NWA NEWSLETTER
No. 02-09, 10 SEPTEMBER-OCTOBER 2002

# PRESIDENT'S MESSAGE

On the 18th of September, I had the privilege of representing the NWA in Washington, D.C. at the National Weather Service COOP Modernization Partners' Forum. It was also good to see Dr. Ken Crawford, Director of the Oklahoma Climatological Survey and an NWA past president, who also participated. As many of you know, over 11,000 cooperative observers volunteer to record weather observations at their homes twice each day and send in monthly reports to the NWS. The data are archived by the National Climatic Data Center (NCDC) in Asheville, NC. Some COOP stations have climate records exceeding 100 years. This is really a goldmine of data that has been somewhat hard to access until recently. Now with Web-based applications, the NCDC, local NWS offices and universities can query the data and do a wide variety of analysis. Interested users can retrieve tidbits such as extreme weather events in their state or compare monthly averages to the climatic record. If you are a broadcaster, utilizing COOP data from time to time may provide some extra "spark" to your weathercast. For more information on the meeting, please see Web site: lwf.ncdc.noaa.gov/oa/climate/coop/modernization.html and for more information on the COOP Observer program see Web site: www.nws.noaa.gov/om/coop/index.htm

In the modernization of the COOP program manual observations may be slowly replaced over the next few years with automated sensors and data loggers that can provide hourly reports and real-time information when needed. Volunteer observers will still be essential to measure snowfall and verify the accuracy of the new sensors against the time-tested instruments in use now. At this time, there is not a consensus on the type of rain gauge to be used in the automated COOP observations system. Methods to get the data from the observing site back to the end-user are also being investigated. The majority of COOP observers are in rural areas that may require satellite uplink capabilities to transmit data in real-time. The eventual goal is to have automated temperature and precipitation observations at a 20 by 20 mile spacing across the country! Data from existing mesonets may be used to supplement the COOP program if the data and observing platforms meet appropriate standards.

With more and more mesonets (roadway weather information systems, school nets, state nets, etc.) being setup around the country it behooves us to use the data to help in operational weather support, but to also be knowledgeable of the mesonet standards, data accuracy and representativeness. Great public and private-sector partnerships have developed mesonets in various parts of the country and that brings me to my second subject.

During my term as president of the NWA, I have urged new partnerships between the private and public sector. Even some small gestures can go a long way toward better relationships. Here's a compilation of initiatives to increase cooperation that I've seen or picked up in discussions at various conferences and training sessions.

1. Whether you are with the NWS or the media, take the lead in developing cooperation. Start with a phone call and set up a lunch meeting to discuss potential areas where you can work together. If you wait for the other side to call, you may be waiting a long time. I recently talked with a TV broadcast meteorologist in a major market and asked him if he knew the local NWS warning coordination meteorologist or science & operations officer. I was shocked to hear the answer was NO!

2. Start simple and work toward larger goals. I know a TV station that made it a policy to offer the NWS a seat in their helicopter to survey storm damage and access the Fujita damage scale rating. In return, the NWS storm assessments credited the TV station for the aerial view. If you don't have a chopper, simply ask to go along on a storm survey and educate your audience on how scientists determine the difference between tornado and straight-line wind damage.

3. Do you have a TV station Doppler radar for an area where the NEXRAD coverage is limited? If so, consider alerting your local NWS office when you see suspicious signatures.

4. Establish a backup communication system between the NWS and media in case phone lines fail in severe weather. The central Iowa NWA chapter funded a radio system to accomplish this. Other local chapters could take the lead in their areas. ➔

## IMPORTANT DATES AND EVENTS

17-19 January 2003 - Second Annual Southeast Severe Storms Symposium at Mississippi State University

9-13 February 2003 - The American Meteorological Society's 83rd Annual Meeting in Long Beach, California

See MEETINGS on page 6 for further information.

5. Local NWS offices should consider inviting the media to attend in-house training sessions. One local office I am aware of holds a day-long winter weather forecasting session each year to get forecasters, including those in the media, up to speed before the snow starts to fall. Consider doing joint studies of significant events with media, NWS and emergency managers.

6. We have seen tremendous cooperation in the organizing of local conferences and symposiums, many involving local NWA chapters. If you don't have a local chapter yet, consider starting one. It really is a great way to bring folks together to share their common interest in weather.

I'm always interested in hearing what works in your area. Please take the time to jot down a few lines and e-mail them to me or better yet, consider a small article for the NWA newsletter so we all can share in your success.

