	Include Time/Date?
NEW	Initial Issuance	IN_EFFECT	Yes
CON	Continuation or update of event.	REMAINS_IN_EFFECT	Yes
EXT	Extend or shorten warning or advisory start and/or ending date/time.	NOW_IN_EFFECT	Yes
EXA	Expansion of event geographic area.	IN_EFFECT	Yes
EXB	Valid time period and area have been extended.	IN_EFFECT	Yes
CAN	Hazard terminated prior to event ending time.	IS_CANCELLED	No
EXP	Product approaching hazard expiration.	WILL_EXPIRE_AT	Yes
	Product has expired. Used after hazard expiration has passed.	HAS_EXPIRED	No
UPG	Upgrade from advisory to warning, or from one marine or tropical warning to another with higher wind criteria - no headline for the upgraded event		

2.4 Expression of Event Beginning and Ending Times. Long duration warning and advisory headlines will include the time, time zone indicator and day the warning/advisory is in effect.

- a. Beginning and Ending Times Listed. When the beginning and ending times are listed, the beginning time is preceded by the word FROM, and the ending time is preceded by the word TO.
- b. Only Ending Time Listed. When the ending time is listed by itself (for an event already in effect), the ending time is preceded by the word UNTIL.

2.4.1 Issuance Time and Event Beginning Time on the Same Calendar Day. When the issuance time and event beginning time occur on the same calendar day, the warning and advisory headline will include the time phrases listed in Table A-2.

Example: Winter Storm Warning

Product Issuance Time

4 AM Tuesday

Event Beginning Time

7 AM Tuesday

Event Ending Time

11 AM Wednesday

...WINTER_STORM_WARNING_IN_EFFECT_FROM_7_AM_THIS_MORNING_TO_11_AM_EST_WEDNESDAY...

Table A-2. Headline time phrases for long duration warnings and advisories in effect on same calendar day of issuance.	
Time Period Covered	Same Calendar Day Time Phrase
Midnight - 5:59 AM	EARLY_THIS_MORNING
6 AM - 11:59 AM	THIS_MORNING
Noon	TODAY
12:01 PM - 5:59 PM	THIS_AFTERNOON
6 PM - 11:59 PM	THIS_EVENING

- a. Special Case #1: Same Time Phrase for the Event Beginning and Ending Times. If the event beginning and ending times use the same time phrase, then only one time phrase will be used and it will be placed after the end time.

Example: Dust Storm Warning

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
10 AM Tuesday	1 PM Tuesday	5 PM Tuesday
...DUST_STORM_WARNING_IN_EFFECT_FROM_1_PM_TO_5_PM_MDT_THIS_AFTERNOON...		

- b. Special Case #2: Use of “Early This Morning” with “This Morning.” If the beginning time uses EARLY_THIS_MORNING and the ending time uses THIS_MORNING, then only place the time phrase THIS_MORNING after the end time.

Example: Dense Fog Advisory

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
1 AM CST Tuesday	4 AM CST Tuesday	9 AM CST Tuesday
...DENSE_FOG_ADVISORY_IN_EFFECT_FROM_4_AM_TO_9_AM_CST_THIS_MORNING...		

2.4.2 Issuance Time and Event Beginning Time are on Different Calendar Days. When the issuance time and event beginning time occur on different calendar days, the warning or advisory headline will include the time and the day(s) of the week on which the event begins and/or ends.

Example: Ice Storm Warning

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
3 PM EST Tuesday	5 AM EST Wednesday	5 AM EST Thursday
...ICE_STORM_WARNING_IN_EFFECT_FROM_5_AM_WEDNESDAY_TO_5_AM_EST_THURSDAY...		

- a. Special Case: Event Beginning Time and Event Ending Time are on the Same Day. If the event beginning time and ending time occur on same day, then the day phrase will be used after the event ending time only.

Example: Red Flag Warning

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
10 PM CST Tuesday	5 AM CST Wednesday	5 PM CST Wednesday
...RED_FLAG_WARNING_IN_EFFECT_FROM_5_AM_TO_5_PM_CST_WEDNESDAY...		

2.4.3 Event Beginning Time Occurs at Issuance Time, or Within Three Hours of Issuance Time. When the product issuance time and event beginning time occur simultaneously, or when the event beginning time is within three hours of the issuance time, the warning and advisory headline will only include the event ending time in the headline.

- a. Special Case #1: Issuance Time and Event Ending Time are on the Same Day. If the event ending time occurs on same calendar day as the issuance time, then use the same calendar rules for the end time phrase set in Table A-1.

Example: Blowing Dust Advisory

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 AM PST Tuesday	6 AM PST Tuesday	8 PM PST Tuesday
...BLOWING_DUST_ADVISORY_IN_EFFECT_UNTIL_8_PM_PST_THIS_EVENING...		

- b. Special Case #2: Issuance Time and Event Ending Time are on Different Days. If the event ending time occurs on a different day than the issuance time, then the day word or phrase will be used after the event ending time.

Example: Wind Advisory

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 PM CST Tuesday	4 PM CST Tuesday	6 AM CST Wednesday
...WIND_ADVISORY_IN_EFFECT_UNTIL_6_AM_CST_WEDNESDAY...		

3. Special Requirements for Marine Hazards Carried in Coastal Waters Forecasts and Nearshore Forecasts. Standardized warning and advisory headlines carried in the Marine Weather Message (MWW) product will follow the guidelines set in Section 2. However, until software can be changed, the standardized headlines that appear in Coastal Waters Forecasts (CWF) or Great Lakes Nearshore Forecasts (NSH) for the same marine warnings and advisories as the MWW will follow somewhat different rules.

- a. CONUS Region Coastal Waters Forecasts and Great Lakes Nearshore Forecasts. The standardized headlines for CONUS Region (defined as the NWS Eastern, Southern, Western, and Central Regions) marine warnings and advisories will use explicit times within 12 hours and general times, as defined in Section 4 for watches, beyond 12 hours.
- b. OCONUS Region Marine Hazards Carried in Coastal Waters Forecasts. Because of larger marine zones, the standardized headlines for OCONUS Region (i.e., NWS Alaska and Pacific Regions) marine warnings and advisories use general times for their entire forecast period, with three hour resolution within the first 12

hours of issuance, and six hour resolution beyond 12 hours. The first 12 hour phrasing is described in Table A-3, while the phrasing for beyond 12 hours is in Table A-4.

