



Aware

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January 2014

From the Top

New Director of NCEP

Dr. Louis Uccellini, NWS Director

Louis Uccellini,
NWS
Director



I am pleased to announce that William "Bill" Lapenta, Ph.D., has been selected to serve as the new Director of the NWS National Centers for Environmental Prediction (NCEP).

Through the products and guidance issued by its nine centers, NCEP serves as a vital partner to the emergency management community. During severe weather season, for example, products issued by the Storm Prediction Center provide emergency managers with essential information—often days in advance—about severe weather threats. The emergency management community also relies heavily on products issued by NCEP's National Hurricane Center during hurricane season.

Bill brings expertise and leadership experience in areas ranging from global observations to numerical

Bill Lapenta,
NCEP
Director



forecasts and important decision support services, making him uniquely qualified to lead NCEP. He has extensive knowledge and experience with NOAA's critical satellite observations, how to best incorporate all observations into numerical weather prediction models, and how the model output is best incorporated into official weather and climate predictions from the sun to the sea.

Furthermore, he has a great reputation throughout the community for working with scientists, forecasters and the diverse user communities as equal partners.

Bill began working at NCEP in 2008 as Deputy Director of the Environmental Modeling Center (EMC). In 2010, he was appointed Acting Director.

At EMC, he was responsible for developing and transitioning to operations 25 NOAA numerical modeling systems that help forecasters deliver more accurate climate and weather prediction information for hurricanes, severe thunderstorms, floods, winter storms, ocean currents and waves.

I have no doubt Bill will continue to do an exemplary job towards making the country a Weather-Ready Nation.

Decision Support

Winter Storm Tests NWS Regional Decision Support

Jennifer McNatt, ERS, NWS
Southern Region

Since late 2011, four Emergency Response Specialists (ERS) have worked in the NWS Southern Region (SR) Regional Operations Center (ROC) as part of a pilot project. The project has four main objectives:

- ◆ Operate a ROC to meet the logistical needs of SR field offices
- ◆ Provide Decision Support Services (DSS) to regional-scale partners
- ◆ Provide regional-scale situational awareness to agency and government leadership
- ◆ Communicate DSS best practices across the Region

All four of these objectives were tested during a recent winter storm that severely impacted Oklahoma, Arkansas and northern Texas.

The normal ROC operating hours are 5 am-7 pm CT on weekdays and 7 am-5 pm CT on weekends. An ERS writes a daily email impact briefing for FEMA Region VI (Southern Plains), and FEMA Region IV (Southeast), as well as other federal and state



NWS Southern Region Regional Operations Center

partners. The duty ERS also provides projected weather impacts to FEMA Region VI for the coming week as well as climate/drought and space weather information.

On Sunday, December 1, the ERS began highlighting a winter weather event expected to impact Oklahoma, Arkansas and North Texas Dec. 5-8, 2013. As the storm drew closer, staff at FEMA Region VI and the Texas Department of Emergency Management (TDEM) began to implement preparedness action plans based on SR ROC briefings.

By Wednesday, Dec. 4, all field offices involved were briefing local and state partners. The SR ROC provided special webinars and outlooks to FEMA and the state of Texas.

Based on these forecasts and briefings, the Texas State Operations Center (TX SOC) and the FEMA Region VI Regional Response Coordination Center (RRCC) started gearing up Thursday evening. The SR ROC began preparing for 24-hour operations, contacting a trained pool of staff.

On Thursday morning, ERS Mark Wiley went to Austin, TX, to staff the TX SOC and ERS Jennifer McNatt went to Denton, TX, to staff the FEMA Region VI's RRCC. ERS Brian Hoeth and Kurt VanSpeybroeck, stayed in Fort Worth to support FEMA Region IV and provide situational awareness to agency and federal leadership. They also supported local forecast offices in the storm's path.

Additionally, the ROC worked

with NWS Fort Worth and the Dallas-Fort Worth Federal Executive Board to provide information related to the need for delayed openings and closures of federal buildings.

To provide such a broad sweep of services, SR ROC called up Tier 2 staffing to augment its 4-person team: ERS Tracy Clark, Paul Witsaman and Corey Pieper. SRH also had significant information technology support during the event from Paul Kirkwood, Jeff Williams and Doug Rhue.

The storm pounded portions of north-central Texas, including Dallas/Fort Worth, southeast Oklahoma and Arkansas with sleet, several inches of ice and freezing rain, leading to power outages, interstates closures, stranded motorists and delayed travelers.