- John McLaughlin
*johnmc49@ecity.net*

# NOS NEWS COLUMN

*Ed. Thanks to member John G. W. Kelley for submitting information on NOAA's National Ocean Service (NOS) data sharing initiatives.*

On August 20th, the NOAA/NOS Coast Survey Development Laboratory released version 1 of a new map-based Web portal called ***nowCOAST.*** It provides the marine community with the capability to view all on-line, real-time observations as well as NOS and National Weather Service (NWS) forecasts for major U. S. estuaries and seaports, adjacent coastal ocean regions, and the Great Lakes. The portal provides spatially-referenced links to real-time information from meteorological, oceanographic, and river observing networks operated by federal and state agencies, and educational institutions, and also to point guidance forecasts from NOS and NWS prediction models and NWS forecasts. Thus, it provides a 'one-stop shopping' Web site to real-time information from a variety of sources in the coastal states.

Presently, the portal provides links to the following weather, ocean, and river observing networks: NOS' Physical Oceanographic Real-Time System (PORTS) and National Water Level Observation Network, National Data Buoy Center's (NDBC) fixed buoys and Coastal-Marine Automated Network (C-MAN), NWS/FAA/DOD's Automated Surface Observing System (ASOS), FAA's Automated Weather Observing System (AWOS), USGS river gages, and the Integrated Flood Observing and Warning System (IFLOWS) as well as non-federal government run networks (e.g., Chesapeake Bay Observing System, Coastal Observing and Prediction System in FL, Texas Automated Buoy System, and the Gulf of Maine Ocean Observing System). In addition, it provides links to radiosondes, boundary layer wind profilers operated by NOAA and state agencies, and NWS' NEXRAD sites. For water quality observations, the portal provides linkages to EPA's Environmental Monitoring for Public Access Community Tracking (EMPACT) stations.

In terms of NOAA forecasts, the portal provides links to NOAA's weather and oceanographic model point forecast guidance from NWS' Model Output Statistics (MOS), Extra-Tropical Storm-Surge Model, NOAA WaveWatch III Model, and NOS' estuarine forecast models for the Chesapeake Bay, Port of New York/New Jersey, and Galveston Bay. In addition, it links to the county weather and coastal marine zone forecasts prepared by the NWS.

***nowCOAST*** was constructed using ESRI's commercial off-the-shelf GIS software Arc Internet Map Server (ArcIMS) Version 3.1. The portal user interface was designed to serve both GIS and non-GIS experienced users. Customizations were made in DHTML and JavaScript for purpose of meeting the needs of these two distinct user groups. Three 'pull-down' menus were created for the user to select: 1) location (i.e., an estuary, seaport, coastal region or Great Lake), 2) type of observation or forecast (i.e., weather, ocean, river, or water quality), and 3) variable (i.e., water level, air temperature, etc.). After selecting any or all of the 3 options, the user chooses "Go" to create a map for their specified information and location. To further inspect the data or forecast product, GIS and non-GIS users may choose to utilize the out-of-the-box GIS tools of the web portal. Common GIS tools include Search, Zoom, Pan, Select by Rectangle, Identify, Query, and Print.

The portal is available at Web site: chartmaker.ncd.noaa.gov/csdl/op/nowcoast.htm Click on "Web Portal". At the present time, the web portal is maintained during weekdays. However, NOS plans to make ***nowCOAST*** an operational Web server at its Center for Operational Oceanographic Products and Services (CO-OPS) in early 2003. The development of ***nowCOAST*** is funded by a 2-year grant from NOAA/NESDIS' Environmental Services Data and Information Management (ESDIM) program. - *John G. W. Kelley*

# NWA BROADCAST COMMITTEE

Outsourcing, stations giving up their news/weather programs altogether, new contracts, some stations adding more science and environmental discussions, others dumbing down the weather – what's the future for weather broadcasters? Where will the public turn for the best weather support? And – how might the National Weather Association help bring about change benefiting all concerned? These and more simple questions keep the NWA Broadcast Meteorology Committee busy responding to members and planning for the future. You can help by sending in your comments, concerns and ideas to the committee chairperson Rich Apuzzo via e-mail to *skyeye@fuse.net* or by regular mail or fax to the NWA office. The NWA Web site also offers a *Sound Off* section – please consider contributing early and often!

# HURRICANE ANDREW RECLASSIFIED

## *AFTER 10 YEARS, HURRICANE ANDREW GAINS STRENGTH*

Based on new research, scientists recently upgraded Hurricane Andrew from a Category 4 to a Category 5, the highest category on the Saffir-Simpson Hurricane Scale.

In their re-analysis of Hurricane Andrew's maximum sustained surface-wind speeds, the NOAA/National Hurricane Center Best Track Committee, a team of hurricane experts, concluded winds were 165 mph – 20 mph faster than earlier estimated – as the storm made landfall. Herbert Saffir, a structural engineer who co-designed the Saffir-Simpson Hurricane Scale, joined the committee as an observer and reviewed the team's results.

