### **NWA NEWSLETTER**

No. 03-10 October 2003

## PRESIDENT'S MESSAGE

#### by Bill Read

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Interested in getting to know the leading meteorologists of our era? Being a leader of an organization dedicated to the advancement of operational meteorology? Helping lead a National organization towards a future 5 to 10 years down the road? Helping forge policy on how weather services provide benefit to America? Then the following article is a must read for you.

As stated in the recent Newsletters, one of our most pressing needs is to seek and hire an Assistant Executive Director (AED). Again, the growth in numbers and complexity of our organization has resulted in an increase in workload such that more than one person is required to accomplish the responsibilities and to provide backup support. And, in the not too distant future, our Executive Director (ED), Kevin Lavin, will wish to retire. This letter will be an attempt to spell out the many responsibilities the ED position has and list some of the skills a successful candidate should possess.

First, I want to embarrass Kevin a little. Kevin took over as Executive Director in January 1993 after Sol Hirsch's 12-year success. In the 10 years Kevin has served us, we have grown in number by 50% - from 2000 members then to 3000 members now. We have grown financially from barely solvent to financially sound, with cash reserves meeting the standard for professional associations. During Kevin's tenure we have developed mature by-laws and procedures, an outstanding Broadcast program, added more local chapters, comprehensive Web site, co-sponsorship of regional and other professional meetings, increased our committee structure by numbers and activities, and have continued to improve on our Annual Meetings. In the process, the ED job has grown to much more than 40-hours per week. and to the hiring of part-time staff to help with the administrative work. What most of us do not see is that Kevin has been the guiding force that carries us forward each year. He does this mostly behind the scenes, taking care of the business of the Association, plus giving helpful advice to the officers and councilors, many who are new

to the process each year. In addition, his professionalism has helped gain respect for the NWA within the meteorological community. A mark of this recognition for the NWA was his recent selection to serve on the AMS Ad Hoc Committee on Response to the NRC Partnership Report. Although the ED salary has been increased... \$12,000 for part time in 1993 to full time at \$35,000 this year... it is obvious we get a lot of "bang for the bucks" out of Kevin. We owe him a big "Thank you" for his hard work and dedication!

So, what does the job entail? The following comes from the ED Position Description:

- 1. The ED is expected to direct the daily operations of the Association in accordance with the by-laws, federal and state nonprofit corporation regulations and standard office practices. This includes keeping knowledge of laws and requirements; answering telephones and snail and e-mail correspondence; payment of salaries and bills; management of receipts; final preparations, publishing and mailing of NWA publications; keeping the Web site current; maintaining membership including the administration of dues and election ballots. Works closely with member volunteers and hires part-time help as needed and affordable.
- 2. Serves as business editor of the "Digest"
- 3. Plans and executes the Association's Annual Meeting
- 4. Represents the Association at appropriate meetings, conferences and media events
- 5. Provides continuity between successive terms of officers and councilors
- 6. Prepares and executes the approved budget for the Association
- 7. Administers the Weathercaster Seal of Approval process
- 8. Organizes and executes the publishing and distribution of the Association's monthly Newsletter

We envision the successful candidate for AED will, under the direction of the ED, assist with and/or →

take over the responsibility for a subset of the ED activities initially and learn the others in anticipation of taking over as ED when Kevin retires.

What knowledge or skills should you have to do this job?

- 1. Knowledge of government and private meteorology organizations
- 2. Experience as an operational meteorologist
- 3. People skills able to interact positively and develop working relationships with diverse membership and leaders in the meteorological community.
- 4. Ability to plan and manage budgets and administrative office operations
- 5. Ability to author, edit, organize, and finalize publications
- 6. Be familiar with the current concerns of the operational meteorological community and plans for changes in the future.
- 7. Technology proficient with personal computers and have the ability to manage applications such as membership databases, Web sites, e-mail systems and listservers.
- 8. Be an agent for change it is going to happen, so why not lead it
- 9. The ability to plan, organize and complete work independently

Salary and benefits - our current budget supports a parttime annual salary of around \$21,000 for the AED position. Our budget does not support provision of any paid benefits such as retirement or insurances. Travel to the annual meeting, to work with the ED, or to do any other work for the Association can be budgeted. Intangible benefits of this position include considerable freedom on the distribution of work hours and the ability to work from one's home.

