

NOUS41 KWBC 111712
PNSWSH

Technical Implementation Notice 12-26
National Weather Service Headquarters Washington DC
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TO: Subscribers:
-Family of Services
-NOAA Weather Wire Service
-Emergency Managers Weather Information Network
Other NWS Partners and Employees

FROM: Kevin Schrab
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Office of Climate, Water, and Weather Services

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

Three Upper Air (UA) sites are scheduled to begin RRS service in
the next 3 months in 2012.

STATION NAME	WMO #	STN ID	RRS START ON/ABOUT
CARIBOU	72712	KCAR	15 June 2012
GUAM	91212	PGUM	26 July 2012
BARROW	70026	PABR	30 Aug 2012

NWS UA observations will be gathering meteorological data from a
new type of Global Positioning System (GPS) radiosondes, the
Vaisala RS92-NGP.

NWS describes the RRS release point location with the National
Geodetic Survey (NGS) OPUS solution. This is a datum combination
that relies on North American Datum 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 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 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 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, each part of the thermodynamic message parts will include the 31313 message indicator associated with various parts of the message.

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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NWS National Technical Implementation notices are online:

<http://www.weather.gov/os/notif.htm>

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