



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

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SOUTHERN TOPICS

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Working Together To Save Lives

REGIONAL DIRECTOR

We have had three recent actions involving Southern Region personnel that I want to call attention to...

Alan Gerard has been named the new Meteorologist-in-Charge at WFO Jackson, Mississippi. Alan assumes this position from Jim Stefkovich, who is now MIC at WFO Chicago. Alan joined the staff at Jackson as a senior forecaster in 1996, and has been the Science and Operations Officer there for the past four years. Please join me in congratulating Alan on this new assignment, and in wishing Jim well as he assumes new responsibilities in the North.

I would also like to take this opportunity to introduce and welcome **Mark Hunter** to the SRH Administrative Management Division. Mark is our new budget officer. He joins us from outside the government where he has been an accountant. He has degrees in both accounting and law. In addition, his background in computer applications and data base management will be especially helpful as he goes to work immediately with the implementation of CAMS. Welcome to the NWS and the Southern Region, Mark.



It is a real pleasure to commend **Paul Kirkwood** on his selection as the NOAA Employee of the Month for August. Paul, formerly our regional AWIPS program manager and now chief of the SRH Dissemination Enhancement Team, was cited for his outstanding and innovative work in developing and implementing AWIPS software, and in particular for the success of his efforts to enhance the capabilities of the new Weather Event Simulator. As a result of Paul's work, all NWS field offices will have archive capability that will significantly improve the usefulness of the WES for local case study development and training. Congratulations, Paul, on this well-deserved recognition.

The NOAA Employee of the Month Award rotates among the NOAA line offices each month, so another NWS employee will be recognized in a few months. We all know there are many, many dedicated employees in the Southern Region whose accomplishments merit such recognition, so I encourage all of our offices to respond with nominations when the announcement is issued for the next National Weather Service NOAA Employee of the Month.

<u>IFPS</u>

IFPS Web Site. The SR GFE Text Formatter Team has a Web page now - go to the following link to see who in Southern Region is working on which formatters: http://www.srh.noaa.gov/msd/textformatterteam.html

Also find some new documents on the main page of the Web site. Felix Navejar (SOO WFO Lake Charles) has provided his forecast methodology and GFE editing techniques. http://www.srh.noaa.gov/msd/html/ifps.html

Customer Interface Team Meeting. On July 23-24, 2002, a number of SR field personnel met at WFO Memphis with representatives of the user community to discuss ways to utilize existing or soon-to-be developed technology to share gridded forecast information with interested users. Participating were Chris Buonanno (WFO Little Rock), Jason Burks (WFO Huntsville), Gerry Rigdon and Greg Garrett (WFO Memphis), Alan Gerard and Steve Listemaa (WFO Jackson), Stephen Parker and David Hotz (WFO Morristown), Brad McGavock (WFO Tulsa), Clark Safford (WFO Atlanta), and Keith Stellman and David Welch (RFC Slidell). Web technology and geographical information systems (GIS) were just two possible tools considered as viable methods to share and display the information.

Current Web sites and their interactive capabilities were reviewed by the participants. Users shared their information needs, which were documented, and many suggestions were put forward. Among concerns that were discussed were potential limitations in the present data transfer rates over existing networks, the need to purchase, obtain access to, or develop needed software; and, providing the necessary training for all involved.

The group will investigate options based on their findings over the course of a tentative timeline they agreed to follow. Included in their timeline are periodic conference calls and meetings to refine their progress. Lastly, the group's findings and recommendations were presented by Jason Burks to the East Continental SMART team MICs on July 25.

IFPS/NDFD Vision Teletraining. Note in the SSD section of this month's *Topics* the dates when this teletraining will be offered during August.

CLIMATE, WATER AND WEATHER DIVISION

METEOROLOGICAL SERVICES BRANCH

SPACEFLIGHT METEOROLOGY GROUP. Weather - and skillful forecasts - played major roles in both the launch and landing of the shuttle Endeavour on its June mission. Launched on June 5 the STS-111 mission continued the construction of the International Space Station. This mission also served as a taxicab for the ISS Expedition crews. The ISS Expedition Four crew, who set a US record for time in space at 196 days, was replaced with the ISS Expedition Five crew. The two-week mission concluded with the touchdown of Endeavour at Edwards AFB on June 19.

For ISS rendezvous missions, only a ten-minute launch window is available each day. For the late May/early June launch dates, the ten-minute launch window fell during the late afternoon, a favored time for thunderstorms in Florida. The first launch attempt on May 30 was scrubbed due to thunderstorms. Timing of the weather worked out for the next launch date of June 5. Forecasts were obviously critical for each launch attempt.

Weather did not cooperate for a landing in Florida. A persistent upper trough over the Gulf moved little during the three possible landing days in mid-June and each day ceilings, showers and thunderstorms developed just prior to the mid-morning landing times. A "no-go" on day three forced the landing to Edwards AFB, where the weather was perfect with clear skies and light winds. Lead SMG meteorologist for the STS-111 mission was Rich Lafosse. Tim Garner was the assistant lead and Doris Rotzoll was the lead techniques development unit meteorologist.

MARINE

WFO Jacksonville Marine Outreach. Al Sandrik, gave a marine presentation for the Amelia Island Sailing Club on July 2 with 30 people in attendance. He discussed NWS marine products, data sources, the MAREP program, new buoy 41012 located east of St. Augustine, NOAA Weather Radio, and the Web sites. The talk was about 45 minutes with a five minute question and answer period. In addition a SLOSH simulation of the 1898 hurricane was presented with a brief session on local hurricane history as it pertains to Amelia Island. Al also gave a presentation for a Jacksonville area HAM/ARES meeting. The topic was "What's New at the Weather Service" and he covered enhancements to our services using AWIPS, GFE, NOAA Weather Radio, and the Internet.

MVERIFY Presentation. David Eversole, WFO Mobile forecaster and author of the MVERIFY program, gave a presentation on July 19 at NWS Headquarters on his new MVERIFY program, which was viewed by the Marine Branch, MDL and MPC. His presentation and enthusiasm were well received, and the questions from the programmers and national marine verification team members stretched the 1 to 1 ½ hour presentation into overtime. The national verification team members in the audience were grateful for the exchange of ideas, and especially wanted to find out more about David's choice for an "equitable skill/threat score." Dave will also be coordinating with MPC and MDL on how MVERIFY will fit in with the national marine verification program being developed by MDL.

