



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

April 2005

SOUTHERN TOPICS

Working Together To Save Lives

Southern Region Home Page Previous Topics

REGIONAL DIRECTOR

Congratulations to the following Southern Region employees who are recipients of 2005 NOAA Administrator's Awards.

Rodney Heckel

For developing and implementing the capability for automated Spanish language broadcasts on NOAA Weather Radio.

John C. Duxbury and Mike Asmus

For developing and deploying the Interactive Voice-Remote Observation Collection System for improving data collection and access to observations from volunteer weather observers

James B. Lushine

For successful implementation of NOAA's rip current outreach and education campaign, "Break the Grip of the RipTM."

Paul Kirkwood, Susan Beckwith, Bruce Marshak, and Dennis Cain For outstanding team efforts in deploying creative IT solutions to meet record breaking web page demands as four major hurricanes hit Florida in 2004.

Please join with me in congratulating these employees for this well deserved recognition.



CLIMATE, WATER AND WEATHER DIVISION

METEOROLOGICAL SERVICES BRANCH

Key West participates in NOAA Safe Sanctuaries 2005. WFO Key West joined NOAA partners from the Florida Keys National Marine Sanctuary, the Office of Response and Restoration, and the National Ocean Service, as well as the United States Coast Guard, and the Florida Department of Environmental Protection in an exercise to test emergency response capabilities. The exercise revolved around the grounding of an 800-foot, fully-loaded cargo vessel with 200,000 gallons of fuel near Elbow Reef, within the Florida Keys National Marine Sanctuary. Drift cards were used to simulate the spread of fuel on the water surface. Incident Meteorologist (IMET) Rick Davis, of WFO Tampa Bay/Ruskin, was dispatched to provide site-specific forecasts from an operational base in Key Largo, while WFO Key West Marine Program Leader Cliff Brock provided detailed forecasts from the WFO Key West. WCM Jon Rizzo coordinated the efforts between Davis and Brock while staffing a desk at the Monroe County Emergency Operations Center in Marathon, Florida for NOAA's Environmental Response Unit. Rizzo provided the site-specific and short-term forecasts to the Situation, Planning, Environmental and Safety units, as well as detailed wind data to NOAA's trajectory modeling unit in Seattle, Washington.

The exercise, the first of its kind to include direct meteorological support from the National Weather Service within a NOAA emergency command post, spotlighted numerous positive efforts. Prior to the exercise, WFO Key West ET Don Byrd and Met Intern Matt Parke installed an automated HANDAR observation station on the Carysfort Reef Lighthouse through the assistance of the National Marine Sanctuary and U.S. Coast Guard. Experience and knowledge from WFO Key West was shared with IMET Rick Davis in the field, enabling him to produce forecasts accounting for diurnal, local effects. This benefit led to timely forecast updates to the trajectory model, which resulted in all of the drift cards being located exactly within the predicted area. NOAA response units were then able to concentrate protective boom deployment and vessel operations in the areas where they were needed most. Media and waterway closure messages compiled at the Command Post's Joint Information Center were relayed through the Jon Rizzo for airing on NWR at Tea Table Key, highlighting the use of the National Weather Service's radio network for broadcasting hazardous material and marine safety information.

Tsunami Information. For all your tsunami information needs, don't forget the Southern Region Tsunami Intranet website at: http://lucretia.srh.noaa.gov/srh/marine/tsunami.html. In addition to a wide array of tsunami outreach material, the website also contains information on how the NWS reached Phase 2 of the *Southern and Eastern Coastal U.S. Tsunami Warning Program System*, which was implemented on April 20th. Specifically, the milestones for Phases 1, 2 and beyond can be found at: http://lucretia.srh.noaa.gov/srh/marine/TsunamiMilestones.pdf

A Day in the Life of a Port Meteorological Officer (PMO). Peggy Alander, PMO at WFO Miami, met AOML research meteorologists Tom Conway and Derrick Snowden on April 9th and helped them remove carbon dioxide research equipment from the cargo ship *Sealand Express*. She



walked them through the various security protocols in place at Port Everglades, visited the ship with them and helped with the task of unloading the air samplers.

The *Sealand Express*, after several years on the AX08 line from New York to Capetown, was moving into Middle East service and would no longer be available as a ship of opportunity for atmospheric carbon dioxide or ocean profile sampling. As they unloaded the equipment, it became apparent that the computer system previously used for expendable bathythermograph sampling was also used as the ship's AMVER/SEAS weather observation record. As they had already removed this equipment at a previous port, the NWS was at risk of losing the *Sealand Express* as a VOS ship as well. At this time, Peggy made arrangements with the PMO in Houston to install new AMVER/SEAS software on the ship's PC and train the crew in its operation.

While only being in the PMO job a few months, Peggy has learned fast and is making a difference to our ship observers, the VOS program, and researchers as well.

Southwest Airlines Florida Tour. Rick Curtis, Southwest Airlines (SWA) Meteorologist, and Paul Witsaman, SR RAM completed a 4 day, 8 office tour of central and south Florida. The trip included visits to the National Hurricane Center, WFO Miami, CWSU Miami, WFO Tampa Bay, WFO Melbourne, and the SWA Airport Offices at Fort Lauderdale, Tampa Bay, and Orlando.

At each NWS office, Rick explained to the staffs how SWA uses NWS products and services. While he stressed the criticality of our TAFs to SWA's operations, he also conveyed the dispatchers' appreciation for the aviation sections contained in many of our WFOs' AFDs. The most helpful aviation discussions use plain language to describe expected timing of frontal passages, wind shifts (especially wind shifts that impact runway direction swaps), precipitation amounts and significant ceiling heights (especially those that impact airport minimums and alternate requirements). While mention of IFR, MVFR and VFR weather conditions is good, those AFDs that contain a short plain language discussion highlighting operational impacts are particularly valuable.

Rick and Paul both felt the trip was a big success, so much so that both would like to visit the other NWS offices that serve the 24 airports in Southern Region served by SWA. A special thank you is due to the management and staffs of WFO Miami, CWSU Miami, WFO Tampa Bay, and WFO Melbourne for attending the meetings with Rick and Paul, and for offering valuable input. As the nation's 4th largest air carrier, Southwest Airlines is one of the National Weather Service's most important aviation partners.

San Juan Joins Forest Service Multi Agency Coordinating Group. Rafael Mojica, WCM, WFO San Juan, recently participated in the annual meeting of the Puerto Rico-Florida Forest Service Fire Management meeting. Rafael gave an overview of the 2004 hurricane season and discussed the outlook for 2005. Each participating federal agency gave an overview of the recent wildfire season in Puerto Rico, which was near record due to drought. The WFO's fire weather program was discussed and liaison contacts with other federal agencies involved in wildfire suppression were established.

Lubbock Launches NWR Improvement Project. This past winter, the NWR Improvement



Project at WFO Lubbock kicked off with the addition of several new products in the broadcast cycle affecting transmitters in Summerfield, Plainview, and Lubbock. The cornerstone of the project was the addition of a "Weather Discussion". This discussion is recorded manually by forecasters as part of their routine shift duties, and is updated at 5 am, 11 am, 5 pm, and 11 pm. The discussion is informal, conversational and communicates information about past and current weather, both locally and nationally. A brief overview of the short term and extended local forecast details are also included in this discussion, which averages around 2 to 2 ½ minutes in length and has a periodicity of 10 minutes. Other items added to the routine broadcast as part of this NWR Improvement Project include manually recorded Red Flag Warnings, and storm summary information.

