



**UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE
Fort Worth, Texas**

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SOUTHERN TOPICS

Working Together To Save Lives

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REGIONAL DIRECTOR

I am pleased with the many honors recently bestowed on a number of National Weather Service Southern Region offices and employees. Their distinguished accomplishments are worthy of praise, and they are so typical of the hard work and dedication of many others.

GOLD MEDAL. Staff members at **WFOs Memphis and Norman** will share in a Department of Commerce Gold Medal (Joint Organization) with WFOs Pleasant Hill and Springfield, Missouri, WFO Paducah, Kentucky, and the Storm Prediction Center, in recognition of the exceptional and life-saving services they provided during the May 4-10, 2003, record outbreak of tornadoes.

NOAA DISTINGUISHED CAREER AWARDS. Please join me in congratulating SR Deputy Director for Performance and Resources **Melvin "Mac" McLaughlin** and Systems Operations Division Chief **Thomas Grayson** who were recognized recently with NOAA Distinguished Career Awards. During his exceptional NWS career, Mac pioneered the development of the NWS severe weather outreach and preparedness programs. He has served in a variety of capacities at many offices, consistently making outstanding contributions to the NWS and NOAA mission. Tom has served as researcher, forecaster and MIC, as well as Deputy and Regional Director during his long career. In all those jobs he has been an innovative leader, particularly in the rapidly developing disciplines of computers and information technology.

F.W. REICHELDERFER AWARD. The American Meteorological Society has recognized WFO Melbourne MIC **Bart Hagemeyer** with their Francis W. Reichelderfer Award for his distinguished contributions over many years to providing operational environmental services to the public. The award is named after the long-time Chief of the U.S. Weather Bureau, and Bart is the latest in a long list of Southern Region employees so honored since the award was established in 1983.



NWA AWARDS. Again this year we are pleased that the National Weather Association has recognized several Southern Region employees and our partners in public service with their prestigious awards. Recipients of NWA 2004 honors are as follows.

Barry Baxter, Kim Brabander, Eric Christensen, Wayne Colin, Robert Handel, Guy Rader and Pablo Santos, forecasters at WFO Miami, received the Operational Achievement Award (Group) for their exceptional skill during a rare tornado outbreak in March 2003.

The staff at **WFO Midland** received the Larry R. Johnson Special Award for their outstanding forecasts and warnings before and during the rainstorms on April 3-6, 2004.

The **CWSU Fort Worth** staff and FSL's Aviation Division received the Aviation Meteorology Award for exceptional sustained efforts to develop and implement operational enhancements in the area of aviation services.

In addition, the Walter J. Bennett Public Service Award was presented John Fleck, with the *Albuquerque Journal* newspaper, for his excellent reporting of science issues. Mr. Fleck has worked closely with and was nominated by WFO Albuquerque. The awards were presented at last week's National Weather Association Annual Meeting in Portland, Oregon.

BLAST 2005. I am pleased to announce the individuals selected for the 2005 Southern Region BLAST (Building Leaders for A Solid Tomorrow) Program. Many excellent applications were received, and it was a challenging task to make the final selections. Everyone who applied should be proud of their accomplishments and I strongly encourage those who were not selected to apply for the 2006 BLAST Program. I also encourage all employees to participate in your Local Office BLAST Program. Remember, leadership is a behavior, not a position. Special thanks to the field managers and the MASC staff for their assistance with the evaluations and interviews. Thanks also to Jose Garcia (WFO Amarillo) for his work - for a fifth year - as Evaluation Team Facilitator. The 2005 BLAST participants are:

Peter Banacos	Forecaster, Storm Prediction Center, Norman
Jason Burks	ITO, WFO Huntsville
Diane Cooper	Hydrologist, ABRFC, Tulsa
Tim Garner	Senior forecaster, SMG, Houston
Bryan Henry	Forecaster, WFO Jackson
Darone Jones	Forecaster, WFO Birmingham
Kent Kuyper	Senior forecaster, WFO Lake Charles
Matthew Lorentson	Senior forecaster, WFO Brownsville
Eric Martello	Senior forecaster, WFO Fort Worth
Ronald Morales	SOO, WFO Corpus Christi
Jennifer McNatt	Forecaster, WFO Tallahassee
Daniel Noah	WCM, WFO Tampa Bay
Timothy Oram	Techniques development meteorologist, SMG, Houston
Jason Wright	WCM, WFO Birmingham



DIGITAL SERVICES

NEW BUILD. IFPS16 is slated for national deployment during the second week of December. To help prepare for this build, training materials can be accessed at the following link:

<http://www.nwstc.noaa.gov/nwstrn/ifpsbuild16.htm>.

Also, our forward-thinking formatting team, the Southern Region Digital Services website contains formatters that have been prepared to work in IFPS 16. You can access this website at <http://intranet.srh.noaa.gov/srh/ifps/formatters.html>

IMPROVING GUIDANCE INPUT FOR GRIDDED FORECASTS. Gridded MRF MOS guidance forecasts are now available sooner and in a form more useful for local forecasts. Speeding up the guidance delivery can help to improve the verification of medium-range forecasts and facilitate earlier coordination among offices. Verification of NDFD forecasts is based on twice-daily snapshots of the database, at 0000 and 1200 UTC, which are then compared to observations. The ability of forecasters to assess the latest medium-range guidance from the 0000 UTC run of the GFS in gridded form as much as two hours earlier greatly enhances their ability to provide more accurate and timely grids to the NDFD.

CUSTOMERS PRAISE WFO DIGITAL SERVICES. We have frequently shared field comments that reflect how other agencies or industries are utilizing the new NWS digital forecasts, but we're always pleased to pass on examples of how the general public is responding to the services. WFO Midland provided the following evidence.