The new version of MVERIFY includes tools for improving marine forecasting and detailed statistical analysis which includes complete flexibility on selection of every possible wind, sea and temporal parameters. Some of the marine forecasting aids include analysis of model performance over the last ten model runs and analysis of all model runs at a selected run time. Forecaster performance can be easily compared with observed and/or guidance data. Forecaster and model performance for past events can be easily performed with these tools as well. The new version of MVERIFY also includes many new statistical measures, and includes verification for Hurricane Force Warnings, and Tropical Storm and Hurricane Warnings. The statistical measures include, but are not limited to, Percent Correct, Equitable Skill Score, Bias Error, Root Mean Squared Error, Mean Vector Error, Mean Absolute Error, Standard Deviation of Error, Correlation Coefficient, Skewness, Kurtosis, Chi-Square, Probability of Detection, False Alarm Ratio, and Critical Success Index.

SEVERE WEATHER PREPAREDNESS AND OUTREACH

WFO San Juan Partners with SAM's Club in Hurricane Preparedness Expo. WFO San Juan WCM Rafael Mojica and forecaster Andy Roche participated in a multi-partner hurricane expo sponsored by SAM's Club in Humacae. Humacae is located in the southeast portion of Puerto Rico where most hurricanes historically make landfall. The WFO San Juan duo staffed an NWS booth that was full of hurricane and lightning pictures, equipped with amateur radio equipment, and stocked with hundreds of safety brochures and hurricane tracking charts for public distribution.

Retirement Village Employees Learn About Hurricanes Through PowerPoint. WFO Brownsville DAPM Jim Campbell teamed up with the Harlingen Police Department to provide a PowerPoint hurricane preparedness presentation to over 60 employees of the Sun Valley Retirement Village in Harlingen. The presentation stressed preparation for the upcoming hurricane season while the police representative stressed actions to take in the event of a natural disaster.

Cub Scouts Learn About Weather Balloons from the Pros. WFO Corpus Christi HMT Steve Smart provided three local Cub Scouts, Den Mother and an assistant the opportunity to watch and learn the importance of releasing weather balloons twice daily into the atmosphere. The Cub Scouts learned how NWS meteorologists use information obtained from delicate instruments aboard altitude climbing weather balloons, coupled with a host of data gathering tools, to produce accurate weather forecasts and warnings relied upon by the public.

WCM Goes to Summer Camp. WFO Nashville WCM Jerry Orchanian, provided a weather presentation to over 40 students ages six to twelve at the Manchester Day Camp. Jerry dazzled the youngsters with a display and explanation of props such as weather balloons, radiosondes and various other weather instruments. Jerry also provided the students a thorough presentation on thunderstorm hazards such as tornadoes, lightning, hail and flooding including information on how to receive NWS warnings about those hazards via NOAA weather radio.

Southern Region Provides Media Training for Key West. Southern Region Headquarters public affairs officer Ron Trumbla provided a training seminar entitled, "Road to Successful Media Interviews" to WFO Key West staff members. Several members of the WFO Key West team, from the operational to the administrative, participated in role play activities and received advice on interview preparation for television, radio and published media markets.

EMERGENCY MANAGEMENT COORDINATION

Nine New StormReady Sites. The StormReady program continued to grow in the Southern Region during July! WFO Jacksonville recognized three Georgia counties; Atkinson, Bacon and Clinch as StormReady, while WFO Atlanta recognized three additional Georgia counties; Fulton, Laurens and Paulding as StormReady. StormReady recognition was achieved by the city of Sapulpa, Oklahoma through WFO Tulsa; Pinellas County, Florida through WFO Tampa Bay; and Mitchell County, Georgia through WFO Tallahassee.

There are now 37 new StormReady sites in Southern Region in FY02.

U.S. Virgin Islands Get a Dose of Hurricane Preparedness. WFO San Juan MIC Israel Matos traveled to St. Croix, U.S. Virgin Islands, to help local government officials and emergency managers understand and plan mitigation strategies for the catastrophic impacts of a potential major land-falling hurricane. Hurricane preparedness and survival of a category four or five were the key messages parlayed to decision makers of the USVI by the MIC.

New and Updated Central Alabama Schools to Get "SAFE" Rooms. WFO Birmingham recently collaborated with the Chilton County, Alabama, Emergency Management Agency (EMA) in a proposal to make schools safer. Discussions between the WFO Birmingham and the EMA led to a letter of proposal to require "Safe Rooms" in any new school built within the county and to consider including safe rooms for students in any older schools during renovations. The NWS "letter of support" was sent to the Chilton County EMA for a formal presentation to the County Commission which passed the safe room proposal unanimously.

Annual Hurricane Drill and Workshop in Puerto Rico. WFO San Juan MIC Israel Matos and WCM Rafael Mojica conducted a three hour in-house hurricane workshop for the new director and seven cabinet members of the Puerto Rico Emergency Management Agency. The workshop provided WFO San Juan the opportunity to discuss its' tropical cyclone plan and operations, describe hurricane forecast uncertainties and limitations, and it's coordination with government and media partners to the new emergency management team of Puerto Rico.

The next day WFO San Juan conducted its annual hurricane drill, in coordination with the Puerto Rico Emergency Management, over a five-day period in early July. WFO San Juan's hurricane drill provided the rookie emergency management team beneficial exposure and orientation to NWS tropical cyclone products prior to the peak of the hurricane season.

EMs Learn Historical Perspective of Hurricanes over Georgia. WFO Jacksonville forecaster Al Sandrik provided local emergency management a historical perspective of land falling hurricanes affecting the southeast Georgia coast during the 19th century. To help the local emergency managers understand and comprehend the power of wind driven water, Al provided a modern day SLOSH model simulation and analysis of how storm surge from the 19th century storms would have affected the southeast Georgia coastline today.

WFO Searches for Place of Last Resort. WFO Key West MIC Matt Strahan, SOO Andrew Devanas, and WCM Jon Rizzo met with Mark Willis, Monroe County Sheriff's Office General Counsel, to discuss the possibility of using the County Sheriff Administration Building on Stock Island as a possible refuge of last resort for NWS employees until the new WFO facility is completed in 2004. The Sheriff Administration Building is category-5 hurricane compliant, offers computing networking, and has a general communications infrastructure that may enable WFO Key West to provide limited operations in the event that a major hurricane threatens the integrity of the current temporary WFO, located at Key West International Airport.

MEDIA/PUBLIC/EXTERNAL CUSTOMER SUPPORT

First Hybrid MAREP Training Session Provided by WFO Miami Team. WFO Miami WCM Jim Lushine provided his first hybrid "Marine Reporting" (MAREP) training session for local south Florida mariners in support of the NWS Marine Program. The two-hour training session, attended by 50 local mariners and patterned after the land-based NWS Skywarn Spotter training, focused on observing and reporting select marine hazards such as waterspouts, downbursts, hail and lightning. The hybrid MAREP training should result in a significant increase in the receipt of timely and accurate marine reports to WFO Miami which should result in improvement of that office's marine warnings, forecasts and marine verification.

