Aware

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NWS Supports Massive Hurricane Evacuation Exercise

By ***Barry Goldsmith***, WCM, NWS Brownsville, TX

In early June 2016, Texas state government conducted a full scale aircraft evacuation (AirEvac) simulation in the Rio Grande Valley in advance of a potentially catastrophic Category 5 Hurricane. The exercise, known as "Tejas," was based on Hurricane Allen, a Category 4/5 storm forecasted to strike the Lower Rio Grande Valley in 1980 with 150+ mph winds and devastating storm surge.

On June 8, the primary action day, several hundred people were taken to an embarkation hub at a local high school where they were screened and processed as medical or general population evacuees. From there, they were bussed to the airport where they boarded one of five military and civilian aircraft. Medical evacuees were flown to San Antonio, and everyone else was flown to Austin or Dallas for overnight sheltering before returning by bus the next day.

Left, NWS Brownsville Senior Forecaster Mike Castillo evaluates output from the new local Hurricane Watch text information generated from the digital forecast. Right, volunteer medical evacuees await movement to the C-130 for transport to San Antonio.

Planning began in late 2015 with meetings and table top exercises at multiple locations from January to May 2016. Federal, state, and local participants included Emergency Management (EM), military, U.S. Department of Homeland Security, local health departments, hospitals and more.

Decision Support Services were critical to the exercise. NWS Brownsville/Rio Grande Valley Warning Coordination Meteorologist Barry Goldsmith worked with the National Hurricane Center (NHC) and the Southern Region Regional Operations Center (SR-ROC) to ensure organizers had access to critical forecast and warning data for use in state and local briefings. NWS staff also helped set up the local office playbook that allowed NWS operational staff to test text and graphical information streams.

NHC staff used the Tejas model to create wind speed probability graphics and text, cone-and-track graphics, and wind speed radii for use in Hurrevac. NWS Brownsville, in turn, used the models to generate hurricane threats and impacts graphics and text.

NWS Regional Operation Staff Forecasters Brian Hoeth and Mark Wiley provided state briefings. Wiley was deployed to the State Operations Center in Austin for several days. Goldsmith provided briefings for Rio Grande Valley participants by webinar and in person at the Disaster District 21 base. Briefing audiences included the DDC-21 participants and related EM staff as well as members of the Healthcare Preparedness Coalition in the Rio Grande Valley.

NWS Brownsville created twice daily text and graphical hurricane information, in English and Spanish, based on the mock advisories. NWS staff also fielded media interviews on the importance of "practicing to play" and the simulated graphics that would be sent via web and social media in a real event.

Ironically, the actual weather caused some delays. Two separate, small thunderstorms on the airport tarmac delayed evacuation flights, and a brief downpour caused one of the transport buses to become stuck in mud. NWS provided EMs decision support for both incidents.

Teamwork between the NWS and other federal, state, and local partners was the true winner of the 2016 Rio Grande Valley AirEvac Exercise. Goldsmith commented, "Many of the operational and decision support tools worked as expected, but just as important, we discovered a few issues that we were able to fix. The experience staff received will allow us to stand ready to serve confidently should a real Tejas strike Texas."

Rip Current Monitoring Program Helps Safety Expansion

By Alex Tardy, WCM, NWS San Diego, CA

There are about 100 rip current deaths each year in the United States. In keeping with the NWS mission to protect lives, a team from the NWS San Diego, CA, reached out to share rip current safety information in southern California.

In May, NWS Forecaster and Marine Program Manager Stephen Harrison and Observation Program Leader Noel Isla visited beaches in Orange and San Diego counties to strengthen the local rip current program. The team met with Del Mar Beach Lifeguard Chief Mark Rathsam, who agreed to regularly participate after the in person session.

The NWS team also presented a recognition award to Laguna Beach Marine Safety Captain Tom Trager and Marine Safety Chief Kevin Snow for their efforts in consistently submitting quality rip current reports since 2014. The team also visited the cities of San Diego and Newport Beach to get a tour of the beaches and discuss winter coastal erosion impacts.

Lt. John Sandmeyer discusses the coastal impact from beach erosion with WFO San Diego staff.

Finally, the NWS team visited Federal Camp Pendleton Marine Corp Base Lifeguard Headquarters at San Onofre beach to discuss rip currents and the TsunamiReady program, observe the extreme beach erosion, and discuss the potential for the base to join the rip current observing program. It is clear from the visits that, although El Niño did not deliver as much rain as hoped to Southern California, it lived up to its potential in terms of the large swells and extreme coastal erosion.

Annual Weather Radio Event expanding across Nation

By Kelly Serr, WCM, NWS Aberdeen, SD

NWS Aberdeen, SD, staff members help customers of Ken's Superfair foods with NOAA Weather Radio questions.

Six years ago the NWS Aberdeen, SD, office began teaming up with Midland Radio, Ken's Superfair Foods, Brown County Emergency Management, and KELOLAND TV in Sioux Falls to encourage the use of lifesaving NOAA Weather Radios across northeastern South Dakota. The team hosts a NOAA Weather Radio Day that is showing real results.