As part of this project, feedback was gathered from NWR listeners. The feedback showed that 90 to 95 percent of listeners approved of the changes. They stated that they enjoy the weather discussion, and appreciate hearing a human voice on NWR. The project team members include Gary Skwira, Intern; Ken Widelski, Journeyman Forecaster; and Jody James, Senior Forecaster and Team Leader.

What follows are typical comments received from NWR listeners:

"I listen to your broadcast every day at about 5 AM and then drive to Plainview where I am a greeter at the new Wal-Mart there. I very much like the weather discussions and the weather explanations to why things are happening. Keep up the good work – it is much appreciated."

"I have been a listener for 20 years. I like the discussion because it breaks up the otherwise monotonous broadcast. I really like the weather history and weather phenomena."

"I am a daily listener and really like hearing the meteorologists tell what is happening and what is expected to happen."

"I would like to congratulate you on the new format. I listen every morning and really like the changes that have been made."

Technical Attachment on Instant Messaging Initiative at Birmingham. As our offices build on the already strong relationships that exist between themselves and their local emergency management and media partners, efforts remain focused on methods for improving the exchange of impact weather information with these groups. One of the communication forms now being employed at some of our offices is Instant Messaging, or "IM". As with other methods, the purpose of IM is to save lives and mitigate property damage by enhancing the flow of impact weather information to the broadcast media and the EM community. This topic is the subject of a new SR Technical Attachment written by Faith Borden of WFO Birmingham entitled "The Success of Instant Messaging for Improving Communications with the Local Media". Her Technical Attachment can be found at the following URL:

http://www.srh.noaa.gov/topics/attach/pdf/MSB05-02.pdf



Interagency Look at Homeland Security. WFO Fort Worth forecaster Dan Dixon recently attended the Incident Command System/Unified Command Course, offered at the North Central Texas Council of Governments in Arlington, TX. There were approximately fifty students in the course, most of whom were from the DFW Metroplex and involved in some form of law enforcement or emergency response. The course covered a wide variety of topics, including a discussion of the different forms of terrorism, as well as other non-terror related civil emergencies. An underlying theme of the course was to stress the benefit of an organized incident response system, which required cooperation of local, state, and federal emergency management officials in order to be effective. The course format was a good mixture of lecture and practical exercise, which included the simulation of a response to three separate terrorist incidents within the DFW Metroplex. As the only meteorologist attending this course, Dan was given the opportunity to speak to the class for a few minutes before one of the sessions, and informed the students of the support services that we can provide at the National Weather Service.

SMG Prepares For Return-To-Flight Shuttle Mission. Preparations for the return-to-flight shuttle mission have shifted into high gear at the NWS Spaceflight Meteorology Group located at NASA's Johnson Space Center in Houston, TX. The planned launch of Discovery in July 2005 will mark the first shuttle mission since the loss of Columbia in early 2003.

SMG has embarked on several changes and improvements during this 2-year shuttle mission hiatus. The primary change was implementing high-fidelity "weather-centric" simulations for both launch and landing. This has provided enhanced training for both SMG meteorologists and key Flight Controllers that are involved with weather-related landing decisions. SMG implemented the ARPS (Advanced Regional Prediction System) mesoscale model over the Kennedy Space Center area. The new SMG "Weather Users Forum" facilitates cross-discussion and information sharing between SMG meteorologists and their Flight Control Team customers. This forum has led to many changes and improvements in SMG operational processes and procedures. SMG has hosted four Weather Users Forums to date.

Meteorologists at SMG helped coordinate two enhancements to Shuttle Weather Flight Rules. The "Rain Shower Rule" clarification improved the rain shower evaluation process for Return-to-Launch-Site (RTLS) and Transoceanic Abort Landing (TAL) landings. Also, a "weather terminology" section was added to the NASA Weather Flight Rules. SMG coordinated weather instrumentation upgrades at the White Sands, NM shuttle landing site, and coordinated the siting of weather instrumentation at the new TAL site at Istres, France.

SMG's direct mission support for STS-114 began in mid-April and will be ongoing until Discovery lands safely back on earth. For more information, please visit the SMG web site at www.srh.noaa.gov/smg.

WFO Midland launches new Spotter/EM Briefing Page. Through a collaborative effort between WCM Pat Vesper and ITO Greg Jackson, a new "Spotter Briefing" page has been installed on the WFO Midland Internet page http://www.srh.noaa.gov/maf/briefing/.



This page is updated with every issuance of the Hazardous Weather Outlook and includes a summary of what can be expected for the remainder of the day and evening. It may also include a forecaster-generated graphic of the primary weather concern for the period. Upon transmission, the information on this page also gets sent via e-mail through the MAF Contact Database to all of the regional and area SkyWarn coordinators and County EMs across West Texas and southeast New Mexico.

Whenever the Hazardous Weather Outlook gets updated, this page is updated with the latest forecaster prognosis. This online briefing provides area spotters and EMs a one-stop-shop for all of their coordination needs before, during, and after a severe weather event.

WFO Lubbock Commemorates the 35th Anniversary of Destructive Tornado. On May 11, 1970, a deadly F5 tornado ravaged the city of Lubbock resulting in 26 fatalities, over 1500 injuries, and approximately \$200 million in damage. As part of a 1-hour ABC television special, *Season on the Edge*, Lubbock WCM Brian LaMarre emphasized the importance of collaboration and partnership between the National Weather Service and local media and emergency management in preparing the public for severe weather and pro-actively disseminating warning information. The special, which aired on Lubbock's KAMC Channel 28 on April 21st, reviewed how advances in weather technology, enhanced scientific training for NWS forecasters, and the mass transfer and availability of critical NWS weather and warning information have evolved since the May 11, 1970 devastating tornado.

In conjunction with the media special, several members of WFO Lubbock, including Gary Skwira, Mark Conder, Steve Cobb, Justin Weaver, and Brian LaMarre, worked closely with local print media on a feature story released in the May 11, 2005 edition of Lubbock's *Avalanche Journal* newspaper. This information was used in the development of a highly-detailed website dedicated to the 35th anniversary of the May 11, 1970 tornado.

CNN Visits Little Rock. Cable News Network recently visited the Land of Opportunity to tell the story of the Beebe, Arkansas, schools during the tornado outbreak of January 21, 1999. On that date, Superintendent Kieth Williams and Coach Hal Crisco kept up with the unfolding tornado outbreak and evacuated the school gym halfway through a basketball game. About 300 people were in the gym at the time, and all were evacuated nearly 30 minutes before a tornado destroyed the building. As part of the story, CNN wanted to show their viewers what happens at a WFO during a severe weather event. At WFO Little Rock, CNN reporter Chris Lawrence did several live broadcasts throughout the morning, at which time hailstorms were moving repeatedly across the northern half of Arkansas. The CNN producers in Atlanta were especially interested in how severe weather warnings are issued, so the crew in Little Rock taped SOO Chris Buonanno issuing Severe Thunderstorm Warnings. During the afternoon, the process of issuing a Tornado Watch was taped, including a portion of the conference call with the Storm Prediction Center. CNN indicated these taped segments, plus part of the earlier live coverage, would be saved for use as background footage in future severe weather coverage on the network. The crew thanked MIC Renee Fair for the hospitality and helpfulness provided by the WFO staff.



HYDROLOGIC SERVICES BRANCH

International Visitors Hosted at ABRFC. On April 5, 2005, Dr. S.K. Roy Bhowmik, Director, Numerical Weather Prediction and Dr. Surinder Kaur, Director, Hydrometeorology, of the India Meteorological Department (IMD) visited the Arkansas Red Basin RFC. These distinguished guests were part of a larger Indian delegation visiting the U.S to gather information of assistance in the ongoing modernization project of the IMD. The visitors were briefed on the overall operations of an RFC, with emphasis on river forecasting operations, Hydrometeorological Analysis and Support (HAS) operations, and ABRFC development projects. The briefings were followed by a question and answer session. Dr. Bhowmik's and Dr. Kaur's visit followed a tour of the National Severe Storms Laboratory the previous week.