Oklahoma Highway Patrol Gets Advanced Skywarn Training. WFO Oklahoma City /Norman WCM Rick Smith provided "Advanced Skywarn Spotter Training" to 70 cadets who attended the Oklahoma Highway Patrol (OHP) Training Academy in Oklahoma City. The training provided the cadets valuable severe weather observing education in support of the NWS severe weather warning program. This was the third year that "Advanced Skywarn Spotter Training," provided by the local National Weather Service Office, had been part of the official OHP curriculum.

Weather Training for Student Mariners in Corpus Christi. WFO Corpus Christi forecaster Tawnya Evans provided a marine safety presentation to over 200 international students who competed in the Optimist Regatta World Boating Championship in the waters of Corpus Christi Bay, Texas. The purpose of the training was to provide the student mariners an understanding and appreciation for meteorological conditions, such as wind direction and speed, that could have a direct effect on the successful piloting of an Optimist (a flat-bottomed sailboat designed for kids) in Corpus Christi Bay.

MESONET under Development Across North Alabama. WFO Huntsville SOO Tom Bradshaw and WCM Tim Troutman began the initial ground work for development of a north Alabama MESONET. Each of the eleven north Alabama emergency managers are in the process of asking for funds to purchase amateur weather stations in their counties in support of homeland security. The NWS, NASA, University of Alabama in Huntsville, and the emergency management community will be cooperative partners involving the use of the county weather data.

WFO Goes Cable. Members of WFO Key West's management and technical staff met with Monroe County Emergency Management director Irene Toner, planner Jerry O'Cathey and the Monroe County technical division to discuss programming on a county government-owned cable channel. Channel 16 routinely provides local information from various local, state and federal agencies to the public, as well as audio from the WFO NOAA Weather Radio transmitter on Sugarloaf Key. Coincident with a change in format of the channel to Internet and Web-based content, WFO Key West plans to supply graphical and text information to Monroe County's cable system at frequent intervals during periods of hazardous weather.

NOAA WEATHER RADIO

NOAA Weather Radio Day Declared in Sweetwater, Texas. The weekly NWR station KWN-37 tone alert test kicked off a special commissioning ceremony in Sweetwater, Texas in July. County Judge Tim Fambrough and Mayor Pro-Tem Larry May were present to sign a special proclamation that July 9 would be designated as NOAA Weather Radio Day in Sweetwater, Texas and Nolan County. Special recognition was given to emergency manager and fire chief Jerry Huffman and staff for utilizing USDA - Rural Utilities grant money for funding the NWR project. WFO San Angelo MIC Buddy McIntyre and WCM Hector Guerrero were on hand to provide a special press conference on the NWR program, the Voice Improvement Project, and the record number of tornadoes that touched down across west central Texas this past spring.

NWR Expands Across Tennessee and Arkansas. Middle Tennessee expanded its NWR broadcast coverage by the recently deployed transmitters at Centerville and Lobelville. These two sites were funded by the USDA - Rural Utilities grant money through the application of the Meriwether Lewis Electric Cooperative. WFO Nashville MIC Derrel Martin, WCM Jerry Orchanian, and staff were instrumental in assisting the cooperator in the application process. This month also marked the completion of the Fountain Hill, Arkansas NWR thirty day acceptance period. This donated site will continue to serve the residents of Crossett and Ashley counties in Arkansas.

Craig Is the Talk of the Region! The recent NWR Quarterly Report indicates that most Southern Region offices have completed the installation of the recent Voice Improvement software load. The concatenated male voice *Craig* appears to be the initial favorite for short and long-fused warnings. The survey also suggests a split between the use of *Craig* and the female voice *Donna* for more numerous routine products.

SEVERE WEATHER WATCH WEB SITE KUDOS. WFO Birmingham MIC Ken Graham received seven phone calls and several people approached him from his neighborhood about the new Severe Weather Watch on the Southern Region Web site. Below is an example.

Just a note to commend you on your improved Web site. The information provided is extensive but yet easy enough for the general user to understand. I especially like the "Severe Weather Watch" page with the animated radar. I also like the home page map with the counties highlighted that are under warning. As you know, we folks in the Huntsville area are very attentive to the weather and this site is very informative.

Keep up the good work.

CWSU FORT WORTH RECEIVES AVIATION SERVICES AWARD. CWSU Fort Worth earned the Southern Region Aviation Services Program trophy for the 2nd quarter (April, May, June). This recognition was awarded to the CWSU for sustained superior performance during the testing and evaluation period for upgrades to the WARP (Weather and Radar Processor) system.

Of significant note from April through June 2002, CWSU Fort Worth served as an instrumental lead in achieving the FAA's national goal of displaying WSR-88D radar data at the air traffic controller's radar console. This important testing and evaluation phase came in advance of the national deployment of this enhancement to the WARP system. The FAA relied heavily upon the Fort Worth CWSU team to evaluate and validate the WARP system software and its functionality prior to national implementation.

CWSU Fort Worth is a finalist for the national NWSH Aviation Services Branch quarterly award. Congratulations to the CWSU staff: MIC Tom Amis, James Ott, Doug Reno and Charlie Hayes.

The next award period is July through September 2002. Offices should be logging significant accomplishments in the aviation program for consideration for the next Southern Region Aviation Services Award trophy.

HYDROLOGIC SERVICES BRANCH

AHPS BROCHURE. An Advanced Hydrologic Prediction Services(AHPS) brochure is now available at the National Logistics and Supply Center (NLSC) in Kansas City. We encourage you to order these brochures for your office so you can distribute them to your customers as part of your office educational outreach activities. Please use one of the following numbers when ordering the brochure.

NSN (NWS0-20-650-0001) or ASN (YPA-200258)

SITE-SPECIFIC MODEL TELETRAINING. The NWSH Office of Services (OCCWS) Hydrologic Services Division, in collaboration with the NWS Training Center, plans to begin teletraining sessions on the WFO AWIPS site-specific model in August. We will provide you with additional information on these sessions as we receive it from NWSH.

WFO AHPS WEB PAGE IMPLEMENTATION. Advanced Hydrologic Prediction Services (AHPS) are new information and products provided through the infusion of new science and technology. These services improve flood warnings and water resource forecasts to meet diverse and changing customer/partner needs.