The upgrade makes Andrew only the third Category 5 (wind speeds greater than 155 mph) hurricane on record to strike the continental United States. The other two Category 5 storms were the "Florida Keys 1935 Hurricane" and Hurricane Camille in 1969.

Since 1997, forecasters have used Global Positioning System dropwindsondes, dropped from hurricane reconnaissance aircraft into the eyewall – the windiest part of the hurricane. The sonde system measures temperature, barometric pressure, water vapor and wind data every 15 feet on its way down. This new method gave meteorologists an important glimpse into the true strength of these devastating storms. The analyses of the dropwindsonde data indicated that, on average, the maximum sustained surface-wind speed was about 90 percent of the wind speed measured at the 10,000-foot aircraft level. In 1992, Andrew's wind speed was estimated at 75 to 80 percent of the aircraft observations. The new research findings resulted in an increase in the estimated wind speeds from 145 mph to 165 mph.

**Summary of Best Track Committee Findings:**

-- Hurricane Andrew was a Category 5 over open water on approach to South Florida.

-- Hurricane Andrew was a Category 5 at time of landfall, with Category 5 winds occurring in a small area on the immediate coast having open exposure to Biscayne Bay.

-- Winds at specific locations over land in Miami-Dade County are unknown. The few reliable observations available did not record the maximum sustained wind, due to instrument failure and dropsondes, which could give a detailed near-surface wind profile, cannot be dropped over populated areas. As is often the case in the severe conditions encountered during hurricane landfall, the precise wind speeds over the interior portions of Miami-Dade County may never be known with certainty.

-- There should be continuing research aimed at better determining hurricane winds immediately preceding and during landfall. The "Hurricane Landfall" component of the U.S. Weather Research Program is structured to address such questions. *- NOAA Public Affairs*

# DROPPING IN ON A HURRICANE

By Laurie J. Schmidt

For years, scientists have struggled to understand the inner workings of hurricanes. Now, by dropping small sensors into hurricanes from above, scientists are acquiring data at high altitudes that will help them better understand the structure and dynamics of hurricanes.

Researchers also need to know what occurs in real time inside a hurricane, according to Jeff Halverson, assistant professor of geography at the University of Maryland/Baltimore County and research scientist at NASA's Goddard Space Flight Center. "Models that make predictions about hurricanes need real-time observations on which to base a forecast," said Halverson. "We have to understand the physics better, and then put that information into the forecast models."

Halverson and NASA research meteorologist Gerald Heymsfield are participants in a series of hurricane field research investigations, initiated by NASA's Earth Science Enterprise, called the Convection and Moisture Experiment (CAMEX). The first two missions, conducted in 1993 and 1995, focused on atmospheric and precipitation processes. In 2000, CAMEX-3 turned its attention to the hurricane intensification process and captured an unprecedented look at Hurricane Bonnie's eye wall — the zone surrounding the eye where surface winds reach their highest speed.

CAMEX-4, conducted in collaboration with the NOAA Hurricane Research Division and the United States Weather Research Program (USWRP) and sponsored by NASA's Atmospheric Dynamics and Remote Sensing Program, took place during the 2001 hurricane season. Based at the Naval Air Station in Jacksonville, Florida, the CAMEX-4 team embarked on a campaign to study hurricane development, tracking, and landfall impacts. The researchers hoped to gather valuable hurricane data by venturing into a hurricane at high altitudes, but there was just one problem: a shortage of hurricanes in the Atlantic. With Hurricane Erin, the CAMEX-4 team finally hit pay dirt. On September 8, 2001, Erin, which was churning towards the island of Bermuda, was upgraded from a tropical storm to hurricane status. On September 10, the NWS classified Erin as a Category 3 hurricane.

That same morning, the research team, equipped with aircraft from both NASA and NOAA, immediately geared up to fly into the region around Erin's eye. "NASA has a unique suite of high-altitude aircraft that can get to those upper levels of the hurricane," said Halverson. "For years, NOAA has been flying planes into hurricanes, but they can't get much above 18,000 feet, and that's just a small piece of what the whole storm represents." NASA's ER-2, however, is a modified U-2 that can fly at 70,000 to 75,000 feet. "This is practically outer space. The pilot is actually required to wear a spacesuit," Halverson said.