Spring Runoff Meeting. On April 8, 2005 Paul Greer from WGRFC joined forces with WFO ABQ Service Hydrologist Ed Polasko, WFO ABQ MIC Charlie Liles, and WFO PUB's Larry Walrod at the 2005 Spring Runoff meeting in Albuquerque. They met with representatives from Bureau of Indian Affairs, Bureau of Reclamation, USF&W, U.S. International Boundary and Water Commission, U.S. Geological Survey, Natural Resources Conservation Service, U.S. Corps of Engineers, New Mexico Office of the State Engineer, New Mexico Interstate Stream Commission, Colorado Department of Water Resources, and New Mexico State University to discuss the details of what is expected for the 2005 snowmelt runoff season. This was the largest turnout for this annual meeting in a long time, if not ever.

After years of below normal stream flows with reservoirs at low levels, there was a lot of optimism at the 2005 meeting, thanks to the wet winter and early spring. A good portion of the upper Rio Grande Basin from northern New Mexico into southwest Colorado has probably received from 300 to 400 inches of snowfall since January 1, 2005, with ample water presently locked up in this snow pack. As much as 75 to 100 inches of this snow fell in one storm in early January. Consequently, storage at Elephant Butte Reservoir (which was below 100,000 acre feet in 2004) is expected to climb to above 400,000 acre feet sometime between Mothers' Day and the middle of May. This is the magic number that will allow Article VII of the Rio Grande Compact Commission to be lifted, so that water can be stored upstream from Elephant Butte Reservoir. Although the multi-year drought is not over in New Mexico, the recent wet weather has very significantly diminished the drought in area and intensity.

Rating Curve Team. During the last HIC meeting, the HICs agreed to form a national team to review the various applications used at the RFCs to collect rating curve related information from the USGS and to share this information with the WFOs. Led by Dave Reed, the team's goal is to identify and recommend the use of one set of RFC applications to perform these functions. Once we have an agreed set of procedures and applications, we will then be able to baseline the application(s) in AWIPS and receive operational support and maintenance for these applications from NWSH.

SHARE Activities. The SR RFCs recently completed the installation and implementation of a



hydrologic event simulator capability at their offices. This simulator, known as Simulating Hydrologic Activities During Real Time (SHARE) was developed by staff at the Lower Mississippi RFC. This simulator runs on the RFC WES computer. This allows the RFCs to conduct displaced real time hydrologic simulations for training, post-storm reviews, and hydrologic model calibration and development. SR HSB Chief Ben Weiger recently gave a briefing on this new technology at the hydrologic service program chief's meeting in Raleigh, NC. There was much interest expressed about this new capability. SR HSB, in collaboration with LMRFC, plan to work closely with the other regions, OCWWS HSD, and the Office of Hydrologic Development to provide this capability to the RFCs outside of our region. Plans are also underway to meet with folks from NWSH, LMRFC, and the Warning Decision and Training Branch to determine what needs to be done to integrate this capability with the WFO WES computer for use with the WFO Hydrologic Forecast System. Coordination is also taking place with OCWWS HSD and OHD personnel to ensure that this application requirement is part of the statement of need for the WES software integration with AWIPS.

DISSEMINATION ENHANCEMENT TEAM

Spanish Language Weather Products on the Web. ITO Rod Heckel, WFO El Paso, is no stranger to computers and their processes. Several months ago he was tasked with providing a means of translating NWS products into Spanish, for broadcast on a Spanish only NWR transmitter in El Paso. Software was purchased by the NWR program with the primary function of providing Spanish content to the CRS system and English products into Spanish for AWIPS. Now, with help from the DET's Leon Minton, they have been successful in taking this a step further: to the Internet. Over the last several weeks, Leon and Rod have worked aggressively to write and test 60 PHP scripts to automatically translate the WWA Clickable Map, the Zip/City Search engine, the Local Obs pages, the Hazardous Weather Pages, and the Point Forecast pages. An experimental Spanish link was added to all the WWA maps on the SR office's main web pages. These links take the user to the clickable Spanish WWA map. Some offices have now developed Spanish pages which use the Spanish WWA clickable map. Recently, on a review of websites, we noticed what an excellent job James Raley of WFO Brownsville and Matt Bragaw and Matt Hirsch of WFO Melbourne had done in achieving and maintaining their Spanish web sites.

Ongoing Projects. The Dissemination Enhancement Team has been very busy this past month working with various projects and different groups within the NWS and NOAA to improve the way we do things.

Bruce Marshak has been working with the staff at WFO El Paso, TX (Santa Teresa, NM) to set up the ingest of the DOD radar located at Holloman AFB, NM, to the WSR-88D Archive II project. Since we have other external connections to the RBBDS, additional security measures had to be put in place. We appreciate the efforts of the site's ESA, Michael Teer, to make this happen.

Bruce Marshak and Susan Beckwith have been working with a group consisting of other NOAA line offices, the other NWS regions, and portions of the Office of the CIO at National Weather Service Headquarters. This group is working hard to bring global load balancing services to



support various NOAA and NWS web sites.

We are working with SOD personnel to bring about changes in the way we support network services to all of Southern Region. Changes to automate some network services are underway and we want to express thanks to those in the field who have been responding to requests we have made for information.

SCIENTIFIC SERVICES DIVISION

Delegation From India Visits WFO Melbourne to Discuss Tropical Cyclone Forecasting. A delegation of four scientists from the Government of India (GOI) visited WFO Melbourne, the Brevard County Emergency Operations Center (EOC), the National Hurricane Center, and the Hurricane Research Division for several days in early April. The scientists, representing the India Meteorological Department, Indian Institute of Meteorology, and the Indian Space Research Organization, are part of a Government of India-U.S. Agency for International Development project on Disaster Management. They were accompanied by Mr. Bob Jubach, the project coordinator from the National Weather Service International Activities Office (NWS IAO).

The multi-faceted project is comprised of five subprojects, two of which are directly related to WFO MLB expertise; improving local tropical cyclone forecast services and more effectively communicating hazardous weather information. WFO Melbourne Senior Forecaster Scott Spratt is assisting the NWS IAO with the tropical cyclone forecasting subproject as Principal Investigator (P.I.). His role as P.I. is to serve as a liaison between the GOI and U.S. scientists to identify areas of training, applied research, and technology transfer that can be implemented within the Indian forecast system to help reduce tropical cyclone impacts to their citizens and economy.

At WFO Melbourne, Bart Hagemeyer (MIC), Dennis Decker (WCM), David Sharp (SOO), and Scott Spratt interacted with the delegation by providing summaries and holding discussions related to local forecast services delivered during the busy 2004 season, experimental hurricane hazard graphics, and forecast coordination, outreach, and building relationships with partners. Once the briefings concluded, the delegation adjourned to the operations floor to take part in a demonstration of operational tropical cyclone analysis and forecast tools.

After spending time at the WFO, the delegation, accompanied by Scott Spratt and Bob Jubach, traveled to the Brevard County EOC, the National Hurricane Center, and the Hurricane Research Division. The goal of these visits was to determine topics for future collaboration, training, and technology transfer, to ultimately assist India with the modernization of their weather services.

During a debriefing at NWS HQ before returning to India, NWS IAO staff reported that the delegation "...spoke very highly of their visit to Melbourne and were impressed with the local emergency management operations and their interactions with the WFO --- and want to try to emulate such a model in India". The project will continue through 2007.