In October each year the small West Texas town of Sanderson, in Terrell County, hosts the Prickly Pear Pachanga, *pachanga* being a Tex-Mex term meaning "half a party." Such a well-attended community event presents an excellent opportunity for NWS outreach. Sanderson has no local radio or TV stations, and even those who have satellite TV get no local news or weather. During their interactions at the West Texas event, the WFO staff heard from one resident, "those [grid point] forecasts on the NWS Midland Web site are our lifeblood. Before the Web site, we wouldn't know if a severe storm was approaching our area unless we were looking out the window."

Early this year Terrell County experienced historic flooding along Independence Creek. The ability to now provide detailed and high resolution forecasts which residents of isolated communities such as Sanderson can easily access are an important focus of WFO Midland's ongoing service (and outreach) efforts.



CLIMATE, WATER AND WEATHER DIVISION

METEOROLOGICAL SERVICES BRANCH

PUBLIC

CID Transition Reminder. On November 9 at 1600 UTC all affected WFOs and RFCs and their backup sites will change their products to modernized PILs. This does not include the node (e.g., SATFFWSAT becomes SATFFWEWX). For the benefit of our customers NWSHQ has posted a list of the products that are part of this transition; they are listed under “combined phase” on the website: <http://www.nws.noaa.gov/datamgmt/cid.html>.

If you want to help spread the word, you are welcome to resend this Reminder PNS locally: http://www.nws.noaa.gov/om/notification/scn04-54_CIDFinalReminder.txt.

More information, including AWIPS and software instructions can be found on the SR CID website at: <http://intranet.srh.noaa.gov/srh/public/cid.html>.

MARINE

COASTFEST 2004. SERFC hydrologist Rick Ullom and WFO Jacksonville WCM Al Sandrik jointly staffed a booth at this year’s COASTFEST at the Brunswick, Georgia Department of Natural Resources facility on October 2. With 7,000 participants, COASTFEST is Georgia's largest organized celebration of the state's coastal natural resources. Rick presented the SERFC’s Advanced Hydrological Prediction System display and spoke about river flooding. Al discussed this year’s active hurricane season and presented historic Georgia storm information.

IMET ACTIVITIES

IMET Provides Support during Oil Pipeline Spill. In late September, IMET Rick Davis from WFO Tampa Bay was dispatched to an oil pipeline spill that occurred in southeast Louisiana near the mouth of the Mississippi River. Rick’s experiences illustrate the versatility of the incident meteorologist program as it expands beyond its traditional fire weather support role to encompass a variety of hazardous events.

Hurricane Ivan, a powerful Category 4 storm, produced waves greater than 50 feet in height as it moved east of the mouth of the Mississippi in mid-September. The enormous waves damaged several oil pipelines in the northern Gulf of Mexico. When oil companies began reactivating the pipeline system several leaks were found, some relatively close to the Delta National Wildlife Refuge and Pass a Loutre State Wildlife Management Area at the Mississippi’s mouth.

Rick arrived at the Incident Command Post in Fort Jackson, Louisiana on the morning of September 29 and quickly began setting up the AMRS unit to provide onsite weather information to NOAA

HAZMAT, USCG, USFWS and incident operations personnel. After a complete look at all the



weather variables using FX Net and other IMET tools at hand, a coordination call ensued with the marine and public forecasters at WFO New Orleans. Rick issued two site-specific forecasts daily, and briefed all branches of the incident command team several times a day. His forecasts added a great deal of accuracy to the NOAA HAZMAT trajectory models and helped accomplish the goals of the Incident Operations Team, which were to repair broken pipelines, control and contain the leaking oil, and protect the wildlife areas.

The dispatch posed a number of challenges, as the IMET was tasked to provide forecasts for operations on the ground, on the Gulf (marine), in the air, and 45 feet under the water's surface. The detailed IMET forecasts were used daily by over 200 people on the team and were of considerable value to response operations. Rick noted there was great teamwork among the different NOAA branches and the entire response group. He cited the event as a very positive experience, and one he believes should serve as a model for future expansion of the IMET program. Congratulations on the great job you did, Rick, under challenging circumstances!

EMERGENCY MANAGEMENT COORDINATION

StormReady Update. Six new StormReady recognitions have already been added to the SR roster for fiscal year 2005. **WFO Norman** recognized the communities of Marietta, Madill, Altus, Midwest City and Cushing, Oklahoma as StormReady. Meanwhile, **WFO Shreveport** recognized the cities of Texarkana (Arkansas and Texas) as StormReady.

As part of a new Southern Region program designed to supplement and enhance the StormReady Program, WFO Norman has designated the Pioneer Telephone Cooperative in Kingfisher, Oklahoma, as the first StormReady "Supporter," since that program became official at the beginning of October.

WFO New Orleans Provides Training on Hurricanes. Frank Revitte, WFO New Orleans WCM, served as an instructor at a training session for emergency managers on the use of the HURREVAC software. HURREVAC is a restricted-use program widely used by government emergency managers to track hurricanes and assist in community decision-making. The training session was organized by Chuck Gregg, Hurricane Program Manager for FEMA Region 6; Sean Fontenot, Louisiana Office of Homeland Security and Emergency Preparedness; and Brett Herr, Corps of Engineers. The session was held at the computer learning lab of the Corps of Engineers in New Orleans. Most of the attendees were experienced users of Hurrevac, though a few had only minimal experience with the software. A good exchange of information took place between the instructors and students on the utility of the Hurrevac software.

SPACEFLIGHT METEOROLOGY GROUP

SMG recently furnished weather support for NASA's 2004 Desert Research and Technology Studies (RATS) project in the Barringer Meteor Crater near Flagstaff, Arizona. The goal of the

Desert RATS team was to field test a variety of equipment being designed to support future planetary exploration. The Arizona high desert isn't quite as tough on equipment as the harsh



environments of the Moon or Mars, but few places on Earth can give prototype spacesuits, field assistant vehicles, communications, and science equipment a better workout.