Key to the mission was a cylindrical instrument roughly 3 inches in diameter and 20 inches long, called a dropsonde. "This technology has been around for awhile, and it involves launching robot sensors, or dropsondes, from aircraft. These sensors fall to the Earth via parachutes, taking measurements of temperature, pressure, winds, and humidity every half second," said Halverson. During their descent, the dropsondes transmit the data to the aircraft where they are recorded for later analysis. Although dropsondes were deployed during previous CAMEX missions, CAMEX-4 introduced a new dimension to the

experiment: for the first time, dropsondes were launched from the ER-2 aircraft at an altitude of 65,000 feet.

CAMEX-4 accomplished what no previous hurricane field studies have achieved, according to Halverson. "Nobody has ever collected data from that altitude in a hurricane. Now we have a data set that is very rich, because we have eight vertical profiles through the center of this strong storm, which represents a complete snapshot of the inside of the hurricane," he said. These new data, according to Halverson, not only promise to help researchers understand the inner workings of a hurricane at high altitudes, but they will also improve future hurricane forecasting.

-- Reprinted with permission from the "2002 NASA DAAC Yearbook: Supporting Earth Observing Science." http://earthobservatory.nasa.gov

*Numerical Weather Prediction Models at forecast centers have certainly improved over the years thanks to research from NASA, NOAA's Geophysical Fluid Dynamics Laboratory and the Atlantic Oceanographic and Meteorological Laboratory and many other agencies and individuals. In the mid-1970s, I remember having to 'bogus out' some significant tropical cyclones from Air Force Global Weather Central NWP model runs. That early model treated many hurricanes as mature vertically stacked lows -- stalled them and filled them. Exec. Dir.*

## NOAA CREATES HISTORICAL DATABASE ON 150 YEARS OF ATLANTIC HURRICANES

Emergency preparedness managers, meteorologists, and the general public now have a powerful new instrument to explore more than 150 years of information about tropical cyclones in the Atlantic Ocean, Gulf of Mexico, and the Caribbean Sea. Developed by the NOAA Coastal Services Center in partnership with NOAA's Tropical Prediction Center, the Historical Hurricane Tracks tool is an internet-based application that allows the search and display of detailed tropical cyclone data and coastal population trends. Found at http://www.csc.noaa.gov/hurricane_tracks, searches can be made using criteria such as storm name, U.S. ZIP code, U.S. state, county, or latitude and longitude. Tropical cyclone activity is archived as far back as 1851. The site also provides a searchable database of population changes from 1900 to 2000 for U.S. coastal counties affected by hurricanes and detailed text reports on the life history and impact of Atlantic tropical cyclones from 1958 to 2001. This is the first NOAA site that provides storm and population data side by side.

# NWA PLANS IN DEVELOPMENT

The NWA **Strategic Planning Committee** has developed a **Vision Statement** and an updated **Strategic Plan.** The NWA Council reviewed this plan in April 2002 and inputs were incorporated into this latest version. *The Vision and Strategic Plan are now awaiting final NWA Council discussion, approval and prioritization at the NWA Council meeting in October 2002.*

By design, the Strategic Plan lists very broad yet concise goals. The next step is to develop an Implementation Plan. This will be the "details," or specific actions to accomplish the broader strategic goals.

The draft plans may be viewed on the NWA Web site at http://www.nwas.org/strategicplan.html and comments are more than welcome. *- Frank Brody*
*Strategic Planning Committee Chair*

# NPOESS $4.5 BILLION CONTRACT AWARDED

NOAA, DoD, AND NASA announced A $4.5 billion contract has been awarded to TRW Inc. of Redondo Beach, Calif., to build and deploy the nation's future polar-orbiting environmental satellite system.

The contract is for the Acquisition and Operations (A&O) phases of the National Polar-orbiting Operational Environmental Satellite System (NPOESS). NPOESS combines the nation's military and civilian environmental satellite programs into a single national system. As directed by the tri-agency Integrated Program Office (IPO), TRW will be the prime contractor for Shared System Performance Responsibility to accomplish the A&O programs. TRW will develop, fabricate, and deliver the NPOESS satellite and ground systems as well as provide launch support, operations and support services for the system through Initial Operational Capability. The federal program office will provide timely funding, clearly defined requirements, mutual participation of instrument development teams and executive reviews.