The position will be considered open until filled. All interested, please submit a detailed resume or curriculum vitae with cover letter and names, addresses and telephone numbers of three references to:

NWA, Attn: Search Committee 1697 Capri Way Charlottesville, VA 22911-3534

The successful candidate requires a two-thirds vote of the NWA Council members. For further information, please contact the NWA office at NatWeaAsoc@aol.com or telephone 434-296-9966.

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#### **BROADCAST COMMITTEE NEWS**

#### Forecasting, The Old Fashioned Way

I am always excited to hear about new forecast models coming online, such as the full runs of the GFS and Eta now available four times each day. The Eta used to be only out to 48 hours at 18Z and 06Z, but now each run goes to 84 hours. The GFS is run out to 16 days, four times each day! The computing power required for this is amazing, but technology is moving along at a blinding pace. Aside from enjoying the new data, I also enjoy (satirically) the knowledge that so many forecasters, especially younger meteorologists, rely so heavily on models. I like that because I know that if they are my competition, I will have a more accurate forecast on a regular basis. They live by the models, and quite often die by the models. However, I am here to help, so consider these thoughts.

While the new tools are excellent, they should be used along with many other sources of information to make a consistent and accurate daily forecast. I find that the best sandwiches have a lot of meat, cheese, toppings, etc., and the best cakes are layered (aside from cheesecake, but we'll ignore that one for now). Likewise, a good forecaster needs more than just models to make a good forecast. To amplify that point, I have an entire PowerPoint presentation dedicated to clouds. When I go to schools, or give talks to community groups and corporations, I always start with my cloud presentation. I grew up staring at clouds and learning to make forecasts based on the types of clouds, development and movement I observed. I tell the viewers of my presentation that if they just looked at the sky a few times each day, they could make their own short-range forecast.

How many of you perform hand analysis of surface and upper-level weather data? It's amazing how many small-scale features you can find when you draw in your own isobars, fronts and pressure systems, and you can do it using the Internet. Just go to: www.rap.ucar.edu/weather and check out a regional surface map. Click on your area of interest and then print out the map and analyze it. Do that once a day and you'll be surprised at how much more in tune with the weather you become.

Too much time in a weathercast is dedicated to model output. You can tell a more complete weather story, make it understandable to the viewers and have a good foundation for your forecast if you spend a little more time on regional satellite and radar data. Show a satellite loop of your area, then have fun and create a loop of the area that your weather is coming from...show that next storm approaching. Try forecasting and broadcasting a little more in the old fashioned way, and I promise you'll have more fun.

Send your thoughts to me at skyeye@fuse.net.

- Rich Apuzzo, Broadcast Meteorology Committee Chair

# **NCEP NOTES**

# **Major** Breakthrough in Operational Climate Prediction

NCEP has made a major breakthrough in operational climate prediction. By coupling NCEP's Global Forecast System (GFS) atmospheric model with NOAA's Geophysical Fluid Dynamics Laboratory 's Modular Ocean Model (MOM3), and initializing the combination with output from the NCEP Global Ocean Data Assimilation System (GODAS), NCEP modelers have been able to produce remarkably good simulations of the El Niño Southern Oscillation (ENSO) pattern (complete with realistic El Niños and La Niñas) with little or no bias in simulations out to 38 years. In addition, NCEP recently completed a series of experiments with the coupled model in which they used historical information (from 1980s and 1990's) to generate seasonal forecasts. The results show that forecasts of Sea Surface Temperature (the parameter used to identify ENSO events) made from Spring/Summer data are 30% more accurate than current statistically produced Sea Surface Temperature forecasts based on the same data — for periods of up to 8 months into the future. Similar forecasts made from winter data show noticeably less skill, indicating additional research and development will be required to capitalize on this breakthrough. This breakthrough has the potential to produce major improvements to seasonal climate and weather predictions. NCEP has embarked on a path to accelerate the operational implementation of this model capability by nearly a full year. Both NOAA and DOC Chief Information Officers are assisting in computing strategies, which accelerate the necessary calibration and validation for a June 2004 implementation.