From September 13-24 SMG provided weather forecasts and briefings on a daily basis to the Desert RATS team members stationed at Johnson Space Center who coordinated the field work in Arizona. The format of the forecast package included a satellite photo overlaid with frontal positions, a synopsis and a three-day forecast. SMG meteorologists Karl Silverman and Rich Lafosse supported the project. The weather turned out to be excellent for most days of the project, however, heavy rains fell over the area during the project's "rest day," which caused some delays restarting the work on Monday.

MEDIA/PUBLIC OUTREACH

WFO Little Rock WCM Interview by National Media. On September 23, WFO Little Rock WCM John Robinson taped a public affairs interview at Equity Broadcasting Company's headquarters in Little Rock. The segment dealt with the hurricane season and the outlook for the upcoming winter. The interview will air each week in October on more than 25 Equity stations across the country. Some of these stations are affiliates of the WB and UPN networks. Times and dates of the segment will vary, based on when each station airs its public affairs programming. It will also be available to 15 Viacom/MTV2 outlets.

WFO Little Rock Hosts Air Force Forecasters. On September 14, WFO Little Rock hosted eight visitors from the 26th Operational Weather Squadron at Barksdale Air Force Base, Louisiana. The USAF group was led by Maj. David Biggar, former forecaster at WFO Jackson. The airmen were in Little Rock to gain familiarization with their forecast area. MIC Renee Fair welcomed the visitors, and WCM John Robinson provided information on public misconceptions about tornadoes in Arkansas. SOO Chris Buonanno showed a Weather Event Simulator case involving very strong rotation over the Ozark National Forest that failed to produce a tornado. Later, the visitors moved to the forecast area where they met and interacted with the forecasters on duty, discussing common concerns associated with forecasting in Arkansas.

"Discover 2004" a Huge Success for WFO Amarillo. WFO Amarillo staffed a booth for the first time at the annual Discover 2004 event held on Labor Day. The event was held on the grounds at the Don Harrington Discovery Center, a hands-on science museum for children. Numerous local businesses staffed booths during the youth-oriented event, and offered kids various hands-on projects and give-a-ways. ITO Scott Pliske and intern Jim Wingenroth are credited with the Amarillo "Tornado in a Bottle" idea; local hospitals and internet hospital vendors donated hundreds of small plastic bottles which were used to make "tornadoes." To create the tornado, the bottle was filled with soapy water and food color, with kids given the chance to choose the color of their tornado. Over 500 tornadoes were given out, with each tornado bottle identified with a local WFO

Amarillo label. About ten WFO staff members donated their time to the event. The Discovery Center Executive Director praised the NWS booth as an excellent addition to the event, and WFO



Amarillo looks forward to participating again in 2005.

Amarillo Shines in Chamber BBQ. For the fourth consecutive year, WFO Amarillo took part in the annual Chamber BBQ, held on the streets of downtown Amarillo. Hundreds of local businesses staffed booths and participated in the cooking contests. The competition included several categories such as brisket, ribs, chicken, and “other.” For the second straight year, WFO Amarillo was fortunate to place in the cooking contest, taking 3rd in the ribs contest and complementing last year’s 3rd place finish in the brisket competition. Chief cook (and MIC) Jose Garcia takes care of the logistics for WFO Amarillo’s entry, and encourages his staff to assist as one more way to interact with our customers. An estimated 10,000 people attended the event. “It’s an excellent way to promote the NWS and have fun in doing so,” said Jose. “We look forward to it every year.” Great job Amarillo!

Community Awareness Day. MIC Ken Graham, WCM Jason Wright, forecaster Darone Jones and intern Jessica Stroupe staffed the WFO Birmingham booth at the annual Community Awareness Day at Linn Park in Downtown Birmingham. This event brought 500 fifth through seventh graders, along with teachers, parents, and the general public together to view a wide variety of information concerning disaster preparedness, especially severe weather implications. The WFO personnel provided multiple handouts and lightning posters to students, along with weather teaching materials for teachers. A hurricane toss game was very popular among many of the students, along with a demonstration of WFO Birmingham’s new tornado chamber machine. During a midday presentation, the WFO staff members proudly delivered a \$1000 check to the American Red Cross toward the Red Cross’s relief fund for victims of Hurricane Ivan. The money was raised from a bake sale at the WFO’s recent open house in association with the Wings & Wheels Air and Car show at Shelby County Airport in Calera, Alabama.

WFO Amarillo hosts Spotter and Coop Observer Appreciation Picnic. WFO Amarillo held its 4th annual Spotter and Cooperative Observer Appreciation Picnic on August 21 with about 85 people in attendance, including spotters, observers, emergency managers and other partners, and several of the Amarillo NWS staff. The three Wal-Mart stores in Amarillo donated all of the food, drink, and many of the door prizes. The Westgate Mall Radio Shack also donated a weather radio as a door prize. The menu consisted of fried chicken, chips, cookies, watermelon and soft drinks. The appreciation picnic is just one way the NWS in Amarillo recognizes and shows appreciation for its volunteers, valued partners and customers. It’s also a great way for the volunteers to learn more about NWS operations, meet the NWS staff, and each other.

Hamfest a Hit. WFO Huntsville WCM Tim Troutman and senior forecaster Robert Boyd staffed the NWS Huntsville booth at the annual Huntsville, Alabama, Hamfest on August 21. Over 3,000 attended the large Ham festival. Tim and Robert spoke to hundreds of amateur radio operators from across the Southeast about NOAA Weather Radio, NWS forecast and warning operations, and many other weather related topics.