NOAA has overall responsibility for the converged system, as well as satellite operations and interactions with the civil and international user communities. The Department of Defense has the lead responsibility for major systems acquisitions, including launch support. NASA has primary responsibility for facilitating the development and incorporation of new cost-effective technologies into the converged system. For more information about the NPOESS program see Web site: http://www.ipo.noaa.gov *- NOAA Public Affairs*

# LOCAL CHAPTER NEWS

**The High Plains Chapter** held a meeting on 6 August 2002, at the Town and Country Kitchen in Norton, KS. The intended mission of this meeting was to discuss plans for the upcoming annual conference in Dodge City. One of the attendees was a visitor, Jerrod Frederking, a SCEP participant at the Dodge City NWS office. Jerrod is a Junior at Oklahoma University in Norman, OK, and a member of both the Central Oklahoma Chapter of the AMS (COCAMS) and the Oklahoma University Student Chapter of the AMS (OUSCAMS). The Chapter membership roster will be updated toward the end of the year when dues are renewed. Chapter dues will remain at $10 for 2003. Jim Johnson did a nice job of restoring the Chapter Web site since the last meeting: http://www.highplains-

amsnwa.org/ Jared Guyer of the Hastings NWS office graciously stepped forward and took on the role of webmaster. A suggestion was made for our chapter to look into sponsoring a scholarship for women in science, as there are not many scholarships of this type available. President John Stoppkotte will head this effort. At least 1 or 2 of our chapter members will attend the AMS Annual Meeting in Long Beach, CA, 9 – 13 February 2003, and will look into displaying a poster representing our High Plains Chapter at the poster session. The next meeting will be at the October conference in Dodge City.

Send in local chapter news at anytime to NewsletterNWA@aol.com. See chapter Web sites on http://www.nwas.org.

# MEMBER NEWS

***Welcome new corporate member!***

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## Embry-Riddle Aeronautical University

600 South Clyde Morris Boulevard
Daytona Beach, FL 32114-3900
Tel: 386-226-6858; Fax: 386-226-7739
Internet: www.opx.erau.edu
POC: Dr. Richard Bagby e-mail: bagbyr@erau.edu

# ➢ IN MEMORIAM ➢

**Norman Stanley Benes** (1921-2002) a charter member of the NWA died at his home in Fair Oaks, California on June 16, 2002. He was born in 1921 in Detroit, Michigan and grew up in Long Island, NY. He was employed by the National Weather Service Sacramento office as a Meteorologist, and National Science Foundation in Antarctica as Research Meteorologist in Charge. He was a member of executive committee Benes Peak Range Antarctica, member of the American Meteorological Society, American Geophysics Union, National Weather Association, Sacramento Valley Scottish Rite, San Juan chapter order of Eastern Star, Ben Ali Temple Sacramento, San Juan Free and Accepted Masons of California Citrus Heights, and Genesis Lodge Brooklyn, NY. He was active in Davis PTA in the 1960's (local chapter president 1965) and active in Fair Oaks Little League. He served in the US Navy 1943-1946 Pacific Operations. He was preceded in death by his wife, Celia Benes in December 2001. He is survived by son Gregory Benes. Modesto, CA; daughters, Heather Benes, Mojave, CA, Michell Benes, Venice, CA, Francine Hamilton, Rancho Palos Verdes, CA; 4 grandchildren; 2 great grandchildren; 2 stepsons, Matthew and Jason Motyka; stepdaughter, Catherine Krueger.

**Keith W. Johnson** (1924-2002) a charter member of the NWA, a former United Methodist minister and National Weather Service meteorologist who had lived in the Washington, D.C., area from 1966 to 1988, died September 11, 2002 at the Salisbury, Maryland, Nursing and Rehabilitation Center after a stroke. He lived in Ocean Pines, Maryland. He worked for the National Weather Service for 22 years before retiring in 1988. He also was the minister at Greenbelt United Methodist Church in 1967 and 1968. From that time until 1988, he was an associate minister at Woodside United Methodist Church in Silver Spring. In 1988, he became a meteorology professor at Jackson State University in Mississippi. He retired from that post in 1995 and moved to Ocean Pines in 1996. Dr. Johnson, a native of Edmonds, Washington, served with the Army Air Forces in the Pacific during World War II. Later in the 1940's he taught English as a missionary in Japan. He received two bachelors' degrees from the University of Washington, a master's degree in meteorology from New York University and a doctorate in meteorology from the University of Maryland. In 1956, he received a master's degree in divinity from the Union Theological Seminary and was ordained a Methodist Minister. His first wife, Mary Jo Summers Johnson, died in 1953. Survivors include his wife, Carolyn B., of Ocean Pines, and their three sons, Barry W., of Silver Spring, Stefan C., of Riverdale, and Erik L., of Prince Frederick; a son from his first marriage, Leslie G., of Annapolis; a sister; and seven grandchildren.