Table A-3. Headline time phrases for times within 12 hours of issuance used in OCONUS Region Coastal Waters Forecasts.		
Time Covered	Same Calendar Day as Issuance	Day + 1 Calendar Day
Midnight to 2:59 AM	LATE_TONIGHT (See Note below)	LATE_TONIGHT
3 AM to 5:59 AM	EARLY_THIS_MORNING	EARLY_<day+1>_MORNING
6 AM to 8:59 AM	THIS_MORNING	<day+1>_MORNING
9 AM to 11:59 AM	LATE_THIS_MORNING	LATE_<day+1>_MORNING
Noon to 2:59 PM	EARLY_THIS_AFTERNOON	Will always be beyond 12 hours of issuance, so phrases from Table A-4 will be used.
3 PM to 5:59 PM	LATE_THIS_AFTERNOON	
6 PM to 8:59 PM	THIS_EVENING	
9 PM to 11:59 PM	TONIGHT	
Note: This phrase would only appear for an event that was issued after Midnight and both began and ended before 3 AM.		

Table A-4. Headline time phrases for times beyond 12 hours of issuance used in OCONUS Region Coastal Waters Forecasts.		
Time Period	Time Phrase Used for Event Beginning Time	Time Phrase Used for Event Ending Time
Midnight to 5:59 AM	LATE_TONIGHT or LATE_<day>_NIGHT	EARLY_<day>_MORNING
6 AM to 11:59 AM	<day>_MORNING	<day>_MORNING
Noon to 5:59 PM	THIS_AFTERNOON or <day>_AFTERNOON	THIS_AFTERNOON or <day>_AFTERNOON
6 PM to 11:59 PM	THIS_EVENING or <day>_EVENING	THIS_EVENING or <day>_EVENING

3.1 Event Beginning Date/Time is at least three hours after the product issuance time, but is within the first 12 hour period, and the Event Ending Date/Time is also within the first 12 hour period.

- a. CONUS Regions. Follow headline requirements for long duration warnings and advisories (Section 2) in specifying both times - i.e., in headline, use explicit times in the Event Beginning Date/Time and Event Ending Date/Time.

Example: CONUS Region Small Craft Advisory

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 AM CST Tuesday	8 AM CST Tuesday	3 PM CST Tuesday
...SMALL_CRAFT_ADVISORY_IN_EFFECT_FROM_8_AM_THIS_MORNING_TO_3_PM_CDT_THIS_AFTERNOON...		

- b. OCONUS Regions. Both the Event Beginning and Ending Times will come from Table A-3.

Example: OCONUS Region Small Craft Advisory

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 AM HST Tuesday	8 AM HST Tuesday	3 PM HST Tuesday
...SMALL_CRAFT_ADVISORY_IN_EFFECT_FROM_THIS_MORNING_TO_LATE_THIS_AFTERNOON...		

3.2 Event Beginning Date/Time is within three hours of the product issuance time and the Event Ending Date/Time is within the first 12 hour period.

- a. CONUS Regions. Follow headline requirements for other long duration warnings and advisories (Section 2) - i.e., in the headline, use an explicit time in the Event Ending Date/Time.

Example: CONUS Region Gale Warning

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4:30 AM CDT Tuesday	4:30 AM CDT Tuesday	3 PM CDT Tuesday
...GALE_WARNING_IN_EFFECT_UNTIL_3_PM_CDT_THIS_AFTERNOON...		

- b. OCONUS Regions. The Event Beginning Time is not mentioned, and the Event Ending Date/Time comes from Table A-3.

Example: OCONUS Region Gale Warning

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4:30 AM CHST Tuesday	4:30 AM CHST Tuesday	3 PM CHST Tuesday
...GALE_WARNING_IN_EFFECT_UNTIL_LATE_THIS_AFTERNOON...		

3.3 Event Beginning Date/Time is at least three hours after the product issuance time, but is within the first 12 hour period, and the Event Ending Date/Time is outside the first 12 hour period.

- a. CONUS Regions. Use a hybrid of headline requirements for long duration warnings and advisories (Section 2) and long duration watches (Section 4) - i.e., in the headline, use an explicit time in the Event Beginning Date/Time with a time zone appended, but use a general time phrase from Table A-6 in the Event Ending Date/Time.

Example: CONUS Region Storm Warning

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4:30 PM EST Tuesday	8 PM EST Tuesday	8 PM EST Wednesday
...STORM_WARNING_IN_EFFECT_FROM_8_PM_EST_THIS_EVENING_THROUGH_WEDNESDAY_EVENING...		

- b. OCONUS Regions. The Event Beginning Date/Time comes from Table A-3, while the Event Ending Date/Time comes from Table A-4.

Example: OCONUS Region Storm Warning

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4:30 AM AKST Tuesday	10 AM AKST Tuesday	10 PM AKST Wednesday
...STORM_WARNING_IN_EFFECT_FROM_LATE_THIS_MORNING_THROUGH_WEDNESDAY_EVENING...		

3.4 Event Beginning Date/Time is within three hours of the product issuance time and the Event Ending Date/Time is more than 12 hours after the product issuance time.

- a. CONUS Regions. Follow headline requirements for long duration watches (Section 4) - i.e., in the headline, use a general time phrase from Table A-6 in the Event Ending Date/Time.

Example: CONUS Region Freezing Spray Advisory

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 PM EST Tuesday	6 PM EST Tuesday	4 PM EST Wednesday
...FREEZING_SPRAY_ADVISORY_IN_EFFECT_THROUGH_WEDNESDAY_AFTERNOON...		

- b. OCONUS Regions. The Event Beginning Time is not mentioned, and the Event Ending Time comes from Table A-4.

Example: OCONUS Region Freezing Spray Advisory

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 PM AKST Tuesday	6 PM AKST Tuesday	4 PM AKST Wednesday
...FREEZING_SPRAY_ADVISORY_IN_EFFECT_THROUGH_WEDNESDAY_AFTERNOON...		

3.5 Event Beginning Date/Times and Event Ending Date/Times are both more than 12 hours after the product issuance time.

- a. CONUS Regions. Follow the headline requirements for long duration watches (Section 4) in specifying both times - i.e., in headline, use general time phrases from Table A-6 in both the Event Beginning Date/Time and the Event Ending Date/Time.

Example: CONUS Region Heavy Freezing Spray Warning

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 AM PST Tuesday	5 PM PST Tuesday	5 AM PST Friday
...HEAVY_FREEZING_SPRAY_WARNING_IN_EFFECT_FROM_THIS_AFTERNOON_THROUGH_LATE_TONIGHT...		

- b. OCONUS Regions. Both times come from Table A-4.

