SUNCOAST OBSERVER

A quarterly newsletter brought to you by the NWS Tampa Bay Area, FL

Summer 2024

Port Tampa Bay Holds Hurricane Preparedness Tabletop Exercise

By: Stephen Shiveley

The Port Tampa Bay and the NWS organized the 2024 Hurricane Preparedness Tabletop exercise which was held in May prior to the beginning of the Atlantic Hurricane Season. This tabletop is crucial for the Port Tampa Bay and its operators in mitigating risks, enhancing emergency preparedness, and ensuring the continuity of operations and safety of the community. The event had over 100 attendees from 40 different companies from around the Port. This exercise aims to help them prepare for the upcoming hurricane season.

This year's exercise scenario was focused on a rapidly intensifying tropical system that developed only 48 hours before landfall near Tampa. A rapidly intensifying storm would challenge the Port when it comes to decisions and actions that need to be taken in a shorter time frame. This was a very realistic exercise since every Category 5 hurricane that has made landfall in the United States was just a tropical storm only 72 hours prior to landfall. Working through this scenario was extremely informative and offers a first hand look at how the Port operates before, during and after a hurricane hits.

Radar & Applications Course Experience

By: Ali Davis

Over the span of a week in April, I had the opportunity to attend the Radar and Applications Course in Norman, Oklahoma at the National Weather Center. Leading up to this in person workshop, the Radar and Applications Course (RAC) requires over 75 hours of online training, webinars, and simulated warning exercises. The primary purpose of the RAC is to train NWS forecasters on the use of the radar in the forecast and warning decision making process. This training is completed by every incoming National Weather Service forecaster, and as the newest addition to the NWS TBW family, I was excited to take on the challenge. The course covers Doppler radar theory, technological aspects of the WSR-88D, and the development of methodologies for use in an operational setting.
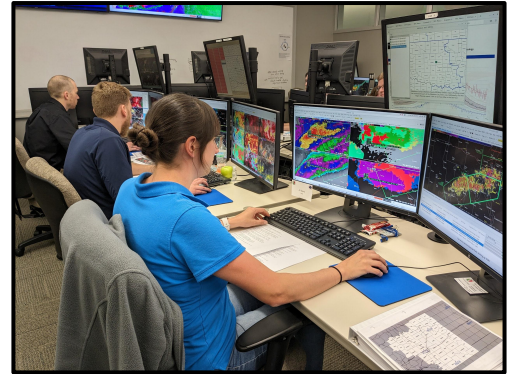
It is that last aspect of the training that the in person workshop focuses most on. I, along with 23 other forecasters from across the lower 48 states, Alaska, Puerto Rico, and Guam, trained in a simulated warning environment. We practiced issuing Severe, Tornado, and Flash Flood warnings on archived severe weather cases. This type of exercise exposed us to the stresses of severe weather situations and demonstrated the importance of communication with each other and our partners. We also had the opportunity to learn about different divisions of the National Weather Center including the Storm Prediction Center, the Hazardous Weather Testbed, and the National Severe Storms Laboratory. This was a very educational and eye-opening experience and I'm happy to be back in Florida with more tools to serve our community!

Staff Spotlight: Paul Close

Paul grew up in the suburbs outside Philadelphia, Pennsylvania and from around the age of 7 became interested in weather and followed the forecast each day, especially when snow or severe weather was predicted. He attended Millersville University in the late 80's and worked part time at the Franklin Institute in Philadelphia providing weather forecasts to a local radio station and giving presentations to the public. Paul started his first NWS job in Memphis, TN in June 1991. Then in September 1998 Paul transferred to NWS Tampa Bay and was promoted to Lead Forecaster in July 2003. Over the more than two decades he has been at this office he has served as Climate Focal Point and Webmaster.

What's your favorite part of your job?

The day-to-day forecast challenge as well as educating other forecasters and the public on the local weather

What's your favorite memory working at TBW?

Working hurricane operations during Hurricane Irma and the camaraderie of our team

2
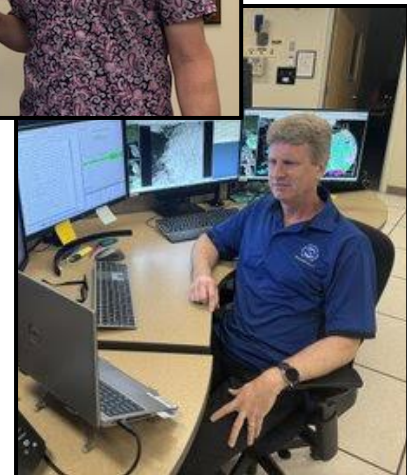
Trio of Expos Kick Off 2024 Atlantic Hurricane Season

By: Tony Hurt

Heading into hurricane season, meteorologists from the Ruskin office have been busy participating in various expos around the area to spread awareness and preparedness information in efforts to foster greater resiliency against the impacts of tropical storms and hurricanes affecting our communities. Hurricane expos have long been a great opportunity to connect with community members, as well as local emergency responders and other important representatives, all of whom ultimately work together before, during and after a storm.

The 2024 Atlantic hurricane season officially got underway on Saturday, June 1st, and three meteorologists from the office deployed to take part in a few of the local area expos being held.

Austen Flannery participated in the Hernando County Hurricane Expo. He spoke to residents about hurricane preparedness, taught a SkyWarn storm spotter class, and also participated in a panel discussion with local broadcast media and the water management district.

Tony Hurt participated in New Port Richey's inaugural Hurricane and Safety Expo, where he spent time discussing hurricane preparedness with local attendees, as well as meeting with the mayor, city manager and fire chief.