**Lt. Col. Calvert "Bill" Walke Tazewell, Jr.** (1917-2002) a NWA Member of the Year for 1998, died on September 27, 2002 in Chesapeake, Virginia. He called himself the *Patriarch of the Internet* for as a venerable senior citizen, he led the way for many local and national organizations to be on the World Wide Web early. He voluntarily started the NWA Home Page in 1995 and maintained it as the primary webmaster for three years. He continued to contribute as webmaster emeritus until his death. He was born in Wilmington, Delaware on April 13, 1917. He joined the Virginia National Guard in 1934 as a radio technician and soon found his way into the Army Air Corps Weather Service when it was organized in 1937. He continued duty as a communications specialist and later as an observer and forecaster becoming a Master Sergeant by 1941. He was promoted to Second Lieutenant by direct appointment while overseas in 1942 and advanced through grades to Lieutenant Colonel before retiring from the US Air Force in 1959. As a military officer, he was assigned duties primarily in the communications field helping to pioneer a worldwide weather communications system during WWII. He was then assigned to a number of communications units in Japan, Korea and the United States. After retiring from the Air Force he held a variety of positions in Dade County, Florida and Norfolk, Virginia and became enamored with computers, history and writing. He was the founder of the Norfolk Virginia Historical Society and its first president. He published many historical articles and eventually began to place many pages on the World Wide Web associated with the genealogy and history of many families and events in the Norfolk, Virginia area. He also started a virtual library for Hampton Roads, Virginia. He was nominated as *International Man of the Year 1998-99* by The International Biographical Centre, Cambridge, England and honored by inclusion in the publication, *Outstanding People of the 20th Century.*

# MEETINGS OF INTEREST

• **The Second Southeast Severe Storms Symposium sponsored by the East Mississippi Chapters of the AMS and NWA, as well as the Mississippi State University Department of Geosciences, will be held at Mississippi State University, 17-19 January 2003.** This symposium will deal with the current challenges of forecasting all types of severe weather in the Southeastern United States. Registration and general symposium information can be found at Web site: www.msstate.edu/org/nwa/symposium.htm .

Presentations on all aspects of severe weather in the Southeast, including winter weather, severe and tornadic thunderstorms, tropical systems and hurricanes, mesoscale systems, severe weather climatology, storm spotting, and broadcasting coverage of severe weather events are encouraged. **The deadline for abstracts is 1 December 2002.** Abstracts should be submitted to:
Southeast Severe Storms Symposium Committee
Department of Geosciences
PO Box 5448
Mississippi State, MS 39762

For further information, please contact one of the following: David Nussbaum: tel: 662-325-8417, e-mail: davidjnussbaum@hotmail.com; Dr. Michael Brown: tel: 662-325-2906, e-mail: mebrown@ra.msstate.edu; Dr. Mark Binkley: tel: 662-325-0939, e-mail: binkley@geosci.msstate.edu

• **The Symposium on the Fujita Scale and Severe Weather Damage Assessment** will be held 10-11 February 2003 as part of the 83rd Annual AMS meeting 9-13 February in Long Beach, CA. **The NWA will co-sponsor this symposium**. The deadline for abstracts has passed. Point of Contact: Dr. Greg Forbes, The Weather Channel, 300 Interstate North Parkway, Atlanta, GA 30339; tel: (770) 226-2045; e-mail: gforbes@weather.com. The complete program is online at www.ametsoc.org/AMS

For additional information on meetings, conferences and special events, please visit the NWA Web site at www.nwas.org

THE NWA LISTING OF COLLEGES AND UNIVERSITIES OFFERING DEGREE PROGRAMS IN METEOROLOGY AND ATMOSPHERIC SCIENCES WAS RECENTLY UPDATED. CHECK IT OUT AND LET US KNOW IF ADDITIONS OR CHANGES ARE NEEDED.
http://www.nwas.org/links/universities.html

# JOB CORNER

*The NWA posts jobs from equal opportunity employers at no cost for the benefit of NWA members. Please see the Job section on the NWA Web site (www.nwas.org) for complete announcements and job links. Members who do not have Internet capability may request announcements from the NWA office at (434) 296-9966.*

**SURFACE SYSTEMS, INC. (SSI)** is one of the country's largest commercial operational meteorological services and the world's largest pavement weather forecasting service. SSI provides accurate forecast services to a wide variety of clients in industry, government, media, and aviation. We have an **immediate opening for an experienced operational meteorologist**. Qualifications must include a Bachelor's degree in Meteorology, at least 3 years operational weather forecasting experience, strong written and verbal communication skills, North American forecasting experience and basic computer skills. Applicants must be able to work well in a team environment and be willing to work nights, weekends, and holidays. SSI provides each forecaster with the latest state-of-the-art tools for forecasting. SSI offers a competitive salary and an extensive benefit package. SSI is an Equal Opportunity Employer. If interested, please send your resume along with cover letter to: Ray Cathcart, Weather Center Manager, Surface Systems, Inc., 11612 Lilburn Park Road, Saint Louis, MO 63146; FAX (314) 569-3567 or e-mail to rac@surface.com. (http://www.ssiweather.com)