Example: OCONUS Region Heavy Freezing Spray Warning

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 AM AKST Tuesday	5 PM AKST Tuesday	5 AM AKST Friday
...HEAVY_FREEZING_SPRAY_WARNING_IN_EFFECT_FROM_THIS_AFTERNOON_THROUGH_EARLY_FRIDAY_MORNING...		

4. Long Duration Watches.

4.1 Order of Elements. The long duration watch headline will include the following elements:

- a. Leading ellipsis (. . .)
- b. Valid watch product name (see appropriate directive)
- c. Event action phrase (see Table A-5)
- d. General event beginning day and time phrase (when applicable - see Section 4.4)
- e. General event ending day and time (when applicable - see Section 4.4)
- f. Trailing ellipsis (. . .)

Exceptions: When necessary (e.g., in mountainous terrain), areal descriptive terms, elevation indicators, or reasons for the watch are permitted after the ending day and time phrase and before the trailing ellipsis, or for better readability placed immediately after the watch product name (see Sections 6.3 and 6.5).

4.2 Event Action Phrases. The long duration watch headline event action phrase corresponds to the VTEC action code. Only the following event action phrases will be used in long duration headlines as shown in Table A-5.

Table A-5. Event action phrases for watch headlines.			
VTEC Action Code	Description	Required Event Action Phrase	Include Time/Date?
NEW	Initial Issuance	IN_EFFECT	Yes
CON	Continuation or update of event.	REMAINS_IN_EFFECT	Yes
EXT	Extend watch start and/or ending date/time.	NOW_IN_EFFECT	Yes
EXA	Expansion of event geographic area.	IN_EFFECT	Yes
EXB	Valid time period and area have been extended.	IN_EFFECT	Yes
CAN	Product cancelled prior to event ending time.	IS_CANCELLED	No
EXP <i>Valid for FFA only</i>	Product approaching hazard expiration.	WILL_EXPIRE_AT	Yes
	Product has expired. Used after hazard expiration has passed.	HAS_EXPIRED	No
UPG	Upgrade to warning or advisory - no headline for upgraded event.		

4.3 Headline Examples.

- a. Initial issuance:
...WINTER_STORM_WATCH **IN_EFFECT** FROM_SUNDAY_MORNING_THROUGH_MONDAY_MORNING...
- b. Update:
...WINTER_STORM_WATCH **REMAINS_IN_EFFECT** FROM_SUNDAY_MORNING_THROUGH_MONDAY_MORNING...
- c. Extended event ending time:
...WINTER_STORM_WATCH **NOW_IN_EFFECT** FROM_SUNDAY_MORNING_THROUGH_MONDAY_AFTERNOON...
- d. Shortened event beginning and end time:
...WINTER_STORM_WATCH **NOW_IN_EFFECT** FROM_SATURDAY_NIGHT_THROUGH_SUNDAY_NIGHT...
- e. Cancelled prior to event ending time/date:
...WINTER_STORM_WATCH **IS_CANCELLED**...
- f. Expiration statement for FFA after event ending time to clear products (event ending time + 30 minutes):
...FLOOD_WATCH **HAS_EXPIRED**...

4.4 Expression of Event Beginning and Ending Times. A long duration watch headline will include general time phrase(s) and the day(s) the watch begins and/or ends, as specified in Table A-6.

- a. Beginning and Ending Times Listed. When the beginning and ending general time phrases are listed, the beginning time phrase is preceded by the word FROM, and the ending time phrase is preceded by the word THROUGH.
- b. Only Ending Time Listed. When the ending time is listed by itself, the ending time is preceded by the word THROUGH.

Table A-6. Headline time phrases for long duration watches.			
Time Period Covered	Same Calendar Day Time Phrase	Day +1 Calendar Day Time Phrase	Day + 2 Calendar Day Time Phrase
Midnight to 5:59 AM		LATE_TONIGHT	LATE_<day+1>_NIGHT
6 AM to 11:59 AM		<day+1>_MORNING	<day+2>_MORNING
Noon to 5:59 PM	THIS_AFTERNOON	<day+1>_AFTERNOON	<day+2>_AFTERNOON
6 PM to 11:59 PM	THIS_EVENING	<day+1>_EVENING	<day+2>_EVENING

Note: See Section 5 for special rules when the Event Beginning and/or Ending time(s) is(are) within the Zero to 12 hour time period.

4.4.1 Issuance Time and Event Beginning Time on the Same Calendar Day. When the issuance time and event beginning time occur on the same calendar day, the watch headline will include the time phrases listed in Table A-4.

Example: Blizzard Watch

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 AM AKST Tuesday	8 PM AKST Tuesday	4 PM AKST Wednesday

...BLIZZARD_WATCH_IN_EFFECT_FROM_THIS_EVENING_THROUGH_WEDNESDAY_AFTERNOON...

- a. Special Case: Similar Time Phrase for the Start and End Times. If the start and end time use the same time phrase, then the time phrase will be used once.

Example: High Wind Watch

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 AM CHST Tuesday	6 PM CHST Tuesday	11 PM CHST Tuesday

...HIGH_WIND_WATCH_IN_EFFECT_THIS_EVENING...

4.4.2 Issuance Time and Event Beginning Time are on Different Calendar Days. When the issuance time and event beginning time occur on different calendar days, the watch headline will include the time phrase(s) (Table A-2) and day(s) on which the event begins and/or ends.

Example: Wind Chill Watch

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
3 PM MST Tuesday	5 AM MST Wednesday	5 AM MST Thursday

...WIND_CHILL_WATCH_IN_EFFECT_FROM_LATE_TONIGHT_THROUGH_LATE_WEDNESDAY_NIGHT...

Example: Lake Effect Snow Watch

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
4 PM CST Tuesday	6 AM CST Wednesday	5 PM CST Thursday

...LAKE_EFFECT_SNOW_WATCH_IN_EFFECT_FROM_WEDNESDAY_MORNING_THROUGH_THURSDAY_AFTERNOON...

5. Special Requirements for Watches when Event Beginning and/or Ending Times are within 12 Hours of Issuance. Because many Hydrologic and Coastal/Lakeshore Watches begin (and can end) within the twelve hour cutoff time for other long-duration watches, the requirements for these headlines are a hybrid between long-duration watches and long-duration warnings. The standardized headlines follow the same rules as CONUS Region Marine warnings and advisories (in Section 3.a), and use explicit times within 12 hours of issuance and general times (as defined in Section 4) beyond 12 hours of issuance. Note that other types of long duration watches will behave the same way if still in effect within 12 hours of the event beginning time.