Birmingham Kicks off the Home School Year. With the arrival of the new school year, WFO Birmingham recently hosted the first of several home school groups. Over 50 students and parents from Day Springs Academy spent a few hours learning about the weather and NWS responsibilities



for protecting life and property. HMT Kristina Sumrall and forecaster Krissy Hurley displayed instruments and used a series of demonstrations to teach the participants about the weather. Forecaster Darone Jones treated the group to a tour of the inflation shelter, while senior forecaster Faith Borden played the ever popular hurricane toss game with the group and reviewed safety rules for all types of inclement weather.

Fire Prevention Week Participation. WFOs Morristown and Nashville participated in the second annual Tennessee Fire Weather and Fire Prevention Week earlier this month. WFO fire weather program managers, David Hotz and John Cohen, in conjunction with their local land management agencies, wrote daily fire weather and prevention statements that were broadcast on NWR. The daily statements were an interagency effort to help educate the public on the relationship between fire behavior and weather, and increase the awareness of fire safety and prevention. Local media were also informed of the upcoming week to help spread the word.

HYDROLOGIC SERVICES BRANCH

AHPS Workshop. In September Eric Jones and Angelo Dalessandro, hydrologic forecasters at LMRFC, participated in an AHPS educational outreach workshop held for the staff at WFO Nashville. Jayant Deo, a contractor for the AHPS program, also participated in the workshop and discussed the paradigm shift associated with hydrologic information delivery via the AHPS Web pages. Eric provided an overview of the NWS AHPS program, while Angelo gave a presentation on the Ensemble Streamflow Prediction (ESP) model used to generate probabilistic hydrologic forecasts. Eric followed with an overview and interpretation of the various types of probabilistic forecasts available from the ESP model. The workshop ended with discussions on generating the baseline set of probabilistic hydrologic forecast information for the AHPS Web page. Thanks to Nashville MIC Larry Vannozzi and his staff for hosting this workshop.

FY04 AHPS Implementation Activities. Southern Region RFCs provided AHPS basic service implementation support at 94 river forecast points during the month of September. For FY04 the SR RFCs met their goal of providing AHPS basic service implementation support for a total of 143 river forecast locations. This included 33 forecast locations in the West Gulf RFC service area, 51 forecast locations in the Arkansas Red Basin RFC service area, 34 forecast locations in the Southeast RFC service area, and 25 forecast locations in the Lower Mississippi RFC service area. Southern, Central and Eastern Region WFO AHPS Web pages were updated to reflect the probabilistic hydrologic information associated with the 143 forecast locations. In particular, WFOs Amarillo, Norman, Tulsa, Morristown, Fort Worth, Huntsville and Nashville were all involved in updating their AHPS Web pages to reflect the addition of the probabilistic hydrologic information. Thanks to all RFC personnel involved with generating the probabilistic hydrologic information for the WFOs, and to WFO personnel who updated their AHPS Web pages during the past year.

Hurricane Ivan Tests LMRFC Backup System. On September 15, LMRFC dispatched four hydrologic forecasters to WFO Lake Charles to establish backup operations due to the potential landfall of Hurricane Ivan in the New Orleans/Slidell area. As events developed, Eric Jones,



Amanda Roberts, Angelo Dalessandro and Carolyn Levert did not have to perform backup operations, but as a result of the deployment LMRFC learned much and is now in a position to improve their plans for possible future backup procedures. Thanks to MIC Steve Rinard and his staff for supporting LMRFC in this effort.

New Supplements on the Way. As part of the new NWS directives system, HSB will be issuing hydrologic service program supplements in the coming months to replace existing ROMLs. The supplements will cover river forecasts, dam break operations, hydrologic service change authorizations, impacts of stream gauge closures on Hydrologic Forecast Services, Drought Information Statements, River Flood Outlook Product, WFO Hydrologic Service Areas, and Hydrologic Program Management Support at WFOs. A draft of the supplement titled "Authorization for Hydrologic Service Changes" is currently out for field review.

Experimental River Recreation Product. In collaboration with the Oklahoma Scenic River Commission, ABRFC launched an experimental Web page for recreation interests along the Illinois River in eastern Oklahoma. The experimental recreational forecast depicts the expected river levels for the Illinois River of Oklahoma, a very popular stream for canoe and raft float trips. The expected stream flow levels are translated to a river floatability index based on guidelines provided by the Illinois River Association and the State of Oklahoma Scenic Rivers Commission. Recreational interests can use the information to better ensure a safe experience on and near the river. Feedback from customers will be collected between now and July 2005. The feedback will be used to determine whether or not the graphic becomes an operational product. The Web address for the experimental product is: <http://www.srh.noaa.gov/abrfc/recfcst/>.

Precipitation Variability Explained. On October 5, WFO Albuquerque MIC Charlie Liles gave a presentation on "The Relationship between ENSO, the PDO, and AMO on Precipitation Variability in the Southwest U.S." at the 2004 South Pacific Division Bi-Annual Joint Water Control and Hydrology & Hydraulics Workshop, hosted by the Albuquerque COE District Office. Engineers and water managers from California, Utah, Arizona, Nevada, Colorado and New Mexico met in Albuquerque for this biannual conference.

Louisiana Forecasters get into Wild Things 2004. Ethan Jolly, senior hydrologist at LMRFC, Patricia Brown, senior service hydrologist at WFO New Orleans, participated in Wild Things 2004 at the Big Branch Marsh National Wildlife Refuge in Lacombe, Louisiana. The Wild Things 2004 festival was hosted by the U.S. Fish and Wildlife Service at the new headquarters of Southeast Louisiana Refuges. This year the festival celebrated National Wildlife Refuge Week by commemorating the 100th anniversary of Breton National Wildlife Refuge, established under the leadership of President Theodore Roosevelt. Visitors to the NWS booth received information on riverine and flash floods, severe weather, NWR, hurricanes, marine weather, the NWS website JetStream, and other topics. Using a model of forestation, the hydrologists demonstrated the impacts of deforestation on rainfall runoff. Another model of the earth's soils was used to explain the impacts of pollution on groundwater sources, including wells and aquifers. Over 300 people visited the NWS booth during the festival.