**UNIVERSITY OF NORTHERN COLORADO**
Department of Earth Sciences invites applications for an **Assistant Professor of Meteorology** tenure track position to begin August 18, 2003. Earth Sciences at UNC is composed of several emphasis areas of which meteorology is the largest. The candidate must have a Ph.D. in meteorology or atmospheric sciences from an accredited institution by the fall of 2003. Candidates from all areas of meteorology will be considered but preference will be given to those with a strong physical and observational meteorology background. The successful candidate will be responsible for the UNC observing/climate records program and will build professional collaborations and research opportunities with regional observing facilities. Teaching responsibilities include 9 - 10 credits per semester with courses that include Physical Meteorology, Climatology, General Meteorology, Our Violent Atmosphere, and courses specific to the candidate's expertise. Other expectations include research, grant activity, service and advising. UNC places a high priority on quality undergraduate instruction, so potential for excellence in teaching is highly desirable. Submit letter of application, curriculum vitae, copies of university transcripts, and 3 letters of reference to: Dr. Bruce D. Lee, Search Committee Chair Department of Earth Sciences, Ross Hall 3480 Campus Box 100, University of Northern Colorado, Greeley, CO 80639 e-mail: bdlee@unco.edu.

Screening will begin November 15, 2002 and continue until a candidate is selected. This position is contingent on funding from the Colorado State Legislature. UNC is an AAEO employer and is committed to fostering diversity in its student body, faculty and staff.

**THE WEATHER CHANNEL** is currently recruiting qualified candidates for 2 **Radio Broadcast Meteorologist positions**. TWC Radio Network operates in a 24/7 environment and provides value-added weather forecasts and related information plus timely & accurate severe weather coverage for radio stations nationwide. TWC Radio Network is also a provider of forecasts and weather related audio products to Satellite Radio, the Internet, and other TWC platforms. Ideal candidates will have strong broadcast skills and a working knowledge of meteorology (BS in Meteorology or related science a plus, but not required). Broadcasting and/or operational forecasting experience is preferred. Successful candidates must be flexible to work various shifts supporting our 24/7 broadcast operation. Please submit your resume online via http://weather.com/jobs and mail an audiocassette aircheck (three 30-45 second forecasts) to: The Weather Channel, ATTN: Laurie White, 300 Interstate North Parkway, Atlanta, GA 30339

**WEATHERDATA, INC.** has an immediate opening for a **Storm Warning Meteorologist** to join our team. WeatherData is the only organization that issues independent warnings for tornadoes, flash floods and other forms of high-impact weather to a wide range of business and governmental clientele. Our meteorologists work with exclusive state of the art technology and as part of a team of congenial people dedicated to excellence and customer service. We are looking for meteorologists with practical knowledge and experience in radar and mesoscale meteorology and with excellent communication skills who wish to dedicate their skills to company success. In return, we offer a competitive salary and excellent benefits in a great city with a low cost of living. The Wichita Metropolitan Area is home to nearly 700,000 residents with a wide diversity of entertainment and activities -- and, a wide diversity of weather to challenge an enthusiastic meteorologist. To learn more about WeatherData, go to: www.weatherdata.com. To learn more about Wichita, go to: www.wichitakansas.org. Please send resume and cover letter to: Kimberly Mendelsohn, EVP of Business Development, 245 N. Waco, Suite 310, Wichita, KS 67202, or by e-mail to: resume@weatherdata.com.

**THE UNIVERSITY OF HAWAII**

**RESEARCH METEOROLOGIST - ID# 22493**

The University of Hawaii Institute for Astronomy invites applications for a Regular, Full-Time position in Honolulu, Hawaii. The incumbent will: conduct research directed at improving meteorological forecast support for astronomical operations; oversee maintenance of ingest of text and binary data from the National Weather Service Forecast Office; oversee maintenance and improvements to the Web-based weather data server, and supervise the Observatory Weather Forecaster. Applicants must have: a Ph.D. in Meteorology (or in Computer Science with a Bachelors Degree in Meteorology). (Ph.D. candidates may apply but must submit evidence of Ph.D completion upon hire); 2 years experience with mesoscale numerical weather prediction models (e.g., MM5); knowledge of the mesoscale numerical weather prediction model; knowledge of Unix workstations and Unix programming; ability to work independently to make improvements to the mesoscale numerical weather prediction model and forecast products. For further information contact Dr. Steven Businger, (808) 956-2569. **Application Requirements**: Send cover letter (note ID#22493) and referral source with narrative on your qualifications for the position, resume with salary history, the names, phone numbers, and addresses of three supervisory references, and copy(ies) of degree(s)/transcripts/certificate(s) used to qualify for position via: 1) e-mail: rcuhhrapply@rcuh.com 2) fax: (808) 956-5022 or 3) mail: Director of Human Resources, Research Corporation of the University of Hawaii, 2530 Dole Street, Sakamaki Hall D-100, Honolulu, HI 96822. See www.rcuh.com for additional information on employment. This is a RCUH Non-Civil Service position & continued employment is dependent upon program/operational needs, satisfactory work performance & available funding. Salary: Commensurate w/ qualifications. EEO/AA Employer. **Closing: 11/15/02**.

