



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

November 2002

SOUTHERN TOPICS

www.srh.noaa.gov

Working Together To Save Lives

REGIONAL DIRECTOR

A groundbreaking ceremony for relocation of the Jackson WSR-88D was held on October 28 at Brandon, Mississippi. Participating in the program were Congressman Chip Pickering from the 3rd Congressional District, NOAA Administrator Vice Admiral Conrad Lautenbacher, NWS Deputy Director John Jones, USAF Director of Weather Brig. General David Johnson, Brandon mayor pro-tem Yvonne Bianchi, WFO Jackson MIC Alan Gerard, and Mac McLaughlin from SRH. A number of emergency management officials from Mississippi were in attendance as well, along with local and state media representatives. Mayor Brandon and the Jackson WFO staff, especially WCM Jim Butch and ESA Mike Ryan and his staff, did a great job in preparing the site for the ceremony, despite several days of rain beforehand and heavy rain the night before the morning event.

The radar relocation was made possible after the Southern Region learned the Air Force WSR-88D at Kessler AFB, which had been used for training, had become available for use elsewhere because new technology was being used to conduct the USAF training. The SRH staff then worked with NWSH and the Air Force to facilitate the transfer of the radar to the NWS. The availability of the radar meant that a relocated Jackson WSR-88D could be accomplished without any downtime in radar coverage. Once the radar is operating at the Brandon site, the existing WSR-88D at the Jackson Airport will become available for other uses within the NWS. Congratulations to all who are involved in this project, which is being accomplished with minimal cost and will result in no interruption of service.



MEDALS AND AWARDS. One group of DOC Bronze Medal recipients was inadvertently omitted from the list which appeared here in last month's *Topics*. The following Southern Region individuals were part of the team responsible for developing the National Significant River Flood Outlook:

| | |
|------------------------|--|
| Ben Weiger | Hydrologic Services Branch Chief, CWWD |
| Kent Frantz | Southeast RFC, Atlanta |
| Jonathan Atwell | Southeast RFC, Atlanta |
| Keith Stellman | Lower Mississippi RFC, Slidell |

Southern Region employees also continue to be honored by the professional societies, along with individuals and partner groups without whom we could not provide such exceptional service to the public. I'm pleased to announce the following were recognized at this month's National Weather Association Annual Meeting, held here in Fort Worth.

Pat Welsh, Science and Operations Officer at WFO Jacksonville, will receive the Operational Achievement Award (Individual) for the outstanding leadership he has provided to his office in the areas of applied science research and technology innovation, and the far-reaching impact the results of his efforts have had on NWS operations.

G. Alan Johnson, senior forecaster at WFO New Orleans Area and Charter Member of the NWA, will be recognized as Member of the Year for his many outstanding contributions to the NWA over the years, and in particular for his work this year as chairman of the Membership Committee.

The Walter J. Bennett Public Service Award will be presented this year to the Texas **South Plains Storm Spotting Team**, under the leadership of Kendall Stanaland, in recognition of the team's direct assistance over many years to the NWS Forecast Office in Lubbock. The team was also recognized this year by NOAA with one of their few "Environmental Hero" awards.

The Southern Region was well represented at the Annual Meeting by those making oral and poster presentations, and serving on committees of the NWA. I want to thank all those locally who worked hard on arrangements to make the meeting so successful, particularly Mike Vescio (WFO Fort Worth SOO) who was the program chairman. Attached to this month's *Topics* is a summary of presentations authored or co-authored by SR participants (<http://www.srh.noaa.gov/topics/attach/pdf/ssd02-32.pdf>).

I was pleased to be one of the keynote speakers to kick off the NWA meeting, along with Jack Kelly and NOAA Deputy Administrator Jim Mahoney. I focused my remarks on the critical role the field offices play in providing forecasts and services. You can link to the slides I used for my talk from my welcome page on the Southern Region Web site (<http://www.srh.noaa.gov/welcome.htm>). Click on the presentation title on the sidebar of that page.

SHARING ACCOMPLISHMENTS AMONG OFFICES. Southern Region offices frequently share good ideas related to operations, administrative and budget matters, systems, facilities, and so on, as a means to operate more effectively and efficiently. Much of this sharing occurs through the routine SMART Meetings, and a number of MICs and HICs have commented they have significantly improved office performance with ideas learned from their colleagues. We have developed a Web site to facilitate that sharing of best practices. All offices share up to five best practices they have implemented, along with no more than ten lines of description. Practices could be in the area of operations, customer service, facilities, systems, administrative/budget, IT, etc. Almost any good practice would qualify, and we have asked that a sentence or two be included on the positive result of the practice.

The best practices will be displayed on the following Web site:

<http://sradmin.srh.noaa.gov/bestpractices/index.htm>

Southern Region best practices (and narratives) will be displayed on the Web along with recognition for the contributing office. Since this will be an ongoing program, new ideas that are developed and implemented in the future are candidates for this best practice Web site. Eventually, this concept will apply across the NWS.

IFPS

On October 28, an IFPS milestone was passed when an NWS Public Information Statement (PNS) was issued to announce that an experimental version of the National Digital Forecast Database (NDFD) will begin to be available to external users beginning December 2. Read the announcement at <http://www.nws.noaa.gov/om/notif.htm>. This experimental version of NDFD will initially contain only data from a portion of the contiguous United States, and for only a few weather elements. Over time additional regions and weather elements will be made available. By making this experimental NDFD available the NWS hopes to begin a dialogue with customers/partners on the utility of the NDFD, as well as needed improvements and modifications to help ensure the NDFD will have maximum value to users.

A new NDFD Web site is taking form at <http://www.nws.noaa.gov/ndfd/index.htm>. The site is linked off of the SR IFPS page.

CLIMATE, WATER AND WEATHER DIVISION

METEOROLOGICAL SERVICES BRANCH

OKTOBERFEST SHOWCASES NWR. WFO San Angelo participated in the annual Oktoberfest Health Fair at San Angelo's Sunset Mall last month. WCM Hector Guerrero set up an NWS booth and used the traveling NOAA Weather Radio (NWR) display to provide visitors with NWR literature and to demonstrate how to program SAME NWR receivers. The booth display was also staffed by MIC Buddy McIntyre, forecaster Jonathan Brazzell and rookie ASA Donnita Gardner. The NWS team passed out numerous severe weather brochures along with localized safety magnets to the attentive crowd.