Hydrologic Information on the SR Intranet. HSB is updating the hydrometeorological information available on the SR Intranet. Information we plan to add in the near future includes the FFMP teletraining material from Brian Boyd at WFO Morristown, user documentation for the new AHPS content management system, documentation on the new framework for upgrading the AHPS Web pages, user documentation for the WFO site-specific hydrologic model, links to new hydrologic supplements, and the action item tracker from our HSB/WFO/RFC conference calls.

CLIMATE SERVICES BRANCH

New WFO Climate Database and Search Engine Available. Based on feedback from WFOs, the NWS regions and NWSH Climate Service Division have partnered with the NOAA Regional Climate Centers (RCCs) to provide each WFO with an historical climate data base for all First Order stations, all ASOS sites, and select Co-Op sites within the County Warning Area of the WFO. The internal Web based system, called xmACIS, is hosted by the various RCCs around the country and is populated with data available from NCDC. It also contains a search engine which allows WFOs to perform climate data queries. The data fields consist of daily maximum and minimum temperatures, daily precipitation and snowfall, and daily snow depth. Monthly averages can also be calculated, as can frequency of events and first and last occurrences.

For the first time, each WFO will now have equal access to historical climate data within their CWA to assist them in issuing guidance products for decision makers. In time, the data can also assist WFOs in performing climate compositing and for developing locally downscaled climate products.

WFO Tulsa Composite Forecast Makes Headline News. Many areas in the Central and Southern Plains had abnormally cool summers. A commonly asked question was whether or not this meant an abnormally cold winter was in the offing. Using simple compositing techniques, WFO Tulsa was able to answer the question and at the same time garner front page coverage in the local newspaper. Tulsa's summer of 2004 was the 6th coolest in the past 100 years of record. The WFO identified the 33 mildest summers (June, July, and August) in Tulsa and then compared those with the following winters (December, January, February). The comparison showed a mild summer does not necessarily mean the following winter will be colder than normal. Of the subsequent 33 winters, only ten were colder than normal, 11 were above normal, and 12 had normal temperatures. The *Tulsa World* carried a feature highlighting this story in the front page of a recent edition. The WFO's study can be found on the office Web site at:
<http://www.srh.noaa.gov/tulsa/summer2004.html>.

September 2004 – One for the Record Books. In addition to the unusual number of tropical cyclones affecting Florida, Georgia and Alabama during September, it was also a month for the record books in regard to precipitation variability. In 110 years of record dating back to 1895, September 2004 was the wettest September ever in Georgia and the 3rd wettest on record in Florida. On a regional scale, the Southeast United States, including Florida, Alabama, Georgia, the Carolinas and Virginia, had their wettest September on record. Coincidentally, this region covers



the hydrologic service area of SERFC. In notable contrast, nearby Arkansas suffered its second *driest* September on record since 1895.

Southern Region WFOs and RFCs issued a large number of forecasts and warnings for the September events, and timely climate-related products of use to decision makers and the general public were made available on Southern Region Web pages, and disseminated via Public Information Statements. Additional graphics detailing the disparity in rainfall across the region can be found at the following links:

http://www.ncdc.noaa.gov/img/climate/research/2004/sep/09Statewideprank_pg.gif

http://www.ncdc.noaa.gov/img/climate/research/2004/sep/09Regionalprank_pg.gif

In addition to the September rainfall differences documented above, extreme precipitation variability existed within the state of Florida itself. West Palm Beach on southeast coast experienced its wettest September (29.40") since record keeping began in 1938. But just 115 miles away Naples, on the southwest coast, experienced its driest September since record keeping began in 1948 by recording only 2.95". Obviously, trying to forecast extremes such as that in the same month (much less a season) would be challenging! September's rainfall variability in the Sunshine State is well illustrated at:

http://www.srh.noaa.gov/rfcshare/p_images/2004/200409/p_FL_200409_obs.jpg

SCIENTIFIC SERVICES DIVISION

AWOC UPDATE. Since current bandwidth limitations prohibit the effective streaming of the audio/video AWOC materials, the Warning Decision Training Branch recently provided all offices with a CD-ROM containing the MacroMedia Flash and Intelligent Presenter files. Offices can then play those files locally without relying on any Internet access. Students should continue to access the course module tests through the NWS Learning Management System (LMS). The CD was masterfully set up with an index page, making navigation through each track a breeze for those taking the course. Jeff Cupo (WFO Midland SOO) has suggested the CD be copied to the office's LAN and linked to the local intranet page. That makes for easy and fast retrieval of individual lessons and facilitates the access of these lessons. Students won't have to wait for the CD to load every so often as a result of the large presentation files, and it gives them a simple page to which to refer every time they are ready for the next lesson. Those taking the course can have what amounts to a "one-stop shopping" for course access and there is no longer a need to fumble with a CD.

LDAR. WFO Fort Worth is now receiving real-time data from an operational total lightning network. The DFW Lightning Detection and Ranging system (DFW LDAR II) is operated by Vaisala, Inc. and was converted from a research network to a real-time operational network this fall. As opposed to the cloud-to-ground lightning data that are available via AWIPS from the National Lightning Detection Network (NLDN), the DFW LDAR II network is made up of seven sensors



that detect pulses of radiation associated with the electrical breakdown processes of lightning. These pulses are then used to reconstruct - in three dimensions - the path of individual within cloud as well as cloud-to-ground (CG) lightning flashes. The LDAR II network can map lightning flashes within approximately 150 km (80 nm) of the center of the network near DFW International Airport. Access to the data was arranged through Vaisala, the FAA, and other agencies in the DFW area who were involved in the North Texas network.

