



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

March 2005

SOUTHERN TOPICS

Working Together To Save Lives

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REGIONAL DIRECTOR

On Wednesday, April 6, 2005, a number of tornadoes struck central and southern Mississippi. Recounted below are two examples of how National Weather Service severe weather preparedness activities and warnings saved many lives. This is a prime example of our motto in action, "Working Together To Save Lives."

One tornado struck a school complex near Mise, MS, about 35 miles south of Jackson. The Mize Attendance Center, where the tornado struck, is actually a K- 12 complex containing three separate schools. The heaviest damage was to the high school, where the second floor was nearly totally demolished. Damage occurred to several other buildings, including three portable classrooms that were destroyed.

The principals stated that they had received the tornado warning via NOAA Weather Radio. The NWR unit they had was one which was purchased several years ago through a Mississippi Emergency Management Agency program which was put together when the Mississippi Legislature enacted the state law requiring NWR units in all Mississippi public schools. They also received the warning via phone calls from local law enforcement and emergency management. Once the warning was received, they activated their emergency plan, which included getting all of the students on the upper level down into lower level interior hallways.

There were 800 students and faculty at the complex at the time of the tornado, and there were no injuries. The State Education Director of Safety was also very complimentary of NWS services on Wednesday, stating that our warning information gave them the needed time to contact schools and ensure that safety action plans were being carried out.

Another tornado struck Brandon, MS, According to a local newspaper, the Rankin County Emergency Manager sounded the sirens about 30 minutes before the storms struck Brandon. In a CNN web article, the mayor of the city of Brandon specifically credited his city's emergency



response to the NWS StormReady® program, as indicated by the following quote: "The city of Brandon has been designated a StormReady® community by the National Weather Service. This morning, we were able to give everybody about 20 minutes [warning]."

CLIMATE, WATER AND WEATHER DIVISION

METEOROLOGICAL SERVICES BRANCH

Aviation Products and Services Assessment in Puerto Rico. WFO San Juan WCM Rafael Mojica recently joined an FAA team to conduct an Aviation Weather Products and Services Assessment in the San Juan area. The purpose of the assessment was to collect information on the quality of weather products and services available to aviation users in the San Juan area. Preliminary feedback indicated the NWS is held in high esteem by the general aviation community, airport operators and FAA AIFSS station. Pilots indicated they relied on NWS local homepages for satellite and radar data for flight planning, and they were satisfied with the accuracy of our aviation terminal forecasts.

Why Continue the CCF? If public verification is now based on the PFM instead of the CCF, why are we still issuing the CCF? That's a good question. Here's the reason: the CCFs are still used by NCEP to create the Selected Cities (SCS) and the Traveler's Forecasts (TAV). NCEP's SCS/TAV software specifically uses the CCFs, and retooling the code to use the SFTs cannot be accomplished at this time. Although some issues need to be worked out (like needing a 'Character of the Day' from the grids), the SCS and TAV products of the future may one day be generated directly from the grids. Some time would also be required to advertise the elimination of the CCF and encourage the use of the SFT/other products.

NOAA Ship. The March 11th edition of AccessNOAA highlighted the *Oscar Dyson*, NOAA's first newly constructed fisheries survey vessel in more than 25 years, and the first of four new planned fisheries survey ships. What the article didn't say was that the New Orleans PMO, Paula Campbell, set up the ship to take and send observations before it departed for Alaska. Paula will outfit and train the next three ships in line as well. The next ship to be finished will be the NOAA ship *Bigalow*. Great job, Paula!

Training at Sea. Paula Campbell was recently a trainer aboard the floating Massachusetts Maritime Academy. The NWS Voluntary Observing Ship (VOS) Program sets a priority on recruiting vessels to take quality weather observations while at sea. The opportunity to provide training and guidance to these young and dedicated cadets provides an avenue for increased participation in the VOS program. These future mates and masters were taught how weather information is vital to their mission. Weather training was presented in four (4) different presentations that were based on the cadets' training level. Training classes included Introduction to Marine Weather, Marine Weather, Advance Marine Weather, and Observations at Sea. In addition to classroom instruction, cadets were given a 4-hour bridge watch. Each cadet on this watch was the dedicated Weather Observer.



Melbourne Tsunami Workshop. The Tsunami Operational Training Workshop was held March 29-30 in Melbourne, Florida, at the Florida Institute of Technology. WCMs and forecasters from 18 of the 23 coastal WFOs in SR and ER were represented. Attendees also included Southern Region Director Bill Proenza, FIT Professor George Maul, Paul Whitmore, Scientist in Charge of the West Coast/Alaska Tsunami Warning Center (WC/ATWC), Melinda Hinojosa, SR Tsunami Program Manager, Walt Zaleski, SR WCM, and a number of federal and state emergency management officials. Topics included the science of tsunami formation, tsunami warning operations and procedures, TsunamiReady, and community education and preparedness. The workshop fostered an exchange of ideas between the NWS personnel and the tsunami and emergency management experts in attendance. Special thanks are due to Melinda Hinojosa and Walt Zaleski for organizing this event, and to the many field WCMs and forecasters who attended. Great job everyone!

