The National Weather Service (NWS) office in Tallahassee, FL provides weather, hydrologic, and climate forecasts and warnings for Southeast Alabama, Southwest & South Central Georgia, the Florida Panhandle and Big Bend, and the adjacent Gulf of Mexico coastal waters. Our primary mission is the protection of life and property and the enhancement of the local economy.

Welcome to our Inaugural Newsletter!

The National Weather Service in Tallahassee is proud to introduce our inaugural newsletter, Tallahassee Topics. With each newsletter, we will introduce you to one of our employees in the Employee Spotlight. In this issue, you will meet Jane Hollingsworth who arrived in the office on August 15th. Jane is the first new MIC in the office in 23 years! We will also update you on any upcoming or recent changes in forecast and warning services; highlight new technologies like the recent Dual Pol upgrade to our KTLH radar (see below); discuss local research projects that are underway; and announce any upcoming outreach activities where NWS personnel go out into the community to interact with those we serve. Finally, we will provide you with a climate summary of the previous season and an outlook for the next. Over the past couple of years, your local NWS office has increased our social media presence on Facebook and Twitter and hope this newsletter will be yet another way for us to connect with you. Feedback and suggestions for future topics are always welcomed by our editors. Contact information is provided on page 2. We plan to publish Tallahassee Topics quarterly, so look for our next issue in March!

New Technology: Dual Pol

In mid October, the Doppler radar in Tallahassee (KTLH) was upgraded with Dual Pol technology. In the past, radars would send and receive only horizontal pulses of energy. With the dual-pol upgrade, the radar will now also send and receive vertical pulses. By comparing the information from both pulses, we can get new information, such as differential reflectivity (ZDR), correlation coefficient (CC), and specific differential phase (KDP). From these products, new techniques and algorithms have been developed. These new data types help us better identify tornado debris, precipitation types aloft, raindrop and hail size, and the location of the melting layer. They may also improve precipitation accumulation estimates. For more information, check out our news story on the dual-pol upgrade: http://tinyurl.com/9z4p5g8.
Q: What sparked your interest in meteorology?
A: There was no one particular event that got me interested in meteorology. I was always interested in earth sciences, especially oceanography, but where I went to school (Indiana University), they didn’t really have an oceanography program. I got my bachelor of science in mathematics. In graduate school, I was part of a NOAA graduate scientist program and got sponsored to earn my master of science in meteorology at the University of Wisconsin.

Q: How did you get your start in the National Weather Service?
A: I started in the NOAA graduate scientist program. After graduation, I interned at the National Storms Forecast Center (SELS), which is now known as the Storm Prediction Center (SPC). After that, I had my first experience at a forecast office as an intern in Denver.

Q: What brought you to Florida?
A: Well, I have friends who live in Florida, and my family has been coming down here to visit for years, so I’ve always loved Florida. I wanted to round out my career with some operational experience in tropical forecasting. This year I got to see the office deal with Debby and Isaac, as well as watch Sandy unfold. It’s been a great experience so far.

Q: What is one thing you would like to accomplish here?
A: I want to have the office be better prepared for decision support in low frequency high impact events.

Q: What is the best/worst part of your job?
A: The best part of my job is to help develop forecasters so that they can move up in the Weather Service and develop their skills in a way that helps them reach their career goals. I also love getting feedback from our users to see how we’ve helped them, what we’re doing well, and where we could improve on the services we provide. The worst part of my job is dealing with bureaucracy, staffing and budgets and cutting through the red tape.

Q: Are you able to turn the job off when you walk out of the building?
A: No. I’ve never been able to turn the job off when I leave work. I’m always watching the Weather Channel and checking our website or my work e-mail. Something could happen at the office at any time and you need to be ready to respond, even in fair weather.

Q: What do you like to do in your spare time?
A: Anything outdoors. I like to play golf, go hiking, and boating. I like working with animals by volunteering in animal shelters or doing travel activities like swimming with dolphins or manatees.

