



# Sterling Reporter



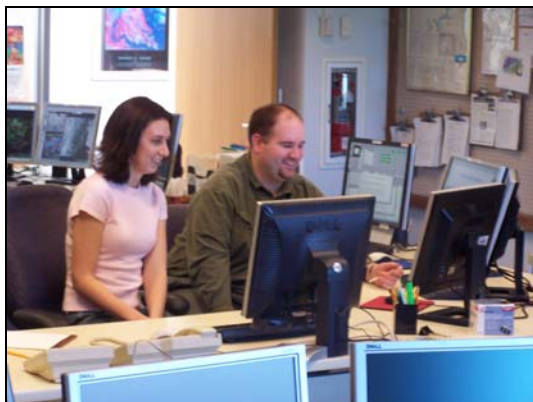
Newsletter of NOAA's National Weather Service Baltimore/Washington Forecast Office

Volume 4, Issue 1

Spring 2005

## WFO Sterling Welcomes New Staff

In January, Sarah Allen was promoted to a General Forecaster at Sterling from her previous Intern position in Jackson, Mississippi. This is a homecoming of sorts for Sarah, as she was born in the City of Petersburg, Virginia. She was raised in Sulphur, Louisiana and obtained her B.S. in Atmospheric Science from the University of Louisiana at Monroe in May of 2004. While in school, Sarah was a student intern at the NWS office in Lake Charles, Louisiana. She was active in ULM student chapter of the American Meteorological Society, and a cooperative observer for the NWS office in Shreveport, Louisiana. Sarah has always wanted to live in this area because of the diverse weather the region experiences, and she enjoys spending time in DC.



Sarah and James examining data

*(Continues on Page 2)*

## Core Values at NOAA's NWS Baltimore/Washington Weather Forecast Office

Jim Lee, Meteorologist-In-Charge

One of the items that I have been promoting here during my first six months as Meteorologist-in-Charge is the concept of **core values**. Core values are important to organizations in that they represent what the company believes in, and what the company finds to be significant. Once core values are identified, then they represent to the employees, customers, and partners of the company the reason for the company being in existence, and to guide policy and decision-making. Here are the seven core values for NOAA's NWS Baltimore/Washington Weather Forecast Office (WFO):

- 1. Products and services from our WFO are within the state of the science.** We don't want to give our customers and partners false impressions by producing products and services that are not rooted in science. An example of this would be to issue a Tornado Warning with a two hour lead time. While over the next decade this much advance notice of tornadoes will likely be possible, it is currently outside our science to issue such a long lead time product and be accurate. Another outcome of this core value is that we want to spend most of our forecast resources on the zero-to-two day forecast. While we recognize the importance of forecasting for days three-to-seven, it is being shown that on a day-to-day basis, forecasters are adding less value to forecasts in the forecast periods beyond day three as our numerical models continue to improve.
- 2. Products and services from our WFO are relevant.** In these days of doing more work with limited resources, we want to ensure that what we spend our time on is relevant to our customers and partners. If any of our products and services are not used, then we will attempt to cease issuing them.
- 3. Every WFO Staff Member matters and contributes.** Once again, in these days of leaner government, we have to rely more on teamwork. Every WFO staff member contributes to common office goals, and their individual work is important to the ultimate success of the WFO as a whole. We recently revamped our Program Leader assignments, and now every one of our twenty-five WFO Staff Member has at least one program assigned to them. Our office has fifty-one separate programs!

*(Continues on Page 4)*

## INSIDE THIS ISSUE

1	WFO Sterling Welcomes New Staff / MIC's Corner
2	Winter of 2004-05
3	Hurricane Hunters Visit / Thunderstorm Related Products
4	Weather Review Oct and Dec 2004 and Jan 2005
5	Washington Boat Show / COOP Award
6	May-June-July Outlook

## Winter of 2004-05 Christopher Strong

This past winter was a pitch straight down the middle, a very typical winter for the region.

For snowfall through the end of February, there were several 'near miss' snow storms that pounded northeast locations just north of Philadelphia into New England, but we always managed to stay just far enough away to get a little snow, but not a lot. In fact, our two greatest snowstorms this past winter were a couple of three to five inch events on January 22nd and February 24th. With a few other minor events in January and February, snowfall ended up near normal. Through the end of February, Washington had nearly a foot of snow (11.7 inches), while the average is a couple of inches more at 13.6 inches.