Total lightning data have been available to forecasters at WFOs Melbourne and Huntsville, thanks to collaborative arrangements with NASA researchers. With assistance provided by WFO Huntsville ITO Jason Burks, forecasters at WFO Fort Worth are able to view the LDAR II data in AWIPS and use it to supplement radar and NLDN data. Some operational applications of total lightning data from LDAR II include the potential for increased lead time for severe thunderstorm warnings, gaining a better representation of the CG lightning hazard region, and improving aviation forecasting during convection.

COMET REQUEST FOR PROPOSALS POSTED. COMET (the Cooperative Program for Operational Meteorology, Education and Training) has issued its 2005 Outreach Program Request for Proposals (RFP) for Cooperative Projects. Full details can be found on the COMET Web site at: <http://dev.comet.ucar.edu/outreach/coop2005.htm>. Cooperative projects are multi-year efforts involving one or more university researcher and at least one NWS office. Proposals should be jointly developed and a draft should be provided to SSD by **January 24, 2005**. The final version must be submitted to the COMET Outreach Program by **March 14, 2005**. It is anticipated at this time that funds will be available to support four new projects. For more information contact SSD, or Dr. Vickie Johnson at COMET (vjohnson@comet.ucar.edu).

Note that applications for the smaller COMET [Partners Projects](#) are accepted at any time.

GOODBYE ETA, HELLO WRF! The NCEP Mesoscale Modeling Branch has announced it will replace the current operational Eta-12 model with a WRF version of their non-hydrostatic Mesoscale Model on October 1, 2005. Last month (September 21) they began regular daily runs of a version of the replacement model as the Hi-Res Window mesoscale model. Information and output are at www.emc.ncep.noaa.gov/mmb/mmbp11/nestpage/. The Forecast Decision Training Branch plans to start providing training on the basics of the replacement model next spring, with more detailed comparisons of the relative strengths, weakness and biases of the model with the Eta-12 in late summer.

SEMINAR SERIES. We continue to have success with information sharing via our Regional Teletraining Seminar Series. The typical seminar has had five offices participate, with five or six people at each of the offices. We're currently at a lull in seminar activity and hope that all offices will consider providing a seminar on a topic of interest. Recent seminars have been based on papers and posters presented by Southern Region participants at last month's AMS Severe Local Storms and Aviation Conferences in Hyannis, Massachusetts, and last week's annual meeting of the NWA in Portland, Oregon. Note the seminars do not have to be on meteorological or hydrological topics, however, they can also deal with leadership, information technology, best practices, or other



mission-related topics. Materials from previously offered seminars can be found online at: <http://intranet.srh.noaa.gov/srh/ssd/Seminars/Archive.html>.

ACCESS TO AMS ONLINE JOURNALS. The American Meteorological Society Journals Online Web site <http://ams.allenpress.com> provides access for anyone to search the journals and/or view the abstract of any article. To view the complete text, however, or print a copy of an article in journals other than the AMS *Bulletin*, you must be a subscriber to the online journal(s). Beginning in 2001, in lieu of purchasing printed copies of *Monthly Weather Review* and *Weather and Forecasting* for all offices, the NWS Headquarters Training Division - with concurrence from the regions - opted to purchase subscriptions to the online versions of the journals only. Included in the purchase are *MWR* (1997-), *W&F* (1997-), and also the more recent *Journal of Hydrometeorology* (2000-). For copies of articles from other journals not included in these online subscriptions, or from older issues of *MWR*, *W&F*, contact the NOAA Central Library <http://www.lib.noaa.gov>.

The majority of our offices indicated they preferred online access and were running out of storage space for journals. Of course, any office which desires to continue subscriptions to printed copies in addition to the online access may still do so. In previous years the AMS journal subscriptions were funded as part of the NWS training program. This year, the NWSH Office of Science & Technology and the Office of Climate, Water and Weather Services agreed to support the online subscriptions to the 2004 and 2005 issues of the journals.

Note also that offices have unrestricted access to the National Weather Association Electronic Journal of Operational Meteorology (<http://www.nwas.org/ej/e-j.html>). Refer to the SOO Reference Notebook at www.srh.noaa.gov/ssd/soonotebook for more details.

RESEARCH OF INTEREST. The September 2004 issue of *Monthly Weather Review* contains a paper titled, "Has the Conversion of Natural Wetlands to Agricultural Land Increased the Incidence and Severity of Damaging Freezes in South Florida?," by C.H. Marshall, R. Pielke Sr., and L. Steyaert. A good summary of the paper is this excerpt from the authors' concluding remarks:

During the twentieth century, a series of devastating freeze events in northern and central Florida precipitated sharp southward migrations in the key production centers of the state's agricultural industries. These migrations, along with increases in areas of winter vegetable and sugarcane production, have resulted in increased conversion of wetlands to cropland in south Florida. The results presented in this paper suggest the ironic possibility that, *in the attempt to avoid devastating freezes by relocating agricultural production centers to the wetlands of south Florida, the required land cover conversion could itself result in an increase in the frequency and severity of freezes in that region.* This feedback of the land use on the frequency, duration, and intensity of freezes is yet another example of the nonlinear coupling of the land surface and the atmosphere within the climate system ...



TECHNICAL ATTACHMENTS. This month we are initiating a new approach to technical attachments. The “attachment” will be electronic, though a link to the originating office’s Internet or Intranet site. New technical attachments will no longer be numbered, but will be cataloged and included on the list of technical attachments on the Southern Region Web site at <http://www.srh.noaa.gov/ssd/html/techattachnew.html>.

We encourage all offices to continue to provide SSD with links to local studies and other documentation on topics relevant to forecast and service operations. This month’s attachments are:

A Comparison of MEX Guidance vs. Ensemble-based Temperature Forecasts, by Loren C. Marz (WFO Morristown). SR/SSD 2004-07.