5.1 Event Beginning Date/Time is at least three hours after the product issuance time, but is within the first 12 hour period, and the Event Ending Date/Time is also within the first 12 hour period. Follow headline requirements for long duration warnings and advisories (Section 2) in specifying both times - i.e., use explicit times in the Event Beginning Date/Time and Event Ending Date/Time.

Example: Flash Flood Watch

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
8 AM MDT Tuesday	1 PM MDT Tuesday	7 PM MDT Tuesday

...FLASH_FLOOD_WATCH_IN_EFFECT_FROM_1_PM_THIS_AFTERNOON_TO_7_PM_MDT_THIS_EVENING...

5.2 Event Beginning Date/Time is within three hours of the product issuance time and the Event Ending Date/Time is within the first 12 hour period. Follow headline requirements for other long duration warnings and advisories (Section 2) - i.e., use a explicit time in the Event Ending Date/Time.

Example: Coastal Flood Watch

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
8 AM CDT Tuesday	10 AM CDT Tuesday	7 PM CDT Tuesday

...COASTAL_FLOOD_WATCH_IN_EFFECT_UNTIL_7_PM_CDT_THIS_EVENING...

5.3 Event Beginning Date/Time is at least three hours after the product issuance time, but is within the first 12 hour period, and the Event Ending Date/Time is outside the first 12 hour period. Use a hybrid of headline requirements for long duration warnings and advisories (Section 2) and long duration watches (Section 4) - i.e., use a explicit time in the Event Beginning Date/Time with the time zone appended, but use a general time phrase in the Event Ending Date/Time.

Example: Flood Watch

<u>Product Issuance Time</u>	<u>Event Beginning Time</u>	<u>Event Ending Time</u>
8 AM EST Tuesday	2 PM EST Tuesday	8 AM EST Wednesday
. . . FLOOD_WATCH_IN_EFFECT_FROM_2_PM_EST_THIS_AFTERNOON_THROUGH_WEDNESDAY_MORNING . . .		

6. Editing Long Duration W/W/A Headlines. When standardized headline wording was first implemented, the headline text was “locked”; i.e., the text of the headline was not editable from within the product generation and editing software. Because of the complicated nature of NWS long duration W/W/A products, it was soon discovered that the software occasionally produces confusing or inaccurate headlines. Forecasters are now permitted (with Regional Office approval) to fix some of the confusing wording, inconsistencies, and errors. The subsections below serve to provide guidance to forecasters on when editing of the headline is appropriate and when it is not. The overall goal of unlocking long duration headlines is to provide users with clear, concise information in a consistent format.

NWS Regional Office Meteorological Services Divisions (MSD) or equivalents will play an active role in determining whether WFOs in their Region will have the option to turn off the software defaults and allow the optional headline editing mode. Unlocking long duration W/W/A headlines is not a free license to change headline language and format to personal preferences; the established headline policy set in Sections 1 through 5 above and in Regional supplements to this directive remain in effect. Forecasters or WFOs who repeatedly misuse headline editing will lose the option of editing.

A vast majority of the long duration W/W/A headlines automatically produced by the software should NOT need editing. Further, many problems found in bad headlines have their roots in the creation of the underlying hazard grids. Forecasters should ensure their hazard grids are accurate and reflect their intent before any headline is edited. Before attempting to edit the headline, all attempts should be made to fix the grids first. This ensures the proper VTEC coding will appear throughout the life of the event, as an edited headline does not carry forward to future products.

Forecasters will also be aware that:

- VTEC code may **not** be edited at any time
- The MND header and UGC strings may **not** be edited at any time

The following sections detail the types of situations where headline editing is allowed. Please refer questions to Regional MSD (or equivalent) if situations not covered in this policy are encountered.

6.1 Upgrade/Downgrade Situations.

6.1.1 Upgrades. Upgrades (as defined in NWSI 10-1703 Section 2.1.2) occur when: a watch is replaced by an advisory or warning; an advisory is replaced by a warning; or a marine or tropical hazard with discrete wind criteria is replaced by another marine or tropical hazard with the same significance level (see NWSI 10-1703 Section 2.1.5) but higher discrete wind criteria.

In some upgrade cases, two headlines are produced. One will state that a cancellation has occurred. At a minimum, forecasters should delete the "cancelled" headline, and may then use "upgraded" wording as shown below:

```
... <hazard name>_UPGRADED_TO_<hazard name>...IN_EFFECT_(FROM_<beginning valid
time>)_UNTIL/THROUGH_<ending valid time>...
```

6.1.2 Downgrades and Replacements. Downgrades (as defined in NWSI 10-1703 Section 2.1.2) occur when either: a warning is changed to an advisory; or a marine or tropical hazard with discrete wind criteria is replaced by another marine or tropical hazard with the same significance level but lower discrete wind criteria. Replacements (also as defined in NWSI 10-1703 Section 2.1.2) occur when a hazard is replaced by a related hazard (without discrete wind criteria) with the same significance level.

In some downgrade and replacement cases, two headlines are produced. As with upgrades, any headline signaling that a hazard has been cancelled should be removed; and a "replaced by" headline should be used:

```
... <hazard name>_REPLACED_BY_<hazard name>...IN_EFFECT_(FROM_<beginning valid
time>)_UNTIL/THROUGH_<ending valid time>...
```

6.1.3 Upgrade, Downgrade, and Replacement Examples.

```
...WINTER_WEATHER_ADVISORY_UPGRADED_TO_WINTER_STORM_WARNING...IN_EFFECT_
UNTIL_3_AM_MST_FRIDAY...
```

```
...HIGH_WIND_WARNING_REPLACED_BY_WIND_ADVISORY...IN_EFFECT_UNTIL_7_PM_
MST_THIS_EVENING...
```

```
...WINTER_STORM_WARNING_REPLACED_BY_BLIZZARD_WARNING...IN_EFFECT_FROM_2_
PM_THIS_AFTERNOON_UNTIL_2_AM_PST_TUESDAY...
```

6.2 Corrections and Late Extensions. In the event that errors in W/W/A timing occur, or if hazards are not extended in time before they expire, the resulting corrective actions will often cause the software to generate two headlines (one for the cancellation or expiration, and one for the "new" hazard) that cannot be changed in a way that makes sense to those reading the product. When these situations occur, the forecaster should delete the cancellation/expiration headline. The VTEC strings associated with both hazards, however, will remain. Here are two examples:

- a. Dense fog advisory mistakenly issued for the wrong time period 24 hours in the future, and then corrected:

```
...DENSE_FOG_ADVISORY_CANCELLED...
...DENSE_FOG_ADVISORY_IN_EFFECT_FROM_11_PM_TONIGHT_UNTIL_9_AM_CST_
WEDNESDAY...
```

In this case, the first headline (for the cancellation) should be deleted.