Southern Region has begun configuring, testing, and evaluating the WFO AHPS Web page. The main concept of this project is to create a coherent AHPS presentation across all of the regions. This includes a common look and feel, a uniform directory organization and seamless navigation. All static AHPS graphics will be consistent and all AHPS pages will have the same baseline structure. The three beta test sites, WFOs Austin/San Antonio, Little Rock and Lubbock have a target date of the first quarter of FY02 for completion of the testing. The latest version of the WFO AHPS Web page is available at: http://www.crh.noaa.gov/cgi_bin/ahps.cgi?dvn

PRECIPITATION IN CENTRAL AND SOUTHERN TEXAS. Week-long torrential rains that began June 29 totaled as much as 2-3 *feet* in parts of south-central Texas, in particular the Texas Hill Country northwest of San Antonio. WFOs San Angelo, Austin/San Antonio, Corpus Christi, Houston/Galveston, Fort Worth and Brownsville provided multi-tiered support to the emergency management community throughout the event, briefing local emergency management coordinators, media outlets, and the general public on the weather and river conditions to be expected. This vital weather information enabled local emergency managers to make the best emergency response decisions possible.

During the event the SRH Region Regional Operations Center was a round-the-clock one-stop source for weather information to organizations such as FEMA, Texas Department of Emergency Management, and the Red Cross. The ROC consolidated information from the several WFOs involved, along with the Fort Worth RFC to provide a cohesive message to regional and national interests so they could make important decisions concerning manpower and resource allocation. Further information about the floods which followed these tremendous rains can be found at the following Web pages:

WFO Corpus Christi: http://www.srh.noaa.gov/crp/hydrology/flood_2002/July/default.html
West Gulf RFC: http://www.srh.noaa.gov/wgrfc/july02/july_floods.htm

The NWS Hydrologic Information Center:

http://www.nws.noaa.gov/oh/hic/current/TX.July 2002.shtml

In addition, the following Web page provides preliminary data from the USGS about the peak stages and discharges that occurred in the various river basins in south-central Texas: http://tx.usgs.gov

SCIENTIFIC SERVICES DIVISION

TECHNICAL ATTACHMENT. This month we are re-running the <u>tech attachment</u> by Mark Fox and Steven Fano (WFO Fort Worth) which appeared last month in truncated form.

NEW PAPERS. Congratulations to authors Tim Troutman (WCM WFO Huntsville), Larry Vannozzi (MIC WFO Lubbock) and John Fleming (Florida Division of Emergency Management) for their paper titled, "The Importance of Educating the Pubic Regarding NOAA Weather Radio Reception and Placement Within a Structure," which was published in the latest issue of the *National Weather Digest*.

The following new Southern Region Technical Memoranda have been recently distributed to all offices:

NWS SR-218, A GIS Flood Inundation Map Based on a Dynamic Wave (FLDWAV) Simulation of the October, 1998 Flood on the Lower Guadalupe River, Texas, by Michael Shultz (West Gulf River Forecast Center).

NWS SR-219, A River Flood Climatology of the Arkansas and Red River Basins, by John Schmidt and James Paul (Arkansas-Red Basin River Forecast Center).

NWS SR-220, A Categorical Flood Forecast Verification System for Southern Region RFC River Forecasts, by Robert Corby (West Gulf River Forecast Center) and William Lawrence (Arkansas-Red Basin River Forecast Center).

TELETRAINING IN AUGUST. Below are VISIT teletraining sessions scheduled for the remainder of this month as part of the Integrated Sensor Training Professional Development Series (ISTPDS). VISIT is the Virtual Institute for Satellite Integration Training. Offices can register for these sessions by sending an email to: <u>visit@comet.ucar.edu</u>. To access the teletraining calendar go to

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

- Lightning Meteorology II (advanced)	August 22
- Lightning Meteorology I (intermediate)	August 21
- Cyclogenesis: Analysis utilizing Geostationary Satellite	
Imagery (basic)	August 27
- Subtropical Cyclone Analysis with Satellite Data (basic)	August 20
- Experimental Satellite Derived Tropical Rainfall	
Potential - TraP (basic)	August 28
- Mesoscale Analysis of Convective Weather Using	
GOES RSO Imagery (basic)	August 29
Also - IFPS/NDFD Vision	August 20, 26

The new session above, *Subtropical Cyclone Analysis with Satellite Data*, was developed by Ray Zehr (NESDIS Regional and Mesoscale Meteorology Branch - RAMM) with assistance from Dan Lindsey and John Knaff (CIRA), Mark DeMaria (RAMM), Jack Bevan and Jiann-Gwo Jing (NCEP/TPC) and Brian Motta (NWS/OCWWS). This session covers Atlantic subtropical cyclone climatology, subtropical cyclone intensity analysis using satellite imagery, and scatterometer/microwave satellite winds.

Forecasters have shown tremendous interest and support for the ISTPDS and VISIT programs, and you are encouraged to contact <u>visit@comet.ucar.edu</u> if you are interested in a session that has not been done recently. They will try to meet your request.

NCEP SOOs. There have been a few changes recently, so below we provide a list of the Science and Operations Officers at the NCEP centers. These individuals can provide important links for their counterparts in the WFOs (and DOHs at the RFCs) on matters related to the national centers, and vice-versa.

Joe Sienkiewicz Marine Prediction Center

Pete Manousos Hydrometeorological Prediction Center

Rick Knabb Tropical Prediction Center Steve Weiss Storm Prediction Center Fred Mosher Aviation Weather Center

HURRICANE GUIDANCE MODEL TRAINING. Bernard Meisner (SSD) has recorded teletraining sessions covering the various hurricane track and intensity guidance models used by NHC. They are available at: http://www.srh.noaa.gov/ssd/Teletraining/Hurricanes/. The sessions can be downloaded and played on a computer, and include an accompanying narration with annotations. Just follow the instructions on the Web page. Additional sessions covering ensembles, the spatial variation of model errors, and tropical cyclone observation tools will be added later this month.

GOV ONLINE LEARNING CENTER PROVIDES FREE E-TRAINING COURSES. The Office of Personnel Management (OPM) has created a new Web site offering free online training courses for federal employees. The OPM calls the creation of the Gov Online Learning Center "the first phase of the President's Management Agenda e-Training Initiative."

Course offerings range from communication and customer service, leadership, and management for the diverse workforce, to Microsoft Office 2000. Course lengths vary; some courses can be completed in as little as two hours, while others may take eight hours to complete.

The Gov Online Learning Center is designed as a virtual building that houses free training courses and knowledge resources in each of its rooms. Visit http://www.golearn.gov/ for registration information.

By the way, the NWS Learning Management System, scheduled for access later this year, will be located on the third floor of the NOAA Building (http://e-learning.noaa.gov/) on this same virtual e-learning campus. It will have a similar user interface.