Texas GIS Forum/CTEEC Visit. Jack Settelmaier and Keith Stellman (SSD), Gilbert Sancen (SOD) and Paul McKee (West Gulf RFC) attended the workshop portion of the <u>15th Annual TX GIS Forum</u> in April. The Texas Natural Resources Information System, a Division of the Texas



Water Development Board, was the host of the forum.

The specific training workshops Jack, Keith, Gilbert, and Paul attended, "ArcGIS Geoprocessing: Development and Deployment of Tools Using ModelBuilder" and "ArcGIS Geoprocessing: Scripting in ArcGIS," were half-day training workshops featuring an ESRI instructor. The first workshop focused on the use of the ArcGIS 9.x ModelBuilder to automate tasks that can be easily be assembled in a model-like framework. The second workshop focused on using scripting languages to merge the geoprocessing power of the ArcGIS software with other tasks that you might want to accomplish in an automated fashion.

The NWS staff plan to use what they learned to automate geoprocessing tasks relating to the mission of SRH and the West Gulf RFC. More specifically, Jack and Keith plan to implement automated techniques to generate a GIS-based verification maps (real-time and deferred) to support our field operations.

While in Austin, Jack, Keith and Paul took the opportunity to meet with Ken Neafcy, Emergency Plans Officer, at the <u>Combined Texas Emergency and Communication Center (CTECC)</u>, and some of his key technical staff. They continued their discussions on how to transfer georeferenced weather information available from SRH and the NWS to the CTECC so that they can more seamlessly incorporate that information into their mission-critical operations. The CTECC is a new facility that combines many City of Austin emergency operations, TX Dept. of Transportation, Travis County, and the Capital Metropolitan Transportation Authority under one roof. We have been working with Ken for over two years now to understand more clearly the impacts of weather on their operations, so that, together, we can more clearly fulfill our common mission -- to protect life and property.

NWA Awards Nominations. The National Weather Association is currently accepting nominations for its annual awards. These awards are an excellent way to provide Southern Region employees with professional recognition. Four award categories are especially relevant for operational meteorologists and/or hydrologists-- Individual and Group Operational Achievement, Aviation Meteorology, and Public Education. There is no specific form for the award nominations. You should be as concise as possible in your citations and be reasonable in the amount of supporting documentation. To nominate an NWS employee, group, or office, please work through your MIC/HIC (or Division Chief in the case of SRHQ personnel). Nominations need to be submitted to Southern Region SSD by May 30th.

COMET Jet Streak Webcast. The Cooperative Program for Operational Meteorology, Education and Training (COMET) has released a Webcast on Jet Streak Circulations http://meted.ucar.edu/norlat/jetstreaks/>.

This Webcast is based on a presentation given by Professor James T. Moore of Saint Louis University at the fifth annual MSC/COMET Winter Weather Workshop on 30 November 2004 in Boulder, Colorado. Dr. Moore reviews many aspects of jet streak dynamics including convergence/divergence, vertical motion fields, ageostrophic winds, propagation, and coupled jets.



The Webcast is 41 minutes in length and includes a quiz. This is an advanced level coverage of this topic.

MAV and FWC Ceiling and Visibility Verification. A question was raised at WFO Tulsa concerning the relative value of the Nested Grid Model-based FWC cig/vsby guidance compared to the Global Forecast System-based MAV guidance. Steve Amburn (SOO) used the TAFTrack program to quickly perform a comparison, which is attached to this issue. Steve thought this paper might be of value to other offices because they can see the kinds of information available from the TAFTrack program. He was able to collect all the data in about 15 minutes, then used a spreadsheet program for the analysis. His results disproved the perception that the NGM-based guidance was better than that based on the GFS.

MODIS Data Set Training at WFO Miami. Dr. Gary Jedlovic, research scientist from the Earth and Planetary Science Branch at NASA's Marshall Space Flight Center in Huntsville, AL, visited WFO Miami May 3 to provide training for WFO staff on newly available Moderate Resolution Imaging Spectroradiometer (MODIS) real time data (including visible and infrared satellite imagery at 250 m, sea surface temperatures (SST) and land surface temperature data with a resolution of 1 kilometer). This data is newly available to the WFO staff in AWIPS as a result of collaboration on mesoscale analysis between WFOs Miami and Melbourne, the Florida Institute of Technology (FIT), and NASA. The analyses, in additional to other local mesoscale data, will be used by locally run forecast models. This collaboration is all part of ongoing research projects between WFOs Miami and Melbourne, FIT, and the University of North Carolina at Charlotte.

Access to NOAA Library Services. In recent months you may have received several messages from the NOAA Central Library announcing the availability of services such as the Meteorological & Geoastrophysical Abstracts, JSTOR – The Scholarly Journal Archive, ASFA: Aquatic Sciences and Fisheries Abstracts, and Net Library's eBook Collection. Although the original messages may have implied that you would have immediate access to these services, we've discovered that some are restricted by IP address (not the noaa.gov domain name). Recently, SSD supplied the NOAA Central Library with the entire list of Southern Region IP addresses to make the access to these services as easy as possible for the field offices. As of this writing, everyone in the Southern Region now should have access to: Meteorological & Geoastrophysical Abstracts, JSTOR and ASFA. Access to the Net Library eBooks should follow soon.

Weather Research and Forecast Model High Resolution Spring/Summer Forecast

Experiment. For the past two years, 4 km convectively explicit real time forecasts with the Advanced Research WRF (ARW) model have been run over the central U.S. from May through July to test the capabilities of such high-resolution simulations to forecast significant convective outbreaks. This year, the model will again be run from April 18 through July 31, with the domain now extending from Nevada to the East Coast. The model is initialized each night with 0000 UTC data from NCEP's North American Mesoscale (NAM) model and are run for 36 hours using NAM boundary conditions. Forecast output is usually available by 8:00 am CDT. The URL is: http://box.mmm.ucar.edu/projects/wrf_spring/index.html



Your SSD has inquired whether it might be possible to distribute the model output using the NOAA Forecast Systems Laboratory's FX-Net servers, as was done during the WRF Developmental Testbed Center's Winter Forecast Experiment.

From April 18 till June 3, these 4 km WRF simulations are being compared to 2 km WRF-ARW and WRF-NMM (non-Hydrostatic Mesoscale Model) simulations over a more limited domain as part of the SPC/NSSL Spring Program. More information concerning the Spring Program can be obtained at: http://www.spc.noaa.gov/exper/Spring 2005/

Planned Upgrade to NCEP's Global Forecast System. An upgrade to the National Centesr for Environmental Prediction's Global Forecast System (GFS) will be implemented a 1200 UTC on May 31st. The horizontal resolution will be increased for all forecast hours and the number of vertical layers will be increased for the extended range portion of the model run. The specifics of these resolution changes are:

Current System

Forecast hours 00-84 - T254 (~55 km) 64 Layers Forecast hours 87-180 - T170 (~75 km) 64 Layers Forecast hours 192-384 - T126 (~100 km) 42 Layers

New System

Forecast hours 00-180 - T382 (~35 km) 64 Layers Forecast hours 192-384 - T190 (~70 km) 64 Layers

This increase in resolution will cause the sizes of the GFS spectral output files to grow substantially. A couple of minor changes will be made to the pressure level GRIB files. These changes include:

A. Soil Moisture and Soil Temperature -- Currently the NCEP provide soil moisture and temperature parameters that cover the depth of 10-200 cm. They will be replacing these parameters with three new parameters in more discreet layers (10-40 cm, 40-100 cm, & 100-200 cm).