MIC Buddy McIntyre and the local StormReady advisory board presented two StormReady signs to Dr. Royce Money, Abilene Christian University (ACU) president. ACU received the designation of "StormReady" from WFO San Angelo in a special ceremony, and is only the second university among more than 4,000 universities in the United States to receive this designation. In addition, the President's Cabinet of ACU, the Crisis Response Team, residence hall directors and building managers were present. Buddy was interviewed by the three local TV Stations KRBC, KTXS, KTAB of Abilene, Texas.

SOO Amy McCullough and hydrologist Jason Johnson gave a tour to 80 Goliad Elementary School students. They also provided them safety rules and a tornado video. The students enjoyed seeing the Co-Op Station, and they were intrigued by the station's 24 hour clock.

SEMINOLE OUTSIDE OF FLORIDA. A new NOAA Weather Radio station completed its 30-day acceptance test at Seminole, Texas last month. Station KNG-562 becomes the latest NOAA Weather Radio site to serve West Texas. Residents of Gaines, southern Terry, northern Andrew, western Martin, and southern Yoakum counties will now receive an audio broadcast originating from WFO Midland.

SEVERE WEATHER PREPAREDNESS AND OUTREACH

Children's Day in Key West is all about Hurricanes. WFO Key West participated in a highly successful outreach event dubbed "Children's Day 2002," a fun yet educational day in the park with an estimated attendance of 3,000 Keys residents and their children. Families who visited the NWS booth were able to learn about hurricane preparedness and play a locally-developed game lightly dubbed "Hit the Hurricane In the Eye." Also, in the spirit of the Halloween festivities, staff members handed out prizes such as frisbees and pencils imprinted with the NWS logo and the WFO Key West Web site address. Every player won a prize and over 250 frisbees and 200 pencils were awarded to the "Children's Day" attendees.

EMERGENCY MANAGEMENT COORDINATION

One New StormReady Site. Southern Region began FY 2003 with one new StormReady county. WFO Atlanta recognized Coweta County in west-central Georgia as StormReady.

Tornado Warnings on Bank and Road Electronic Signs. WFO Huntsville WCM Tim Troutman continued to work on a collaborative pilot project with the DeKalb County Alabama Emergency Management (EM), Alabama Department of Transportation (DOT) and north Alabama banks to have tornado warnings scrolled on electronic road and bank signs. If the pilot project is deemed successful, all eleven county emergency management agencies in north Alabama plan to work with local banks to provide the tornado warning service to area residents. Also, at least 20 north Alabama DOT electronic road signs on state highways are expected to flash tornado warnings to travelers.

NWS Team Promotes NWR Expansion in Deep South Texas. WFO Brownsville WCM Jesus Haro, DAPM Jim Campbell, and HMT Alfredo Vega met with Starr County emergency management coordinator Romeo Lopez in Rio Grande City to discuss potential future NOAA Weather Radio expansion in Deep South Texas. The cooperative meeting between the WFO Brownsville trio and the Starr County emergency management brought additional discussion regarding alternative methods of NWS data retrieval such as EMWIN and the Internet.

NWS Border WFO Participates in Cooperative Interagency Meeting. WFO Brownsville SOO Shawn Bennett, and forecaster and marine focal point Jeff Philo lent their support to the U.S. Coast Guard and Texas General Land Office by participating in the annual South Texas Coastal Zone Area Committee meeting. Attendees included numerous federal, state and local agencies, private corporations as well as Mexican agencies. The purpose of the meeting was to coordinate emergency response to terrorist attacks involving biological and chemical weapons, as well as hazardous materials releases or spills in the coastal zone environment. More than 30 officials were in attendance at the South Padre Island meeting.

Southern Region at National Emergency Managers Association Conference. The Southern Region was well represented at the annual National Emergency Managers Association conference in Asheville, North Carolina with appearances by Director Bill Proenza and staffing of the NWS booth display by WFO Morristown WCM Howard Waldron. With Tropical Storm Edouard threatening Florida and Louisiana, the NWS booth was a big hit, featuring NWS Web pages and the new IMET response PC which duplicates many of the features in AWIPS, including a D2D display. During some of the breaks, the regional director demonstrated the ease of navigating around the NWS Web pages while briefing several of the state emergency management directors.

Fall Tornado Season Kicks Off with a Drill. WFO Shreveport conducted its successful semi-annual “Fall Tornado Drill” to kick off the start of the second tornado season over Oklahoma, Texas, Arkansas and Louisiana. Schools within the warning area of the Shreveport weather office participated in the drill to help check their capability to receive and properly react to an NWS tornado warning on a real time basis. Deemed a success, the drill met its goal by helping uncover areas in those preparedness plans that needed improvement before the start of the tornado weather season.

MEDIA/PUBLIC/EXTERNAL CUSTOMER SUPPORT

Semi-Annual “Dry Season” Media Briefing Conducted in Miami. WFO Miami, spearheaded by MIC Rusty Pfof, WCM Jim Lushine and SOO Pablo Santos, provided their semi-annual weather media briefing to at least 12 media attendees. The semi-annual tradition coincides with the beginning of south Florida’s two seasons, one wet and the other dry.

The WFO Miami management team provided presentations on winter weather products, improvements in the hydrologic program and locally produced graphical products. Also, a recap of the 2002 rainy season along with an outlook on the projected impacts of a moderate El Niño pattern on South Florida through the upcoming wet season was provided to the attentive audience.

University Receives StormReady Recognition. WFO San Angelo recognized Abilene Christian University (ACU), with a student population of more than 5,500, as a StormReady community. ACU is only the second university among over 4,000 institutions of higher learning in the United States to earn the highly selective and prestigious NWS StormReady recognition. WFO San Angelo worked with ACU to ensure StormReady requirements were met and implemented. StormReady helps community leaders strengthen their local hazardous weather operations by ensuring they have the tools needed to receive life-saving warnings in the quickest possible time.

National Weather Association Conference Comes to Southern Region. Personnel from Southern Region Headquarters teamed up with staff members from the West Gulf RFC to staff a large and impressive NWS booth at the NWA Annual Meeting which was held in downtown Fort Worth. Southern Region WCM Walt Zaleski, along with hydrologists Gregg Waller and Alana McCants, interacted with several of the vendors, media, academic and private meteorologist attendees who provided several positive comments regarding the severe weather and hydrology theme of the NWS display. The booth featured severe weather, hurricane and flood videos projected onto the display, along with a plethora of the latest NWS inland flood and severe weather brochures for distribution.