#### **New Features for NCEP Model Web Page**

Several new features were implemented in early August on NCEP's Model Web Page: http://www.nco.ncep.noaa.gov/pmb/nwprod/analysis/. Forecast maps out to 84 hours have been added to the 06 UTC and 18 UTC Eta model page. Previously they were available only out to 48 hours. Also, the North Pacific domain boundary was extended to 20 degrees South. Finally, two new charts are being generated: the 850-mb vorticity graphic and the 200-mb heights and winds graphic. The NCEP model page was launched in July 2001 to provide displays of meteorological forecast graphics from NCEP's major models. The Web site is updated in real time so forecast graphics are available on the site at the same time products from the models become available to NWS Forecast Offices and other users of NCEP model grids. Updates and improvements will continue to be made to this site on a three-month cycle.

# North Pacific Hurricane (NPH) wave model implemented

The NPH was implemented at NCEP on Tuesday, 12 August 2003. The Western Region, Pacific Region, Ocean Prediction Center, and Tropical Prediction Center requested this implementation to improve their forecast services. The NPH uses the same quarter-degree lon/lat grid as the Eastern North Pacific wave model and is based on the WaveWatch III wave model core, with the addition of input winds from the Geophysical Fluid Dynamics Lab Hurricane model when tropical systems exist. This same wave model has been run operationally for the North Atlantic region since September 2001. Spectral wave text and grib bulletins are available via NOAAPORT. Further model information can be found at Web site: polar.wwb.noaa.gov/NEW.waves/implementations.html

#### **NCEP Begins Real-Time Testing Air Quality Model**

On 5 August 2003, NCEP began the real-time testing and evaluation of the EPA Community Model for Air Quality (CMAQ) forecast system. The initial implementation of the CMAQ system will provide a once-per-day forecast of ozone concentration over the northeastern quarter of the continental U.S. For this test, forecasts from this model will be made available to a group of state and local air management agencies who have agreed to evaluate the output as guidance for their air quality index forecasts during the test period. The real-time tests will continue through October of this year.

# Schedule for Removal of FAX Charts from National Weather Service Server

All FAX charts based on output from the following models were removed from the NWS ftp server on the dates indicated:

Nested Grid Model (NGM) - 29 July 2003 Eta Model - 19 August 2003 Misc - 9 September 2003 MRF - 16 September 2003 GFS (AVN) - 23 September 2003

Alternate products can be found at: http://www.nco.ncep.noaa.gov/pmb/nwprod/analysis/ - Lauren Morone, NWS/NCEP

Reminder: The National Weather Association is a member-led, nonprofit professional association, that counts on all members to contribute by supporting and promoting excellence in operational meteorology locally and nationally, by recruiting members, participating in activities and committee work, and by sharing news, technical articles, applied research studies, and ideas for improvements in all areas. The Officers and Editors welcome any and all submissions. Newsletter submissions can be sent to: NewsletterNWA@earthlink.net

## **NWA Electronic Journal Update**

The NWA *Electronic Journal of Operational Meteorology* has published two new papers during 2003. The new articles include "Recent Improvements to the GOES Wind Index" by Kenneth Pryor, Gary Ellrod and Andrew Bailey, and "The Nashville Ice Storm of 1951" by Mark A. Rose. As of October 2003, three other papers were in the review process for the Electronic Journal.

The Electronic Journal was developed by the NWA Weather Analysis and Forecasting Committee as a means to allow the rapid publication of papers uniquely suited for electronic publication due to their use of graphics, animation and colors. If you have a paper fitting this description, we urge you to submit to the Electronic Journal! The e-journal is a peer-reviewed publication, but has a streamlined review and publishing process, which helps to facilitate more rapid publication than print journals. For more information on publication guidelines or to peruse the E-Journal, check out the NWA Web site at www.nwas.org, and click on "The Electronic Journal of Operational Meteorology" button.

- Alan E. Gerard, Co-chair of NWA WAF committee and Co-editor of the Electronic Journal

#### **MEMBER NEWS**

Richard P. McNulty retired from the National Weather Service in September after 30 years of government service. He graduated from New York University with a degree in meteorology and oceanography and later returned to complete his Masters and Ph.D. His early career began with the Weather Bureau in Boston, Massachusetts and then Travelers Weather Service in Hartford, Connecticut. Richard also served in the Navy at Fleet Weather Central in Norfolk, Virginia, during the Vietnam War. Following release from active military duty, Richard stayed in the Naval Reserve and retired with the rank of Commander after 22 years of service.

