NOUS41 KWBC 022015 PNSWSH

Technical Implementation Notice 12-07 National Weather Service Headquarters Washington DC 415 PM EDT Thu Feb 2 2012

To: Subscribers:

-Family of Services

-NOAA Weather Wire Service

-Emergency Managers Weather Information Network

-NOAAPort

Other NWS Partners, Users and Employees

From: Joseph Facundo

Chief, Observing Systems Branch Field Systems Operation Center

Subject: 2012 Dates for Transition from the Lockheed Martin Sippican 1680 MHz(B2) Radiosonde to the Vaisala Model RS92-D Radiosonde

From April 1 through June 30, 2012, Eight Cooperative Hurricane Upper Air Station (CHUAS) sites are scheduled to transition to the Vaisala RS92-D radiosonde. The specific sites are as follows:

| Station Name | WMO # | STN ID |
|--------------------|-------|--------|
| | | |
| Barbados | 78954 | TBPB |
| Belize | 78583 | MZBZ |
| Dominican Republic | 78486 | MDSD |
| Grand Cayman | 78384 | MWCR |
| Jamaica | 78397 | MKJP |
| San Andres | 80001 | SKSP |
| St. Maarten | 78866 | TNCM |
| Trinidad | 78970 | TTPP |
| | | |

These Upper Air sites are not expected to be out of service during this transition.

NWS is transitioning from the Lockheed Martin Sippican 1680 MHz B2 radiosonde to a Vaisala Model RS92-D radiosonde. The major changes are a change from 6-second data to 1-second data. The RS92-D also has a faster responding temperature and relative humidity sensor and is equipped with a digital 1680 MHz transmitter. The temperature sensor is a capacitive wire. The humidity sensor is a thin-film capacitor, heated twin sensor, and the RS92-D has a silicon based pressure sensor.

The format of the messages will be the same World Meteorological Organization (WMO) format for coded upper air (UA) messages used with the IMS-1500 system. The coded message 31313 group from these Vaisala RS92-D radiosondes will indicate that the temperature data is not corrected for radiation.

The vendor has provided the solar correction for the Vaisala RS92-D

radiosonde. The table is the RSN2005 radiation correction. The corrections in the table are a function of pressure and sun elevation angle. The corrections are subtracted from the measured temperature:

http://www.nws.noaa.gov/os/notification/resources/rsn.pdf

For additional information on the coded message requirements, see WMO 306 Manual on Codes (International Codes): Volume I.1 Part A - Alphanumeric Codes and Volume II Regional Codes and National Coding Practices (WMO Region IV).

If you have questions or feedback, please contact:

Jean Tomkowicz
Maintenance Branch
National Weather Service
Silver Spring, MD
301-713-0259, Ext. 133
jean.tomkowicz@noaa.gov

National Technical Implementation notices are online at:

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

\$\$ NNNN