West Gulf Power Squadron Goes to Weather Class. WFO Brownsville forecaster/marine focal point Jeff Philo and forecaster Tim Speece provided a marine weather presentation to at least 30 attendees from a local Power Squadron in Harlingen, Texas. The marine presentation focused on various types of weather patterns found in the southern third of the United States and how they can

impact local weather and boating conditions over the western Gulf of Mexico. Also, the attendees were informed of the different types of marine products and warnings generated by WFO Brownsville and made available to all mariners to improve boater safety.

Hoop Draws Crowd at FLASH Event. WFO Tampa Area brought out the basketball hoop to help increase participation at an NWS booth during a safety fair organized by the Federal Alliance for Safe Homes (FLASH) in Ybor City (Tampa). As energetic children jockeyed for position at the hoop, WCM Dan Noah and ET David Chaffin informed their parents about the positives in owning a weather radio and becoming prepared for hazardous weather in the Tampa metro area. The interactive booth display provided a unique opportunity for the NWS staff to inform onlookers of the hazards of Florida weather and methods in which to prepare for their wrath.

WFO Gets Familiar With Aviation Counterparts. WFO Key West aviation focal points and forecasters Bill South and Laura Kasper made a familiarization trip to the NWS Center Weather Service Unit (CWSU) and FAA Automated International Flight Service Station (AIFSS) in Miami. The purpose of the trip was to interact and learn the needs of the local aviation customer and improve products and services at WFO Key West. Bill and Laura met with CWSU Miami MIC Stan Holland and forecaster Harry Petaisto and learned about CWSU forecaster responsibilities and shift duties. Also, at the Miami AIFSS air traffic manager Leonard Hopkins and his staff provided Bill and Laura a tour of their facilities, and discussed how AIFSS personnel interpret NWS aviation forecasts. The duo's experiences and lessons learned from the aviation "fam" trip will be passed to fellow WFO forecasters at an in-house aviation workshop.

NWS/FAA OFFICE RECEIVES THIRD QUARTER AVIATION SERVICES TROPHY. The NWS office at the FAA Academy in Oklahoma City earned the Southern Region Aviation Services Award for the July-September period. Office staff include MIC Armando Garza, Teresa DeLand, Marco Bohorquez, Doug Streu, Mike Bender, Robert Prentice and John Jarboe. The NWS staff at the FAA Academy was recognized for outstanding performance in their daily efforts to elevate the Pilot Weather Briefer (PWB) standards, while improving NWS and FAA working relationships. They were also cited for playing a key role in providing aviation outreach materials for all NWS field offices.

The group also remains a finalist for the NWSH Aviation Services Branch quarterly award.

NEWS FROM ALBUQUERQUE. On November 5 WFO Albuquerque hosted a customer meeting for state and federal fire weather agencies in their CWA. IMET Brent Wachter discussed new product formats coming in December. Brent also showed performance statistics related to red flag warnings and fire weather watches. SOO Deirdre Kann gave a presentation on IFPS/GFE capabilities being developed to provide better information to the fire weather agencies. Finally, MIC Charlie Liles presented relationships between ENSO, the PDO and how these influences would likely affect the 2003 fire season in terms of duration and intensity. A round-table discussion

followed and continued until the sun set behind Mt. Taylor. Customers remarked they thoroughly enjoyed the open discussion.

MARINE

Kudos for WFO Jacksonville. WFO Jacksonville received the following thanks from a customer in search of marine data. Marine forecaster Andrew Shashy responded with links to several NOS and other NOAA sites which provided just what the customer needed. Great work Andrew.

I am thankful and appreciative of your efforts to provide me with water temperature in the local St. Augustine area. I am also impressed that my original communication to Cheryl Demers, NOAA National Buoy Data Center Webmaster was forwarded to your office.

The information that you provided me is extremely helpful and it is obvious you spent a certain amount of time generating the report you sent me.

Thank you for your efforts on my behalf, it reflects well on the NOAA.

WFO Mobile is a Beta Test Site for SAFESEAS. WFO Mobile forecaster Dave Eversole is the Southern Region representative on the Marine and Coastal Working Group for AWIPS Applications Team. One of the subjects the team is working on is an application called the System on AWIPS for Forecasting and Evaluation of Seas and Lakes (SAFESEAS).

Basically, SAFESEAS is to marine warning operations what SCAN is to radar warning operations, and it is based on the SCAN approach. Other than the eventual capability to monitor radar velocity data over the marine area, we not aware of any functions of SAFESEAS that will duplicate those already existing in SCAN. In the test version of SAFESEAS, which WFO Mobile will be receiving, the ability to monitor radar data will not yet be implemented. SAFESEAS is being designed to monitor current marine warnings and observations and alert the forecaster to conditions that have met a set list of threshold criteria (such as Small Craft Advisory conditions). Dave has provided regional input on many different preferences concerning the operation of SAFESEAS, such as what data will be monitored and how alarms will be displayed.

PUBLIC

Sister-Sister Backup Plan. January 14, 2003 will be the date SR offices switch over from long-fused and short-fused backup responsibility to sister-sister backup. Instead of an inoperative office having a long-fused backup office and several short-fused counties of different offices to backup, WFOs will now have only one WFO to backup.

HYDROLOGIC SERVICES BRANCH

WFO ALBUQUERQUE ATTENDS THE NEW MEXICO WATER CONFERENCE. WFO Albuquerque MIC Charlie Liles opened the 47th Annual New Mexico Water Conference in Ruidoso, New Mexico with a presentation on the relationships between ENSO, the PDO and New Mexico precipitation. His presentation included a 20-year forecast for water supplies based on an integrated Pacific Oscillation Factor he developed. The New Mexico Water Conference is one of the biggest events of the year for the engineering and science community in New Mexico, with approximately 300 people in attendance.

NEW MEXICO FLOODPLAIN MANAGERS ASSOCIATION CONFERENCE. Senior service hydrologist Ed Polasko gave a presentation on NWS programs and the types of hydrologic products WFO Albuquerque issues to the Fall New Mexico Floodplain Managers Association (NMFMA) Conference in Ruidoso, New Mexico. In addition to providing data on flash flood losses in New Mexico over the past five years, Ed showed that flood-related deaths since 1959 trailed only lightning-related fatalities in New Mexico for weather hazards. For two years Ed has addressed the NMFMA, whose 150 voting members include Emergency Managers and Professional Engineers working in land use and water related fields.