COASTAL STORMS INITIATIVE BUOY LAUNCHED. A new weather buoy, funded through NOAA's Coastal Storms Initiative, was deployed on June 25, near the edge of the Gulf Stream, 42 miles east of St. Augustine, Florida. The buoy, identified as 41012, joins two similar buoys off Florida's Atlantic Coast. The buoy will give NWS meteorologists in Jacksonville more information to develop better marine weather forecasts, as well as giving oceanographers and biologists improved data on water movements below the surface.

Data buoys collect real-time observations of wind speed, wave heights, and air-and-sea surface temperatures. Buoy 41012 also reports the water's salt content, a first for NDBC buoys. Long-term salinity measurements help scientists monitor changes in the underwater ecosystem, including fish and plant life. The new buoy's real-time weather observations will be posted under the "Recent Data" section of the NDBC Web site. The latest observations also are available through the Dial-a-Buoy system, (228) 688-1948.

The new buoy, launched by the NDBC and the U.S. Coast Guard, will give a vertical profile of ocean current measurements using an Acoustic Doppler Current Profiler, which operates much like a Doppler weather radar. The profiler sends sound waves in different directions toward the ocean floor, and helps detect shifts in ocean currents.

The Coastal Storms Initiative, administered by NOAA's National Ocean Service, is responsible for a wide range of activities in the Jacksonville area, including improved measurements of the depths and currents of the St. Johns River.

ADDITION OF CLIMATOLOGY TO MRF MOS (MEX) MESSAGES. Since 1200 UTC on July 30, climatic normals for the max/min temperature and probability of precipitation (PoP) have been included in the MRF MOS MEX messages. These values are the same climatic normals included in the obsolete MRF MOS FOX messages and are not available for all stations. Under the column labeled "CLIMO," the "X/N," "P12," and "P24" lines for some stations will now contain climatic normals valid during the 96 - 120 h period, which is approximately the mid-point of the projections included in the MEX message. The normal min and max temperatures are based on 30-year normals (1961-1990) provided by NCDC. The normal observed relative frequencies of 0.01 inches or more of precipitation were computed from 13 years of data (October 1972 to September 1985), and are documented in NOAA Technical Report NWS 39.

Please note that no date separator (|) is placed between the last forecast date and the "CLIMO" columns, and that each climatic normal can be up to three digits wide. Missing values are indicated by 999, and if both max/min or both 12-h PoP values are missing, the CLIMO column will contain 999999. For further information see the MRF MOS Technical Procedures Bulletin at http://www.nws.noaa.gov/om/tpb/460.htm.

FORECASTER VISIT TO STORM PREDICTION CENTER. As part of the NCEP/SPC field visitation program, WFO Melbourne senior forecaster Scott Kelly traveled to SPC in July. Scott presented a seminar on severe weather in the Florida peninsula, with an emphasis on the challenge of forecasting and warning for summertime pulse severe convection. He also discussed the behavior of the east and west coast sea breezes as they relate to the location of the subtropical ridge axis and different thermodynamic profiles. Scott described cloud to ground lightning as the primary threat to life during the summer and gave examples of enhanced services to the public, such as the WFO's Excessive Lightning Alerts and the Graphical Hazardous Weather Outlook. The seminar was attended by several SPC forecasters and the center's techniques development staff, along with members of NSSL's Mesoscale Applications Group. During his visit Scott participated in SPC operations and interacted one-on-one with forecasters to discuss WFO-SPC interaction and coordination issues.

Such visits are always mutually beneficial for the national center staff and our forecasters. Along with NCEP's support the Southern Region will continue to encourage and support visits by our forecasters to the NCEP centers - and vice-versa - when resources allow.

HAVE QUESTIONS ABOUT NCEP MODELS - GET ANSWERS. Online newsgroups were launched earlier this year to enhance communication among field forecasters and those at NCEP particularly the Environmental Modeling Center (EMC). The newsgroups are run by COMET as part of the overall NWS training in the area of numerical weather prediction.

Previously, forecasters and SOOs with questions or concerns about the NCEP Eta and Global Forecast System models would send email to EMC, prompting EMC to respond to that individual; and field notification of model changes occurred only through established model change notification procedures. The newsgroups now provide an open forum where everyone can see and benefit from the questions and answers, and where model difficulties and EMC development efforts to address them can be discussed. For example, six weeks before the June 19 emergency fix to the Eta model, a message was posted explaining the problem, the conditions under which the model made a poor forecast, and how to identify those situations and correct for it. This was followed three weeks later by an explanation of experiments underway to fix the problem and an approximate time frame for the tests to be completed and the fix to become operational.

Stephen Jascourt and Bill Bua monitor the Eta and GFS newsgroups, respectively, providing information and researching questions. Both are employed by COMET but assigned to NCEP so that they can interact directly with the NWP model developers. In effect, Steven and Bill work for our forecasters, and they encourage NWS forecasters to make use of their assistance, not only to ask general questions about the models, but also to bring cases of either exceptionally good or poor model performance to their attention. They will investigate the cases and when appropriate develop Web-based training on forecast issues identified in those cases. Questions are addressed as quickly as possible -- often by the next day -- although follow-up development into training cases will typically take longer.

The newsgroups can be viewed from a link on the COMET Web page: http://meted.ucar.edu/nwp/newsgroups, which will invoke the Web browser's email program. Messages are read and new messages posted like email; however, they do not get mixed with regular email. This Web page also has a link to complete instructions for subscribing to the newsgroups.

Cases that have been developed into Web-based training can be found at http://meted.ucar.edu/nwp/pcu3/cases, with more being added on a continuing basis. These include both cases brought to the attention of Stephen and Bill by the field and cases that they have identified on their own.

NAS DISPERSION MODELING WORKSHOP. On July 22-23, Jack Settelmaier (SSD) represented the Southern Region at a National Academy of Sciences workshop entitled "Tools for Tracking Chemical/Biological/Nuclear (CBN) Releases in the Atmosphere: Implications for Homeland Security." Held at the NAS' Erik Jonsson Center in Woods Hole, Massachusetts, this workshop was hosted by the Board on Atmospheric Sciences and Climate (BASC), which is one of many boards of the National Academies. The meeting goal was to investigate ways for participants to contribute to the federal government initiatives related to counter-terrorism and homeland security. More about BASC can be found at:

http://www7.nationalacademies.org/basc/Homeland%20Security.html

Many individuals from diverse backgrounds participated in the meeting, all with potential contributions to make toward the goal of the workshop. After overview presentations were shared, participants were asked to join in breakout groups to consider more in-depth one of three main topics; 1) atmospheric transport and dispersion modeling, 2) observations and data assimilation for the atmospheric transport and dispersion studies, and 3) the information needs of emergency first-responders. The final day of the workshop allowed for sharing of the breakout groups' recommendations with the BASC. These recommendations will be considered as input for a subsequent NAS report.