B. Potential Vorticity Unit (PVU) surfaces – The NCEP currently make available heights, temps, pressures, and winds on the +2 and -2 PVU surfaces. However, they are incorrectly labeling these levels in the GRIB PDS section from what is defined by the World Meteorological Organization as 0.002 PVU surface. They will correct this error when the T382 is implemented. As a result of these changes, the size of these files is expected to increase by only 0.2 MB.

Upgrade to NCEP's North American Mesoscale Model. An online PowerPoint presentation summarizing the recent upgrade to the NCEP's North American Mesoscale (NAM) model is available at:

wwwt.emc.ncep.noaa.gov/mmb/mmbpll/Spring2005.NAMUpgrade files/v3 document.htm



Note this will be the last upgrade to this (Eta) version of the model. A WRF version of NCEP's non-hydrostatic mesoscale model is scheduled for implementation as the new NAM model in March 2006.

Visit May Teletraining Calendar. The Virtual Institute for Satellite Integration Training (VISIT) calendar for May is now available. Offices can register for the teletraining sessions by sending email to: wisit@comet.ucar.edu Note, the URL of the VISIT web-pages have changed. The teletraining calendar is now at: http://rammb.cira.colostate.edu/visit/ecal.asp The teletraining planning calendar with sessions by the Interactive Forecast Preparation System team and Warning Decision Training Branch (AWOC teletraining) is at: http://rammb.cira.colostate.edu/visit/planning.html

The VISIT sessions for May include:

- * NEW AvnFPS 3.0 by NWS Training Center (Basic, May 12,18,25,27)
- * New Downscaling Technique by Climate Team (Basic, May 19,31)
- * Predicting Supercell Motion in Operations (Intermediate, May 18,24)
- * Modern Severe Weather Parameters (Basic/intermediate, May 17)
- * RSO imagery with other Remote Sensor Data for Diagnosing Severe Weather across the CONUS(RSO 3) (Intermediate, May 10,11)
- * Mesoscale Analysis of Convective Weather Using GOES RSO Imagery (Basic, May 4)
- * Convective Downburst Potential Using GOES Sounder Derived Products (Basic, May 12,26)

Note: The VISIT has begun using a new standard survey as requested by the NWS Training Division. All participants in NWS training activities are asked to complete the same form.

Note: there are two more sessions with instructor audio/annotation:

- Utilizing GOES Imagery within AWIPS to Forecast Winter Storms by Dan Bikos and Jeff Braun(CIRA) and John Weaver(NESDIS)
- Predicting Supercell Motion in Operations by Matthew Bunkers (NWS Rapid City, SD)

The VISIT team is assisting the NWS Training Center by scheduling a new session on AvnFPS 3.0. AvnFPS 3.0 is part of the AWIPS Build 5 release. The session covers the following:

- Differences between AvnFPS 2.0 vs 3.0
- Introduce new guidance sources and monitoring capabilities (Eta-BufKit, LLWS)
- Introduce Conditional Climatology as quality control and forecast tool.
- Introduce individualized "Stats on Demand" verification program

The new session "Local Climate Products: Downscaling Basics" is by Nicole Kempf (WFO Tulsa) and is for Climate focal points. Climate Services will introduce a new local climate product in March 2006. This product is the Local 3-Month Temperature Outlook. The purpose of this lesson is to introduce the methodology used to develop this product.

All previous sessions, including those with recorded instructor audio and annotations, are available at: http://rammb.cira.colostate.edu/visit/ts.html



SYSTEMS OPERATION DIVISION

AWIPS OB4.2. Fifteen of 38 Southern Region offices have installed Maintenance Release OB4.2. For the most part, the installs have gone smoothly. Offices with significant local customizations to D2D may be more likely to experience problems with the install. So, if you do have problems displaying data, look to old customized files first as a source of the problem. As sites schedule their Linux DX install, they can also schedule the installation of OB4.2. Pre-requisites will be OB4.1, IFPS 16.2, Linux XTs, and the DX/NAS installed. The mod note for OB4.2 can be found at:

http://www.ops1.nws.noaa.gov/awipsnew/software/SW%20Installation%20Note%2054%20(OB42) _S.pdf

OB5 continues testing at several locations across the country. So far, there have not been any significant issues specific to OB5 during beta testing. National deployment has been delayed until May so additional patches can be included based on previous release issues.

The OB5.1 MR will contain the Red Hat Enterprise Linux (RHEL) upgrade to Workstation 3 update 4. Testing of the new operating system (OS) has begun and will undergo field testing at Central Region Headquarters the week of May 9th. This upgrade will also contain a switch from the GNOME desktop to KDE. Because of these two changes, it is likely that user customizations will be lost and need to be regenerated. Deployment of MROB5.1 is scheduled for late May or June.

Full deployment of the new DX/NAS hardware is underway with 18 out of 38 offices successfully installing the hardware and software. Remember to schedule the install once you have received the hardware. The mod note for the DX/NAS install can be found at:

http://www.ops1.nws.noaa.gov/awipsnew/software/sysmod24a-dxupgrades S.pdf

The new LDAD redundant NetScreen firewall will begin Operational Acceptance Testing (OAT) the second week of May. The OAT will run from May 9th through June 10th. If the OAT is successful, national deployment is scheduled in mid July. More information can be found on this and other upcoming installs on the intranet:

http://intranet.srh.noaa.gov/srh/awips/install_status.html

The rack consolidation plan will begin Operational Acceptance Testing (OAT) the second week of May. The OAT will run from May 23rd through June 17th. The plan primarily consists of removing the old AS1 and AS2 servers and then moving the remaining hardware from the AS1 rack into the AS2 rack. This would leave the AS1 rack empty. There will be several options on what to do with the rack from that point that will be discussed at a later date. Stay tuned. More information can be found on this and other upcoming installs on the intranet:



http://intranet.srh.noaa.gov/srh/awips/install_status.html

NEXRAD. ORPG Build 7 beta testing continues at WFO Peachtree City, GA and Jacksonville, FL. So far no problems have been observed with the new software and national deployment is still on track for June. Beta training on ORPG Build 7 can be found at:

http://www.wdtb.noaa.gov/buildTraining/RPG7/index.html

Telecommunications. The Houston/Galveston Weather Forecast Office has completed the move to their new building. All comms services were installed in time for the move and resulted in a fairly smooth transition. A new telephone system was installed and programmed and is working well. A complete inventory of all of the new services, including circuit IDs, telco providers, etc. is being worked and will be updated soon. The effort now focuses on disconnecting the services from the old office location and updating all informational databases with the new information. Orders will be submitted promptly to disconnect all old circuits and phone lines at the previous location. We appreciate everyone's efforts in helping to get the office moved and the comms up and operational so quickly. This was do to a great TEAM effort.

Others Items. The Southern LINC 800 MHZ service for the WFO Tallahassee is being installed. The equipment has been placed at the office and the circuit is being installed. There was a problem with the engineering of the circuit that has delayed the installation; however we are back on course to have this circuit and service installed and operational in approximately two weeks.

The WFO Key West move is still on schedule. We have had a number of discussions with Bell South concerning the issues associated with diverse routing to the site and are ready to move forward. We anticipate comms installations to begin approximately June 20th, with the building occupancy date (BOD) being June 28th. We are working to coordinate with all responsible parties to insure a smooth relocation like we achieved at WFO Houston/Galveston.