Dr. McNulty held many oceanographic and meteorological assignments including Research Meteorologist with the Techniques Development Unit at the National Severe Storms Forecast Center in Kansas City, Missouri; Deputy Meteorologist in Charge at the Weather Service Forecast Office in Topeka; Chief, Hydrometeorology and Management Division, at the National Weather Service Training Center in Kansas City; and Senior Aviation Meteorologist at the Aviation Weather Center in Kansas City. He has also taught meteorology courses at several universities.

Richard has been a member of the American Meteorological Society (AMS) and is a charter member of the National Weather Association (NWA). He has been a NWA Councilor, Co-Editor of the *National Weather Digest*, and currently is a member of the NWA Education Committee.

### **LOCAL CHAPTER NEWS**

Three Rivers Chapter - On 13 May 2003, fifteen students and two faculty members from the Three Rivers Chapter of the NWA and California University of Pennsylvania's Department of Earth Sciences embarked on a thirteen-day storm intercept trek. The trip was part of an upper-division 'Field Methods' course in Earth Sciences in which undergraduate students can enroll. Students were required to forecast convective activity every day of the trip, verify their forecast, and discuss any atmospheric changes during a given day. These forecast elements were then compiled into a written journal to be turned in for assessment at the conclusion of the trip.

The third day of travel proved to be the most successful when three tornadoes were sighted near Stratford, Texas. Earlier that same day near Bushland, Texas, we caught up with Josh Wurman, President of the Center for Severe Weather Research, and the Doppler on Wheels (DOW) units. Wurman described for the students the principles behind mobile Doppler radar and the benefits of the newest rapid scan unit. Some of our group members were able to view the real-time radar images produced by the DOW survey scan. We later departed from Bushland heading north to intercept a supercell, which produced the tornadoes north of Stratford. The fourth day of chasing did not work out as well since the upper-level low, primarily responsible for the severe weather the previous day, was moving east too rapidly into eastern Oklahoma and Arkansas. Unfortunately for the group, an upper-level ridge amplified over the region the next few days, reducing the number of severe weather days.

With this downturn in "favorable" weather, the group ventured north to Lincoln, Nebraska to visit the University of Nebraska-Lincoln, then on into Wyoming to observe the University of Wyoming's research facilities and aircraft units, such as the King Air. The group continued on to Fort Collins and Colorado State University, where Ph.D. student Sarah Tessendorf provided a tour of the Atmospheric Science department. We then stopped in Boulder, Colorado and were provided an abbreviated tour of the National Center for Atmospheric Research (NCAR) and the supercomputers located therein. Although the weather did not cooperate the entire duration of the trip, the storm chase of 2003 remained a great learning experience for all participants involved. The group not only traveled five thousand miles of the interior U.S., but visited several renowned universities with meteorology programs and several atmospheric research - Chad Kauffman, faculty advisor facilities.

The High Plains NWA Chapter met on 5 August 2003, for a lunch gathering at Gwen's Hometown Café in Hill City, Kansas. There were 19 in attendance, a very good turnout for our chapter. There were five guests, including our featured speaker, Dr. Matt Parker from the

University of Nebraska, Lincoln. NWS Office in Goodland, Kansas brought two student-trainees and NWS Office in Hastings, Nebraska brought one, and the other guest was visiting from the US Air Force Weather Agency (AFWA) at Offutt AFB Nebraska. Our business meeting was held following lunch. Then our invited speaker, Dr. Matt Parker, gave a presentation on "Adiabatic Layers and Tornado Genesis," an interesting perspective on the relationship of layer lapse rates and tornado genesis. The talk was well received and generated plenty of discussion. Dr. Parker is looking for more verification of his theory from the field, and anyone with further interest can contact him at UNL.

After the usual review of the past meeting minutes, the treasury report, and general introductions, the meeting centered around plans for the Annual High Plains conference 8-10 October 2003.

A submission for Chapter of the Year was sent to the NWA. Jared Guyer assembled and submitted the application. The chapter Web site is at: www.highplains-amsnwa.org.