We estimate that local residents have bought more than 600 radios since 2011, including 125 this year. Brown County EM Scott Meints stated, "Awesome, 600 families that are better prepared for severe weather. This makes my job much easier!" In addition to purchasing new NOAA Weather Radios, the public was encouraged to bring in radios to have reprogrammed.

The program has expanded to several other areas of the

nation thanks to the efforts of Midland Radio Meteorologist and Spokesperson Bruce Jones. Jones noted that NOAA Weather Radio Day works so well in South Dakota because of the "promotional power of Jay Trobec and his team [at KELOLAND TV]. When they take the time to educate viewers about the importance of having a weather radio, demonstrate how they work, and promote these in-store events, they create the demand that makes this successful. Add on the newspaper advertising from Ken's [Superfair Foods], and Brown County's social media push, and you have a winning combination."

Additionally, the partnership between the NWS and Ken's Superfair Foods resulted in the store being the first grocery chain in the nation to become a Weather-Ready Nation Ambassador.

More Prescribed Burn Training Opportunities in the Future

*By **Kelly Serr,** WCM, NWS Aberdeen, SD*

The Prescribed Fire Training Exchange (TREX) program began in 2008 in Nebraska and Texas and has grown ever since, providing fire fighters with opportunities to become qualified in various prescribed burn positions. The primary goal of the program is conservation, reducing overgrown vegetation and improving wildlife habitat and range conditions, but it also benefits the NWS.

NWS forecasters gain first-hand knowledge of how spot forecasts are used for prescribed burns and learn how to improve this critical Decision Support Service routinely provided to the fire community.

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The Sand Lake National Wildlife Refuge in northeastern South Dakota recently sponsored its first TREX sessions in May 2016. During this time, around 80 fire fighters across the country convened across northeastern South Dakota to plan, conduct and monitor up to 50 burn units.

This extended period allowed NWS Aberdeen forecast staff to visit prescribed burns.

Incident Meteorologist Kari Fleegel said of the opportunity, "It's very important that firefighters and meteorologists speak the same language. Events like this help foster trust and lead to confidence in our forecasts and an overall safer environment for wildland firefighters."

Getting Thousands to Attend Open House

*By **Chris Strong,** NWS Sterling, VA*

How do you entice more than 2,000 people to come to an NWS Open House and leave with a positive impression of NWS weather safety programs? NWS Baltimore, MD/Washington, DC, in concert with the NWS Sterling Field Support Center (SFSC), approached the challenge by inviting as many partners and holding as many events as possible.

The Open House included local media and recognized long-standing Cooperative Observers for their service. It also offered attendees the opportunity to learn about a multitude of weather threats, the NWS warnings that precede those threats, and the facility and technology that allows NWS to give that advance notification.

Attendees watched weather balloon launches to learn about one way NWS regularly samples the atmosphere. Two presentation tents ran half hour sessions on high interest topics such as the Blizzard of 2016, flooding, hurricanes, tornadoes, and how to become a meteorologist. To ensure a broader reach, there was a presentation in Spanish about services the NWS provides for the community.

In addition to attending presentations, people walked through the forecast office operations area, the core of

SKYWARN spotter and Cooperative Observer Dan Gropper, owner of Weather Eagle, got to show off the foam truck that pumps 1,000 gallons per minute from the turret gun.

NWS 24/7 forecast operations. Attendees could read about how forecasters put together a sea of information to create up-to-date forecast and official NWS watches, advisories and warnings. Attendees interacted with NWS forecasters to gain even more insight on how things worked, as well as the wealth of technology needed to produce an accurate weather forecast.

The SFSC across the street also offered weather balloon launches and offices tours. SFSC tests and evaluates new gear for the NWS before it is deployed into the field. To do this, the office has chambers to simulate all kinds of extreme weather, including a Category 4 hurricane wind tunnel, one of the favorite stops of the Open House.

The driveway in between the forecast office and SFSC was filled with first responder and EM vehicles that kids could see and climb into, including the crash response behemoth from nearby Dulles International Airport.

Other partners shared information with participants from booths within the NWS Partners' Tent. During the course of the weekend, almost all presentation tents were full or overflowing. And as an added bonus, NWS certified over 250 new SKYWARN weather spotters.

NWS Launches New Career Website: Faces of the NWS

*By **Mary Fairbanks**, NWS Communications Staff, Silver Spring, MD*

The NWS's Office of Communications and Office of Equal Opportunity and Diversity Management recently created a new NWS career website called Faces of the NWS. The new site contains career resources, information about student employment opportunities, and profiles of a diverse group of NWS employees in multiple career fields. The Faces of the NWS website shows that education is key to developing a future workforce able to lead in building a Weather-Ready Nation.

NWS employs more than 4,000 people serving a variety of career fields including scientific, technical and administrative positions in offices across the country. The Faces of the NWS site explains careers with the NWS in the fields of meteorology, hydrology, physical science, information technology and operations support. Two goals of the project were to demonstrate that the NWS employs more than just meteorologists and to show that people in all of the NWS's available career fields are needed to build a Weather-Ready Nation.

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