<u>ADMINISTRATIVE MANAGEMENT DIVISION</u>

Diversity

WFO New Orleans/Baton Rouge LA (LIX) conducted a tour for 31 African-American high school seniors from Cohen High School of New Orleans, LA. The tour group also included three adults. The goal of the instructors was to introduce the seniors to career opportunities within the NWS and NOAA. The tour began with attendance at the morning map briefing, where a potential scenario for severe weather was being outlined. Forecasters Mary Keiser and Freddie Ziegler, HMT Doug Tranchina, and MIC Paul Trotter led a tour of the WFO, where the collection of upper air and hydrologic data, and the preparation of forecasts and warnings were explained. Senior Hydrologist Amanda Roberts next provided an overview of LMRFC operations, including data retrieval, calibration, river forecast models, and a basic primer on hydrology.



Senior Service Hydrologist Patricia Brown discussed career opportunities in NOAA, including salary potential and educational requirements. Special emphasis was placed on the more common disciplines within the NWS – meteorology, hydrology, electronics, engineering, and computer science.

Moves

SOUTHERN REGION WORKFORCE TRANSACTIONS April 1 – 30, 2005					
Southern Region Losses					
Name	From	Action/Transfer	From Title/Grade		
	(Office)				
Monica Sowell	SMG HOU	Retirement	ASA, GS-7		
Ruth Kieffer	WFO EPZ	Retirement	ASA, GS-7		

Southern Region Gains					
Name	To (Office)	Action/Transfer	To Title/Grade		
Felix Castro	WFO SJU	New Hire	Met Intern, GS-5		

Within Region Transfers/Actions					
Name	To (Office)	Action/Transfer	To Title/Grade		
Anthony Reynes	WFO TBW	Reassignment	Meteorologist, GS-11		
J. Michael Coyne	WFO HUN	Promotion	MIC, GS-14		
Richard Martinez, Jr	WFO CRP	Reassignment	Electronic Technician, GS-11		
Daniel Byrd	WFO JAN	Reassignment	Forecaster, GS-11		

OUTREACH ACTIVITIES

Caribbean Boat Show. WFO San Juan recently participated in the 7th Annual Caribbean Boat Show at Puerto del Rey Marina in Ceiba, Puerto Rico. Forecasters Ernesto Morales and Scott Stripling shared exhibit responsibilities during the three-day event, providing free materials while also answering mariners' and visitors' questions. Attendance at the WFO booth was estimated around 500.

Huntsville Partners with Local Boating Organization. WFO Huntsville SOO Chris Darden recently gave a safety talk to approximately 25 members of the Huntsville Power Squadron. The Huntsville Power Squadron is a local chapter of the United States Power Squadron, a nonprofit, educational organization dedicated to making boating safer and more enjoyable by teaching classes in seamanship, navigation and related subjects. The members of the organization were quite interested in the products and services that the local NWS office provides, and plans to partner on future boating outreach and safety endeavors are already in the works. In addition, starting with the



May edition, WFO Huntsville will be including a special weather information and safety section in each month's Power Squadron newsletter (available on their home page at: http://www.usps.org/localusps/hunts/)

WFO Huntsville Volunteers for Weather Radio Project. Several members of WFO Huntsville volunteered their time to program 100 NOAA Weather Radios for elderly citizens at the Stevenson, Alabama housing authority complex. MIC Mike Coyne and WCM Tim Troutman held a ceremony along with Jackson County, Alabama emergency management at the housing authority complex on April 27th. This outreach effort was well attended and received coverage from local newspapers and media. The 100 weather radios were handed out to the residents along with local severe weather outreach and NWR pamphlets. Both Mike and Tim spoke about the importance of NOAA Weather Radio and severe weather preparedness across the Tennessee valley.

Key West Aviation Services Seminar. WFO Key West Lead Forecaster Bill South recently led an aviation services seminar for 30 members of the Middle Keys Experimental Aircraft Association at Marathon Airport. Several pilots living in the Keys spend part of each year residing out of state, and depend on detailed forecasts to plan their seasonal trips. There was also interest in international flight conditions for the Caribbean, Central and South America. The pilots learned what products were available to them through their local NWS office, and where to find detailed information on icing, turbulence, and convective trends through National Weather Service websites.

Amarillo Partners Host Successful Severe Weather Workshop. WFO Amarillo and the Amarillo Department of Emergency Management hosted its biennial Severe Weather Workshop on March 12, 2005. Over 400 people attended the event. This year's theme, "Tornadoes in Your Backyard; A 50 Year History", included several presentations by local TV meteorologists, local NWS forecasters, and Dr Kevin Kloesel of the University of Oklahoma. Topics included the history of tornadoes across the panhandle, how tornado safety and tornado detection have evolved over the past 50 years, and what the future holds. The day long workshop also included sessions on basic radar interpretation and severe storm spotter training, and hosted over 20 booth exhibitors. Numerous local businesses and organizations donated merchandise or services to make the workshop a top notch event. This was the 6th biennial workshop hosted by WFO AMA and local emergency management. The first Severe Weather Workshop debuted in 1995.

During the workshop, Amarillo MIC Jose Garcia presented Cooperative Weather Observer Tommy Saye of Clarendon, Texas with the Edward H. Stoll award. The award, which recognizes Mr. Saye's 50 years of cooperative weather observations in Clarendon, was accompanied by an official Cooperative Observer windbreaker for those windy Texas panhandle days.

Hurricane Preparedness Focus at New Orleans. WFO New Orleans MIC Paul Trotter partnered with Dexter Accardo, Homeland Security and Office of Emergency Preparedness Director for St. Tammany Parish, Roy Dokka, LSU Professor of Civil and Environmental Engineering, and host Steve Bellas on the television interview show, "Northshore Focus", taped at Southeastern Louisiana University. Using a half hour round table format, the objective of the show was to provide hurricane information and related area impacts including storm surge and flooding.



The show will be viewed pre-hurricane season with a supplemental show being proposed during hurricane season. Northshore Focus can be viewed on cable networks in the parishes located on the north shore of Lakes Pontchartrain and Maurepas.

New Orleans/Baton Rouge Media Workshop. WFO New Orleans/Baton Rouge hosted a Media Workshop for broadcast meteorologists serving southeast Louisiana and extreme south Mississippi. The event was attended by nine on-air broadcast meteorologists representing six of the seven televisions stations in the CWA. The WFO participants in the workshop included MIC Paul Trotter, WCM Frank Revitte, SOO Mike Koziara, and Service Hydrologist Patricia Brown. The Lower Mississippi River Forecast Center was represented by HIC Dave Reed. Among the topics covered in the workshop were a review of the 2004 hurricane season and lessons learned, WFO and RFC forecast products (including AHPS), a brief review of recent local severe weather events, and an update on the NWS tsunami watch/warning initiative for the Atlantic/Gulf Coasts. The topics generated good discussion and exchange of ideas between the participants. The attendees thanked the WFO and RFC staffs for arranging the event, and expressed their desire for a similar event next year.

Birmingham Staff Participates in Emergency Preparedness Fair. WFO Birmingham Lead Forecaster Ken Lorek, ESA John Peruzzo, DAPM Dave Wilfing, and WCM Jason B. Wright participated in the Severe Weather and Other Emergency Preparedness Fair held at Eastdale Mall, in Montgomery, Alabama on April 2nd. Sponsored by the Montgomery County Emergency Management Agency, this event brought together organizations from both the public and private sectors. NWS personnel handed out informational materials and answered questions from fair visitors regarding severe weather safety in central Alabama.

Panel Discussion at Texas EM Conference. WFO Midland WCM Pat Vesper and WFO San Angelo WCM Hector Guerrero chaired a panel discussion on NWS forecast and warning services during the State of Texas Emergency Managers Conference in Waco March 21-25. Included as part of the guest panel for roundtable discussions were Dale Little (EMC Midland County) and Patrick Repman (EMC City of Midland). This panel discussion was well attended and received by state EM conference attendees.