SR Tsunami Program. The goals of the SR Tsunami Program are: "Planning, Communication, Response." Outreach and education are both crucial to the protection of lives in the event a tsunami strikes our shores. The SR Tsunami Program Manager Melinda Hinojosa, the TsunamiReady Focal Point for SR, Walt Zaleski, and the tsunami Intranet website are all valuable sources of information for any questions you might have: (http://lucretia.srh.noaa.gov/srh/marine/tsunami.html).

In addition, Dan Noah, WCM from Tampa, has created a Tsunami Presentation geared toward the Southern Region. It can be downloaded from the Tsunami IntrAnet webpage (http://lucretia.srh.noaa.gov/srh/marine/EastCoastTsunamis.ppt), along with these two animations: http://lucretia.srh.noaa.gov/srh/marine/NOAAtsunami-indonesia12-2004.avi and http://lucretia.srh.noaa.gov/srh/marine/atlantic2.wmv.

HYDROLOGIC SERVICES BRANCH

Interagency Water Resource Meeting. The second annual interagency water resource meeting covering the Corps of Engineer's Southwest Division service area (includes most of Texas, all of Oklahoma, and parts of Arkansas and Kansas) took place between March 22-24, 2005 in Fort Worth, TX. Over 45 representatives from the NWS, U.S. Geological Survey, Corps of Engineers, and the Bureau of Reclamation were in attendance. The NWS had 12 representatives at the meeting. The NWS session included presentations about future initiatives in the NWS Hydrology Program (e.g., Water Resource Initiative and the Community Hydrologic Prediction System), the National Digital Forecast Database, distributed modeling, ensemble hydrologic forecasts, the SR RFC precipitation analysis web page, and an update on the AHPS program. NWS presenters included Tracy Howieson (WGRFC), John Schmidt and Billy Olsen from ABRFC, Kandis Boyd and Jack Settelmaier from SRH, and George Smith from the Office of Hydrologic Development. The agencies agreed to evaluate a new web based application to share hydrometeorological information graphics during flood coordination briefings.

Southern Region Celebrates National Flood Safety Awareness Week. The first annual National Flood Safety Awareness Week (NFSAW) was held March 21-25, 2005. NFSAW is designed to



educate and remind citizens of the potential death and destruction posed by floods. Each day of the week emphasized a different aspect of hydrology: AHPS, TADD, Tropical Cyclone Inland Flooding, Flood Hazard Mitigation, and Flood Safety. Southern Region offices also participated on a local level to promote NFSAW.



Freddie Zeigler, Senior Forecaster at WFO New Orleans/Baton Rouge, developed posters for NFSAW. The posters were disseminated to offices in Southern Region as well as other NWS regions. Proclamations were declared for several cities, including Austin and San Antonio. The Governor of Mississippi signed a Proclamation declaring "Flood Safety Awareness Week".

WFO New Orleans/Baton Rouge, LA Participates in Federal Executive Board's Shared Government Management Symposium. WFO New Orleans/Baton Rouge, LA (LIX) participated in the New Orleans Area Federal Executive Board's Shared Government Management Symposium in New Orleans, LA on March 9, 2005. Attendees for the Symposium were Paul Trotter, Meteorologist-In-Charge, Patricia Brown, Senior Service Hydrologist, and Paula Bolline, Administrative Support Assistant. The sessions covered a variety of topics pertinent to the area's government employees, including Sarbanes-Oxley 2006 – A 123, fiscal responsibility, personnel issues, homeland security/preparedness activities, and safety issues.

Paul Trotter, Meteorologist-In-Charge at WFO LIX delivered the luncheon message entitled "Hurricanes in the View – Lessons Learned" that covered the impacts of a strong hurricane over this region, particularly the flooding potential. Following Mr. Trotter's message and the detailed



description of damage from Mr. St. Amant, a lively discussion ensued on the impact of a direct hit in a hurricane over the New Orleans metropolitan area. Considerable attention was given to the potential flooding that would be induced by the storm surge, as well as inland flooding in tropical systems and transportation issues. Given the "Bowl Effect" caused by the levees surrounding New Orleans, water from a storm surge would likely become trapped in the city should a strong hurricane move over the area. Likewise, floods produced by heavy rainfall would also pose major problems over much of the region, including the area north of New Orleans and Lake Pontchartrain, known as the Northshore.

Water Supply Plans for the City of Albuquerque. Joe Chwirka, Project Manager at CDM, visited WFO Albuquerque on January 19, 2005. Joe gave an informative and timely presentation on the San Juan-Chama Project and Albuquerque's new water treatment plant. Albuquerque currently relies on groundwater to meet all of its domestic and municipal needs. To mitigate the negative impact of groundwater mining, the City of Albuquerque will undergo a monumental shift in the coming years as it begins to divert and treat surface water to augment its drinking water supply. Albuquerque owns rights to portions of both the Rio Grande and Colorado Rivers under the terms of interstate compacts and federal law. In order to put Colorado River water to beneficial use, Albuquerque has invested more than \$40 million in the San Juan-Chama Diversion Project. The project consists of a system of diversion structures and tunnels that transports water from the upper San Juan River Basin - part of the Colorado River Basin - 26 miles under the Continental Divide to the Rio Chama, which is a tributary of Rio Grande. The diverted water is stored at Heron and Abiquiu reservoirs in north-central New Mexico. Until recently, the city had no means to use its yearly San Juan-Chama allotment of 47,000 acre-feet per year. However, in late 2004, the city begun construction on a multi-million dollar water treatment facility that will treat the San Juan-Chama surface water and augment its domestic water supply. When completed in 2006, the diversion project will supply 70 percent of Albuquerque's future water needs and will allow the city to greatly reduce the pumping of its underground aquifer.