- Tim Burke, Secretary

<u>Central Iowa Chapter</u> - At the September meeting to begin the 2003-2004 season, Chapter, president Bryan Karrick began the meeting with officer introductions. We had a large number of new attendees, mostly Meteorology students from Iowa State University. We discussed setting up the schedule for future meetings through May. We will put out a vote on our online discussion.

Our next Meeting is scheduled for Monday, 27 October at 6:30 PM at the National Weather Service office in Johnston Iowa. We will hold officer elections and our guest speaker will be Elwynn Taylor, professor at Iowa State. On 17 November at 7 PM, Alan Czarnetzki, of the University of Northern Iowa and the Storm Project, will speak about the Storm Project. This is open to all Central Iowa NWA members and will be a joint effort with the Iowa State University AMS chapter. A grant application for schools to fill out for grants from our chapter is posted on our chapter Web site at: www.iowa-nwa.com.

Bryan Karrick will attend the National NWA conference in October 2003. He chairs the NWA Broadcast Workshops. We discussed the possibility of sending one of our members. Discussion next occurred about a sponsorship of the Iowa Games that are held each July in Ames. This would be a great way to get our chapter's name out in the public and a great way to promote weather safety, especially with the 10,000+attendees. We also want to get involved again with National Lightning Safety Awareness Week, and we discussed a potential joint effort with the Science Center of Iowa (in Des Moines). The idea of doing something at the Iowa State Fair, Kids Fest and Safety Link Zone was also mentioned.

The officers and current members of the chapter would like to welcome the newest members from Iowa State University, which are members through December 2004: Seniors in Meteorology: Meghan Gehrke, Brian Gunsolley, Mike Holts, and Dan Gilbert; Sophomore: Elise Johnson; and, Freshmen: Joshua Grove and Justin Gehrts.

If you are interested in becoming a full member of the chapter, please contact mjkeegan@myway.com.

- Mitch Keegan, Secretary



Central Iowa NWA Chapter members take to the sky to spread weather message. John McLaughlin, past president of the NWA, and Central Iowa NWA Chapter president Bryan Karrick have been educating central Iowans about weather and aviation during a series of helicopter visits. McLaughlin, a commercial rated pilot in both airplanes and helicopters, says, "The celebration of the 100th anniversary of powered flight in 2003 seemed like a good time to combine weather and aviation education and take it directly to the kids." response to the helicopter visits at schools and community festivals has been outstanding. Picture above shows: (l-r) Bryan (note NWA patch) and John after recently dropping into a gathering of 500 people, including actors portraying Amelia Earhart, and Wilbur and Orville Wright.

# MORE INFORMATION ON THE CENTENNIAL OF POWERED FLIGHT

is available at Web site:

http://www.centennialofflight.gov/index.cfm

There is even a National Contest to Challenge Students to Predict Conditions for Dec. 17, First Flight Re-Creation as Part of the Centennial of Flight Commemoration

(Teachers register by 2 November 2003 at http://www.centennialofflight.gov/2003FF/index.html)