Midland Media Feast on Digital Services BBQ. WFO Midland Forecasters Todd Lindley, Brian Curran, ASA Beverly Martin, WCM Pat Vesper, and SOO Jeff Cupo hosted a "Digital Services BBQ" on April 13th for all local media across West Texas. While digging into hamburgers straight from the WFO's grill, three local on-air meteorologists got a chance to hear the latest developments in NWS Digital Services. Jeff Cupo shared information on the Polygon warning system, followed by Brian Curren's presentation on NDFD and the methods we employ to produce forecasts today. The TV meteorologists conducted interviews during the BBQ, and one station even did their on-air weather segment from the office.

West Texas HamFest. WFO Midland hosted an NWS informational booth at the Midland HamFest March 18-20. This was a 50th anniversary HamFest hosted by the Midland Amateur Radio Club and attended by several hundred amateur radio enthusiasts from across Texas and New



Mexico. WFO Midland staff was available to distribute brochures, answer questions about NWS products and services, conduct SKYWARN training classes and chat with our many weather spotters who attended this large event.

Little Rock Participates in TV Station's Severe Weather Show. WFO Little Rock took part in a live severe weather show on KARK-TV, the NBC affiliate in Little Rock. Viewers were invited to call or e-mail their questions concerning severe weather during the one-hour, prime-time program. Assisting the station's meteorologists in answering the questions were WCM John Robinson; N. Wayne Ruthven, the Director of the Arkansas Department of Emergency Management; and James Thompson, a spokesperson for Entergy, the state's largest electric utility. The program also featured several pre-taped segments with John Robinson concerning tornadoes (including Arkansas' only documented F5 tornado), lightning, and NOAA Weather Radio. Service Hydrologist Steve Bays discussed the dangers of flooding in his segment. As a testament to the show's success, the station received so many questions that the call-takers ran out of forms on which to write. As a result, additional forms had to be made up while the show was on the air!

Severe Weather Safety day at Wal-Mart a Success! WFO Huntsville Intern Kurt Weber attended "Severe Weather Awareness Day" at a local Super Wal-mart in Huntsville on April 23rd. Kurt participated in this event along with the American Red Cross, local emergency management and several local storm spotters. At least two hundred local residents were educated on tornado, flooding, and lightning safety. This event provided WFO Huntsville with a great opportunity to partner for public safety with one of the major commercial entities in the city.

WFO Key West – Tsunami information was recently distributed to the public by WFO Key West as part of its Earth Day activities at the Bahia Honda State Park, Monroe County, Florida. Visitors to the NWS booth asked specific questions concerning the predicted heights of tsunamis in the Keys. Information provided was limited to the behavior of tsunami waves and the processes by which they can reach the Keys.

AHPS Outreach. In early April, West Gulf RFC hydrologic forecaster Tracy Howieson and senior HAS forecaster Greg Shelton attended the Texas Floodplain Management Association Spring Conference in Del Rio, TX. This meeting was attended by approximately 50 – 75 floodplain managers and other water resource agencies from across the state of Texas. Tracy provided a briefing on the NWS AHPS program, with a special focus on the long-term probabilistic forecasts that are available with AHPS. The briefing was well received, with many of the attendees inquiring when these probabilistic products would be available for their areas of responsibility.

GA Water Resource Conference. The Southeast River Forecast Center (SERFC) co-sponsored the 2005 Georgia Water Resources Conference. The biennial conference took place on the campus of the University of Georgia in Athens from April 25-27, 2005.

The overall theme of the SERFC effort this year was the communication and response during September 2004, when Hurricanes Frances, Ivan, and Jeanne pounded Georgia. This theme was reflected in the SERFC exhibit prepared by hydrologist Rick Ullom and the session moderated by



hydrologist Mark Fuchs. The exhibit consisted of a large collage of satellite imagery showing each of the seven named tropical systems which affected the SERFC area during the 2004 hurricane season, along with a tabletop water model depicting examples of minor, moderate, and major flooding along a stream.

The session began with three presentations. WFO Peachtree City meteorologist Jeff Dobur presented a climatology of Georgia flash flood events. HAS forecaster Jack Bushong provided an overview of Advanced Hydrologic Prediction Services (AHPS) web pages currently available, along with a glimpse of graphical hydrographs to be available this summer. Mark Fuchs gave a summary of graphical products issued during September 2004. A panel session followed, consisting of short presentations by representatives from the U.S. Geological Survey, the Corps of Engineers, the U.S. Department of Homeland Security, Georgia Power, and the state of Georgia's Safe Dams Program. These presentations described each group's objectives during the flooding, how NWS products were used to reach these objectives, and what additional information might be needed. Based on comments from attendees, the session was highly instructive in explaining how the SERFC provides critical information to the public, and how key hydrologic partners interact during times of potentially significant flooding.

WFO Huntsville Active During "Take Your Child to Work Day". On April 29th, WFO Huntsville participated in NASA Marshall Space Flight Center's (MSFC) "Take Your Child to Work Day" activities. Throughout the day, WFO HUN gave tours to several school age children and their parents who work at MSFC. This was a unique outreach opportunity for the office, and tours of the NWS facility were a big hit with all the kids.

Huntsville SCEP Trains Teachers at NASA. WFO Huntsville SCEP Holly Allen, provided two training sessions with teachers at Marshall Space Flight Center in April. These training sessions continued the series of weather train-the-trainer sessions at NASA. The NWS Southern Region Headquarters "Jet Stream" weather education curriculum was used to provide the training to the teachers. Further training will continue into the summer months at NASA's Space Camp. NASA's Marshall Space Flight Center estimates that over a thousand teachers from across the U.S. will be attending and participating in "Jet Stream" training in Huntsville this summer.

CWSU Albuquerque Participates in Engineering Fair. Forecaster Alberta Vieira participated as a judge in the New Mexico State Science and Engineering Fair. The State Fair is held each year in Socorro, New Mexico, on the campus of New Mexico Tech. This year there were approximately 550 participants with 500 projects. Alberta judged projects in the senior team in which the projects could be from any scientific discipline. There were 13 projects which fell in this category with the majority being in programming.

WFO El Paso Reaches Out to UTEP. Lead Forecaster Joe Rogash recently served as Guest Lecturer for Dr. Thomas Gill's Atmospheric and Meteorological Processes class at the University of Texas – El Paso (UTEP). There were 10, mostly graduate level environmental science and engineering students, who attended the lecture which lasted about 80 minutes. The class focused on multi-scale (convective scale, mesoscale and synoptic scale) processes which contribute to optimal



heavy rain environments. Mr. Rogash gave overviews on basic cumulus dynamics, the circulations associated with surface boundaries, and jet streaks. The class discussed weather patterns that favor heavy rainfall in the Borderland, with an emphasis on conditions that contribute to monsoonal flash flooding.

Mr. Rogash's presentation was the first in a series of academic exchanges between the WFO and UTEP's emerging Atmospheric Sciences group. Dr. Gill will visit the WFO later this spring and present the results of his research on atmospheric and source regions for blowing dust in the Borderland.

Bilingual Students Visit WFO El Paso. Approximately 40 2nd grade students from Anthony Elementary School visited WFO El Paso on April 5th. The students are involved in a program that emphasizes English. Spanish is their first language. WCM John Fausett spoke about weather safety and the hazards often encountered in this area of the country. Weather-related topics are not easily translated in to Spanish, John was fortunate that one of the teachers was a trained Skywarn spotter and effectively insured the messages were understood by the students. Afterwards, senior forecaster Greg Lundeen and journey forecaster John Park demonstrated the operational procedures involved in a typical forecast shift. The teacher/spotter was impressed at how well the students understood the El Paso staff, which confirmed the success of their bilingual program. As a bonus, another teacher present determined to attend an upcoming spotter training session.