POST STORM SURVEY. WFO Tallahassee service hydrologist Joel Lanier and HMT Bob Duggan conducted a post flood survey in the town of Donalsonville in Seminole County in Southwest Georgia last month. They met with Travis Brooks (Seminole County EMA), Gary Rice (GEMA field coordinator) and John Adams (Seminole County commissioner).

Donalsonville, Georgia was hit by a severe flash flood as a result of Tropical Storm Hanna on September 14-15. A total of 18 to 20 inches of rain accumulated in a 48-hour period. Of that total, 14.59 inches fell in a seven-hour period from 10:30pm Saturday night until 5:30am Sunday morning, as measured at the Donalsonville Sewage Plant COOP weather station. As a result of the rainfall, a local creek called Fishpond Drain flooded over 200 homes and 38 businesses in and around Donalsonville, including the Sewage Treatment Plant. The water level came up to the bottom of the rain gauge at the Sewage Treatment Plant.

During the survey, Gary Rice gave a tour of the flooded area. Pictures, GPS readings and flood elevation marks were recorded in several locations which will be used later to determine the extent of flood inundation. The Seminole County emergency manager and the GEMA field coordinator were very happy with the warning and forecast support provided by WFO Tallahassee during the event.

PERSONNEL CHANGES IN OUR HYDROLOGY FAMILY. We have had some personnel changes in our hydrology family during the past few months.

Barry Baxter is the new hydrology focal point at WFO Miami. Barry was a meteorologist at Sea World Florida for two years before working at NWSH as an AWIPS contractor from 1997-1999. He also worked at WFO Atlanta, the NCF at NWSH, and WFO Cleveland before he arrived at WFO Miami. Barry was instrumental in starting up the critical weather watch at the NCF.

Tracy Howieson is a new hydrologic forecaster at West Gulf RFC. She entered the NWS in May 1993 as a cooperative education student assigned to the North Central RFC in Minneapolis. During her five years at NCRFC Tracy experienced several extreme hydrologic events, including the historic 1993 Mississippi River flooding and the spring snowmelt floods along the Red River of the North in April 1997. Tracy joined the ABRFC in Tulsa in 1998 and was involved in many projects which included water supply forecasting and the operational implementation of the Advanced Hydrologic Prediction Services along the Upper Arkansas River in Colorado.

Welcome Barry and Tracy to your new positions.

SCIENTIFIC SERVICES DIVISION

NEW JACKSON SOO. We welcome Jeff Craven as the newest Southern Region SOO - at WFO Jackson. Jeff assumes his new job this month from former Jackson SOO Alan Gerard, newly appointed MIC of the same office. After beginning his NWS career as an intern at WFO Lake Charles in 1991, Jeff worked subsequently in two other NWS regions and NCEP. He served as a forecaster in Dodge City, became the first SOO at WFO Elko, Nevada, and for the past six years has been a mesoscale/outlook forecaster at the NCEP/Storm Prediction Center in Norman, Oklahoma. During his time at Norman Jeff earned an M.S. in meteorology at the University of Oklahoma. Congratulations, Jeff, and welcome (back) to the SOO ranks.

CSTAR REQUEST FOR PROPOSALS. The NWS CSTAR program (Collaborative Science, Technology, and Applied Research) plans to issue an RFP by January 1 to solicit proposals from universities that will address critical applied science research needs of the NWS, particularly as they apply to regional warning and forecast operations. The FY2003 NWS budget permitting, CSTAR will endeavor to fund up to four 1-3 year proposals, submitted by teams of at least two university researchers, for research involving substantial collaboration with NWS forecast offices - WFOs and RFCs - and/or NCEP centers. The RFP will identify overall NWS science priorities as well as regionally specific needs and priorities which the proposals should address. For more information, contact SSD.

NWA MEETS IN FORT WORTH. The local National Weather Association Chapter hosted the 27th Annual Meeting of the NWA in Fort Worth, October 19-24. A list of presentations by the many Southern Region participants is included as a technical attachment (<http://www.srh.noaa.gov/topics/attach/pdf/ssd02-32.pdf>) this month. The meeting agenda can be found on the NWA Web site at <http://www.nwas.org>. It was a very successful meeting, in large part because of considerable effort on the part of the many individuals who assisted with local arrangements and organization. Congratulations to all who were involved.

GPS-DERIVED PRECIPITABLE WATER UPDATE. As part of this year's NWA meeting, SSD worked with staff of the profiler office at OAR's Forecast Systems Lab in Boulder to arrange a special session dealing with wind profilers and the use of global positioning system (GPS) sensors for atmospheric moisture soundings. (See the tech attachment

(<http://www.srh.noaa.gov/topics/attach/pdf/ssd02-28.pdf>) on the latter subject which was included in the September 2002 *Topics*.) Utilizing GPS satellites for precise mapping and geo-positioning has resulted in nothing less than a revolution in everything from the availability of high-resolution on-line maps to how wars are fought. Who knew a few years ago that an indirect benefit, because GPS signals are attenuated by atmospheric moisture, would be accurate and high-resolution observations of integrated precipitable water? For more information, review the paper in the latest issue of *Weather and Forecasting* (October 2002): "A Lightning Prediction Index that Utilizes GPS Integrated Precipitable Water Vapor," by R. Mazany, S. Businger, S. Gutman and W. Roeder. This paper describes the development of a GPS lightning index, the goal of which is to increase the forecast skill and lead time for prediction of a first strike at Kennedy Space Center. Verification results show a significant decrease in false alarm rate for first strikes within a 12-hr forecast period. The index also improved the desired KSC lead time by 10%.

QUALITY CONTROL OF U/A OBSERVATIONS AT NCEP. A recent incident called into question the role of human intervention at NCEP in quality-controlling upper air observations. Studies indicate that automated procedures may have reached the point where that may no longer be necessary. More details on this are provided in a technical attachment (<http://www.srh.noaa.gov/topics/attach/pdf/ssd02-35.pdf>) this month.

MORE SATELLITE MOVES. Last month we mentioned that GOES-12 would be taken out of storage-in-space and moved eastward to 75W where it will replace the aging GOES-8 as the operational GOES-East satellite. The move should be completed by the end of next March. While that is occurring, another move will be underway over the Pacific Ocean, as GOES-9 will be taken out of storage and begin a shift westward in mid-December to temporarily replace GMS-5. That move also should be completed March 31, with the final satellite location at 155E. The Japanese Meteorological Agency's GMS-5 was launched in 1995 and has provided data over Japan, the West Pacific Ocean, Australia and Asia. In order to support the operation of GOES-9 from 155E, a command and control ground station is currently being built in Fairbanks, Alaska.