- b. Dense Fog Advisory extended just after the original expiration time:

```
...DENSE_FOG_ADVISORY_IN_EFFECT_UNTIL_10_AM_PST_THIS_MORNING...  
...DENSE_FOG_ADVISORY_HAS_EXPIRED...
```

In this case, the second headline (for the expiration) should be deleted.

6.3 Placement of Elevation/Location in Headline. When long duration hazards are expected to affect only portions of a zone (such as a particular area[s] or above, below, or between certain elevations), the location and/or elevation range may be added to the headline immediately following the hazard instead of at the end of the headline. This is often more clear and makes more sense to the reader. Here are a few examples:

```
...WINTER_STORM_WARNING_ABOVE_4000_FEET_UNTIL_5_PM_MST_THIS_AFTERNOON...  
...LAKE_WIND_ADVISORY_FOR_LAKE_TAHOE_IN_EFFECT_FROM_10_AM_UNTIL_7_PM_PDT_THIS_EVENING...
```

6.4 Marine - Reduce Number of Headlines. There are two common situations where unnecessary headlines can be eliminated in marine products: when wind and/or sea conditions are ramping up and back down during the forecast period; and when forecasting Small Craft Advisory conditions.

6.4.1 Ramping Up and Down. During major weather events affecting marine areas, the ramping up and down of wind and/or sea conditions (e.g., from Small Craft Advisory to Gale Warning to Storm Warning and back) can generate multiple headlines. Marine warnings and advisories are only mandated in the first 12-hour forecast period. In most situations, the forecaster can leave off the hazards after the upgrade or the most severe hazard.

For example, in a Coastal Waters Forecast, instead of:

```
...SMALL_CRAFT_ADVISORY_IN_EFFECT_UNTIL_1_PM_EST_THIS_AFTERNOON...  
...GALE_WARNING_IN_EFFECT_FROM_1_PM_EST_THIS_AFTERNOON_THROUGH_THIS_EVENING...  
...SMALL_CRAFT_ADVISORY_NOW_IN_EFFECT_FROM_THIS_EVENING_THROUGH_FRIDAY_MORNING...
```

it should be sufficient to use:

```
...SMALL_CRAFT_ADVISORY_IN_EFFECT_UNTIL_1_PM_EST_THIS_AFTERNOON...  
...GALE_WARNING_IN_EFFECT_FROM_1_PM_EST_THIS_AFTERNOON_THROUGH_THIS_EVENING...
```

6.4.2 Small Craft Advisories. There are four types of Small Craft Advisories that can be used in the CWF, NSH, or MWW. The only nationally mandated one is the generic Small Craft Advisory. Use of the other optional varieties of Small Craft Advisory (for Hazardous Seas, for Hazardous Winds, and for Rough Bar) is left to forecaster discretion. Forecasters should only use one type of Small Craft Advisory in a forecast segment unless they are reasonably sure of user understanding. Use of two or more types of Small Craft Advisory in combination with more severe marine warnings (e.g. Gale Warning) is especially discouraged.

For example, in a Marine Weather Message (MWW) product, instead of:

```
...SMALL_CRAFT_ADVISORY_FOR_WINDS_REMAINS_IN_EFFECT_FROM_7_AM_THIS
MORNING_THROUGH_7_PM_EST_THIS_EVENING...
...SMALL_CRAFT_ADVISORY_FOR_HAZARDOUS_SEAS_REMAINS_IN_EFFECT_FROM_7_AM
THROUGH_7_PM_EST_THIS_EVENING...
...GALE_WATCH_REMAINS_IN_EFFECT_FROM_4_PM_THURSDAY_AFTERNOON_THROUGH_7
PM_EST_FRIDAY_EVENING...
```

it should be sufficient to use:

```
...SMALL_CRAFT_ADVISORY_REMAINS_IN_EFFECT_FROM_7_AM_THIS_MORNING
THROUGH_7_PM_EST_THIS_EVENING...
...GALE_WATCH_REMAINS_IN_EFFECT_FROM_4_PM_THURSDAY_AFTERNOON_THROUGH_7
PM_EST_FRIDAY_EVENING...
```

6.5 Fire Weather Headlines. Where desired, Fire Weather Watch and Red Flag Warning headlines may be altered to include the reason for the watch or warning and/or the area affected within the main portion of the headline, instead of appended to the end. Here is an example:

```
...RED_FLAG_WARNING_FOR_STRONG_WIND_AND_LOW_HUMIDITY_IN_EFFECT_FOR_
THE_SAN_BERNARDINO_MOUNTAINS_FROM_9_AM_THIS_MORNING_UNTIL_8_PM_PDT_
TONIGHT...
```

6.6 Flood Watch Issues. In cases where areal Flood Warnings have been issued for an area covered by an areal Flood Watch, and the WFO wishes to remove the now-unnecessary watch, the software generates a cancellation message without any mention of the warning(s), since they appear in separate product(s). Forecasters are encouraged to remove the cancellation headline and replace it with a statement that warnings are in effect. Also, in the event multiple areal and point flood watches are in effect and one is cancelled, the resultant multiple headlines are confusing. Again, forecasters should remove the "cancelled" headline when appropriate.

6.7 Duplicate Headlines. In cases where the software erroneously produces duplicate headlines (and VTEC) for the same hazard, one of the headlines should be deleted.

6.8 Timing Changes. In some cases, changing the valid time of a hazard can create confusing multiple headlines. For example, if a forecaster changes the valid times in a case where a Wind Advisory follows a High Wind Warning, and both are valid within the first three hours after issuance, two headlines will be generated implying that both hazards are in effect simultaneously. For example:

```
...HIGH_WIND_WARNING_IN_EFFECT_UNTIL_1_PM_PST_THIS_AFTERNOON...
...WIND_ADVISORY_NOW_IN_EFFECT_UNTIL_6_PM_PST_THIS_AFTERNOON...
```

Generally speaking, whenever the three hour "now in effect" rule causes confusing headlines, forecasters should edit them to make them clear to the reader. Oftentimes, it is easiest to edit the future event to show the explicit beginning time. For the example above:

```
...HIGH_WIND_WARNING_IN_EFFECT_UNTIL_1_PM_PST_THIS_AFTERNOON...
...WIND_ADVISORY_IN_EFFECT_FROM_1_PM_UNTIL_6_PM_PST_THIS_AFTERNOON...
```

6.9 Midnight/Noon Issues. In some cases, the software will use the times 12_AM or 12_PM in headlines instead of MIDNIGHT or NOON. For clarity, forecasters should edit the headlines to change the explicit time to the proper day word or phrase.