Baltimore had nearly a foot and a half of snow (17.6 inches), while the average is a couple of inches less at 15.7 inches. The greater than normal snowfall disparity rose to the northeast. Other than a couple of trace or barely measurable events in December, all snow fell in January and February.

Temperatures were slightly warmer than the 30 year average, about a degree. That still puts it near the middle of the pack in the record books. Baltimore at 36.1 degrees was a little more than a degree above the average 34.8 degrees. Washington at 38.5 degrees was a degree warmer than the 37.5 degree average. There were two main stretches of frigid winter weather. The first was the week preceding and around Christmas, specifically from the 19<sup>th</sup> through the 26<sup>th</sup>. Temperatures on the 20<sup>th</sup> in particular were extraordinarily cold, especially for December. Highs were in the lower to mid 20s and lows were near 10 degrees. A trace to a fraction of an inch of snowfall occurred during the night before, across much of Maryland, that led to a rash of traffic accidents when coupled with the extremely cold road surfaces.

The other cold stretch came during the second half of January, when high temperatures generally ranged from 25 to 35 degrees, and lows were in the teens and low 20s. That cold half of January very nearly balanced out the exceedingly warm first half of January. Interestingly, three of the first four days of the month had very warm high temperatures in the middle to upper 60s, including New Year's Day.

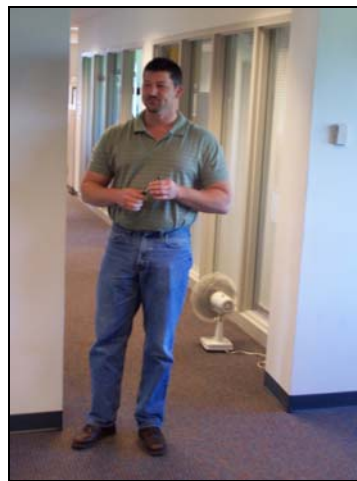
Other than those two stretches, the rest of the winter varied between seasonable and brief stretches of warmth.

Precipitation was also near normal. Washington was a little less than an inch below the normal amount of rain and melted snow. Baltimore was an inch and a half below normal.

In summary, there were three weeks of frigid winter temperatures this season. When that is balanced with the large stretches of seasonable temperatures and brief stretches of warm temperatures, the year ends up near the 30 year average. While the weak El Nino in the tropical Pacific this past winter helped to fuel coastal winter storms off the Atlantic coast, the brunt of these storms was felt just a bit northeast of the Mid Atlantic region. Snowfall and precipitation ended up near the seasonal averages.

*( 'New Staff' continued from Page 1 )*

Jim Lane also joined the staff January as our new Electronic System Analyst (ESA). He grew up in Charleston, South Carolina, and received an athletic scholarship to college in West Virginia. After he realized he wasn't going pro, he joined the Air Force for 4 years. He finished his AAS in Electronics Engineering while on active duty and serving during the first Gulf war (serving in Texas). Jim entered the NWS in 1991 at the Bristol, TN office. Next, he worked at the Melbourne, FL office where he finished his B.S. in Computer Information Systems. Jim became the ESA at the State College, PA office, before working at Corpus Christi, TX and Charleston, WV as the Information Technology Officer.



Jim Lane checking on the operations area

James Brotherton joined the Baltimore/ Washington office in February. He was promoted to a Senior Forecaster from his forecaster position at the Louisville, Kentucky weather office. James is proud of being part of that office's

forecast team during several significant events, such as this past winter when portions of Kentucky and southern Indiana received over 30 inches of snow from a record breaking Ohio Valley storm. James also was on hand during the extensive tornado outbreaks of Late May 2004 in the Ohio Valley, and the historical derecho event in Indiana and Kentucky, when extensive hurricane force winds caused widespread tree damage across a large portion of Kentucky.

Before his 3 year tenure at the Louisville office, James spent 2 years at the Charleston, SC weather office as a meteorologist-intern. James is a graduate of Purdue University, and participated in the co-op student program at the Climate Prediction Center in Camp Springs MD. Some of James' hobbies include travel, hiking, playing the trombone, and visiting with family and friends.

## Hurricane Hunters Visit Baltimore Area

Steve Rogowski

On Tuesday May 3<sup>rd</sup>, the Hurricane Hunters of NOAA's National Weather Service flew into Martin State Airport in Middle River Maryland.