CLIMATE SERVICES BRANCH

New Climate Training Modules Available. The Climate Prediction Center (CPC) has completed two new courses for the NWS Personnel Competency Unit (PCU) in Climate. The purpose of these courses is to explain the scientific basis and operational production methods of climate forecasts. VisitView software is needed to view the lectures, entitled:

"An Inside Look at CPCs Extended Range Forecasts", and "An Inside Look at CPCs Long Range Forecasts". Details on these distance learning courses can be found on the NWS Climate Services Division website at:

http://www.nws.noaa.gov/om/csd/pds/pcu3/webcast3 3.htm

http://www.nws.noaa.gov/om/csd/pds/pcu3/webcast3_4.htm



WFO New Orleans Assists Regional Planning Commission. In response to a query from the New Orleans area Regional Planning Commission, WFO New Orleans was able to compile a climatological summary of many different weather related events for the local area. This summary included:

- *Average number of severe thunderstorms per year.
- *Average number of tornadoes per year.
- *Average number of hurricanes per year.
- *Average number of earthquakes per year.
- *Average number of floods per year.

The Commission intends to use this information to assist them in attracting businesses for spurring local economic development.

Land of Enchantment Rains Spur Climate Media Contacts. February 2005 saw the state of New Mexico record their wettest February ever, logging an average total of 1.74" statewide, or approximately 300% of the normal amount of 0.57". This in turn contributed to the wettest winter (December-January-February) ever in New Mexico, dating back to 1895. This sudden change from what had been a very dry period prompted WFO Albuquerque to launch a media blitz, conducting interviews with the *Albuquerque Journal* and *Santa Fe New Mexican* newspapers, as well as many statewide TV and radio outlets.

Datzilla on the Loose! Three SR WFOs, in partnership with the Regional Climate Centers (RCCs), and NCDC, will conduct tests of Datzilla, a new real-time error reporting and tracking system for NOAA datasets. Using this electronic notification system, WFOs will be able to interact with the RCCs and NCDC to better notify them of suspect data. The offices will be able to highlight precipitation and/or temperature data extremes that may seem spurious, but are indeed valid. The ultimate goal is the more efficient exclusionary parsing of incorrect data, and the inclusion of extreme values which are indeed correct and valid.

SCIENTIFIC SERVICES DIVISION

WFO HUN Welcomes Representative of the Panamanian Government. During a month long stay in the United States, Joel Perez, a weather and climate specialist for the Panamanian government, visited WFO HUN on two occasions. The government of Panama is currently working with representatives from NASA Marshall Space Flight Center and other Latin American countries to improve meteorological services, preparedness, and community awareness across Latin America. During his second visit, Mr. Perez shadowed SOO Chris Darden on shift. The encounter led to some in-depth discussions on social, scientific, and economic strategies for achieving the goals set forth by the partnering countries.

WFO HUN Collaborates with NSSL. On March 17th, NSSL research scientist Kevin Scharfenberg visited WFO Huntsville to discuss the use of total lightning observation in real-time



forecast in warning observations. For two years, WFO Huntsville has been ingesting total lightning information from the North Alabama Lightning Mapping Array into their AWIPS system. In the very near future, NSSL and WFO Norman will start accessing similar datasets in near real-time. During the visit, SOO Chris Darden gave Kevin a tour of the WFO, and ran him through several archived case studies of severe weather in which the LMA data was utilized for warning decision making purposes. In addition, data ingest and other logistical information was shared between the two parties.

NCEP Model Changes. The last planned upgrade of the Eta model in the North American Mesoscale (NAM) system has been scheduled for Tuesday, May 3, 2005. At that time the Eta code will be frozen until it is replaced with a Weather Research & Forecast (WRF) version in the spring of 2006. The changes proposed for this current upgrade are listed below:

3DVAR Analysis Changes

Re-introduce surface temperature observations from all on-time overland sites. Assimilate WSR-88D Level 2.5 radial wind data as super-observations.

Data Assimilation Changes

Improve robustness of precipitation assimilation by:

- 1) using observed precipitation directly in driving the land-surface model, and
- 2) eliminating the option to aggressively create precipitation.

Numerical Model Changes

Modified components and coefficients in the operational radiation code to be more consistent with those in the GFS radiation scheme.

Improve model cloud cover formulation.

Refine numerous aspects of the land-surface physics, including use of high-resolution soil type and vegetation type data sets.

Product Changes

Include effects of convective rain rate in visibility algorithm.

Add clear-sky radiation fluxes (for Air Quality Forecast).

There will be no change to the NAM files transmitted over the AWIPS Satellite Broadcast Network (SBN) at this time.

The resolution increase of the Global Forecast System (GFS) from T254 to T382 has been tentatively scheduled for Tuesday, 31 May. The highest resolution portion of the forecast will be extended from 84 to 180 hours. From 180 to 384 hours the model resolution will increase to T190. The vertical resolution will remain at 64 levels to 180 hours and will increase from 42 to 64 levels beyond 180 hours. There will be no change to the GFS files transmitted over the AWIPS Satellite Broadcast Network (SBN) at this time.