FAWN SITES EXPAND. The "mesonet" of FAWN sites in Florida continues to grow. The Florida Automated Weather Network was initiated by the state and the University of Florida's Institute for Food and Agricultural Sciences to provide weather support for agriculture-related interests, with a particular emphasis on cold protection. The Florida WFOs have been involved with the FAWN network since its beginning several years ago, from providing advice regarding locations for the automated surface observing sites (to complement ASOS and other existing data), to integrating the 15-minute data into AWIPS for realtime access by NWS forecasters. There are now 25 FAWN sites statewide, including four just activated. Those new sites are at Jay in the Florida Panhandle, and Marianna, Quincy and Live Oak, all in north Florida. Three more sites in north Florida are expected to be activated within the next month, at Monticello, Bronson, and Macclenny. Additional sites expected to become operational within a few months will be at Sebring and Kenansville in central Florida, Carrabelle in the Panhandle, and Palmdale in south Florida. Expansion of the FAWN network to a total of 32 sites was made available by funding from the Florida Department of Community Affairs, Division of Emergency Management, and FEMA. More

information about the network, location of all the sites, and access to real-time data are on the Web at <http://fawn.ifas.ufl.edu/>.

SYMPOSIUM ON FIRE AND FOREST METEOROLOGY. It's not too early to consider the AMS 5th Symposium on Fire and Forest Meteorology, which is planned for November 17-20 *next year* in Orlando. The theme of the symposium will be to share experiences, new techniques and technologies in such areas as fire weather forecasting, application of local numerical models for fire planning, development of weather forecasts for prescribed fire planning and burning, smoke management and air quality mitigation, and use of climatological information for wildfire decision making. The Southern Region has an active fire weather program, and our forecasters have been involved in many of these areas. The deadline for submitting abstracts to the AMS for the symposium is June 2, 2003. More information is contained in the Call for Papers which is included as a technical attachment this month (<http://www.srh.noaa.gov/topics/attach/pdf/ssd02-34.pdf>).

NEW NWS LEARNING MANAGEMENT SYSTEM. The NWS is developing a new Learning Management System to manage, track and deliver training to all its employees. The first part of that system, which includes access to extensive libraries of commercial online training course, is now available for test and evaluation by volunteers from our field offices. An attachment (<http://www.srh.noaa.gov/topics/attach/pdf/ssd02-33.pdf>) to this month's *Topics* outlines the history and plans for this new system.

TERMINATION OF OLD MRF MOS PRODUCTS. On or about April 1, 2003, the NWS Meteorological Development Laboratory (MDL) is planning to remove all obsolete MRF Model Output Statistics (MOS) forecast guidance from production. This includes the alphanumeric bulletins, forecasts in BUFR and GRIB format, and any graphical products derived from these forecasts. The alphanumeric bulletins are listed under the AWIPS ID FMRxxx and WMO Headers FOXE40-60, FOXC40-73, FOXS40-68, FOXW40-63 KWBC, and FOUS20 KWNO. The BUFR products are available under the WMO Headers JSMT51-59 KWBC. After the removal, these products will no longer be available from the NWS Gateway, the NWS ftp server (tgftp), or from the MDL Web pages.

This early notification is provided at this time to allow customers approximately six months to transition any processing that is currently using the obsolete MRF MOS products. The new MRF MOS forecast guidance (AWIPS ID MEXxxx) is available, and links to these products and their description, can be found at <http://www.nws.noaa.gov/mdl/synop/products.htm>.

The MDL has developed a new One Stop Web interface to the various MOS products. You can access this feature from: <http://www.nws.noaa.gov/mdl/synop/products.htm>.

AMS METEOROLOGICAL MONOGRAPH NO. 50. Chuck Doswell (NSSL) is the editor of this latest in a series of AMS monographs, titled *Severe Convective Storms*. The 561 page volume is a compendium on the subject, and those with long memories will recall a similarly named monograph published in 1963 (*Severe Local Storms*, David Atlas, ed.) which this one most

effectively updates. The new volume also includes a chapter (“Severe Local Storms Forecasting”) authored by WFO Fort Worth senior forecaster Alan Moller. The book is available from the AMS, which offers a significant discount for members.

PAPERS OF INTEREST. In addition to the reference mentioned above, the October *Weather and Forecasting* contains this paper with Southern Region co-authors:

“Recognition of Negative Mesoscale Factors for Severe-Weather Potential: A Case Study,” by C.A. Doswell (NSSL), Don Baker (WFO Lubbock) and Charlie Liles (WFO Albuquerque). Emphasis is given to the challenge of recognizing possible *negative* effects created by mesoscale effects.

The June 2002 issue of *Weather and Forecasting* is devoted entirely to papers derived from the National Symposium on the Great Plains Tornado Outbreak of May 3, 1999, which was held in Oklahoma City on the first anniversary of that extraordinary event. Papers in that issue reflect the theme of the symposium, which was to stimulate cross-cutting discussions for linking separate disciplines (meteorology, engineering, social science, policy making, insurance, public health and safety, media, and so on) in ways to promote future interaction. Note in particular the following paper:

“Warning Decision Making: The Relative Roles of Conceptual Models, Technology, Strategy, and Forecaster Expertise on 3 May 1999,” by David Andra (WFO Norman), Elizabeth Quetone (WDTB) and Bill Bunting (WFO Fort Worth).

All NWS offices have been provided with on-line access to the AMS journals *Weather and Forecasting*, *Monthly Weather Review*, and *Journal of Hydrometeorology*.

SYSTEMS OPERATIONS DIVISION

SYSTEMS INTEGRATION BRANCH

AWIPS. We have begun scheduling and installing the new Linux communications processors across the region. Thus far, the responses from offices on the installation procedures and benefits have been quite favorable. AWIPS Build 5.2.2 beta was installed at SRH last month, producing a few concerns. More detailed instructions would be beneficial for the pre-installation section. Communicating to the field offices that the pre-installation section should be done a day or two in advance of the upgrade will make the installation go much smoother. Aside from those concerns, the installation went fairly smoothly.