The crew of the P3-Orion Hurricane Hunter plane greeted the public and gave tours, answering questions in between posing for photographs. In addition to the plane's crew, members of our office took the opportunity to reach out to the public and address the topic of tropical weather across our region. Fran's flooding rain of 1996, Isabel's wind and coastal flooding in 2003, and Ivan's record tornado outbreak in 2004 serve as a constant reminder of the impact of tropical systems on our local area.

The Baltimore Metro area was the second stop in the week long East Coast Awareness tour. The plane flew into Martin State Airport from Bangor, ME, and later visited Richmond, VA; Charleston, SC; and Jacksonville, FL.



## Thunderstorm Related Products

**Severe Weather Outlook** – A locally redefined outlook in collaboration with the Storm Prediction Center in Norman, Oklahoma. This statement which is issued within 18 hours of a potential event, assigns a categorical risk (slight, moderate, or high) to the upcoming event. Potential thunderstorm threats including type, aerial extent and timing are also discussed in the Severe Weather Outlook.

**Severe Thunderstorm Watch** – Issued for an area that appears favorable to receive at least 6 reports of severe thunderstorms (hail >0.74" in diameter and/or winds >57 mph) within the next 2-6 hours in collaboration with the Storm Prediction Center in Norman, Oklahoma. A Typical watch covers about 8,000 square miles.

**Severe Thunderstorm Warning** – A thunderstorm is currently or will likely imminently produce hail >0.74" in diameter and/or winds >57 mph. These warnings are usually issued for a county for 30 to 60 minutes.

**Tornado Watch** – Issued for an area that appears favorable for at least 2 tornadoes, or any tornado F2 or greater within the next 2-6 hours in collaboration with the Storm Prediction Center in Norman, Oklahoma. A Typical watch covers about 8,000 square miles.

**Tornado Warning** – A thunderstorm is currently or will likely produce a tornado. Hail >0.74" in diameter and/or winds >57 mph may also occur. These warnings are usually issued for a county for 15 to 45 minutes.



**Weather Review –  
October and December 2004/January 2005  
Steve Rogowski**

For the detailed report on these weather events, see the Storm Data monthly reports on our website at:

<http://www.erh.noaa.gov/lwx/Storms/Strmdata/index.htm>

**October**

16<sup>th</sup>: Thunderstorms affected the region during the late afternoon and early evening. These storms produced numerous wind gusts between 34 and 40 knots near and over the Tidal Potomac and Maryland portion of the Chesapeake Bay.

**December**

1<sup>st</sup>: Very strong winds accompanied a cold front that crossed the region on the first of December. The strong winds produced damage in parts of western Maryland, the Shenandoah Valley and the Potomac Highlands. Numerous trees and powerlines were downed. Some damage to structures was reported and there were many power outages. Winds gusted to 58 mph at Frostburg, MD, Martinsburg, WV, Keyser, WV, and to 55 mph at Petersburg WV.

14<sup>th</sup>: A winter storm affected the Potomac Highlands on December 13-14. The storm produced a total of 4 to 8 inches of snow across portions of Highland, Grant and Pendleton counties.

23<sup>rd</sup>: A strong cold front crossed the region during the afternoon hours of 23 December 2004. Ahead of the cold front passage, very strong winds occurred particularly in the higher terrain of the Blue Ridge and Appalachians. Peak wind gusts of 72 mph were measured northeast of Smithburg, MD, while a 63 mph wind gust was measured in Luray, VA. Wind damage was reported in Mineral County, WV.

**January**

14<sup>th</sup>: An unseasonably warm and moist airmass was in place during the morning hours of 14 January 2005, ahead of a cold front which was pushing through the region. A line of thunderstorms developed as a result, producing numerous reports of flooding and thunderstorm wind damage which largely coincided with the predawn hours. Trees and powerlines were reported downed across portions of Charles County, MD, along with Albemarle, Orange, Prince William, and King George Counties in VA. Flooding closed roads for the morning commute across the Baltimore and Washington metro areas, and central Shenandoah Valley. Water rescues occurred in Annandale (Fairfax County, VA).

22<sup>nd</sup>: A winter storm which moved out of the northern plains brought snow to the Mid-Atlantic region on 22 January. The storm produced several inches of snow across central, northern and western Maryland before coming to an end during the late evening hours of the 22<sup>nd</sup>. The storm produced a large area of 4-8 inch snowfall totals with some of the highest totals from the storm in the Baltimore metropolitan area where some totals reached as high as 9 inches. 4-6 inches of snow were reported in the eastern panhandle of West Virginia.