<http://www.srh.noaa.gov/mrx/research/tempstudy/marzstudy.htm>

Essentials and Eccentricities of E-Learning, by Jon Zeitler (WFO Austin/San Antonio) and Kenneth Widelski (WFO Lubbock). SR/SSD 2004-08.

http://lucetia.srh.noaa.gov/ewx/soo/elearning_TA.pdf

MAV/FWC Model Output and Forecaster Temperature Verification for WFO Shreveport’s Forecast Area, by Michael Berry and Bill Murrell (WFO Shreveport). SR/SSD 2004-09.

http://www.srh.noaa.gov/shv/Temperature_Verification.htm.

National Weather Association Annual Meeting, Portland, October 17-21, 2004: Presentations authored or co-authored by NWS Southern Region Participants. SR/SSD 2004-10.

<http://www.srh.noaa.gov/topics/attach/pdf/ssd04-10.pdf>

AMS 22nd Conference on Severe Local Storms, and 11th Aviation, Range and Aerospace Meteorology Conference, Hyannis, MA, October 4-8, 2004: Presentations authored or co-authored by NWS Southern Region Participants. SR/SSD 2004-11.

<http://www.srh.noaa.gov/topics/attach/pdf/ssd04-11.pdf>

SYSTEMS OPERATIONS DIVISION

OBSERVATIONS AND FACILITIES BRANCH

Cooperative Program Site Safety Review. A recent negotiated settlement between NWS and NWSEO will require the CPM or designee to annually survey each Coop site for potential hazards to NWS employees. A survey form and completed examples were provided, however, direction has not yet been given regarding a start-stop schedule, priorities, etc. It is assumed the surveys will be conducted by HMTs with any high risk sites examined first. The MIC is the responsible party for



final determination on subsequent trips to the site, with union input provided by the local union steward.

MIC E/S Certifications. SR WFO MIC's or their E/S Focal Points delegated to review the Safety and Environmental Management manuals have begun to send the required certifications for FY04 that their offices are in compliance with the provisions of the various sections of each of the two manuals. This process was slowed by the active hurricane and severe weather events in September.

Safety and Environmental Intranet Forum. Following the lead of HMT Kristina Sumrall and senior forecaster Darone Jones at WFO Birmingham, the SR Intranet Environmental and Safety Forum was initiated in early October with a monthly discussion on three topics from the Safety and Environmental Management manuals. The discussion topics for October are: hazardous materials storage, compressed gas safety, and accident/illness reporting. All E/S focal points have been invited to participate in the Intranet E/S Forum following the recent monthly SR E/S conference call. Participation in this forum will permit the focal points to become more proficient in the subject matter by sharing ideas, questions and concerns on the various manual sections.

WFO Key West. Construction activity at the new White and United Street site continues with foundation excavation and forming. The progress is being updated weekly by the WFO Key West staff with Web page photos and a description of the construction details.

Performance values for FY04. The SR WFOs completed FY04 with outstanding performance ratings in support of the Coop program. During FY04 nearly 5500 station visits were documented which resulted in a regional visitation rate of 185%. Missing data rates were also commendable with only 0.95% of the Climatological Data (CD) missing while the missing Hourly Precipitation Data (HPD) rate was 1.19%. The regional goals for missing data are less than 2% missing CD and less than 3% missing HPD. The offices also reported that nearly half-a-million miles were driven in support of the program – the equivalent of nearly 20 trips around the world!

150 Years of Observations at Clarksville, Tennessee. WFO Nashville honored the City of Clarksville for its dedication in taking weather observations since 1854. An afternoon ceremony was held on October 7 at the city Waste Water Treatment Plant, where employees currently log weather observations every midnight. Many of the employees were on hand to receive the plant's plaque and to learn some of the ways their information is used. Later that evening, WFO Nashville MIC Larry Vannoizzi presented a plaque to the mayor of Clarksville during the City Council meeting. DAPM Ralph Troutman arranged the logistics for both ceremonies and issued the press release.

The *Leaf Chronicle* newspaper covered the event and wrote a very interesting article related to the cooperative program and the services that the local observers perform. The article indicated this is the only station in Tennessee which has weather records so far back into U.S. history. The station has been active during the administration of 30 presidents and through not only both World Wars, but also weather data were collected there during the Civil War! Read the article at <http://www.theleafchronicle.com/apps/pbcs.dll/article?AID=/20041008/NEWS01/410080325/1002/>



NEWS01.

Lost Time Injury. An employee received an eye injury and missed three days of work as a result when he struck his head on the overhead door at the upper air inflation shelter. The door was not fully raised, which is not uncommon during windy conditions, and may have slid down after he exited and re-entered the inflation high bay. An anchor point has been added to which the door chain can be attached when the door is in the open position, and other UA sites with this door configuration will be advised to do the same.

Diesel Exhaust in Building. The Key West airport installed an extension on their diesel generator exhaust stack that was previously allowing exhaust products to be ingested into the WFO by the outside air intake for the HVAC system. The last three times the generator has run there have been no diesel fume complaints by the staff. This problem was first documented and presented to the airport management in August 2003.

New Spill Plans for SR. Nine offices in SR have been surveyed for new spill plans since the existing plans had expired. These spill plans are required by the EPA to include facility description, potential drainage to nearby waterways, fuel tank inspections, employee training for spill response, regulatory notification of spills, and cleanup contractor identification. Six spill plan site surveys were done by contractors and three were done by SRH and WASC. The nine sites are Brownsville, El Paso, Atlanta, Midland-Odessa, Miami, Nashville, Birmingham, Corpus Christi and Jackson.

Reimbursable Estimates for FY05. On September 24 Southern Region provided NWSH OS7 with the Corps of Engineers (COE) reimbursable observation network cost estimates for FY05. The NWS maintains a large group of Coop sites in support of COE requirements. In return the COE funds the NWS and NCDC to cover the expenses associated with these observing locations.