6.10 Order of Headlines. In cases where the software creates multiple headlines in order of event significance level rather than in chronological order, the forecaster may rearrange the order of headlines so the first headline relates to the first expected hazard, the second headline relates to the second, etc.

6.11 Statements and Short Term Forecasts. In addition to the Watch, Warning, and Advisory products covered in this appendix, Special Weather Statements (SPS) and Short Term Forecasts (NOW) may also be given multiple headlines. The forecaster may edit/delete them as necessary to create a more clear and readable product.

In cases where grammatical or spelling errors are inadvertently issued to the public in certain statements, the software may repeat the error in subsequent products. The forecaster should edit the headline to correct errors when updating the product.

APPENDIX B - Completed Examples

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1. **Introduction.** The following completed examples are representative of the typical format blocks (but generally without specific text) of a majority of products, as discussed in the main body of this document. Not all variations of formats, however, can be shown in this appendix. See appropriate Product Specification documents for details on how formats, text and certain codes are handled in individual product classes.

The product format structure comes in two basic versions, i.e., non-segmented and segmented. The UGC string, as well as any associated VTEC string(s), and certain other (parts of) format blocks, are placed in different locations in each. The UGC and VTEC strings are shown in each of the examples.

The following apply to all of the examples below:

- Text (narrative and any data) is a subset of the Product Content Block. See definitions in Section 5 of the main body of this document.
- Required spaces between characters are identified by an underscore (_) in all examples.
- The **\$\$** always ends a non-segmented product, even if the UGC is not used; and each segment in a segmented product.
- An information key describing each line follows each example.

2. **Non-Segmented Examples.** Examples 1, 2 and 3 show non-segmented products.

2.1 **Example 1: Non-segmented routine product.** It could be either with (or without) UGC and optional **&&**. Note the UGC string (line 4), when used, occurs immediately after the AWIPS Product Identifier (lines 1 to 3) in a non-segmented product. A non-segmented product without the UGC would follow the same format, except that the UGC would be eliminated and line 5 (blank line) would move up to line 4, and so on.

```

1)  ##      (not visible on AWIPS)
2)  FPUS63_KDMX_112101
3)  SFPIA
4)  IAZ001>099-121115-
5)
6)  STATE FORECAST FOR IOWA
7)  NATIONAL WEATHER SERVICE DES MOINES IA
8)  402 PM CDT WED JUN 11 2008
9)
10) ...HEADLINE(S)...
11)
12) <text>
13)
14) &&
15)
16) <text continues>
17)
18) $$
19)
20) XYZ
21) **      (not visible on AWIPS)

```

Information Key (for Example 1):

- 1) **##** Communications Start-of-Message Code (Lines 1 to 3 are collectively the AWIPS Product Identifier)
- 2) WMO Abbreviated Heading
- 3) AWIPS Identifier - AI
- 4) UGC String
- 5) blank line
- 6) Product Type Line (lines 6 to 8 collectively are the MND Block)
- 7) Issuing Office Line
- 8) Issuance Date/Time Line
- 9) blank line
- 10) **...HEADLINE(S)...** (lines 4 and 10 to 18 collectively are the Content Block)
- 11) blank line
- 12) Text (typically multiple lines)
- 13) blank line
- 14) **&&** (optional separator of information)
- 15) blank line
- 16) Text (typically multiple lines, continues)
- 17) blank line
- 18) **\$\$** ends the product
- 19) blank line (optional)
- 20) Forecaster ID (optional - see Product Specifications)
- 21) ****** Communications End-of Message Code

2.2 **Example 2: Non-segmented warning product.** It contains UGC (line 4), VTEC (line 5), broadcast instruction (line 7), and issuing office (line 10). Note that this product will use the bullet format, and includes Call-to-Action (CTA) markers (lines 15 and 19), Lat/Lon information (lines 21 and 22) and storm location and motion information (line 23) to conclude the content block. These occur before the **\$\$** (line 25).

```

1)  ##      (not visible on AWIPS)
2)  WUUS53_KILX_041851

```

NWSI 10-1701, NOVEMBER 11, 2010

3) SVRILX
4) ILC035-049-079-041915-
5) /O.NEW.KILX.SV.W.0121.080604T1851Z-080604T1915Z/
6)
7) BULLETIN - EAS ACTIVATION REQUESTED
8) SEVERE THUNDERSTORM WARNING
9) NATIONAL WEATHER SERVICE LINCOLN_IL
10) ISSUED BY NATIONAL WEATHER SERVICE CHICAGO/ROMEOVILLE_IL
11) 151 PM CDT WED JUN 4 2008
12)
13) <text>
14)
15) PRECAUTIONARY/PREPAREDNESS ACTIONS...
16)
17) <text>
18)
19) &&
20)
21) LAT...LON_3894_8801_3903_8865_3921_8870_3922_8865
22) _____3922_8864_3922_8848_3928_8847_3938_8810
23) TIME...MOT...LOC_1851Z_257DEG_45KT_3914_8855
24)
25) \$\$
26)
27) XYZ
28) ** (not visible on AWIPS)

Information Key (for Example 2)

- 1) ## Communications Start-of-Message Code (Lines 1 to 3 collectively are the AWIPS Product Identifier)
- 2) WMO Abbreviated Heading
- 3) AWIPS Identifier
- 4) UGC String
- 5) P-VTEC String
- 6) blank line
- 7) Broadcast Instruction Line (Lines 7 to 11 are collectively the MND Block)
- 8) Product Type Line
- 9) Primary Office Line
- 10) Issuing Office Line
- 11) Issuance Date/Time Line
- 12) blank line
- 13) Text (typically multiple lines - uses asterisks [*] in bullet format for this short duration warning) (Lines 4 to 5 and 13 to 19 collectively are the Content Block)
- 14) blank line
- 15) PRECAUTIONARY/PREPAREDNESS ACTIONS... (beginning call-to-action marker)
- 16) blank line
- 17) Call-to-Action Text (typically multiple lines)
- 18) blank line
- 19) && (ending call-to-action marker)
- 20) blank line
- 21-22) Lat/Lon (perimeter points that describe the affected area)
- 23) Time/Mot/Loc (identifies location and movement of storm at issuance time)
- 24) blank line
- 25) \$\$ ends the product
- 26) blank line

- 27) Forecaster ID (optional - see Product Specifications)
- 28) ** Communications End-of Message Code