ELECTRONICS. Steven Baker, SRH electronics program manager, has been very involved with the WFO/RFC Regional Electronics/Maintenance Staff Position Description Team which has finalized the last draft of the PDs. The team charter was established in June 2002. Since then members have reviewed, redefined, updated and validated the position descriptions for the ESA,

electronics technician, regional maintenance specialist and facilities engineering technician. The team's recommendations must be reviewed and accepted by the NWS Workforce/Human Capital Committee and further approved at the NWS Corporate Board level.

ASOS. Hurricane Lili created many ASOS problems in the Lake Charles county warning area. The most significant were to New Iberia and Saltpoint, Louisiana. It took the local electric company 14 days to restore power to the New Iberia ASOS. Saltpoint was under water for two weeks. Once the water receded the ETs replaced the DCU cabinet and sensors.

SRH regional maintenance specialist James McDaniel assisted NWS Headquarters and WFO Memphis during the pre-construction meeting for the new FAA ASOS installation at West Memphis, Arkansas. This system is scheduled to be fully operational this month.

UPPER AIR. SRH regional system specialist Charlie Lake attended an upper air Radiosonde Replacement System seminar at Sterling, Virginia last month. This seminar contained several relevant discussions on deployment schedules, data continuity testing, training, future plans and WFO involvement with the new system.

WSR-88D. SRH regional system specialist Joe Villescaz conducted an onsite inspection of the WSR-88D at WFO Austin/San Antonio along with addressing Modification Note 67. This note involves the relocation of critical circuit breakers at the RDA shelter. There have been notable concerns as to the potential electrical code compliance and the involvement of installation requirements by electronic technicians, field engineering technicians and/or a licensed electrical contractor. A request for further review has been submitted to NWSH.

NWR. Booneville, Mississippi and Seminole, Texas have been fitted with the new dual Crown WRG- 1000W NWR transmitters. The Booneville site is a relocation and was coordinated by Larry Tennison, regional maintenance specialist. The new facility provides NWS a location with greater stability and reliability due to improved electrical and telephone service, and an emergency power generator. The Seminole site is a new install and will provide NWR coverage for Gaines and surrounding counties. RMS Phil Shideler provided the guidance and coordination with this install. Both sites are currently under a 30-day acceptance test.

TELECOMMUNICATIONS. The WFO Huntsville telecommunications services are operational. We are preparing the orders for the four NWR circuits to be transitioned to this office from the Birmingham office. We are requesting these circuits be installed by mid-December.

Orders for NWR circuits for Bogalusa, Louisiana, Las Cruces, New Mexico, and Dilley and D'Hanis, Texas were submitted recently.

MCI has completed the changeover of the 73 circuits that were identified as needing a new circuit ID. The field offices were notified with a spreadsheet identifying the new circuit ID for circuits in their area of responsibility.

OBSERVATIONS AND FACILITIES BRANCH

PC-ROSA REPLACEMENT PROJECT. The Southern Region Source Selection Board traveled to Denver to hold a pre-performance coordination meeting last month. Kelly Rima, MASC contracting officer, also attended the meeting. Frank Solutions, Inc. (FSI) provided a draft copy of the design specification deliverable prior to the meeting for government review. Government comments were discussed along with four new, out of scope, requirements that will be added through a contract modification to improve the system. Action items from the meeting yet to be completed include:

NWS to identify all observation elements required by November 1, 2002.
FSI will provide a final project schedule after the design specifications are approved by NWS.
An operational system ready and installed for field testing is expected by January 15, 2003.

ASOS AUGMENTATION/BACKUP DUTY RESPONSIBILITY TRANSFER. Last month all applicable Service Level C ASOS sites in SRH completed augmentation/backup from the NWS to the FAA. Unfortunately at several locations throughout the country NWS WFOs and regional offices are reporting non-compliance with Federal Meteorological Handbook #1 and FAA air traffic procedures to both FAA regional offices and NWSH. We are working closely with both offices to improve performance where needed.

LEASE FOR MIAMI WSR-88D. The existing ten acre land use agreement for the site which houses the Miami WSR-88D with the U.S. Army in southwest Miami expires on December 31, 2002. The Army is in the process of abandoning the property, complicating the renewal of the land use agreement. SRH is working with MASC to secure ownership of the same ten acre tract from the GSA at no cost to NWS. GSA/DOD have agreed in principle on a no-cost land transfer to the NWS. MASC on behalf of NWS sent GSA the official request and is currently awaiting the return of the signed documents.

KEESLER AFB WSR-88D RELOCATION. A preferred tract of land for relocation of the Keesler AFB WSR-88D has been secured in Brandon, Mississippi. A no-cost 20-year lease has been approved by the local city attorney and city officials, and the Mississippi attorney general's office. The three digit station identifier of "DGX" has been approved by the FAA National Flight Data Center for the WSR-88D, and the frequency authorization has been approved. The Radar Operations Center is now working in earnest to dismantle the existing WSR-88D at Keesler AFB and begin the relocation and installation at the Brandon site.

ASOS SENSOR RELOCATIONS. Under the guidance of SRH, an airport procured contractor relocated the ASOS Combined Sensor Group (CSG) at Tallahassee last month. The necessary FAA approval and configuration management approval had been received.

WFO HUNTSVILLE RADAR COVERAGE. Narrow band communication lines have been installed at both WFO Birmingham and at the Columbus, Mississippi WSR-88D RDA shelters. These lines will provide WSR-88D data to WFO Huntsville. The wideband T-1 line interfacing the Hy-Top WSR-88D with WFO Huntsville has also been installed. Coincident with this, SRH is coordinating with the ROC on the needed installation of an ORPG with Build 2.0 at WFO Huntsville.

WEST MEMPHIS, ARKANSAS AIRPORT ASOS INSTALLATION. In response to a new FAA requirement, SRH is working with NWSH, the FAA southwest region, and WFO Memphis to site, install and commission a new FAA sponsored ASOS in West Memphis. WFO Memphis will add site maintenance responsibility to their inventory. The NWSH contractor completed the Combined Sensor Group installation and Acquisition Control Unit installation last month. Minor outstanding deficiencies are being corrected locally, allowing the site to be commissioned by January 2003.

ASOS PROCESSOR UPGRADE AND PLANNED PRODUCT IMPROVEMENT. Several SRH sites continue to participate in the Operational Test and Evaluation (OT&E) of the new ASOS processor upgrade. After a brief hiatus due to persistent problems with lockups and warm starts, the new Watchdog Timer software (Version 2.6A-5) has been installed at four sites in Southern Region (ATT, Clinton, Oklahoma; Mobile, and Memphis). Lockup problems at both Mobile and CSM forced the removal of this software and reinstallation of the old software. The reliability of the software at sites other than ASOS single cabinet sites after installation has been unacceptable placing an unnecessary burden on the ET staffs at the OT&E sites. NWSH continues to work with the regions to identify the problems and expand the number of OT&E sites.