Also in May the resolution of the Rapid Update Cycle (RUC) will be increased from 20km to 13km. In addition to the finer horizontal resolution the 13km RUC includes the assimilation of new observations (GPS precipitable water, METAR cloud/visibility, mesonet, etc.) and improved model physics and post-processing. There will be no change in format or content of RUC model output on the AWIPS SBN at this time. At some point in the future, 13 km output will become available on the SBN.

April Visit Teletraining Calendar. The Virtual Institute for Satellite Integration Training (VISIT) calendar for April is now available. Offices can register for the teletraining sessions by sending email to: visit@comet.ucar.edu The teletraining calendar is at:

http://www.cira.colostate.edu/ramm/visit/ecal.asp

The sessions for April are:

Predicting Supercell Motion in Operations (Intermediate, Apr 11,25)

Modern Severe Weather Parameters (Basic/intermediate, Apr 5,19)

Forecasting Convective Downburst Potential Using GOES Sounder Derived Products (Basic, Apr 14,28)

Water Vapor Channel Satellite Imagery (Basic, Apr 21)

RSO Imagery with Other Remote Sensor Data for Diagnosing Severe Weather across the CONUS(RSO 3) (Intermediate, Apr 12,13,26,27)

Mesoscale Analysis of Convective Weather Using GOES RSO Imagery (Basic, Apr 5)

Lightning Meteorology I (Basic, Apr 6)

Lightning Meteorology II (Advanced, Apr 7)

Enhanced-V: A Satellite Severe Storm Signature (Basic, Apr 12)

All previous sessions including several with recorded instructor audio and annotations are available at: http://www.cira.colostate.edu/ramm/visit/ts.html

SYSTEMS OPERATION DIVISION

Spill Prevention Controls and Countermeasures Plans. Nine fuel spill response plans in Southern Region have been finalized by the WASC environmental contractor after being revised and updated. Previously there was an EPA requirement to update these SPCC plans after three years, but that was increased recently to a five-year interval.

Of the nine expired plans, three were revised by Southern Region E/S Focal Point Terry Brisbin as "Best Mana gement Plans" (BMP's), and the remaining six were revised by the contractor as SPCC Plans at a cost of approximately \$5K each. The difference lies in the total amount of fuel stored being above or below the EPA threshold of 1,320 gallons.

The nine NWS sites are Brownsville, El Paso, Corpus Christi, Midland-Odessa, Birmingham, Jackson (MS), Knoxville, Atlanta, and Miami.



NOAA Tier I & II E/S Assessments. NOAA Environmental and Safety engineers previously associated with MASC and CASC have received funding to perform E/S assessments of a small number of Southern Region offices. One visit is scheduled at Lake Charles for May 24, 2005, and there is the possibility of visiting five others.

We are trying to spread the Tier I and II visits so that each office will be reviewed either by the NOAA engineers (Tier II) or the independent contractors hired by NOAA (Tier I). The Tier I assessments are typically more formal and involve more inspectors with quarterly tracking of action items resulting from the assessments.

Regional Facilities Maintenance Supplements. The second and final draft of the Southern Region Emergency Power Generator (EPG) maintenance supplement to 30-4104 was released for comment. The draft incorporated all but two comments from an earlier draft. Also, revisions to the Southern Region Supplement 01-2003, Work Order Procedure, are underway. The revision will incorporate the new EMRS Facility Maintenance procedures replacing SR's MP-2 asset management database. The first draft is scheduled to be released for comment by April 11, 2005.

Upper-Air. February 2005 was an excellent month for Southern Region (SR) upper-air sites with 14 of 23 SR sites earning scores above the national average of 284.95. WFOs Miami and Key West earned the region's top two upper-air scores for February.

WFO Key West's upper-air staff completed a special project the week of March 14-18, 2005. The staff launched a special 18Z flight each of these five days. These flights will be in support of the National Air and Space Intelligence Center, USAF, Wright-Patterson AFB, Ohio.

We are currently working out the last details on a Memorandum of Agreement (MOA) for the Texas Air Quality project that will start May 2005. The purpose of this MOA is to establish an agreement whereby the Texas Commission of Environmental Quality (TCEQ) will provide funds to NWS for the collection of additional upper-air observations. Local, State, and Federal governments are joining forces to conduct a major field study to address air quality issues in the eastern half of Texas. The Texas TCEQ requests that WFO Fort Worth's upper-air staff collect additional 30 18Z flights during the period of May 2005 through September 2006.

Observation Program. WFO Albuquerque held it's first ever "Weather Data Awareness Week" March 7-11. The week consisted of issuing daily statements describing the value and resources for various weather data, handling media interviews, participating in a Community Collaborative Rainfall Hail and Snow Network (Cocorahs) training session with the Colorado State Climate Office, and hosting an open house on Cooperative Weather Observer Appreciation Day (March 11). Nolan Doesken joined forces with WFO ABQ to train a number of new observers for the Cocorahs supplemental network. This network posts precipitation event information on the web, including mapping of precipitation reports. The highlight of the week for the staff was the Cooperative Observer Appreciation Day. Members of the staff provided what seemed like tons of



food as observers from across the CWA visited the office for a tour, food, and good conversation. By the end of the day, over 100 visitors (not to mention the media) had toured the office.