SYSTEMS OPERATIONS DIVISION

SYSTEMS INTEGRATION BRANCH

AWIPS. Eric Howieson from WFO Tulsa will be reporting to SRH in late August as the new AWIPS program manager for Southern Region.

Last month we completed the next step in the AWIPS migration to a Linux-based system with the installation of the Pre-Processors PX1 and PX2 on the SRH system. Beta testing will be performed this month on these new systems. We will also be performing alpha testing on the AWIPS archiver system which will be installed early this month. Paul Kirkwood will be setting up and testing the software in coordination with NWS Headquarters.

IT. Late this month we successfully downloaded the SSL Server Certificate from NWSH. This certificate was installed and initialized on the messaging server. This improvement in security will allow users a secure SSL login for messages via the Internet. Currently we have both the SSL port and the original http port 80 turned on. In the future we will only support the secure https for email logons from outside the network.

TELECOMMUNICATIONS. The new Huntsville WFO project is moving along. A change order was approved to facilitate the installation of the conduit and access for the communications services to the office. In the coming weeks, the local telecommunications carrier will install the cabling to the office teleo room demarc and activate service for the telephone system. MCI is also awaiting installation of facilities at the new location in order to install the new frame relay circuits for the regional WAN and AWIPS. Request for bids to install the telephone system and wiring of the phone sets and data wiring will be submitted soon. Hopefully the telephone system and circuits installations for the WAN and AWIPS will be completed this month.

We continue to work on orders for NWR circuits installations. Some of the installations have been delayed due to building delivery issues and lease problems. These are being worked on by the NWR program manager.

Representatives from the NWS account team of MCI visited SRH last month to discuss the current status of the company in light of its recent bankruptcy filing. The briefing was very informative and we were assured there would be no degradation of services during the period of reorganization at WorldCom. We also discussed billing issues, regional inventories, and new services being offered on the FTS2001 contract.

Later this month a video teleconference is scheduled with MCI, NWS Headquarters and the other regions to review progress and update status on the billing issues and credits received from MCI recently. The flat file training received in June has allowed a clearer understanding of the MCI billing process and where the credits are posted and how to reconcile and verify invoicing issues. We continue to monitor and review these issues to insure we are getting what we are paying for.

NOAA is almost done with the hierarchy code changes for FTS2001 accounting. Once this is complete, it will allow us to reconcile charges and credits back to each particular circuit or service. It will definitely enhance our ability to track charges against these circuits and allow us to more easily reconcile disputes.

UPPER AIR. Obtaining Azimuth and elevation drive assemblies is becoming more difficult. NLSC's inventory of motors for these units is at a zero balance and the expected replacements are not scheduled to arrive until August 30. On two occasions this month we were able to obtain parts from the NWSTC who cannibalized their training system to assist our field offices. We greatly appreciate such support from the Training Center. Everyone involved is working hard to resolve this issue, but we may well be faced with an extended outage of this system in the future.

NWR. Three new NWR sites were installed last month: Fountain Hill, Arkansas, and Centerville and Lobelville, Tennessee. Fountain Hill and Lobelville have been fitted with Crown 1000 watt transmitters, and Centerville houses a 300 watt Crown transmitter. Major NWR improvements have been completed in Mississippi. Bude, Jackson, Rose Hill, and Inverness, Mississippi, have had transmitter power increases, in addition to repairs on the coax cabling and antennas. These improvements to the transmitters and towers in Mississippi will greatly improve the NWR performance and coverage for the Jackson CWA.

EMRS. Last month Steve Baker, Southern Region Electronics Program Manager, attended the EMRS Enhancement Conference. The team conversed on EMRS system improvements, better ways to do business, and planning for future expansion and implementation. Overall, the trip was worthwhile and should result in improved operations.

OBSERVATIONS AND FACILITIES BRANCH

ASOS AUGMENTATION/BACKUP DUTY RESPONSIBILITY TRANSFER. SRH continues to work with local WFOs and the FAA regions to implement the October 1, 2002, transfer of ASOS augmentation/backup duties at six Service Level C airports that have co-located WFOs.

UPPER AIR RANKINGS. Last month, 18 of the 23 Southern Region upper air sites received scores above the national average. WFO Lake Charles has the best twelve-month average in the nation with a score of 296.65 (300 is perfect).

ROOF-TOP UPPER AIR AT WFO TALLAHASSEE. The WFO Tallahassee upper air program started flying balloons from the new rooftop location on the FSU campus at 0000 UTC on July 1. Initial results indicate they are achieving excellent heights and data.

COMPLETION OF IHOP 2002 PROJECT. WFOs Albuquerque, Amarillo, Fort Worth, Midland, Norman, and Shreveport completed 230 special upper air observations in support of the International H₂O Project (IHOP) which ended on June 25.

NASA CRYSTAL-FACE SPECIAL PROJECT. The NASA-led Cirrus Regional Study of Tropical Anvils and Layers - Florida Area Cirrus Experiment (CRYSTAL-FACE) began on July 3 across South Florida. Three WFOs (Tampa, Miami, and Key West) supported NASA on this project with special upper air soundings between July 3 thru July 30. On Special Intensive Experiment Days, two additional special soundings were taken. At the same time, SR/SOD has worked with NASA to install special Local Data Manager (LDM) computers at each of the WFOs. The LDM is used to route WSR-88D base data in real-time from the NEXRAD Base Data Distribution System, through NCDC and on to NASA via the Internet.

RSOIS UPDATE. NWSH has requested that delivery of RSOIS be delayed until a problem with the base station data display unit is corrected. Until corrected NWSH will not ship any RSOIS units to any new stations. The priority now is getting the existing RSOIS units in the field repaired as soon as possible. Several of the RSOIS Phase II sites in SR are preparing their sites for a tower to install RSOIS, including installation of a concrete pad with power.

TRAINING UPDATE. Due to transfers and retirements of two HMTs and a DAPM at WFO Norman, a request was made to Southern Region to train new staff personnel on completing a theodolite comparative. Al Abernathy, the SR upper air focal point, was able to train five staff members on theodolite comparisons as well as techniques on leveling and setting up the theodolite.

HOUSTON/GALVESTON PROJECT. Galveston County is in the process of acquiring property adjacent to the existing Office of Emergency Management building. Plans to award a construction contract for the Galveston County Emergency Management and Communications Center (EMCC) are now expected by late February 2003. It is planned for this new facility, expected to open in May 2004, to also house the WFO Houston office. The county would be solely responsible for all construction costs associated with the new EMCC. Under a lease-free agreement, the NWS would provide the existing WFO Houston building to Galveston County.