RFC and WFO Fort Worth Reaches Out to Community. RFC Fort Worth Hydrotech, Joann Lewis organized a food drive and office luncheon for the WFO and RFC Fort Worth. Employees were asked to bring five canned goods to donate to the Texas Food Bank. Money was collected and donated to the Food Bank also. Joann organized an office luncheon to coincide with the food drive. Great job Joann!

WGRFC Fort Worth Employees Recognized. Mike Shultz, Hydrologist and Keith Stellman, former Senior HAS Forecaster at the West Gulf River Forecast Center were awarded the National Isaac Cline Award for Hydrometeorology. Mike and Keith were recognized for their exceptional coordination and efforts to produce timely river forecasts for a series of fast-responding streams in the hydrologically dangerous Texas Hill Country. Congratulations Mike and Keith.

NWS SMG Meteorologist Recognized. SMG Meteorologists Tim Oram and Tim Garner were recognized by the Johnson Space Center United Space Alliance (USA) Approach and Landing Group for their outstanding support to Return-to-Flight operations. Mr. Chris Lessman, Chief of the Ascent/Descent Flight Design Approach and Landing Technical Integration Group, presented the awards at the SMG Weather Users Forum on April 20, 2005.

Thunderstorm Workshop in Memphis. The Aviation Team of the Mid South (ATOMS) members which includes WFO Memphis WCM Scott Cordero, CWSU Memphis MIC Doug Boyette and retired WFO Memphis MIC Jim Duke hosted a pilot seminar entitled "Thunderstorm Workshop". Approximately 60 people attended the event, which was held at the Pan Am Flight Training Academy in Memphis. The two house workshop was slit into three blocks. Scott detailed



thunderstorm structure and development, Doug discussed where pilots might find thunderstorms looking at the surface weather map and Jim elaborated on wind shear and other hazards associated with convection. The event was sponsored by the FAA's Memphis Flight Standards District Office (FSDO) with much of the planning done by Safety Manager Nadine Yeager.

CWSU Memphis Participates in Operation Raincheck. CWSU Memphis forecaster Bryan Harman and MIC Doug Boyette participated in the second edition of the Memphis ARTCC's annual "Operation Raincheck Briefing". This was an overflow event to the first Raincheck, which was held on February 26th. There were approximately 30 pilots in attendance. Doug provided the group with a 20 minute presentation on CWSU history, current products and services, and the impact of weather on the National Airspace System. The group was then split into three groups of 10 and proceeded to tour the ARTCC operations floor. During this phase, Bryan showed each group the equipment used by CWSU forecasters and explained their role in the local operation, as well as answering many questions.

Talks and Tours in Shreveport. Forecaster Jason Hansford gave a talk and tour to two students in a meteorology class from Bossier City Community College located in Bossier City, LA. While being filmed, Jason demonstrated an upper air balloon release, conducted an office tour, and explained NWRs and AWIPS importance. He answered general weather questions as well as questions pertaining to a career in Meteorology. Jason showed the students a severe weather event on radar that had occurred a couple days earlier and explained the importance of Emergency Managers, media, and storm spotters during severe weather for accurate and timely warnings.

Forecaster Bill Parker gave a talk to 50 students from Queensborough Elementary School located in Shreveport, LA. Bill gave a severe weather safety presentation to the 4th and 5th grade students, as well as explaining safety rules, the operations of the NWS, NWR, how the warnings are generated from our offices and the importance of the news media and storm spotters.

WFO Tallahassee Busy With Tours and Spotter Training Class. During the month of April there were several tours conducted at the WFO TAE. April 7 and 18, SOO Irv Watson provided tours for approximately 130 local Florida State University (FSU) students who were taking the meteorology class for non-majors. April 13, MIC Paul Duval hosted an office tour for a a Miami Herald Newspaper reporter. April 15, Forecaster Ron Block and HMT Jim Bolden hosted a tour of the office for 34 Tallahassee Community College students. All the office tours included demonstrations of the unique design features of the office including the circadian lighting system and the rooftop upper air launch facility. On April 14 WCM Bob Goree provided basic spotter training to 25 volunteer "weather watchers" and members of the staff of WTXL-TV.

WFO San Juan Outreach Activities. WFO Lead Forecaster Brian Seeley visited Fort Buchanan Middle Schoool during the career awareness day and conducted three presentations for approximately 40 students. The presentation included careers in NOAA with emphasis on NWS and other possible careers in meteorology.

Lead Forecaster Hector Rivera visited the Jose Barreras High School during a career day. Hector



presented careers in NOAA and NWS to approximately 300 students, teachers and parents.

MIC Israel Matos visited the Lurgrea School as part of the Science Fair Week. Israel conducted a presentation on hurricanes as well as careers in NOAA and the NWS for approximately 104 students from the 6th to the 11th grade.

HMT Jesus Figueroa visited the University of Puerto Rico and conducted a hurricane presentation for approximately 20 instructors.

WCM Rafael Mojica visited La Piedad High School in Carolina and conducted a presentation on tsunamis and hurricanes for three-hundred high school students as part of the school's science club activities. Rafael also assisted VA Hospital emergency managers with their annual table top hurricane drill. Rafael assisted with the drill scenario, provided radar, satellite, and rainfall maps as a guidance, and addressed the 25 member audience reading the advisories leading to the exercise.

Tsunami Outreach

WFO San Juan - WCM Rafael Mojica, provided a 10 minute radio TsunamiReady interview in Spanish with a Spanish Broadcast System radio station in New York. The show was "Amor Temprano en La Manana", hosted by Juan Carlos Alonso, Marcia Julia, and Alfredo Galban. The main topic was tsunamis and their risk on the U.S. East Coast, especially Manhattan. Closing comments, translated to English, were "we feel secure now in knowing that the NWS has a plan for the East Coast in case of a tsunami".

WFO Tampa - WCM Dan Noah provided a tsunami and TsunamiReady presentation to 16 first responders at the State of Florida Emergency Operations Center in Tallahassee. Attendees included 4 EOC Operation Managers, 3 EM coordinators, 1 Red Cross, 2 Hams, and 6 WCMs. The primary discussion focused on the need for adequate evacuation route signs due to the lack of warning lead time to evacuate. Dan also provided a four minute interview with Robert Pankau of WFLA 970 AM radio regarding the April 20th tsunami test.

WFO Miami - WCM Jim Lushine provided a five minute presentation on the COMCAST Newsmakers Program about tsunamis that will be broadcast periodically throughout the month of May on the local CNN station. Jim also participated in a 30-minute panel discussion program about tsunamis on Miami-Dade Public Television Station WLRN, along with local Emergency Managers and coastal scientists.

WFO Melbourne - WCM Dennis Decker provided tsunami and Tsunami Ready presentations to eight 911 operators, at the Indian Harbour Beach, Florida, 24 hour warning point. Dennis also provided Tsunami Ready presentations to 24 members of the India- Atlantic Rotary Club in India-Atlantic, Florida.

WFO Key West - WCM Jonathan Rizzo provided a TsunamiReady presentation to the Monroe County Emergency Management Agency, which included information on the phased Atlantic/Gulf tsunami warning system and regional TsunamiReady requirements. Monroe County expressed an



interest in Tsunami-Ready recognition, and agreed an appropriate time may be during the 2006 renewal process for StormReady.