RADAR MAINTENANCE OF THE WSR-88D IN PUERTO RICO. In response to a request from SRH, and with FAA approval, the ROC sent a team of technicians to assist the local FAA technicians to ensure both microwave communications channels are operational between the remote WSR-88D location in Cayey and the WFO located in San Juan. This was successfully completed in late September, and the radar and both microwave communications channels continued to perform well as the Atlantic hurricane season drew to a close.

SRH is also working with WFO San Juan, the local FAA airways facilities technicians, FAA Southern Region, and the ROC on the establishment of a new Local Operational Agreement for improved maintenance and notification procedures for the FAA-owned WSR-88D.

SURFACE OBSERVATION PROGRAM. During September and into early October Southern Region received 140 requests from the aviation community for new certificates, cancellations and changes in type of surface certificates. An increase of new certificate requests continued through September caused by the scheduled ASOS augmentation transfer of Service Level C sites to the FAA.

UPPER-AIR OBSERVATION PROGRAM. The September upper air rankings for Southern Region offices continue to be excellent. Seventeen of the twenty-three SR offices received scores above the national average of 288.61. Sixteen offices had scores above 290 with a perfect score being 300. WFO Little Rock led Southern Region with a September rating of 299.04 edging out Lake Charles score of 299.01. Both offices continue to set the performance measure higher.

Other offices deserving notable mention include WFO El Paso (297.18), Jacksonville (296.51), Miami (296.23), Nashville (295.70), Brownsville (295.60), Fort Worth (295.59), Birmingham (295.56), Corpus Christi (295.51), Midland (294.60), Del Rio (293.88), Key West (291.60), New Orleans (291.45), Jackson (291.44) and Amarillo (290.41). Nationally, WFO Lake Charles' 12 month average continues to lead SR offices with a top score of 294.73 just ahead of Fort Worth with 293.30. Other than a few uncontrollable equipment problems, all SR upper air programs are doing an excellent job.

RSOIS. Radiosonde Surface Observing Instrumentation System (RSOIS) has been delivered to WFO San Juan and is currently being installed by local staff. Once installed, only WFO Norman will remain to receive and install their equipment completing Phase I of the Implementation Plan. In Phase II sites continued to install concrete pads and towers ahead of equipment delivery. These locations include WFOs New Orleans, Lake Charles, Shreveport, Corpus Christi and Amarillo. Two of the three remaining locations in SR have already received their RSOIS towers and are currently in the process of having them installed.

As an alternate to the RSOIS radio/base station problems, NWSH has given the remaining field offices the option to use a fiber optic cable to connect the sensors to a PC in the office. Several offices in SR have taken advantage of this offer. These sites include WFOs Tallahassee, Lake Charles, Albuquerque, San Juan, Corpus Christi, Little Rock and Shreveport. Once the radio to base station problems are corrected, it will also allow offices to display local surface data at a second location in the office and be used as a backup.

RRS DEPLOYMENT MEETING. A second Radiosonde Replacement System (RRS) deployment planning meeting was held last month in Sterling, Virginia. A new requirement added to the original RRS program is to conduct a data continuity evaluation in support of the climate community. At this time it is not known if the evaluation will delay the deployment of the RRS. Details of this evaluation have been worked out with all parties involved. A follow-up meeting was scheduled for late October at NWSH with end-users to refine the requirements and goals for this evaluation.

When RRS deployment is complete, the new upper-air radiosonde system will automatically send archive data electronically to the National Climatic Data Center (NCDC) via ftp over the Internet. This process will allow the transfer of very large archive data files that will be generated from the new upper-air system. Furthermore, it will be easier for NCDC to ingest data into their archive system if sent electronically.

WFO JACKSON. The last week of September, the Southern Region Tiger Team comprising WFO Corpus Christi DAPM Dave Davenport and SRH upper air program manager Alton Abernathy traveled to WFO Jackson to conduct data acquisition training for the new data acquisition staff. Over a very short period WFO Jackson lost all of their experienced data acquisition staff including the DAPM. Because of this rapid turnover in personnel, station performance began to suffer. SRH proactively, in conjunction with the MIC, activated the Tiger Team to help train and work with the new staff. Due to the onset of Tropical Storm Isidore, the data acquisition training was limited to the upper air and surface programs only. During this time, several special upper air flights were requested which gave the Tiger Team additional opportunities to work with the staff on proper procedures, quality control and documentation. In addition to the training, several copies of the new upper air training tape, “An Introduction and Practical Guide to Upper Air Duties” was provided for the entire staff to review.

FIRST EMERGENCY PHONE USE IN SR. The evacuation last month of WFO Midland/Odessa due to a nearby HAZMAT fire resulted in the first-ever official use of the emergency cell phones provided to all WFOs by SR/SOD last fiscal year. Employees were out of the WFO for four hours, but used the phone to communicate with the operational service backup office (WFO San Angelo).

The emergency cell phone was also used to communicate with SRH and to keep WFO Midland-Odessa employees informed on an hourly basis of when they would be allowed back into the building. The phone also provided the WCM and SOO access to the ASOS for current on-site Emergency Operations Center weather information during this HAZMAT event.

KEY WEST 35% DESIGN REVIEW. The Key West 35% design review conference was held at the office of the architects and engineers in Lafayette, Louisiana last month. Participants included NWS employees from SR and NWSH, CASC engineers, and contractors from the two Louisiana A&E firms involved in the design. Many items were identified for further definition by the government and the contractors prior to the 95% design review which is currently scheduled for December 12, also in Lafayette.

NOAA TIER II ASSESSMENT DISCREPANCY REPORTING. The first draft of the NOAA Tier II environmental compliance and safety assessments were made available to NWS for comment by Internet access only to the designated responsible officials at each location, either the MIC or ECS focal point. Unfortunately, Hurricane Isidore, followed the very next week by Hurricane Lilli, limited the participation of some of the Gulf Coast office staffs in reviewing the assessors’ comments. However, there will be an additional opportunity for review of draft comments before the final NOAA ECS findings are completed. One important factor in closing the findings will be the corrective action completion dates, which will be determined by the NWS offices visited rather than the NOAA contractors or staff.