WFO TULSA. Over the last several months the Tulsa WFO/RFC has experienced an above normal amount of computer equipment failures which includes power supplies, disk drives and CRTs. Most of these failures occur during or immediately after the relocation of equipment, furniture, or installing new data cables. Previous corrective actions include correcting grounding deficiencies at the generator, closely monitoring the electrical power, and tightening all loose electrical connections in the operations and equipment room. A fourth site inspection revealed grounding deficiencies associated with the raised computer floor. Next month SRH will begin a procedure to improve grounding of the raised floor tiles and improve the electrical distribution wiring.

INTERACTIVE VOICE ROSA. MASC has released for bid the development of the Interactive Voice ROSA data collection system which will replace the existing PC-ROSA currently used to collect near realtime data from the volunteer observing sites. The system will be very similar to those commonly used at banks around the country. The computer will ask the observer for the various data values and the observer will enter the information using the telephone key pad. Current plans call for testing to begin by the end of this fiscal year with the system operational for SR observers by the end of the calendar year. When used in conjunction with the Internet-based WxCoder II software being developed by Central Region, all observers will be able to provide the NWS with higher quality data in a more user friendly fashion.

FISCHER-PORTER DATA RESCUE. Two Fischer Porter upgrades were done recently in SR at WFO Melbourne and at a Coop site in WFO San Juan's area. These units are part of the OT&E of the data rescue units. This will allow the NWS the ability to test the electronic movement of data and eliminate the existing punch tape. Two additional units will be installed over the next few months at WFO Fort Worth and WFO Nashville.

ENVIRONMENTAL COMPLIANCE AND SAFETY. The NOAA Self-Inspection safety survey has been underway by the ECS focal points at all WFOs, RFCs, SRH, SMG and the Oklahoma City FAA facility. The survey was created by NOAA Safety Management and may be used for the identification of funding for future safety improvements at NWS and NOAA facilities.

SR facility engineering technicians were provided with portable monitors to measure the CO₂ levels at their respective offices per EHB-15 requirements for indoor air quality. A high CO₂ level may indicate the outdoor air dampers of the HVAC system are not allowing an adequate intake of fresh air, which is an early sign of "sick building syndrome."

The access gate at the Miami WSR-88D RDA location was moved approximately 100 feet away from the pavement to prevent NWS employees from having to stop on the street prior to opening the gate. The parked government-owned vehicle was a hazard to the employees and to other motorists on the six lane access road.

Bids are being solicited for battery-powered, lighted vests that identify the wearer as an NWS employee on both front and back. These vests can be worn by NWS staff responding to post-storm assessments as well as employees who have a need to be identified during low light conditions, such as accessing river gauges on highway bridges.

The NWS national noise survey being conducted by the U.S. Public Health Service should have completed the first phase in Fort Worth last month before moving to Albuquerque. Noise measurements at DFW Airport and Dallas Love Field were deemed to be compromised by rain and will be redone in late July.

NOAA ECS ASSESSMENT VISITS. NOAA Environmental Compliance and Safety (ECS) contract inspectors from E2M Company along with NOAA personnel visited six SR offices in mid-July to determine NWS compliance with EPA and OSHA regulations. After a pre-assessment visit by SR personnel, only minor discrepancies were noted. Formal findings will be provided to NOAA and NWS by E2M within two weeks.

MASC ECS ASSISTANCE VISITS. MASC Environmental Compliance and Safety inspectors Mark George and Rhonda Carpenter visited SR sites this spring to also inspect for ECS compliance in a less formal method than the NOAA team. Four sites were visited, with the inspectors commending WFO Morristown for the most successful implementation of the NWS program seen to date.

KEY WEST 15% DESIGN REVIEW. The Key West 15% design review was held in Key West in a meeting which included architectural and engineering personnel from NWSH, SRH, and NOAA-CASC, as well as the local Monroe County Emergency Management Authority. The most recent site plans and specifications were provided and comments were given by NWS personnel on the various design features. The most notable items included a cost error by the A&E contractor which places the project over the specified budget, along with an action item for SRH to perform dimensional analyses for the upper air balloon flight characteristics and upper air antenna limiting angle studies. The next design review is the 35% stage to be held in September.

SOUTHERN REGION RDA HVAC REPLACEMENTS. Six RDA sites were selected for HVAC replacement of the Bard air conditioning units based on age and mechanical reliability. These units are being replaced with identical Bard 5-ton units supplied with the RDA shelters.

KEESLER AFB WSR-88D RELOCATION. SRH has identified two viable locations at which the Keesler WSR-88D can be relocated in Brandon, Mississippi. MASC is currently awaiting responses to their Solicitation for Offers from the two landowners.

OPEN RPG BUILD 2.0 TEST SITES. On the week of July 22, WFO Amarillo, in conjunction with Radar Operations Center personnel, successfully upgraded their RPG to Build 2.0. WFO Atlanta will do the same on the week of July 29. Both these OT&Es are precursors to future national deployment. This upgrade means that each WFO can now increase their RPS list up to 65 products through the implementation of the TCP/IP interface to AWIPS.

ASOS SENSOR RELOCATIONS. Site surveys have been completed with the FAA and local airport officials for the ASOS Combined Sensor Group relocations at Tallahassee and College Station. The airport has already selected the contractor for the Tallahassee move while FAA Form 7460 approval is pending. A Request for Proposal to solicit bidders for the College Station move has been let by the FAA Southwest Region.

WFO HUNTSVILLE RADAR COVERAGE. In conjunction with the ROC, SRH has created an implementation plan for WSR-88D radar coverage in Huntsville for the new WFO Huntsville. Narrowband phone lines will be in place by the end of September to the RPG for Columbus AFB, as well as WFO Birmingham to access data from the Hy-Top, Alabama ORPG. The ROC will install an ORPG with Build 2.0 loaded in early January coincident with the installation of a wideband T-1 line directly from the Hy-Top WSR-88D to WFO Huntsville.

ASOS COMMUNICATIONS TRANSFER. Various Service Level A and B airports with the Integrated Terminal Weather System (ITWS) installed are changing their method of longline data dissemination from the NWS AWIPS to the FAA ADAS. This will save the NWS communications costs since a dedicated dial-out phone line will no longer be needed at the ASOS ACU. Atlanta Hartsfield Airport was scheduled to be transferred on July 31, and Oklahoma City Will Rogers Airport is scheduled for August 14. Ten additional sites are slated for later in 2002.

