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