Aviation Safety Policy. Our application for exemption for the NOAA safety stand-down is still under review at NWSH. This exemption is for two SR forecast offices, New Orleans and Lake Charles, to be able to complete their required Supplementary Aviation Weather Reporting Stations (SAWRS) site inspections in the Gulf of Mexico. The new NOAA Aviation Safety Policy is still under going review. It is expected to be issued by early summer. In the meantime, we are under the stand-down order.

ADMINISTRATIVE MANAGEMENT DIVISION

Diversity

Regional Director Represents Secretary Gutierrez. Southern Region Regional Director Bill Proenza represented Secretary Gutierrez at a DOC sponsored meeting hosted by California State University President, James Lyons. The theme was Hispanic Serving Institutions (HSI) and the Federal Government: Partnerships for America's Future. The DOC sponsored meeting for all HSI universities across the nation is part of the White House Initiative on Educational Excellence for Hispanic Americans. Mr. Adam Chavarria represented the White House at the meeting and conveyed the support and thoughts of the White House on this important Presidential initiative.

CWSU Albuquerque Participates in National Native American Science Fair. Meteorologist Alberta Vieira participated as a judge in the National Native American Science Fair in Albuquerque on March 25. There were approximately 350 students from around the nation, including Alaska, who came to Albuquerque to participate in every science. The grade levels ranged from 5th grade to senior level. Before making it to the Nationals, the students had to compete in 2 or 3 science fairs. From the Nationals, they may be recommended for the International competition. From the category that Alberta judged, environmental sciences, there were three students recommended for the International competition.

OUTREACH ACTIVITIES

Operation Raincheck Briefing. CWSU Memphis Forecaster Bryan Harmon and MIC Doug Boyette participated in the annual "Operation Raincheck Briefing" held at the FAA's Memphis Air Route Traffic Control Center. The event is geared towards general aviation pilots and provides a chance for pilots to get a view of air traffic control operations up close and personal. Representatives of the Memphis Air Traffic Control Tower were also on hand. Bryan hosted about 70 pilots in ten separate groups in the CWSU operations area, showing them the equipment and answering questions. Doug provided a 20 minute formal presentation highlighting CWSU history, operations and the impact of weather on aviation. The event was booked solid, requiring a second overflow briefing, which will be held on April 2.



WFO El Paso Reaches Out to Retired Federal Employees. WFO El Paso MIC Bill Alexander addressed approximately 20 members of the El Paso area National Association of Retired Federal Employees (NAFRE). Bill discussed the history of the NWS office in the El Paso area including its modernization to a WFO and relocation from El Paso International Airport to Santa Teresa, NM. Bill also gave an overview of weather hazards in the area, including an extensive talk and concluded with a question and answer session that featured information about new technologies at the Forecast Office and how best to receive critical weather information in which Bill suggested NOAA Weather Radio and the local media.

Career Day. WFO El Paso Lead Forecaster, Tim Brice participated in the Berino Elementary School Career Day where he spoke to approximately 150 students and teachers during the day. Tim spoke primarily to 4th and 5th graders about the field of meteorology. During his presentation, Tim was able to demonstrate some basic weather elements. Each of the seven presentations were wrapped up by covering thunderstorm and lightning safety tips. The students sho wed great enthusiasm and understanding with great questions.

Georgia Science Teachers Association Conference. WFO Peachtree City WCM Barry Gooden participated in the Georgia Science Teachers Association Conference in Columbus, GA. An NWS Booth was set up and staffed during the conference. This provided an opportunity to meet many of the science educators (approximately 1000-1200) across the state, and to identify resources for them in their presentation of science curricula. The Wednesday evening opening provided a preview period for the educators to meet the exhibitors, which ranged from other educational entities such as Georgia Public Broadcast, NOAA – Gray's Reef National Marine Sanctuary, and vendors selling science-related materials and instruments. There were approximately 277 visitors to the NWS booth. The most frequently asked question was whether we had a developed curriculum they could use for their class. They were directed to the JetStream web page and other NWS resources.

CWSU Albuquerque Participates in Career Fairs. Forecaster Alberta Vieira joined approximately 150 other professionals in a career fair on March 12 at the Albuquerque Convention Center. The career fair was hosted for 8^{th} and 9^{th} graders all over the state of New Mexico. There were approximately 2500 students who attended the event. The students were able to ask questions and participate in individual activities the presenters had available. On March 16, Alberta participated in another career fair at Rio Grande High School in Albuquerque, NM. This career fair hosted more than 600 students ranging from $9^{th} - 12^{th}$ grade.

TAMSCAMS Welcomes NWS. WFO Corpus Christi MIC Armando Garza and Forecaster Jason Dunn addressed the Texas A&M Student Chapter of the American Meteorology Society (TAMSCAMS) on Monday, March 7. Armando and Jason briefed students on "Jobs in the NWS" and talked about options available to enter the NWS during the special meeting held the evening before the first annual Geosciences Career Day. Gena Morrison, EEO Manager, was there to answer questions after the briefing. There were over 40 students in attendance who are majoring in Atmospheric Science and they all showed a lot of interest in the information presented by the NWS



staff. The majority of the students were from Texas and almost a third in attendance noted they were from the Houston area.