With the coordination and collaboration between local field offices, the SR ROC and the onsite ERS, along with the NWS HQ Operations Center and NOAA/FEMA Liaison, NWS's partners were prepared for a significant winter event.

Outreach Insights

Houston Aviation Meteorologists Tackle Local Aviation Expansion

By [Roland Nuñez](#) and [Chris McKinney](#)

NWS Houston produces the Terminal Aerodrome Forecast (TAF) for Lone Star Executive and Eastwood Airports, two challenging sites to forecast.

Due to its proximity to Piney Woods and a large drainage basin, fog develops near Lone Star Airport more often than at other inland sites across southeast Texas.

A thriving economy is expanding rapidly north of Houston and promises to increase air traffic expo-

nentially. NWS Houston/Galveston Aviation Focal Point Chris McKinney and Houston Center Weather Service Unit and Meteorologist in Charge Roland Nuñez recently met with Scott Smith, airport manager at Lone Star Executive Airport to discuss how NWS can better support this growth.

The airport visit opened new doors for partnership. Smith invited forecasters from the CWSU and WFO to speak at a future FAA Safety Team (FAAST) meeting in February 2014. FAAST is an FAA sponsored program dedicated to reducing aviation accidents.

Lone Star Executive Airport is in Conroe, TX, about 40 miles north of Houston and 25 miles north of the Houston Intercontinental Airport. The field is home to several



New Galaxy Fixed Based Operations at Lone Star Executive Airport

corporate aviation operations and numerous owner operators as well as aviation assets for the Drug Enforcement Agency, Customs and Border Patrol, and U.S. Army Reserves.

The airport recently expanded its longest runway from 6,000 feet to 7,500 feet, allowing it to handle most business jets and military training flights. Finally, the airport expects Exxon Mobil to increase corporate flights to the facility when it completes its central campus 15 miles away.

Lone Star Airport is not the only Houston area facility expanding.



Overflow aircraft parking at Easterwood Field on September 14, 2013 Photo by Terry Klagmann, FAA Manager

When Texas A&M moved to the Southeast Conference, air space usage became a real issue near College Station, TX. On January 6, 2014, McKinney, Nuñez and Texas A&M University Professor Dr. Don Conlee met with air traffic controllers at Easterwood Field on the Texas A&M University campus to find solutions.

NWS also produces the TAF for Easterwood Field Airport which averages nearly 140 operations per day between general and commercial aviation and military training flights. The airport is normally fairly quiet, but revs up during football season when game days transform the airport into one of the busiest sectors in the Houston Air Route Traffic Control Center (ARTCC) airspace.

Existing aircraft parking areas can quickly fill up. During the Alabama vs. Texas A&M game last September, 225 aircraft were parked on the airfield, requiring the airport to close two of the airfield's three runways to provide parking areas.

Before these big games, the Houston ARTCC coordinates with the Houston Terminal Radar Approach Control and the Easterwood Field Airport tower to prepare for increase in air traffic.

"The Houston ARTCC depends on Houston CWSU meteorologists to

predict weather impacts that may occur, especially during high traffic events", said Nuñez. "The importance of NWS forecasts takes on a new light when aircraft, the value of which totals in the billions of dollars, are parked tightly and require ample time to disperse or to protect them should weather hazards develop."

Controllers at the tower stated they rely heavily on the Terminal Aerodrome Forecast to make decisions on airport operations and praised NWS responsiveness. McKinney received considerable feedback from the controllers and the overwhelming consensus was positive, particularly on ceiling forecasts for the field.

In addition to game day traffic, Easterwood is frequently visited by national and international dignitaries due to the presence of Texas A&M's George Bush School of Government and Public Service.

Fire, Flu and Frenzy: Incident Command System Tabletop Exercise

[NWS News Staff](#), Silver Spring, MD

Much of western and central Wyoming was on fire before monsoonal flow brought heavy rain and created widespread flooding. Firefighters at one complex developed Norovirus, and over half of camp fell ill.

Residents facing evacuation experienced limited pathways and transportation, and wildfire smoke had adverse health impacts across northern Wyoming.

Though this scene may be realistic for some summers in the NWS Riverton, WY, County Warning Area, (CWA), this was not a real incident. NWS Riverton created this scenario for a CWA-wide incident command system tabletop exercise last November.



Participants at the Incident Command System Tabletop Exercise

NWS Riverton Forecasters Kelly Allen and Katy Branham, and Warning Coordination Meteorologist Chris Jones joined forces with EMs, public health staff, the Wyoming Department of Transportation, (WyDOT), and the U.S. Forest Service to create the tabletop exercise. Planning for the day-long event began in early June after which NWS hosted monthly conference calls through October.