30<sup>th</sup>: A storm system brought a mix of snow, sleet, and freezing rain to the region. Most notably, portions of central Virginia, the central Shenandoah Valley, along with Pendleton and Montgomery Counties accumulated ¼" of ice or greater, causing hazardous driving conditions.

*("Core Values" continued from Page 1)*

4. **Every customer and partner matters.** Studies have shown that the average business hears from only 4% of their unhappy customers; for every complaint received, the average company has up to twenty-four other customers with problems (Goodman, John, "Basic Facts on Customer Complaint Behavior and the Impact of Service on the Bottom Line," *Competitive Advantage*, June 1999, pp. 1-5). At our WFO, we want to hold to a minimum the number of unhappy customers (with a goal of zero unhappy customers) by constantly reminding ourselves that our customers and partners are the sole reason for our WFO's existence.
5. **Welcome and promote innovation.** Once again, with limited resources, we are frequently asked to do more. Most of the time, these requests to do more make a lot of sense! The only way you can do more with the same resources without adversely impacting the quality is by asking how we do things better, quicker, more efficiently, etc.
6. **Strive for organizational and operational excellence, and nothing less.** Finally, everything we do at the Baltimore/Washington Weather Forecast Office must be done with excellence and with the customer and partner in mind. If we are going to do something, we are going to do it correctly, and apply the proper resources for the outcome to be excellent.

I hope that this short review of NOAA's NWS Baltimore/Washington Weather Forecast Office's core values was informative. If you have any questions or comments on this or any of our products and services, please feel free to drop me an email at [James.E.Lee@noaa.gov](mailto:James.E.Lee@noaa.gov).

## WFO Baltimore/Washington Participates in 2005 Washington Boat Show

Brandon Peloquin

The staff from WFO Baltimore/Washington represented NOAA's National Weather Service February 9 - 13 at the 2005 Washington Boat Show. This year's Show was held at the Washington Convention Center in downtown Washington D.C.

The Washington Boat Show is considered one of the biggest indoor Boat Show between New York and Miami, and is known by many in the marine community as "The Big Show," where thousands of spectators attend for the five day event. A tradition for nearly a half century, the Washington Boat Show features boats of all sizes, from small fishing and water skiing boats up to large express cruisers.



Brandon shows off our Washington Boat Show booth

Participants from WFO Baltimore/Washington met with a diverse group of boaters during this year's Show. Marine safety and the importance of having NOAA Weather Radios on boats was accentuated to booth visitors. A wide array of weather information available on our website ([weather.gov/washington](http://weather.gov/washington)) was also highlighted. Many boaters told us they won't go out on the waters without first inspecting the National Weather Service website. Our office also received positive feedback from our users. One recreational boater described a situation where a warning from WFO Baltimore/Washington prompted immediate safety action for he and his family: *"We were out on the Bay last summer, and were able to navigate away from an approaching severe storm when the [Special Marine] Warning was issued and broadcast on the NOAA Weather Radio."* After collecting some marine safety pamphlets, a seasoned boater said: *"Keep up the good work and keep us safe."* This sentiment summarized many of the comments received from the marine community that stopped by NOAA's National Weather Service booth at the 2005 Washington Boat Show.

## COOP News

John Darnley

The National Weather Service (NWS) Cooperative Observer Program (COOP) is truly the Nation's weather and climate observing network of, by and for the people. More than 11,000 volunteers across the country take observations on farms, in urban and suburban areas, National Parks, seashores, and mountain tops. The data is truly representative of where people live, work and play.

Volunteer weather observers contribute their time so that observations can provide the vital information needed. These data sets are invaluable in learning more about the floods, droughts, heat and cold waves affecting us as we go about our daily lives. This data is also used in agricultural planning and assessment, engineering, environmental-impact assessment, utilities planning, and litigation.

COOP data consist of daily maximum and minimum temperature readings, twenty-four hour and monthly precipitation amounts as well as snow fall reports and hydrological reports along local rivers and streams. These data play a critical role in efforts to recognize and evaluate the extent of human impacts on climate from a local standpoint to a global scale.

The Sterling, Virginia weather forecast office has 117 COOP stations located throughout Eastern West Virginia, Northern and Central Virginia, Western and Northern Maryland, and the District of Columbia. A few of these Stations date back to the late 1800's and directly contribute to our short and long term forecast. These daily COOP reports are also used to verify our forecasts, warnings and advisories. The availability of this data is a valuable asset, and promotes operational excellence by allowing us to provide the best service possible.