Geosciences Career Day at Texas A&M University. Gena Morrison, EEO Manager SRH, WFO Corpus Christi MIC Armando Garza, Forecaster Jason Dunn and WFO Austin/San Antonio MIC Joe Arellano participated in the first ever Geosciences Career Day at Texas A&M University in College Station, Texas on March 8. Meteorology undergraduate students who visited the NWS booth display were provided information and instruction on career opportunities in the NWS as well as student employment program opportunities. Due to the success of the career day, the College of Geosciences at Texas A&M plans on holding a similar event next year.



From left to right: WFO Corpus Christi MIC Armando Garza, SRH EEO Manager Gena Morrison, WFO Austin/San Antonio MIC Joe Arellano and WFO Corpus Christi Forecaster Jason Dunn

WFO Huntsville Trains Teachers at NASA's Space Camp. Representatives from WFO Huntsville, AL began the first of four weather education and outreach training sessions to teachers attending NASA's Marshall Space Flight Center's Space Camp in mid March. SCEP Holly Allen kicked off the training sessions with the teachers to begin a series of weather train-the-trainer sessions using NWS Southern Region Headquarters "Jet Stream" weather education curriculum. Plans are to continue this type of training with sessions again in mid-April and twice in May. NASA's Marshall Space Flight Center estimates that over 1000 teachers from across the U. S. will be attending and participating in "Jet Stream" training in Huntsville.

WFO Little Rock Forecasters Become Judges at the Science Fair. WFO Little Rock Forecasters Newton Skiles and John McLeod and George Wilken, retired WFO Little Rock SOO, judged projects at the Central Arkansas Regional Science Fair held on the University of Arkansas-Little Rock campus. Newton and John judged Environmental Science and Physics projects, respectively, and George judged Earth Science projects. A total of 257 junior and senior high school projects



were entered in the fair. Several of the projects judged will advance to the State Science Fair in Conway, AR in early April.

West Gulf River Forecast Center is Reaching Out. Senior HAS Greg Shelton, Hydrologists Alana McCants and Gregg Waller gave an office tour to two Texas A&M meteorology students during the week of March 14. Greg, Alana and Gregg demonstrated some of the WGRFC programs and discussed RFC operations. WGRFC HIC Jerry Nunn and Hydrologist Mike Shultz provided a tour for a visitor from Fairfax County, VA, during the same week. Jerry discussed the WGRFC operations, products and services while Mike provided a demonstration on the distributed model, which is being tested at the WGRFC. The following week, Hydrologist Gregg Waller gave a tour of the WFO and RFC to a high school student and her mother. The student is interested in pursuing a meteorology degree. HAS Greg Story, Hydrologist Gregg Waller and Alana McCants helped man an information booth in conjunction with SRH and WFO Fort Worth at the National Science Teachers Conference in Dallas on 3/30-4/1/05.

Shadows in San Juan. WFO San Juan hosted two senior high school students from Perpetuo Socorro Academy recently. The students shadowed forecasters and HMTs for a few hours to learn more about WFO operations. They met with the MIC, WCM, ITO and other focal points in the office. Both students have been accepted at state side universities and plan to pursue a career in meteorology. The school counselor said, "They felt very enthusiastic after the visit and confident of their career decision".

WFO San Juan MIC Serves as Facilitator and Presenter. WFO San Juan MIC Israel Matos participated in a joint meeting between the University of Puerto Rico Mayaguez Campus Climate Modeling group and the NASA Goddard Space Flight Center Atmospheric Sciences Group. The purpose was to interact and exchange climate related research relevant to the Caribbean and explore future collaborations. Israel served as the discussion facilitator and a presenter for the NWS perspective and interests to the group.

WFO San Juan Conducts Tour for Upward Bound Program. WFO San Juan personnel conducted an office tour for 40 high school students of the Inter-American University, Bayamon Campus, Upward Bound Program. This program targets low income high school students who may also be among the first in their family to consider going to college. The project provides academic and personal support designed to motivate and prepare the students for college. Careers in NWS as well as NOAA were discussed.

WFO San Juan Staff Visits Universities. WFO San Juan Forecaster Hector Rivera visited the University of Puerto Rico Rio Piedras Campus, Environmental Science Department to lecture on Pollutants and Global Climate Change to a senior undergraduate seminar class of 70 students. HMT Jesus Figueroa visited the Turabo University to participate as a judge in the Regional Science Fair, sponsored by the Puerto Rico Board of Education. Jesus evaluated 12 projects in the areas of Physics, Space Sciences, Mathematics and Engineering.



WFO San Juan MIC Visits Interior Puerto Rico Schools. WFO San Juan MIC Israel Matos traveled to Naranjito Puerto Rico to provide educational outreach on hurricanes and tsunamis to 35 senior students at the Francisco Morales School. The same day, Israel also visited the San Francisco de Asis School in Barranquitas to talk to 42 students in the $2^{nd} - 4^{th}$ grade.

WFO Little Rock Aviation Team. WFO Little Rock Aviation Team partnered with the Arkansas Aerospace Education Center (AEC) during the premier weekend in Little Rock of the IMAX film, "Forces of Nature." The IMAX Theatre is part of the AEC, and is located at the Little Rock National Airport.