SPILL PLAN SITE INVESTIGATIONS UNDERWAY. Personnel from NOAA and their contractor TetraTech are surveying 14 SR offices for the purpose of preparing or updating fuel spill

plans per EPA guidelines. Most of these offices are leased sites that did not receive spill plans during construction. The remaining sites are being updated as required on a three-year basis. The WFOs being surveyed are Tulsa, Norman, Austin/San Antonio, San Angelo, Lubbock, Amarillo, San Juan, Memphis, Nashville, Albuquerque, Huntsville, Shreveport, Melbourne and Mobile.

WFO HOUSTON/GALVESTON PROJECT. A meeting was held on November 6 to revise current plans for the new design and layout for the Galveston County Emergency Management and Communication Center (EMCC). Over the past five months Galveston County has been in the process of acquiring property adjacent to the existing Office of Emergency Management building. Planning and design of the new facility will occur at a rapid pace condensing the schedule as much as possible. A contract award for construction is expected by late February or early March 2003. The new facility is expected to open in June 2004 prior to the hurricane season. The county is solely responsible for all the construction costs associated with the new EMCC. NWS Southern Region will fund the move. The NWS has agreed to provide the existing WFO building to Galveston County under a lease-free agreement. This agreement requires Congressional language introduced in the FY03 appropriations bill. Approval is expected soon.

ADMINISTRATIVE MANAGEMENT DIVISION

DIVERSITY/EEO AND COMMUNITY OUTREACH ACTIVITIES

WFO BIRMINGHAM. The National Weather Service Forecast Office in Birmingham was one of two dozen sponsors of the third annual Project Impact Community Awareness Day in Birmingham on October 10. Inclement weather and the threat of rain forced the normally outdoor event inside to Boutwell Auditorium. But being inside did not reduce the enthusiasm and interest of the nearly 1,800 students that visited the various booths. MIC Ken Graham and WCM Brian Peters have worked with the Project Impact Committee since last May to plan and execute the event for the third time. The tents to be used for the various displays outside in the large downtown park were brought inside the arena giving a very festive air to the whole event.

Birmingham forecaster Faith Borden and DAPM Dave Wilfing along with Brian and Ken worked the booth. The hurricane toss designed and built by Faith and her husband was a big success with the kids and many of the adults attending. Besides the exposure to all the fifth graders, the Weather Forecast Office in Birmingham had prepared packets for all of the teachers, so they went back to their schools with a treasure chest of materials for instruction. A drawing by emergency management gave a grand prize paid trip to tour the National Weather Service in Birmingham. The city will pay for the bus trip and lunch for the entire class.

WFO BROWNSVILLE. DAPM Jim Campbell, Lead Forecaster Tim Speece, HMT Dana Watkins, ITO James Raley, and WCM Jesus Haro, provided tours of WFO Brownsville to approximately 300 fifth graders from Senator Eddie Lucio Middle School. The children were shown local office operations, given PowerPoint presentations regarding NWS operations, and also tours of the office upper air facilities. The tours were met with an enthusiastic response by the children and teachers alike.

WFO SHREVEPORT. Met intern Jason Hansford demonstrated a weather balloon release for the third and fifth graders and teacher at South Highlands Elementary School in Shreveport. The Alliance for Education provided funding for teachers to purchase weather balloons and helium throughout the school year so that their students can make balloon releases. Jason explained how upper air releases showed how the wind direction changed with height, how the jet stream drives various weather systems, and how important it is in forecasting weather.

Jason and forecaster Bill Parker participated in Bossier City Fair Day at the Bossier City Center. Many juniors and seniors from schools in the Bossier City Parish high schools visited the NWS booth, as Jason and Bill explained careers in meteorology, discussed universities which have meteorology programs, and described the courses involved.

Forecaster Mary Keiser gave a talk, along with slide presentations, on the operations of the NWS to the seventh and eighth grade students from Stanley High School of Stanley, Louisiana, and the seventh and eighth grade science students from Linwood Middle School in Shreveport.

| SOUTHERN REGION WORKFORCE TRANSACTIONS | | | |
|---|----------------------|-------------------------|--------------------------|
| <u>October 1-31, 2002</u> | | | |
| <u>Southern Region Losses</u> | | | |
| <u>Name</u> | <u>From (Office)</u> | <u>Action/Transfer</u> | <u>From Title/Grade</u> |
| Glen Heaton | SRH AMD | Transfer to USFS | Admin. Officer, GS-13 |
| Henry Laskosky | WFO SJU | Retirement | Senior Forecaster, GS-13 |
| John Salmen | WFO EPZ | Transfer to WR | Forecaster, GS-12 |
| William Finn | RFC FWR | Transfer to State Dept. | Hydrologist |
| David Ihle | WFO BMX | Retirement | Forecaster, GS-13 |

| Southern Region Gains | | | |
|------------------------------|--------------------|------------------------|-----------------------|
| <u>Name</u> | <u>To (Office)</u> | <u>Action/Transfer</u> | <u>To Title/Grade</u> |
| David Hennig | WFO AMA | New Hire | Forecaster, GS-7 |
| Paul Halleck | WFO MLB | Transfer from WR | El Tech, GS-11 |
| Bradley Bryant | WFO JAN | New Hire | Met Intern, GS-5 |
| Gary Jones | WFO FFC | Transfer from PR | El Tech, GS-11 |
| Phillip D. Scheibe | WFO ABQ | Transfer from CR | HMT, GS-11 |
| Cyril Robinson | WFO EPZ | New Hire | El Tech, GS-10 |
| Terrence Lebo, Jr. | WFO LCH | New Hire | Met Intern, GS-7 |
| Sean K. Daida | WFO EYW | New Hire | Forecaster, GS-9 |
| Jennifer M. Yost | WFO LCH | New Hire | Forecaster, GS-11 |
| Donnita Gardner | WFO SJT | New Hire | ASA, GS-7 |

| Within Region Transfers/Actions | | | |
|--|--------------------|------------------------|-----------------------|
| <u>Name</u> | <u>To (Office)</u> | <u>Action/Transfer</u> | <u>To Title/Grade</u> |
| Bruce Sherbon | WFO TSA | Promotion from SHV | Forecaster, GS-11 |
| Mike Hughes | WFO TBW | Promotion from TAE | RMS, GS-12 |
| Tracy Howieson | RFC FWR | Reassignment from TUA | Hydrologist, GS-12 |
| Keith DeArmas | WFO LIX | Reassignment from LIX | SFT, GS-11 |