WRN FLYERS Host Convective Weather Flight Planning Workshop

By: Aviation Weather Center Staff

The Weather-Ready Nation FLYERS (FLYing Education, Resources, and Safety) team hosted a virtual workshop in April called “Convective Weather Flight Planning”. The workshop was designed with pilots’ needs in mind and highlighted convective weather products available from WFOs, CWSUs, and AWC. The first part of the workshop covered background material such as thunderstorm types and hazards, convectively-induced turbulence, and an overview of NWS thunderstorm products. The second part of the workshop used a case study to focus on two different parts of the flight planning process: prior to departure and en route. The workshop included a live demo of the products and features available to pilots on the Aviation Weather Center site. Stephanie Avey presented information on how pilots can participate in the annual Aviation Weather Testbed. The workshop concluded with guest speaker Paul Suffern, an NTSB meteorologist, who discussed a thunderstorm accident case study. There were 127 attendees on the webinar. Feedback was very positive and included comments such as "I've been involved with this since the late 50's. Best I have ever attended." and "Great Practical seminar for GA pilots to put together an effective weather brief."

The video is available on AWC's YouTube channel. If you are interested in learning more about WRN Aviation Ambassadors, WINGS (FAA WINGS pilot proficiency program), or general aviation outreach, please contact the team at wrn.flyers@noaa.gov. For more information about WRN Aviation Ambassadors, please visit the WRN website.
NWS Jackson (MS) Hosts the Virtual Warning Improvement Forecast Improvement Meeting

By: NWS Jackson (MS) Staff

On June 9th, the NWS Jackson Mississippi office virtually hosted our Warning Improvement Forecast Improvement (WIFI) meeting. The meeting was an intimate setting of core partners which included local Emergency Managers from Arkansas, Louisiana and Mississippi, state partners from the Mississippi Emergency Management Agency (MEMA) and the state of Louisiana Governor’s Office of Homeland Security and Emergency Preparedness (GOHSEP), and broadcast media to name a few. The objectives of this meeting were to provide our partners updates on new NWS products that they can use to aid us in meeting the NWS mission of protecting life and property, as well as creating open and honest discussions that focus on the improvement and/or continuation of certain NWS services.

This year, the agenda focused on the coming changes for Severe Thunderstorm Warnings; namely, the addition of catastrophic and destructive tags when certain wind and hail criteria are reached. In addition, when the destructive wind and/or hail criteria are expected, the Wireless Emergency Alert will be alerted. Other topics of discussion included a review of the back-to-back High Risk weeks in March of 2021 and whether our core partners noticed weather fatigue amongst the public. NWS staff gave a demonstration of the Mississippi Valley River Dashboard, which is a useful tool for promoting weather situational awareness that can be utilized by all our core partners. Several NWS Jackson emergency managers spoke to the impact the February winter weather event had on their county, since it has been several years since the county experienced an ice storm of this magnitude. Dr. Laura Myers, the Director and Senior Research Scientist at the University of Alabama, spoke to the social science perspective of how the general public reacts to such hazardous weather events.

*The NWS mission of the protection of life and property cannot be accomplished without the help of our partners. Having these intimate meetings will result in the continuance of learning from one another while strengthening our professional relationship.*
Fostering Enhanced Partner Relationships Through Exercise Building/Planning

By: NWS State College Staff

Over the past 16 months, several staff at NWS State College have worked closely with Dauphin County Emergency Management (EM) to design a functional exercise based on a multi-hazard severe weather event. The selected scenario was based on the infamous April 27-28, 2011 episode that spawned over 300 tornado reports along with numerous downburst wind/hail reports east of the Mississippi River to the Atlantic Coast, with all hazards affecting portions of Central Pennsylvania.

Planning for the exercise began close to the start of the COVID-19 pandemic (February 2020), thus keeping all planning meetings after the initial one in a virtual format. An extensive workload went into creating this exercise, ranging selecting a severe weather case on which to base it to providing verbal/graphical briefings during the actual exercise. NWS State College staff developed several graphics and products that realistically simulated the 2011 event with slight modifications to cater to the County’s desired exercise goals. These products and graphics included SPC Convective Outlooks/Mesoscale Discussions, Watch/Warning graphics/text, 1-page and multi-slide briefings extending out to two days prior to the exercise, WPC Excessive Rainfall Outlooks, and high-resolution maps of Dauphin County utilizing GIS software/technology.
Regular planning meetings throughout the 16-month planning process helped further enhance the NWS-EM relationship. EM officials provided a set of desired impacts for each municipality (right) and the NWS worked to build the event around those impacts. The NWS provided a timeline of storm events based roughly on the 2011 outbreak and then the EM officials pared down the timeline in order to fit within the time constraints of the exercise. This collaborative effort showcased the excellent relationship between NWS State College and Dauphin County EMA.

In addition to exercise design, NWS State College staff provided two training sessions prior to the exercise to help EMs better understand the scope of NWS products and services, along with how they can access and relay information. Several hotwash sessions were conducted after the exercise so that future improvements and developments can be made for subsequent exercises.

NWS State College is currently working on another severe weather exercise with the EM of the Carlisle Barracks United States Army facility. This exercise focuses on a tornado moving through the town of Carlisle, PA, as well as the Carlisle Barracks.