SYSTEMS INTEGRATION BRANCH

ASOS. Recent hurricanes have demonstrated that the new DTS1 dew point sensor has problems handling high winds and rain, based on our experiences at the Tampa, Tallahassee, Jacksonville and Mobile offices. The issue was raised during the monthly ASOS conference call and will be investigated by WSH.

The upgraded Ice Free Wind (IFW) sensor power supplies have been installed at two SR Operational Acceptance Test (OAT) sites and we're now waiting on the improved sensor. After talking with Bryan Moore and Richard Ahlberg at WSH, WFO Key West will be added as an OAT site and will receive the necessary hardware to test the IFW sensor.

Upper Air. NRC has shipped an improved ART-1 pylon to WFO Fort Worth and requested the pylon be installed and field tested. The improved pylon has a new three-phase motor and a converter box that converts the single phase to three-phase.

NWR/CRS. The NOAA Weather Radio program continued to grow during the month of



September with the completion of a new site in Kingsbury, Texas. The Kingsbury site is located near Seguin and transmits on a frequency of 162.475 MHZ. The broadcast audio originates from WFO Austin/San Antonio. The dual 1000 watt transmitters provide service to the citizens of Guadalupe and Comal counties, with coverage extending into parts of Hayes, Caldwell and Bexar counties.

September saw the delivery of the new CRS Build 10.0 and VIP 3.1 software deployed to the field agency-wide. The new build repairs many known deficiencies that currently exist within CRS and will also allow for the delivery of products in a more secure method by employing the new "VIP Remote SFTP" feature. WFO Austin/San Antonio served as a Beta Test site for the new build. After installing the new software and monitoring the reliability of the system for over four weeks, the build proved to be sound and very reliable. Agency wide approval was granted and build release took effect on September 21.

WSR-88D. The Radar Operations Center (ROC) in Norman, Oklahoma dispatched personnel to WFO Miami to assist the local staff in restoring the radar system to normal operation after it had experienced a significant lightning strike during Hurricane Charley. The radar, which was out of operational service for a minimal amount of time due to the hard work and dedication of the local staff and ROC personnel, was not only repaired in record time, but was also brought back into service in time to "weather" the remaining storms!

Telecommunications. New circuits and ROAMS lines have been ordered for Throckmorton and Marietta, Texas sites with installation dates this month. Also good news ... the circuit for Culebra, Puerto Rico has been installed at Fajardo. The San Juan WFO will microwave the broadcast from the Fajardo site via UHF link to the Culebra transmitter. This project is still underway, and hopefully will be completed in the near future.

The NWSNet T-3 circuit was installed at SRH and became operational September 30.

Work continues on the WFO Houston/Galveston move. An inventory of all of the comms has been made and vendors are being contacted to support the move. Plans to start ordering the circuits for the new location are underway, to be completed by mid-October for a mid-to-late December installation. We're working with responsible parties at WSH to coordinate circuit installations and moves.

AWIPS. We continue to work with NWSH to help ensure official modification notes are posted for use by field offices before AWIPS hardware is installed. Delayed issuance of mod notes causes delays in the field. This is especially true now that the NCF is limited to supporting only three installations of any given type per day.

ADMINISTRATIVE MANAGEMENT DIVISION

DIVERSITY/EEO AND COMMUNITY OUTREACH ACTIVITIES



WFO SAN JUAN. WCM Rafael Mojica visited the University of Puerto Rico Mayaguez campus to participate in the closing ceremony of the Physics Department Atmospheric Science Summer Internship Program. Several graduate and undergraduate students, three of whom were assigned to the WFO during the summer, presented the results of their summer internships.

Rafael also conducted a teletraining session on hurricanes for 95 students of the Geophysical Science class at the Caribbean University in Bayamon.

WFO MIDLAND. SOO Jeffrey Cupo and forecaster Seth Nagle manned an NWS booth at this year's Marfa Lights Festival in Marfa, Texas. The festival, which celebrates the mysterious lights which have been seen in the desert east of town for more than a century, took place on September 4-5 and provided the perfect opportunity for awareness outreach. "Whenever you can piggyback on another event's popularity, it really becomes a win-win for everyone," said Jeff. Outreach included information on NOAA Weather Radio, severe weather preparedness, product definitions, as well as on-going Hurricane Frances. The most popular item, in fact, was the hurricane-tracking chart; somewhat surprising given Midland's distance from the nearest salt water. Jeff and Seth also met with members of the Big Bend Amateur Radio Community, a club that has been a vital link in Skywarn operations for the southwest portions of the Midland CWA for many years.

WFO HUNTSVILLE PAYS TRIBUTE. Last July, H.D. Bagley, a local media weather icon and a pioneer in the U.S. Weather Bureau/National Weather Service in Huntsville, passed away. He began his career with the USWB in 1950 as a Hydroclimatic Inspector, a precursor to the CPM, based out of Atlanta. In 1958 he helped establish the first weather office in Huntsville. A few weeks before his death Mr. Bagley was interviewed by WFO Huntsville MIC John Gordon and SCEP Holly Allen. Part of the interview, and additional information, are on the WFO Web page at www.srh.noaa.gov/hun/hdbagley. This tribute was created by University of Alabama in Huntsville volunteer student Daniel Lamb. Dick Wright, retired Operations Manager at WHNT-TV, reflected the feelings of many in the community toward Mr. Bagley and the information contained in the tribute, saying, "I have just finished reading the pages on H.D. As a person who worked with him for 10 years, I was impressed with what I did not know about him. Our community has suffered a great loss, not only the weatherman, but a person who really cared. Thanks for your efforts and I hope that you leave the pages up on the web site for a LONG time."