ASOS PROCESSOR UPGRADE AND PLANNED PRODUCT IMPROVEMENT. Several SRH sites continue to participate in the new ASOS processor upgrade. After a brief hiatus due to persistent problems with lockups and warm starts, it is hoped that a new Watchdog Timer will alleviate the lockup problem. The new Dew Point Replacement Sensor was successfully installed at Mobile. Two sites have been identified to participate in the upcoming Ice Free Wind Sensor OT&E.

ADMINISTRATIVE MANAGEMENT DIVISION

NEW MASC WEB PAGE. MASC has announced an addition to their Web site which shows the primary contact(s) by functional topic or activity for the MASC Divisions and affiliate offices (such as the Mountain Region Security Office and DOC Boulder Labs police). The new Web page also provides access to information for many of the MASC functional topics or activities. Click on the topic link to read more about it or to find additional links. Phone numbers for each contact are shown or you can click on a contact name to send an email. The page is at: http://www.masc.noaa.gov/masc/masc_contacts.html, or it can also be reached from the MASC home page by clicking on the "Contacts" link.

DIVERSITY/EEO AND COMMUNITY OUTREACH ACTIVITIES

WFO BIRMINGHAM. Ever call one of the pesky voice mail systems only to get frustrated and hang up? WFO Birmingham put a team together to tackle this very issue. This team effort resulted in a friendly phone system with easy access to staff and weather information. Added were a voice recorded forecast, mail box extensions for the entire staff, and several friendly voices.

The WFO conducted a regular "heartbeat" meeting on July 10. They try to meet at least once a month to discuss issues and most importantly, find solutions. The heartbeat meeting is designed to foster communications among everyone in the office. Prior to the meeting, DAPM David Wilfing, senior forecaster Patricia Hart, and forecaster Mark Linhares cooked hot dogs and hamburgers for the entire staff. For those unable to attend the meeting, this group was kind enough to make "to-go" plates. Sounds like a productive, yet fun time!

WFO BROWNSVILLE. Sixteen students and their professor, Dr. Ravi Nandigam, from the Physical Science Department at the University of Texas at Brownsville, toured the office last month. DAPM Jim Campbell coordinated the tour after meeting Dr. Nandigam at a Career Fair at the university in June. Jim made a PowerPoint presentation on office operations and showed them the procedures for releasing a weather balloon. WCM Jesus Haro gave a real-time weather briefing, describing forecast procedures and the tools used to create a forecast.

Jim Campbell and HMT Alfredo Vega gave hurricane preparedness presentations for 70 migrant students and their parents, as part of the SMART program at Perkins Middle School. Jim reviewed the past three hurricane seasons and their effects on the lower Rio Grande Valley, as well as hurricane hazards and the outlook for the upcoming hurricane season.

WCM Jesus Haro and student volunteer Margarita Salcedo gave a presentation to the Brownsville Lion's Club that dealt with tropical cyclone preparedness and the Atlantic Basin outlook for 2002.

WFO SAN ANGELO. MIC Buddy McIntyre and WCM Hector Guerrero provided a motivational and interactive career day talk to high school students at Angelo State University. This program was sponsored by the Angelo State University Physics Department. The goal of this program was to encourage students to pursue careers in the math and sciences. One of the students volunteered and gave a mock TV weather broadcast in front of her peers. About 50 students were in attendance.

WFO SHREVEPORT. Met interns Jason Hansford and Bruce Sherbon, forecaster Bill Parker, and SOO Ken Falk were all instrumental in helping Christy Hopkins, a science teacher from Elm Grove Middle School. Christy spent 40 hours at the WFO becoming familiar with the operations. She spent most of her time working in the public service unit, but also spent some time learning about forecast operations. Christy plans to teach a week of meteorology to all of the science classes at her middle school.

Forecaster Mary Keiser gave a talk to the Volunteers of America-The Lighthouse in Shreveport on the operations of NWS, as well as safety rules, NOAA Weather Radio, upper air, severe weather, and how to get weather information using the Internet.

NAACP OLYMPICS OF THE MIND. Spaceflight Meteorology Group MIC Frank Brody and WFO Houston MIC Bill Read were science fair judges in the physics category at the annual NAACP Afro-Academic, Cultural, Technological and Scientific Olympics (ACT-SO). ACT-SO is a year-long enrichment program designed to recruit, stimulate, improve and encourage high academic and cultural achievement among African-American students. The science fair took place in Houston on July 5. In addition to judging the science fair entrants, Frank provided input on worthwhile candidates to be considered for a science familiarization trip on the new NOAA Ship *Ron Brown*.

SOUTHERN REGION WORKFORCE TRANSACTIONS <u>July 1-31, 2002</u>				
Southern Region Losses				
Name	From (Office)	Action/Transfer	From Title/Grade	
John Dove	WFO MLB	Retirement	El Tech, GS-11	
Donna Cayton	WFO HSV	Transfer to AR	Met Tech, GS-8	
Doug Cramer	WFO JAN	Transfer to CR	Met Intern, GS-7	
Gautam Sood	SRH SOD	Transfer to NWSH	Student Trainee, GS-5	
Mary Goessling	WFO SJT	Death	ASA, GS-7	
Grady Svoboda	WFO ABQ	Retirement	DAPM, GS-12	
Norman Van Jester	WFO TBW	Retirement	RMS, GS-12	
Douglas Pearson	CWSU ZTL	Resignation	Meteorologist, GS-12	

Southern Region Gains				
Name	To (Office)	Action/Transfer	To Title/Grade	
Jeffrey Michalski	WFO ABQ	New Hire	Met Intern, GS-7	
Barry Baxter	WFO MFL	Transfer from CR	Forecaster, GS-7	
Craig Sullivan	WFO TSA	Transfer from CR	Forecaster, GS-12	
Jason Runyen	WFO LUB	New Hire	Met Intern, GS-7	
Jonathan L. Howell	WFO MEG	New Hire	Met Intern, GS-7	
Donald Burkhardt	WFO AMA	Transfer from ER	El Tech, GS-10	
Frank Kielnecker	WFO EPZ	Transfer from ER	HMT, GS-10	

Within Region Transfers/Actions			
Name	To (Office)	Action/Transfer	To Title/Grade
Gregory Garrett	WFO MEG	Reassignment from JAN	ITO, GS-13
David Matson	WFO OHX	Reassignment from MRX	Forecaster, GS-12
Clark Safford	WFO FFC	Promotion from FFC	ITO, GS-12
Erin Maxwell	WFO OUN	Reassignment from OUN	Forecaster, GS-5
Chad Entremont	WFO JAN	Reassignment from JAN	Senior Forecaster, GS-12
Matthew Foster	WFO SHV	Reassignment from SHV	ITO, GS-13