2.3 **Example 3: TEST non-segmented warning product.** This example includes the actual text in it, to show how the test wording (discussed in Section 7.1 in the main body of this document) would appear. It contains UGC (line 4), VTEC (lines 5 and 6) and broadcast instruction (line 8). Note that this product will use the bullet format, and includes Lat/Lon (line 41 - in this case, the actual perimeter points that describe the affected area) to conclude the content block. The Lat/Lon and a blank line (line 42) occur before the \$\$ (line 43). See NWSI 10-922, *Weather Forecast Office Hydrologic Products Specification*, for information on the inclusion of VTEC strings in hydrologic products.

```

1)  ##      (not visible on AWIPS)
2)  WGUS56_KOTX_141831
3)  FFWOTX
4)  WAC043-141900-
5)  /T.NEW.KOTX.FF.W.0002.070914T1831Z-070914T1900Z/
6)  /00000.U.GO.000000T0000Z.000000T0000Z.000000T0000Z.OO/
7)
8)  BULLETIN - EAS ACTIVATION REQUESTED
9)  TEST...FLASH FLOOD WARNING...TEST
10) NATIONAL WEATHER SERVICE SPOKANE WA
11) 1131 AM PDT FRI SEP 14 2007
12)
13) ...THIS MESSAGE IS FOR TEST PURPOSES ONLY...
14)
15) THE NATIONAL WEATHER SERVICE IN SPOKANE HAS ISSUED A
16)
17) * TEST FLASH FLOOD WARNING FOR A GLACIAL LAKE DAM OUTBURST IN...
18)  CENTRAL LINCOLN COUNTY IN EAST CENTRAL WASHINGTON...
19)
20) * UNTIL NOON PDT
21)
22) * THIS IS A TEST MESSAGE. AT 1131 AM PDT...A GLACIER AT
23)  DAVENPORT HAS MELTED...RELEASING LARGE QUANTITIES OF IMPOUNDED
24)  WATER AND CAUSING FLASH FLOODING.
25)
26) * THIS IS A TEST MESSAGE. AFFECTED LOCATIONS INCLUDE DAVENPORT.
27)
28) PRECAUTIONARY/PREPAREDNESS ACTIONS...
29)
30) THIS IS A TEST MESSAGE. MOST FLOOD DEATHS OCCUR IN AUTOMOBILES.
31) NEVER DRIVE YOUR VEHICLE INTO AREAS WHERE THE WATER COVERS THE
32) ROADWAY. FLOOD WATERS ARE USUALLY DEEPER THAN THEY APPEAR. JUST
33) ONE FOOT OF FLOWING WATER IS POWERFUL ENOUGH TO SWEEP VEHICLES
34) OFF THE ROAD. WHEN ENCOUNTERING FLOODED ROADS MAKE THE SMART
35) CHOICE...TURN AROUND...DON'T DROWN.
36)
37) &&
38)
39) THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS MESSAGE.
40)
41) LAT...LON_4771_11790_4733_11790_4733_11846_4771_11846
42)
43) $$

```

44) ** (not visible on AWIPS)

Information Key (for Example 3):

- 1) ## Communications Start-of-Message Code (lines 1 to 3 collectively are the AWIPS Product Identifier)
- 2) WMO Abbreviated Heading
- 3) AWIPS Identifier
- 4) UGC String
- 5-6) VTEC Strings
- 7) blank line
- 8) Broadcast Instruction Line (lines 8 to 11 collectively are the MND Block)
- 9) Product Type Line (Note use of TEST both before and after the actual product type name).
- 10) Issuing Office Line
- 11) Issuance Date/Time Line
- 12) blank line
- 13-39) Text (Note use of * in bullet format, test language, and appropriate blank lines.) Lines 4 to 6 and 13 to 41 collectively are the Content Block. Lines 28 and 37 are the Call-to-Action markers.
- 40) blank line
- 41) Lat/Lon (perimeter points that describe the affected area)
- 42) blank line
- 43) \$\$ ends the product
- 44) ** Communications End-of-Message Code

3. Segmented Product Examples. Examples 4, 5 and 6 show segmented products. Note that when plain language geographic names are used, two-letter state IDs may be included with each name for added clarity (see Section 3.7 in the main body of this document as well as Example 6 below).

3.1 Example 4: Segmented routine product. It contains plain language geographical names, uses an additional term (UPDATED) at end of Product Type Line (line 5), uses an associated “BBB” field in WMO abbreviated heading (line 2), and a “reason for update” line in each segment (lines 14 and 25).

- 1) ## (not visible on AWIPS)
- 2) **FPUS53_KARX_200233_AAA**
- 3) **ZFPARX**
- 4)
- 5) **ZONE_FORECASTS...UPDATED**
- 6) **NATIONAL_WEATHER_SERVICE_LA_CROSSE_WI**
- 7) **933_PM_CDT_FRI_SEP_19_2008**
- 8)
- 9) **MNZ086-087-094-095-200915-**
- 10) **DODGE-OLMSTED-MOWER-FILLMORE-**
- 11) **INCLUDING_THE_CITIES_OF...ROCHESTER...AUSTIN**
- 12) **933_PM_CDT_FRI_SEP_19_2008**
- 13)
- 14) **UPDATED_RAIN_WORDING_AND_WINDS_TONIGHT**
- 15)
- 16) *<text>*
- 17)
- 18) **\$\$**
- 19)
- 20) **IAZ008>010-018-019-029-200915-**

```

21) MITCHELL-HOWARD-WINNESHIEK-FLOYD-CHICKASAW-FAYETTE-
22) INCLUDING_THE_CITIES_OF...DECORAH...CHARLES_CITY...OELWEIN
23) 933_PM_CDT_FRI_SEP_19_2008
24)
25) UPDATED_WINDS_TONIGHT
26)
27) <text>
28)
29) $$
30)

```

(Other segments may follow. Last segment ends with \$\$, followed by a blank line, an optional forecaster ID and **. See the other examples in this Appendix for the typical ending of products.)

