NOUS41 KWBC 011905 CCA
PNSWSH

Technical Implementation Notice 12-26 Corrected
National Weather Service Headquarters Washington DC
305 PM EDT Mon Oct 1 2012

To: Subscribers:
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         -NOAA Weather Wire Service
         -Emergency Managers Weather Information Network
         -NOAAPort
         Other NWS Partners, Users and Employees

From: Kevin Schrab
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Subject: Corrected: 2012 Dates for Termination of Automated
Radiotheodolite Tracking (ART) and Radio Direction Finding Radiosondes
(RDF) with Installation of Radiosonde Replacement Systems (RRS)

Corrected to include the code 045208 established for the new radiosonde in
service at these three sites.

Three Upper Air (UA) sites are scheduled to begin RRS service in the next
four months in 2012:

Station Name   WMO #   STN ID   RRS Start On/About
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Caribou, ME   72712   KCAR   June 15, 2012
Guam   91212   PGUM   July 26, 2012
Barrow, AK   70026   PABR   August 30, 2012

The NWS UA observations will gather meteorological data from Global
Positioning System (GPS) radiosondes of a new type: the Vaisala RS92-NGP.
The assigned equipment code is 045208. The leading 04 indicates a
correction is applied for solar and infrared exposure. The 08 suffix
indicates automatic satellite navigation. This code appears immediately
after the heading 31313 in the TTAA, TTBB, TTCC and TTDD messages.

The NWS describes the RRS release point location with the National
Geodetic Survey (NGS) Online Positioning User Service (OPUS) solution.
This is a datum combination that relies on North American Datum of 1983
(NAD83) for latitude and longitude, whereas the release point elevation is
based on North American Vertical Datum 1988 (NAVD88) with the GEOID03
model. By contrast, the GPS radiosonde flight information of latitude and
longitude and altitude will rely on the world geodetic system of 1984
(WGS84) standard.

Parts of the UA coded messages will be significantly longer with RRS
conversion. NWS has coordinated with its partners on the longer length of
these messages.

The format of the messages will be the same World Meteorological
Organization (WMO) format for coded UA messages used with the MicroArt
legacy system. The number of levels in the coded messages will be two to
three times greater for the TTBB and TTDD. As a result, two categories of
Advanced Weather Interactive Processing System (AWIPS) text products will
increase in size: SGL and ABV. The number of levels in the TTAA, TTCC,
PPBB and PPDD parts will be relatively unchanged. These changes reflect
updated coding practices and higher resolution level selection criteria.
The maximum size limits of the parts of the coded messages are as follows:

TTAA: 15 Levels
TTCC: 10 Levels
TTBB: 135 Levels
TTDD: 40 Levels
PPBB: 40 Levels
PPDD: 40 Levels

In addition, the 31313 message indicator associated with various parts of
the message will be included with each part of the thermodynamic message
parts.

For additional information on the message requirements, please see the WMO
306 Manual on Codes (International Codes): Volume I.1 Part A –
Alphanumeric Codes, and Volume II, Regional Codes and National Coding
Practices. Users can find information on the levels selection criteria
used in NWS coding software online at:

http://www.ua.nws.noaa.gov

If you have questions or feedback, please contact:

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National Technical Implementation notices are online at:

https://www.weather.gov/notification/archive

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