

NOUS41 KWBC 072100
PNSWSH

Technical Implementation Notice 11-04
National Weather Service Headquarters Washington DC
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To: Subscribers:
 -Family of Services
 -NOAA Weather Wire Service
 -Emergency Managers Weather Information Network
 -NOAAPort
 Other NWS Partners, Users and Employees

From: Kevin Schrab
 Chief, Observing Services Division
 Office of Climate, Water and Weather Services

Subject: Second Quarter 2011 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 receive RRS Upgrades in the
next 2 months in 2011:

Station Name	WMO #	STN ID	Outage Dates
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Pago Pago	91765	NSTU	February 8, 2011
Koror	91408	PTRO	March 9, 2011
Yap	91413	PTYA	March 20, 2011

These UA sites may be out of service for as long as 10 days. When the NWS
UA observations resume, the RRS will be gathering meteorological data from
Global Positioning System (GPS) radiosondes.

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>

Although the effective date for this notice is less than the 30-days advised in NWS Instruction 10-1805, this notice will be sufficient to inform users of the UA service outage at Pago Pago in American Samoa. This site is managed by a Weather Service Office that is staffed 24-hours a day and the outage during typhoon season is considered low risk.

If you have questions or feedback, please contact:

Ivan Navarro
Engineering and Acquisition Branch
National Weather Service
Silver Spring, MD
301-713-1841, Ext. 123
ivan.navarro@noaa.gov

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