The WFO set up an NWS floor display highlighting aviation services, severe weather preparedness, NOAA Weather Radio, and details about how to become an NWS meteorologist. NWS severe weather publications were made available during the weekend. The Aviation Team consisting of Senior Forecaster Newton Skiles, SOO Chris Buonanno and Meteorologist Intern Paul Iniguez, were on hand to answer questions at the February 10 premier party for AEC members. Over 300 attended the premier party. WCM John Robinson manned the display and answered questions on February 11 and 12. Newton Skiles manned the display on February 13, answering questions as needed. A total of over 1600 people viewed the film in its first four days in Little Rock. The film will continue at the IMAX for the next four months and the WFO display will remain at the AEC through that time.



From left to right: Senior Forecaster Newton Skiles, SOO Christopher Buonanno and Met Intern Paul Iniguez

SMG. SMG Meteorologist Doris Hood wrote a meteorology test for the Gulf Coast Regional Science Olympiad held at the University of Houston – Clear Lake. The test was geared towards middle school age students with an emphasis on severe weather. Doris and a fellow Houston AMS



Chapter member, Brian Plants, proctored and scored the test. The SRH Jetstream web site was used heavily for test question concepts.

SMG Assists in Expanding Your Horizons Organization. SMG Meteorologist Doris Hood gave two 1-hour presentations to 6th grade girls at the Super SciTech Saturday for the Expanding Your Horizons organization. The event was held at the University of Houston – Clear Lake. The presentations consisted of a series of basic science experiments related to meteorology such as creating condensation in a bottle, imploding a heated can when plunged into ice water, several tornado tubes, and Cartesian divers. These experiments were also presented to the SMG staff for their familiarization and possible future use.

SMG Hosts Tours. Meteorologist Karl Silverman hosted six ISU meteorology students on March 16 and 17 who traveled to Houston to visit the SMG and NASA on spring break. The students toured SMG, NASA's mission control rooms, backrooms, and simulators. The group also attended the local Houston AMS chapter meeting where SMG Meteorologist Tim Garner was the featured speaker. Tim talked about SMG's participation in providing meteorological data and analysis for the post Columbia accident investigation.

"Weather or Not". WFO Albuquerque Senior Forecaster Kerry Jones and SOO Dierdre Kann participated in the Santa Fe Water Festival which is designed to bring 4th grade students together to spend a day learning about water. During the two day period, Kerry and Deirdre worked with ten groups of students. Their presentation, entitled "Weather or Not," taught students about flash floods and the climatology of New Mexico. Students analyzed meteorological and hydrological data to determine if flash flooding might occur, and they issued warnings with appropriate call-to-action statements. Materials for the course were all converted into an English/Spanish bilingual format.

Texas Balloonists Learn About the Weather. WFO Fort Worth forecaster Dan Shoemaker provided a presentation to the Plano, Texas Ballooning Association with about 50 people in attendance. Dan discussed WFO operations and aviation meteorology as it applies to balloons. Several balloonists provided accolades on the quality and thoroughness of Dan's presentation, particularly as it related to wind forecasting. After the presentation, association members rated Dan's presentation nearly a ten, and he's been asked to provide a follow up talk to the group!

Lubbock Cub Scouts and Severe Weather Safety. WFO Lubbock Senior Forecaster, Mark Fox, provided a weather safety presentation that hit home – literally! As his son listened and watched closely, Mark provided an exciting talk about weather safety to his son's Cub Scout pack. He focused on what to do when bad weather strikes during a Scout campout. The kids ranged in age from six to ten, and ranked all the way from Tiger cubs to Webelo Scouts. After the presentation, one of the boys told his mom the presentation was "awesome with all the cool tornado pictures". The NWS presentation helped the pack earn their Outdoorsman Activity Badge. Great job, Mark!

Corpus Christi Participates in Groundhog Job Shadow Day. This year's "Job Shadow Day" was a national event spearheaded locally by Junior Achievement of the Texas Coastal Bend. WFO



Corpus Christi Forecaster Jason Runyen CRP SOO Ronald Morales took part in this year's shadow program. Each of the participating businesses from the Corpus Christi International Airport (including the NWS) was asked to provide a brief discussion on why the students should spend the day with them. Fifteen students from a local high school could then choose which company they would like to shadow. Two female students and one teacher chose the NWS and spent the day at WFO Corpus Christi. They were given a comprehensive tour and a brief demonstration of forecast operations using AWIPS and other technologies. They also received information on career paths in meteorology and academic criteria for becoming a meteorologist. Job Shadow Day not only showcased the NWS's service to the community; it also helped guide two young adults through the difficult task of choosing a career.

WFO New Orleans/Baton Rouge Hosts Hydrology Workshop. The WFO at New Orleans/Baton Rouge LA hosted two Severe Weather and Hydrology Workshops for emergency managers and first responders within the Parish and County Warning Area (PCWA) of southeast Louisiana and south Mississippi during the first quarter of 2005. The first workshop was held on January 26, 2005 in Hammond, LA at Southeastern Louisiana University. Hosted by Harrison County in Gulfport, the second workshop was held for a half day on March 10, 2005.

WFO LIX works closely with the emergency management community on hurricane preparedness, since hurricanes are the primary weather threat to the warning area. The severe weather and hydrology contacts with the parish/county emergency management agencies are conducted on an individual basis. The Lower Mississippi River Forecast Center (LMRFC) also participated in both workshops. The LMRFC covered the development of river forecasts and guidance products issued to the forecast offices, forecast models, and RFC operations. In addition, the January workshop featured presentations from the U.S. Army Corp of Engineers, the U. S. Geologic Survey, the NOAA National Ocean Service, and the Amite River Basin Commission in a panel discussion on their roles in river flood forecasting.