"During this presentation, we illustrated how the NWS in Riverton provides content during weather events, in addition to how we maintain a relationship with the public during quiet weather days," said Allen.

NWS Riverton prepared a situation manual and accompanying PowerPoint presentation for about 40 people. Attendees were separated into five region-based groups to discuss area specific operations and response efforts.

A particularly successful part of the event was an NWS presentation on the use of social media. Many of these partners were interested in how NWS Riverton developed content for its Facebook and Twitter accounts.

The 2-hour presentation, which illustrated both crisis scenarios and quiet weather days, generated lively discussion. All sides said they learned valuable information ranging from setting up accounts, to how NWS Riverton creates its branded products, to a discussion

on other communication platforms including CodeRED, WebEOC, and Nixle.

Informal feedback on the presentation was positive, with special kudos on NWS Riverton's social media efforts.

"There was enthusiastic participation by the players in the exercise. It was clear that the scenario was viewed as both realistic and challenging," said Jones.

NWS Riverton conducted a hot wash following the scenario and received favorable comments and a few suggestions for the team to consider for future exercises. Three evaluators who attended the exercise provided their recommendations to the participants and controllers.

NWS Riverton wrote an after action report, available by [contacting the Riverton office](#).

NCEP Hosting Colloquium on Cyclones in May 2014

Allan Lee, NWS News Staff, Silver Spring, MD

February marks the 35th anniversary of the 1979 Presidents Day Snowstorm. To recognize the advances made since this storm in the understanding, predictive capability, and service advancements of extratropical cyclones, the NCEP will host a free 1-day colloquium at the NOAA Center for Weather and Climate Prediction in College Park, MD, in May 28, 2014.

"The colloquium is an opportunity to hear first-hand of the challenges that we've faced and overcome to gain the understanding and predictability we now take for granted concerning mid-latitude cyclones," said Joseph

Sienkiewicz, chief of the Ocean Applications Branch/Ocean Prediction Center at NCEP.

"It is also an opportunity to challenge the next generation of meteorologists to improve upon those gains, to pass the torch."

The colloquium will feature six key speakers followed by 15 minute mini sessions in the afternoon. The schedule is available on the [colloquium website](#). Time will be left for questions and discussion. Finally, NCEP is offering a tour of its operations following the talks.

The meeting also will be available via the Internet for those who cannot attend in person.

NCEP hopes students, operational forecasters, and developers will participate, either in person or remotely, as this is a truly unique opportunity to discuss openly the challenges of the past, present, and future.

Advances in Extratropical Cyclone Understanding and Prediction Since the 1979 Presidents' Day Storm
Past, Present, and Future Perspectives on Extratropical Cyclone Prediction

February 19, 2014
College Park, Maryland
NOAA Center for Weather and Climate Prediction

4-8 inches of snow was forecast for the nation's capital... when the snow ended 18.7" was recorded at DCA with a large area of 20' or more blanketing the eastern suburbs of Washington, DC and eastern Maryland. The impact was paralysis. The rapid intensification, excessive snow rates, and snowfall totals of the 1979 President's Day Snowstorm exposed the limitations of the predictive capabilities of the time for extratropical cyclones. This coming February will mark the thirty-fifth anniversary of that momentous storm.

The National Centers for Environmental Prediction (NCEP) will host a one day colloquium on February 19, 2014 to:

- reflect on the challenges of that time
- discuss the advances in understanding and prediction of extratropical cyclones
- recognize those that contributed to those advancements
- discuss today's challenges predicting varying aspects of extratropical cyclones
- contemplate future challenges of extratropical cyclones

Please join us at the NOAA Center for Weather and Climate Prediction to honor this anniversary and hear from the featured speakers who helped to advance our understanding of extratropical cyclones, apply that understanding and improve prediction and services.

Featured Speakers

- Dr. Louis Uccellini
Director, National Weather Service
- Dr. Lance Bosart
Professor, SUNY Albany
- Dr. John Gyakum
Professor, McGill University
- Dr. Clifford Mass
Professor, University of Washington
- Dr. Melvin Shapiro
UCAR

NOAA Center for Weather and Climate Prediction
5830 University Research Court
College Park, MD 20740

Register online >>> <http://www.opc.ncep.noaa.gov/35th.php>

[Colloquium information, registration, and flyer are online.](#) NCEP has arranged for snacks, beverages, and lunch in the Kloud Cafe for a nominal fee.

You can find the menu at the [colloquium website](#) and make meal selections if desired.

Aware

NOAA's National Weather Service Awareness and Performance Div.

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ISSN 1936-8178