Recent Staffing Changes

There have been many staffing changes at the office over the past year with several individuals promoted and others retiring after lengthy and eventful careers. Donal Harrigan was promoted to general forecaster and Katie Moore was selected for a full-time meteorologist intern position after participating in our Student Career Experience Program (SCEP). Our information technology officer, Tony Freeman, was selected for a position at Southern Region Headquarters and one of our general forecasters, Bryan Mroczka, was promoted to a lead forecaster position at WFO Tampa. Another of our SCEPs, Liz Vickery, was selected for a full-time meteorologist intern position at WFO Key West. The most recent promotion went to our Science and Operations Officer, Todd Lericos (pictured at left), who was selected as the new Meteorologist in Charge (MIC) for WFO Las Vegas, NV. We also said farewell to our MIC, Paul Duval in April, and Observation Program Leader, Mike Vise in October, both of whom retired this year. We’d like to say congratulations and good luck to all of you. Our most recent addition to the office is new MIC, Jane Hollingsworth, who arrived in August and is featured above. She comes to us from Weather Service Headquarters in Silver Spring, MD where she served as the National Tsunami Program leader. Prior to that she was the MIC of WFO Reno, NV.
Research & Mentoring

Strong Traditions at NWS Tallahassee

The National Weather Service (NWS) office in Tallahassee, FL has a very active program in student training and trendsetting research facilitated by our office’s co-location with the Florida State University Meteorology Program. The purpose of student programs is twofold. First, they allow the NWS to evaluate and recruit top-notch candidates for permanent positions. Second, students gain valuable work experience that both adds to their academic rigor and makes them more viable as potential employees after graduating. The NWS office in Tallahassee has four student programs that provide a variety of work experience opportunities. In the Volunteer Program, our largest program, students shadow NWS forecasters and learn all aspects of NWS operations. The Mentorship program is typically offered to rising college juniors or seniors. These students are paired with a forecaster mentor for the summer semester and receive more personalized training. The Pathways Program (formerly called the SCEP Program) is a paid internship position that offers a distinct advantage in that upon successful completion, students are more competitive when applying for full time NWS positions. The final program is the Hollings Scholarship Program where students compete for up to $8000 a year to pursue research in ocean and/or atmospheric sciences, including a 10-week full-time summer internship position. Many participating students have gone on to fruitful careers in the NWS, private industry, and the military. This includes six current staff members.

The office has always sported an active research program including collaborative efforts with the FSU Meteorology Department faculty and with students from various institutions. This included a three year minimum temperature study with lead forecaster Ron Block and then FSU SCEP Kelly Godsey. More recent collaborative efforts included the development of a storm damage assessment toolkit by lead forecaster Parks Camp with software development by FAMU student and Hollings Scholar, Frank Johnson. Currently, lead forecaster Jeff Fournier and volunteer Ryan Walsh are involved in a Sea Grant proposal. Jeff Fournier is also involved in several GFE (Graphical Forecast Editor) projects including one with Alex Lamers on producing enhanced short term grids. Don Van Dyke is researching ways to improve local tornado forecasting using a combination of local climatology and numerical models. He also recently completed a collaborative study with Dr. Clark Evans of the University of Wisconsin-Milwaukee on the extreme rainfall produced by Tropical Storm Fay (2008) across the local area. WCM Jeff Evans has paired with FSU Emergency Manager Dave Bujak on a FSU lightning detection project.

This Quarter’s Focus:

Student Mentorship Projects

Each newsletter will focus on one research project. This issue highlights our newest endeavor, where forecasters Donal Harrigan, Don Van Dyke and Alex Lamers (pictured below) are mentoring FSU students Michael Navarro and Andy Lahr. Michael is compiling a “Weather History on this Date” archive for our forecast area. Andy’s project will use GRAnalyst, a radar viewing software, to relate radar reflectivity and hail core heights to hail reports and environmental conditions. Both projects will enhance our ability to serve the community.