WFO Albuquerque Participates in the Santa Fe Water Festival. On February 9-10, Kerry Jones, Senior Forecaster, and Deirdre Kann, SOO, participated in the Santa Fe Water Festival. The Water Festival is designed to bring 4th grade students together to spend a day learning about water. During the two day festival, Kerry and Deirdre worked with 10 groups of students. Their presentation, entitled "Weather or Not," taught students about flash floods and the climatology of New Mexico. Students analyzed meteorological and hydrological data to determine if flash flooding might occur, and they issued warnings with appropriate call-to-action statements. Materials for the course were all converted into an English/Spanish bilingual format.

Albuquerque Drought Presentation. WFO Albuquerque MIC Charlie Liles joined Mayor Martin Chavez, scientists from the agricultural community and 400 attendees at the 19th Annual "Think Trees" conference in Albuquerque. After experiencing the 4th wettest year on record in 2004, Charlie was given the topic "Is the Drought Over" for his presentation. His short answer was "no," as he described how the drought has evolved over the past five years in New Mexico. He provided a 25 year forecast based on his studies on the relationships between various Atlantic and Pacific



signals and New Mexico precipitation. After completing his presentation, Charlie fielded numerous questions from the enthusiastic audience.

AHPS Outreach Efforts. Folks from the Weather Forecast Office in Houston, the West Gulf River Forecast Center, and SRH conducted an AHPS briefing for the Trinity River Authority (TRA) and local/regional emergency management officials in southeast TX at the TRA's Lake Livingston facility on March 10, 2005. The briefing included an overview of the AHPS program, showcasing the WFO Houston AHPS web page, and information about long term probabilistic hydrologic forecast product creation and interpretation. Attendees from the NWS included Tracy Howieson, Gregg Waller, and Jerry Nunn from WGRFC; Bill Read, Gene Hafele, and Dave Schwertz from WFO Houston; and Ben Weiger from SRH. Along with TRA staff, emergency managers from Polk, Walker, San Jacinto, and Liberty County, and Texas DEM Regional Liaisons from Lufkin and Bryan were in attendance.

AHPS outreach also continues in Tennessee. WFO Nashville recently hosted two seminars for emergency managers in Middle Tennessee. As part of the agenda, Senior Service Hydrologist Mike Murphy presented an overview of Hydrologic Services including AHPS. To illustrate the benefits of AHPS to Middle Tennessee, the WFO Nashville Rivers and Lakes / AHPS web page and the availability of long range probabilistic river forecasts were covered in the presentation.

Educational Outreach in Georgia. Southeast River Forecast Center (SERFC) employees traveled to Dalton, GA to teach almost 1700 4th Graders from the Coosa River, Tallapoosa River, and Tennessee River basins about the hazards of major flooding. Using a desktop river flood model of a community built along a flood-prone stream, SERFC employees Mark Fuchs, Jonathan Atwell, and Brad Gimmestad explained the effects of major flooding during the 2005 Children's Water Festival, held at Dalton State College on March 8th.

The Festival was comprised of numerous classroom presentations spread around the campus, and a series of shorter presentations and demonstrations (including the NWS demonstration) in the lower level of the college's student center, called the Water Jamboree Activity Hall. Presenters came from a variety of water resource agencies, universities and colleges, environmental groups, and private businesses. The Activity Hall gave groups of 70 to 200 students the opportunity to have fun while learning about the various aspects of water management, ecology, conservation, and safety. Each large group was then broken down to groups varying from just a few students to as many as 20. Children would spend 3-5 minutes at each activity and come, either as a group or individually, to the SERFC exhibit. This allowed these students to focus on questions and topics such as:

- Which building would incur the greatest flood damage and why?
- Should a vehicle attempt to cross a bridge with water standing or flowing over it? Why or why not? The booth photo of the turned over car in the stream served as compelling evidence of what can happen when the wrong decision is made.



• Weather.gov provides is the web source of all of the river and flood information you may need, along with weather forecasts and warnings of severe thunderstorms, tornadoes, and hurricanes.

Area teachers attending the festival voiced high praise of the variety of information provided in the day-long event.

SOUTHERN REGION WORKFORCE TRANSACTIONS <u>MARCH 1 – 31, 2005</u>						
Southern Region Losses						
<u>Name</u>	From (Office)	Action/Transfer	From Title			
James Noel	WFO FFC	Transfer to ER	Hydrologist, GS-13			

Southern Region Gains					
Name	To (Office)	Action/Transfer	To Title/Grade		
Jim Belles	WFO MEG	Promotion	Meteorologist in Charge, GS-15		
Steven L. Ippoliti	WFO AMA	New Hire	Met Intern, GS-7		
Derek R. Deroche	WFO SJT	New Hire	Met Intern, GS-7		
David Billingsley	SRH SSD	Transfer from NWSH	Chief, Scientific Service Division, GS-15		

Within Region Transfers/Actions					
<u>Name</u>	To (Office)	Action/Transfer	To Title/Grade		
Ken Graham	SRH/SOD	Reassign	Chief, Systems Operations Division, GS-15		
Matthew Duplantis	WFO SHV	Transfer	ITO, GS-13		
Kent Frantz	WFO FFC	Promotion	Sr. Service Hydrologist, GS-13		