Ross Giarratana participated in the St. Pete Beach Hurricane Preparedness Expo, presenting to residents geared toward hurricane readiness while also partaking in a panel alongside local broadcast media.
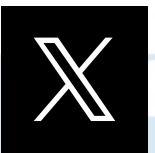
We look forward to continuing the tradition of participating in expos throughout the area into the future, as educating the public and increasing awareness will remain a key cog of our mission.

0 - Green	**Little to no** risk from expected heat.
1 - Yellow	**Minor** - Affects primarily those individuals extremely sensitive to heat, especially when outdoors without effective cooling and/or adequate hydration.
2 - Orange	**Moderate** - Affects most individuals sensitive to heat, especially those without effective cooling and/or adequate hydration. Impacts possible in some health systems and in heat-sensitive industries.
3 - Red	**Major** - Affects anyone without effective cooling and/or adequate hydration. Impacts likely in some health systems, heat-sensitive industries and infrastructure.
4 - Magenta	**Extreme** - Rare and/or long duration extreme heat with little to no overnight relief. Affects anyone without effective cooling and/or adequate hydration. Impacts likely in most health systems, heat-sensitive industries and infrastructure.

NWS Introduces New HeatRisk Tool

By: Ali Davis

The National Weather Service, in collaboration with the CDC, has developed a new heat tool that takes into account climatology, community adaptability, and CDC heat-health data to identify potentially dangerous heat. This new tool, called HeatRisk, is a color-numeric-based index that provides a value of expected heat risk for 24 a hour period. HeatRisk is being added to the arsenal of existing NWS heat tools that includes Heat Index and Wet Bulb Globe Temperature that aid in the issuance of NWS official heat products.
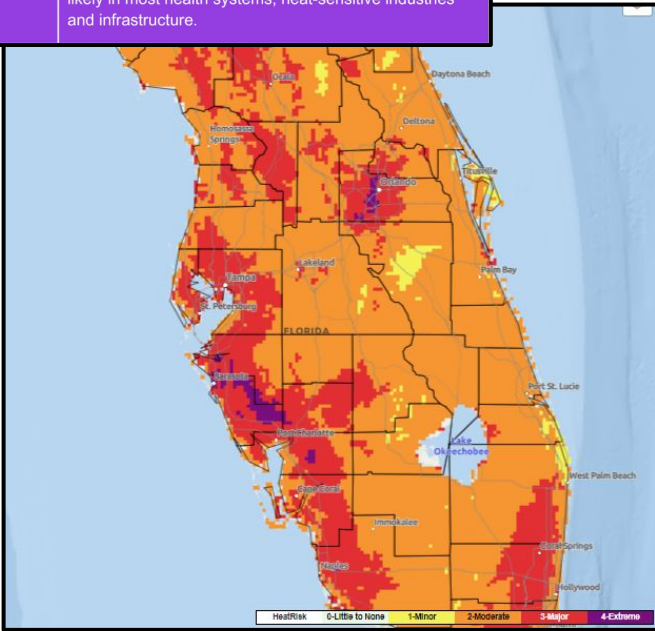
HeatRisk values, ranging from 0 to 4 (green to magenta), are calculated using both climatology as well as heat-health data. The second to lowest threshold, Category 1 (yellow/minor), is the lowest temperature that people start to die from heat. Whereas Category 3 (red/major) is the threshold at which half of heat-related deaths occur above or below. Other thresholds are composed of climatological data including how significantly above normal temperatures are, humidity in the form of diurnal temperature range, and the duration of a heat event. For example, Category 4 (magenta/extreme) is reserved for long duration, intense heat events. HeatRisk serves as another NWS heat tool that can be used to protect lives and property from the potential risks of extreme heat.

The interactive HeatRisk viewer can be found at the following link:
https://www.wpc.ncep.noaa.gov/heatrisk/

2024 Hurricane Season Outlook

NOAA National Weather Service forecasters at the Climate Prediction Center predict above-normal hurricane activity in the Atlantic basin this year. NOAA's outlook for the 2024 Atlantic hurricane season, which spans from June 1 to November 30, predicts a range of 17 to 25 total named storms. Of those, 8 to 13 are forecast to become hurricanes, including 4 to 7 major hurricanes. Forecasters have a 70% confidence in these ranges.

The upcoming Atlantic hurricane season is expected to have above-normal activity due to a confluence of factors, including near-record warm ocean temperatures in the Atlantic Ocean, development of La Nina conditions in the Pacific, reduced Atlantic trade winds and less wind shear, all of which tend to favor tropical storm formation.

New This Season:

- Beginning August 15, NHC will start to issue an experimental version of the forecast cone graphic that includes inland watches and warnings.
- NOAA's new generation of Flood Inundation Mapping will provide information to emergency and water managers to prepare and respond to potential flooding.
- NOAA's National Data Buoy Center upgraded many buoys in the tropical Atlantic and Caribbean to include measurements of 1-minute wind and 5-second peak wind gust and direction and lowest 1-minute pressure.

2024 Atlantic Hurricane Season Outlook

85% Above normal
10% Near normal
5% Below normal
Season probability

Named storms
17 - 25

Hurricanes
8 - 13

Major hurricanes
4 - 7

Be prepared: Visit hurricanes.gov and follow @NWS and @NHC_Atlantic on X.   May 2024

2024 Atlantic Tropical Cyclone Names

Alberto	Helene	Oscar
Beryl	Isaac	Patty
Chris	Joyce	Rafael
Debby	Kirk	Sara
Ernesto	Leslie	Tony
Francine	Milton	Valerie
Gordon	Nadine	William

Names provided by the World Meteorological Organization

Be prepared: Visit hurricanes.gov and follow @NWS and @NHC_Atlantic on X.   May 2024