# **SUNCOAST OBSERVER**

A quarterly newsletter brought to you by the National Weather Service Tampa Bay Area, FL

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#### **KTBW Radar Pedestal Replacement**



NWS Melbourne had their pedestal replaced in December.

By: Dan Noah

\*\*NWS Ruskin Radar to be Offline for Upgrade\*\*

Beginning Monday January 6 2020, the KTBW WSR-88D operated by NOAA's National Weather Service in Ruskin, Florida will be down for approximately two weeks for an important upgrade. Technicians will refurbish and replace the pedestal, one of the most critical components of the radar, which is necessary for antenna rotation and positioning to capture data in all directions. The components are extremely heavy and will require the radome to be removed by crane and replaced when the work is completed. The radar and pedestal were designed to last 25 years, and this radar has exceeded its lifespan. This activity is necessary to keep the radar functioning for another 20 years or more.

The pedestal refurbishment is the third major project of the NEXRAD Service Life Extension Program, a series of upgrades that will keep our nation's radars viable into the 2030s. NOAA's National Weather Service, the United States Air Force, and the Federal Aviation Administration are investing \$150 million in the eight-year program. The first project was the installation of the new signal processor and the second project was the refurbishment of the transmitter. The fourth project will be the refurbishment of the equipment shelters. The Service Life Extension Program will be complete in 2023.

### 20th SKYWARN Recognition Day



Our SKYWARN volunteers making contact, using VHF/ UHF and HF radios, with other NWS Offices and Hams during SKYWARN Recognition Day By: Richard Rude

We participated in the 20th SKYWARN Recognition Day on December 7th. SKYWARN Recognition Day was developed in 1999 by the National Weather Service and the American Radio Relay League to celebrate the contributions that volunteer SKYWARN radio operators make to the NWS mission, the protection of life and property.

During the event, which ran from 8 am to 7 pm, 8 SKYWARN operators visited and used our WX4TOR station to contact other amateur radio stations. A total of 108 stations were reached, in 27 states, Puerto Rico, and Ontario, Canada. The most distant stations contacted were Pendleton, OR and Oxnard CA, both are other NWS offices.

## Sharing Our Passion for Weather with the Next Generation: The Great American Teach-In

GREAT
AMERICAN
Teach-In

By: Austen Flannery

Ask any meteorologist when their passion for weather began, and they would likely tell you that it started at a young age. Maybe it was a specific weather event that peaked their interest. Perhaps it was a TV Meteorologist that always seemed to know what was going on, and delivered the information in an understandable and relatable way. For others still, it may have been a meteorologist that once visited their school and told them about the amazing science of studying the weather.

That brings us to an opportunity to spark an interest in weather amongst the next generation: The Great American Teach-In. Over the course of two weeks, four meteorologists from the National Weather Service (NWS) Tampa Bay went to five schools in three Bay Area school districts, reaching hundreds of students from K-12 to share a passion for the science of the atmosphere with those who will one day be tasked with understanding the impacts of weather, water, and climate on society.

Meteorologists love the job. Getting to share that with others is an incredible opportunity. The National Weather Service Tampa Bay Area is grateful for the continued community partnerships and opportunities to educate the public on all aspects of atmospheric science. Sharing our passion for weather is one more way we get to advance the NWS Vision of building a Weather-Ready Nation.

## 2019 Hurricane Season Wrap-Up



By: Dan Noah

The 2019 Atlantic hurricane season, which ends on November 30, was marked by tropical activity that churned busily from mid-August through October. The season produced 18 named storms, including six hurricanes, of which three were "major" (Category 3, 4 or 5). NOAA's outlook called for 10-17 named storms, 5-9 hurricanes and 2-4 major hurricanes, and accurately predicted the overall activity of the season.

This year marks the fourth consecutive above-normal Atlantic hurricane season. The only other period on record that produced four consecutive above-normal seasons was 1998-2001. Also this year, five tropical cyclones formed in the Gulf of Mexico, which ties a record with 2003 and 1957 for the most storms to form in that region. Of those, three — Barry, Imelda and Nestor — made landfall in the U.S.

The three major hurricanes this season were Dorian, Humberto and Lorenzo. Hurricane Dorian is tied with three other hurricanes — the 1935 Labor Day Hurricane, 1988's Hurricane Gilbert and 2005's Hurricane Wilma — as the second strongest hurricane on record in the Atlantic basin in terms of wind (185 mph). In all, four storms made landfall in the U.S. during the 2019 season: Barry, Dorian, Imelda and Nestor.

During the 2019 season, NOAA's hurricane hunter aircraft and crews flew 57 missions over 430 hours, which along with the 53rd Weather Reconnaissance Squadron of the Air Force Reserve, provided critical data that aided in storm forecasting and research. In addition, NOAA's King Air crew collected more than 26,939 aerial images covering more than 4,300 square miles of areas affected by Hurricane Dorian, including shoreline, ports and impacted inland areas of several Bahamian Islands to aid in emergency response.