Information Key (for Example 4)

- 1) ## Communications Start-of-Message Code (Lines 1 to 3 are collectively the AWIPS Product Identifier)
- 2) WMO Abbreviated Heading (with required “BBB” field. AAA = first update)
- 3) AWIPS Identifier
- 4) Blank Line
- 5) Product Type Line (includes . . . UPDATED) (Lines 5 to 7 are the MND Block)
- 6) Issuing Office Line
- 7) Issuing Date/Time Line
- 8) Blank Line
- 9) UGC String (Lines 9 to 30 [and beyond, if additional segments are included] collectively are the Content Block)
- 10) Plain Language Geographic Names
- 11) “Including The Cities Of” Line
- 12) Issuing Date/Time Line (repeated for each segment)
- 13) Blank Line
- 14) “Reason For Update” Line
- 15) Blank Line
- 16) Text (typically multiple lines)
- 17) Blank Line
- 18) \$\$ ends the segment
- 19) Blank Line
- 20) UGC String
- 21) Plain Language Geographic Names
- 22) “Including The Cities Of” Line
- 23) Issuing Date/Time Line (repeated for each segment)
- 24) Blank Line
- 25) “Reason For Update” Line
- 26) Blank Line
- 27) Text (typically multiple line)
- 28) Blank Line
- 29) \$\$ ends the segment
- 30) Blank Line

3.2 **Example 5: Segmented long duration warning product.** It uses a special MND header, i.e., the Broadcast Instruction Line and Product Type Line are combined into a generic line (line 5). The example includes plain language geographical names (lines 13 and 25 to 26), uses an

additional term (CORRECTED) at end of “Combined” Product Type Line (line 5), uses an associated “BBB” field in the WMO abbreviated heading (line 2), and has a “reason for correction” line in the corrected segment (lines 29 and 30).

```

1)  ##      (not visible on AWIPS)
2)  WWUS76_KSGX_192312_CCA
3)  NPWSGX
4)
5)  URGENT - WEATHER MESSAGE...CORRECTED
6)  NATIONAL WEATHER SERVICE SAN DIEGO CA
7)  406 PM PDT THU JUN 19 2008
8)
9)  <optional headline and/or overview text>
10)
11) CAZ061-062-201330-
12) /O.NEW.KSGX.EH.W.0001.080620T1700Z-080621T0300Z/
13) COACHELLA VALLEY-SAN DIEGO COUNTY DESERTS-
14) 406 PM PDT THU JUN 19 2008
15)
16) ...EXCESSIVE HEAT WARNING IN EFFECT FROM 10 AM TO 8 PM PDT
17) FRIDAY...
18)
19) <text>
20)
21) $$
22)
23) CAZ048-050-201330-
24) /O.COR.KSGX.EH.W.0001.080620T1800Z-080621T0300Z/
25) SAN BERNARDINO AND RIVERSIDE COUNTY VALLEYS-THE INLAND EMPIRE-
26) SAN DIEGO COUNTY VALLEYS-
27) 406 PM PDT THU JUN 19 2008
28)
29) CORRECTED TO ADD A HIGH TEMPERATURE FORECAST FOR THE SAN DIEGO
30) VALLEYS.
31)
32) ...EXCESSIVE HEAT WARNING IN EFFECT FROM 11 AM TO 8 PM PDT
33) FRIDAY...
34)
35) <text>
36)
37) $$
38)
39) **

```

Information Key (for Example 5)

- 1) ## Communications Start-of-Message Code (Lines 1 to 3 are collectively the AWIPS Product Identifier)
- 2) WMO Abbreviated Heading (includes the “BBB” field, where CCB = 2nd correction)
- 3) AWIPS Identifier
- 4) Blank Line
- 5) Special Broadcast Instruction/Product Type Line (includes . . . CORRECTED) (Lines 5-7 collectively are the MND Block)
- 6) Issuing Office Line
- 7) Issuance Date/Time Line
- 8) Blank Line

- 9) Text of Product Headline(s) and/or Overview (both optional, and may be multiple lines)
- 10) Blank Line
- 11) UGC String
- 12) VTEC String
- 13) Plain Language Geographic Names
- 14) Issuance Date/Time Line (repeated for each segment)
- 15) Blank Line
- 16-17) ...Headline...
- 18) Blank Line
- 19) Text (typically multiple lines)
- 20) Blank Line
- 21) \$\$ ends the segment
- 22) Blank Line
- 23) UGC String (begins new segment)
- 24) VTEC String
- 25-26) Plain Language Geographic Names
- 27) Issuance Date/Time Line (repeated for each segment)
- 28) Blank Line
- 29-30) "Reason for Corrected" Lines (occurs before any headline or text for each segment)
- 31) Blank Line
- 32-33) ...Headline...
- 34) Blank Line
- 35) Text (typically multiple lines)
- 36) Blank Line
- 37) \$\$ ends the segment
- 38) Blank line
- 39) ** Communications End-of-Message Code

3.3 **Example 6: Segmented short duration warning follow-up product.** This short duration warning follow-up product is in a segmented format, with the UGC (line 9), VTEC (line 10), plain language geographic name (line 11), and a repeat of the issuance date-time line (line 12) occurring after the MND block (lines 5 to 7). Note that although this particular product contains only one segment, it is prepared in a segmented format as are all products of this type.

```

1)  ##      (not visible on AWIPS)
2)  WWUS53_KIWX_152137
3)  SVSIWX
4)
5)  SEVERE WEATHER STATEMENT
6)  NATIONAL WEATHER SERVICE NORTHERN INDIANA
7)  537 PM EDT WED OCT 15 2008
8)
9)  INC183-152147-
10) /O.EXP.KIWX.SV.W.0158.000000T0000Z-081015T2145Z/
11) WHITLEY_IN-
12) 537 PM EDT WED OCT 15 2008
13)
14) ...THE SEVERE THUNDERSTORM WARNING FOR EASTERN WHITLEY COUNTY_
15) WILL EXPIRE AT 545 PM EDT /445 PM CDT/...
16)
17) <text>
18)
19) LAT...LON 4102_8556_4103_8555_4119_8555_4128_8534
20) _____4125_8532_4122_8532_4120_8532_4119_8534
21) _____4104_8534_4101_8562

```

22) **TIME...MOT...LOC_2137Z_251DEG_44KT_4122_8502**
23)
24) **\$\$**
25)
26) ****** (not visible on AWIPS)

Information Key (for Example 6):

- 1) ## Communications Start-of-Message Code (lines 1 to 3 collectively are the AWIPS Product Identifier)
- 2) WMO Abbreviated Heading
- 3) AWIPS Identifier
- 4) Blank Line
- 5) Product Type Line
- 6) Issuing Office Line
- 7) Issuance Date/Time Line
- 8) Blank Line
- 9) UGC String (begins product segment)
- 10) VTEC String
- 11) Plain Language Geographic Name
- 12) Issuance Date/Time Line (repeated for each segment)
- 13) Blank Line
- 14-15) Headline, with multiple time zones included
- 16) Blank Line
- 17) Text (typically multi-lines)
- 18) Blank Line
- 19-21) Lat/Lon information
- 22) Time, Motion, and Location information
- 23) Blank Line
- 24) \$\$ ends the segment, and in this case the product
- 25) Blank Line
- 26) ** Communications End-of-Message Code