NOUS41 KWBC 211159 CCA
PNSWSH

Technical Implementation Notice 13-14, Corrected
National Weather Service Headquarters Washington DC
758 AM EDT Jun 21 2013

TO: Subscribers:
-Family of Services
-NOAA Weather Wire Service
-Emergency Managers Weather Information Network
-NOAAPORT
Other NWS Partners and Employees

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

SUBJECT: Corrected: August 20, 2013, the first of three Alaska Upper Air Sites will Terminate its Automated Radiotheodolite Tracking (ART) and Radio Direction Finding Radiosondes (RDF) upon Installation of the Radiosonde Replacement System (RRS)

Corrected for proper WMO Numbers for McGrath and Cold Bay and to increment TIN to 13-14.

Three Upper Air (UA) sites in Alaska are scheduled to begin RRS service on or after August 20, 2013.

STATION NAME	WMO #	STN ID	RRS START ON/ABOUT
KOTZEBUE	70133	PAOT	20 Aug 2013
MCGRATH	70231	PAMC	30 Aug 2013
COLD BAY	70316	PACD	24 Sep 2013

These UA sites may be out of service for as long as 10 days. The NWS UA observations will gather meteorological data from Global Positioning System (GPS) radiosondes of a new type, the LMS-6. The assigned equipment code is 48208. The leading 4 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) 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 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 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:

Neal Dipasquale
Acting Director, Field Systems Operations Center (OPS21)
National Weather Service
Silver Spring, Maryland 20910
301-713-0039 Ext. 155
Neal.Dipasquale@noaa.gov

NWS National Technical Implementation notices are online at:

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

$$