We would like to thank Mr. Tim Thomas for his thirty-five years of service in Cumberland, MD. With help from his son Sean, wife Marcia, and father Charles, his family has contributed almost sixty years of observations. Their hard work has greatly benefited our operations. Thank you for your outstanding service! Trina Heiser is Sterling's COOP Program Leader.



Tim Thomas (center) receives his award from Jim Lee (MIC) on the right and Mickey Brown (Eastern Region Headquarters) on the left

(Continued on page 6)

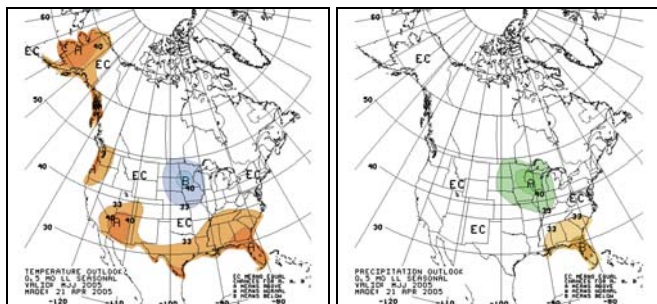
(‘COOP News’ continued from Page 5)

We are indebted to our Volunteers for their time and service for without them the program would deteriorate and valued data would be lost over time. We are looking forward to continue to service the public with the best Environmental Real-Time Observation Network. This means looking for a new generation of observers interested in service to their neighbors and community. We are seeking individuals willing to share their interest in weather with the National Weather Service as we try to better understand the weather around us. The program mission today is two-fold: 1) To provide observational meteorological data required to define the climate of the United States and to help measure long-term climate changes, and, 2) To provide observational meteorological data in near real-time to support forecast, warning, and other public service. Hence, the future name change of the COOP program as we move forward with new instrumentation will become “NOAA’s Environmental Real-Time Observation Network (NERON)”.

On behalf of the entire staff here at the Sterling forecast office, I would like to extend our thanks to all of our current Coops for their time and dedication to the program.

### May-June-July Outlook

NOAA’s National Weather Service Climate Prediction Center created these May-June-July temperature and precipitation outlooks during mid April. EC means Equal Chance, A stands for Above Normal, while B is Below Normal. These are probabilistic forecasts; the forecast probability anomaly is the difference between the actual forecast probability of the verifying observation falling in a given category and its climatological value.



Climate Prediction Center outlooks, discussions and explanations are available at:  
<http://www.cpc.noaa.gov/products/predictions/90day/>

### **Upcoming SKYWARN Classes**

For more information check out the SKYWARN website:  
<http://www.erh.noaa.gov/er/lwx/skywarn/classes.html>

#### **BASICS I SKYWARN CLASS**

This class is essential for becoming a SKYWARN Spotter. It is a 3-hour class that covers the basics of how SKYWARN and the National Weather Service operate, what you need to report and how, and how to spot severe thunderstorms and tornadoes. This class is a pre-requisite for all other classes.

#### **BASICS II SKYWARN CLASS**

This class is an optional sequel to the Basics I class. It is 2 1/2 hours long. It is good for spotters who need a refresher or feel they want additional information and training. It reviews the basic spotting techniques and covers more information about thunderstorms and Doppler radar. You must have taken Basics 1 to attend this class.

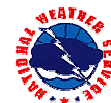
#### **WINTER STORM CLASS**

This is an optional 2 1/2 hour class that is occasionally offered seasonally (November - January). Its focus is on the Mid-Atlantic snow storms and nor'easters. It looks at the frequency and history of the storms, how they form and the difficulties in forecasting them, how to be prepared, how to measure snow and ice, and how SKYWARN operates during a winter event. You must have taken Basics I to attend.



## ***Sterling Reporter***

Spring 2005 Edition



Newsletter of the National Weather Service  
Forecast Office in Sterling, Virginia  
<http://www.weather.gov/washington>

Published quarterly. Available on the web at  
<http://www.erh.noaa.gov/lwx/reporter/>

National Weather Service  
44087 Weather Service Rd.  
Sterling, VA 20166  
703-260-0107

Editors:  
Steve Rogowski [Steve.Rogowski@noaa.gov](mailto:Steve.Rogowski@noaa.gov)  
Brandon Peloquin [Brandon.Peloquin@noaa.gov](mailto:Brandon.Peloquin@noaa.gov)