**PELMOREX / THE WEATHER NETWORK** Each week more than eight million Canadians rely on The Weather Network and MétéoMédia, 24-hour national specialty television networks broadcasting coast to coast in English and French, for up-to-the-minute accurate forecasts. The Weather Network, MétéoMédia and their respective Web sites, www.theweathernetwork.com and www.meteomedia.com, are wholly owned and operated by Pelmorex Inc. Through its television, newspapers, telephone and Internet services, Pelmorex is Canada's leading private sector weather information provider. We are located in Mississauga, Ontario. We are currently looking for **Meteorologists** (2 Full-time positions). **RESPONSIBILITIES:** Regular analysis of all available numerical models for input to the Pelmorex Forecast Engine (PFE); Utilize all available numerical models to create a 'best' ensemble forecast; Continuous updating of forecast database through utilization of PFE. **QUALIFICATIONS:** B.Sc. or equivalent in Meteorology; Strong knowledge of Canadian climates and geography; Specific knowledge of and/or extra course work in numerical models/modeling; Solid understanding of numerical models and their output. Specific understanding of the relative (dis)advantages of all relevant North American models; An understanding of the different forecast areas (climates) of Canada; Strong computer knowledge/technical background - is comfortable dealing with new meteorological technology. **COMPETENCIES:** Able to work alone and as part of a team; Self starter and Willing to work shifts. Qualified applicants should submit their resume to: Human Resources, Fax: 905-566-9696 or email: hr3@on.pelmorex.com. Please indicate job code TWN50. Pelmorex is committed to equity in the workplace.

**RAPID WEATHER** is looking for a dozen energetic men and women who want to work in operational meteorology. The ideal candidates must have at least a BS/BA in meteorology or atmospheric science, be willing to train at Rapid Weather facilities for 50 to 100 hours and then take on a new job within a month. Rapid Weather has several requests for placement of trained forecasters now at various locations and looking at filling at least 25 positions in the next year. The positions are in the USA and nearly all of them are either forecaster positions or entry-level, promotable to forecaster positions. All interested, please see the Rapid Weather Web site at www.rapidwx.com and click on "Get a Job Here".

**UNIVERSITY OF NEBRASKA – LINCOLN** The Department of Geosciences, University of Nebraska - Lincoln, seeks candidates for a tenure-track position in the broad area of hydrological sciences. The position will be filled at the rank of **Assistant Professor**. A Ph.D. at the time of appointment is required. The successful candidate will be expected to develop a vigorous externally funded research program and to provide quality teaching at the undergraduate and graduate levels. We seek candidates in any of the fields of hydroclimatology, hydrometeorology, surface hydrology, aqueous geochemistry, or hydrogeology. The Department of Geosciences has 25 faculty members, some of whom share appointments with the University of Nebraska State Museum, the Conservation and Survey Division, or the School of Natural Resource Sciences. The department offers BA, BS, MS, and Ph.D. degrees, with graduate specializations in geology, hydrogeology, and meteorology/climatology. Additional information can be found on our Web site: www.unl.edu/geosciences/geohome.html. Applicants should submit a hard paper copy (no e-mail) of a curriculum vitae, as well as a statement of research and teaching interests, and arrange to have three letters of reference sent to: Dr. Sherilyn C. Fritz, Chair Hydrological Sciences Search Committee, Department of Geosciences, University of Nebraska, 214 Bessey Hall, Lincoln NE 68588-0340.

Further information about the position can be obtained by phone (402-472-6431) or e-mail (sfritz2@unl.edu). Review of applications will begin December 1, 2002 and continue until the position is filled. The University of Nebraska is committed to a pluralistic campus community through affirmative action and equal opportunity and is responsive to the needs of dual career couples. We assure reasonable accommodation under the Americans with Disabilities Act; contact Sherilyn Fritz at 402-472-6431 for assistance.

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**National Weather Association – Supporting and Promoting Excellence in Operational Meteorology and Related Activities since 1975**

**NATIONAL WEATHER ASSOCIATION**
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