For Andy’s project, there has been skill demonstrated in other parts of the country correlating the height of various radar reflectivity values in a core above the freezing level to severe hail. This includes one at WFO Des Moines, IA, and another at WFO Ft. Worth, TX. A similar correlation might exist in the local area, but the actual values could be slightly different than in other parts of the country. Andy’s project will determine those values.

For Michael’s project, most NWS offices around the country have a collection of significant historical events on their websites. However, some offices have taken the additional step of compiling a history of weather information on individual dates, usually titled “Weather History on this Date”. This is good information to publish via social media, and this compilation of significant events that Michael is creating will be a big benefit to our office. Tropical cyclones have had a very big impact on the area, and a collection of information on all of the tropical cyclones that we have on record for this area in one location on our web page would be a good resource for the staff, media, weather enthusiasts, and the general public.
Outreach Efforts

We want you to know about us...

WFO Tallahassee maintains an active outreach program that allows all area residents to directly interact with the NWS. This includes participation in a number of area activities including the North Florida Fair, Springtime Tallahassee, Weatherfest, Hurricane Awareness Day, Bama Jam decision support, and many other outreach activities in South Georgia and Southeast Alabama. We also provide office tours, lectures and on-site visits to a variety of schools, groups, and organizations of all ages and interests. Our events are typically focused on the NWS mission, weather safety, and severe weather. Hurricane presentations are especially popular each summer. Our office is also integrating online training sessions to our current weather spotter training program to make them more accessible to all area residents. These are offered before the fall and spring severe weather seasons. Office staff also serve as science fair judges and career day speakers at schools, assist boy scout troops in garnering their weather merit badges, and provide literature and guidance for students considering meteorology as a career. An extensive education and outreach section on our TAE webpage was developed primarily to assist educators.

Our November activities included the North Florida Fair where we staffed a booth over its entire twelve-day period. The booth focused on weather safety and helped spotlight our active partnership with the Florida Division of Emergency Management and the North Florida chapter of the American Meteorological Society (AMS)/National Weather Association (NWA). Thousands of area residents visited our interactive displays (pictured at right). We hosted Tallahassee Community College science classes and provided them an orientation to the NWS mission, careers in meteorology, and an office tour demonstrating the forecast process. Representatives from the office also attended the local AMS/NWA professional mixer where they interacted with FSU meteorology students, faculty, and other local meteorology professionals, while discussing their careers in meteorology.

Climate Recap for Autumn

The climate for Tallahassee during the 3-month period of September through November 2012 saw temperatures that were slightly warmer than normal. We recorded our first freeze on November 25th, or nine days later than the average first freeze. The maximum temperature recorded at the Tallahassee Regional Airport during this period was 95 degrees on September 3rd and the lowest was 28 degrees on November 25th and 26th. On November 3rd we tied the record high from 1972 of 86 degrees. We typically see a drying trend as we transition from summer into fall with October and November being two of our drier months on average. However, after a wetter than normal September the past two months have been much drier than normal. Despite the recent dry weather, we do still have a small year-to-date surplus of rainfall at Tallahassee. Also, it should be noted that the hurricane season officially ended November 30th. In a season that spawned Hurricane Sandy, there were no direct or indirect impacts from tropical systems on the Tallahassee area during this three month period.

Climate Outlook for Winter

Looking ahead to winter (December through February), there continues to be a lot of uncertainty in what to expect. The current El Nino Southern Oscillation (ENSO) cycle shows a weak El Nino which is the warming of the eastern Pacific Ocean off the coast of Peru and Ecuador. El Nino can have big impacts on worldwide climate mainly during the Northern Hemisphere’s winter season. For the southeastern U.S., we typically see wetter and cooler than normal conditions during winter. Since this El Nino is weak and the Climate Prediction Center (CPC) is now forecasting ENSO-Neutral conditions, predictability is lower than normal. The latest CPC outlook for this winter calls for equal chances of experiencing above, below or near normal rainfall and temperatures for the Tallahassee area. The average temperature for Tallahassee during winter is 53.0 degrees and the average rainfall is 14.09 inches.