## MEETINGS OF INTEREST

- The National Weather Association's 28th Annual Meeting will be held 18-23 October 2003 at the Adam's Mark Hotel, 225 Coastline Drive, Jacksonville, Florida 32202.
- For information, please contact the NWA office at Tel/FAX: (434) 296-9966 or e-mail: NatWeaAsoc@aol.com. Information is also on the NWA Web site at: www.nwas.org.
- The 2003 Southern New England Weather Conference will be held on Saturday, 1 November 2003 from 7:30 AM to 9:00 PM. It is sponsored by the National Weather Service, the Blue Hill Observatory, the Boston and UMass Lowell Chapters of the American Meteorological Society, and the Southern New England Chapter of the National Weather Association. The meeting will be held at the conference facilities of the Wachusett Mountain Ski Area in Princeton, Massachusetts. For more information, please visit Web site: http://www.bluehill.org/snewc/info.html
- · The Second Conference on Weather Analysis and Forecasting Issues in the Central United States (WAFICUS II) will be held at the University of Missouri-Columbia (UMC) on 5-6 December 2003. It will address topics relating to operational meteorology in the Midwest. This gathering is a joint effort by UMC, the UMC chapter of the National Weather Association, and the Missouri Climate Center seeking to emphasize those areas of operational meteorology of greatest concern to forecasters. The conference will be held at the University of Missouri-Columbia in the School of Natural Resources' Conservation Auditorium. Registration is due by 31 October 2003 to get the reduced rate of \$50.00; the student rate is \$30.00. Registration and other details as well as scenes from WAFICUS I can be found at the conference Web site: http://weather.missouri.edu/WAFICUS/. Registration forms and payment should be sent to: Ms. Sharon Burnham, University of Missouri-Columbia, Department of Atmospheric Sciences, 373 McReynolds Hall, Columbia, MO 65211; (573) 882-6591. For further information, contact Dr. Anthony Lupo at e-mail: LupoA@missouri.edu.
- The Third Annual Southeast Severe Storms Symposium will be held 16-18 January 2004, hosted by the East Mississippi NWA & AMS Chapter and the Department of Geosciences at Mississippi State. This Symposium is designed to share forecasting and technical expertise related to all weather phenomena in the Southeast U.S. The papers should be written with a very strong operational content bias. Although a wide variety of hazardous weather topics are welcome, our focus will be the 30th anniversary of the 3-4 April 1974 Super-outbreak, the 2003 tropical weather season, and the May 2003 week long series of tornado outbreaks. Submission of extended abstracts (3 pages or less including figures) ends 1 December 2003. Acceptance notification (via e-mail) will be no later than 10 December 2003. Presentation slots are 20 minutes long. Presentations should be delivered using Microsoft PowerPoint or Corel Presentation software. Papers will be reviewed by the members of the committee, and accepted or rejected with status notification by e-mail. Submissions will be accepted at: mebrown@ra.msstate.edu. Please go to Web http://www.msstate.edu/org/nwa/symposium.htm for detailed information about the symposium and instructions for composition of extended abstracts.

- The 29th Annual Northeastern Storm Conference will be held 12-14 March 2004 in Saratoga Springs, New York. The conference is sponsored by the Lyndon State College AMS & NWA Chapter. Abstracts are due by 31 December 2003. More information is on the chapter Web site at: http://apollo.lsc.vsc.edu/ams/ or e-mail Chapter President Corey Potvin at Corey.Potvin@lyndonstate.edu.
- The 2004 Severe Storms and Doppler Radar conference will be held from Thursday, 25 March Saturday, 27 March at the Embassy Suites Hotel, Des Moines, Iowa. The conference is sponsored annually by the Central Iowa NWA Chapter. Please watch Web site: http://www.iowa-nwa.com/for updated information.
- The First World Conference on Broadcast Meteorology will be held 3 - 5 June 2004 in Barcelona, Spain. The National Weather Association is a co-sponsor of this conference being run by the International Association of Broadcast Meteorologists (IABM). This will be a scientific conference, with a diverse group of attendees and presenters engaged in discussing the current state of weather broadcasting in the world, examining ways to reduce the impact of natural disasters and debating the controversial issue of climate change. Morning sessions during the three-day event will feature presentations from leading broadcasters and meteorologists. Keynote speakers have been invited for the afternoon sessions. Barcelona was selected by the IABM to host the conference because of substantial financial support for the conference and a tremendous infrastructure to support the event. Some 200 scholarships have been made available to reduce the cost of traveling to Barcelona to around \$500 including air travel and hotel accommodations. Conference details and funding applications through the IABM can be found http://www.IABM.org. Scholarships will be awarded in the fall, based on geographical diversity and willingness to broadcast via satellite from Barcelona back to home stations (uplink provided). NWA broadcasters wishing to submit a presentation should contact IABM Secretary Gerald Fleming at chairman@iabm.org While the conference is geared toward the broadcast weather field, all NWA members are welcome to attend this historic meeting.
- · Symposium on the 50th Anniversary of Operational Numerical Weather Prediction, 14-17 June 2004, College Park. Maryland. The National Centers for Environmental Prediction (NCEP), Air Force Weather Agency (AFWA), Fleet Numerical Meteorology and Oceanography Center (FNMOC), National Weather Association and American Meteorological Society (AMS) will cosponsor this historical symposium to be held at the Inn and Conference Center at the University of Maryland in College Park, Maryland (just north of Washington DC). Please submit abstracts electronically to Eugenia Kalnay, ekalnay@atmos.umd.edu, and Ken Carey, kcarey@mitretek.org, by 15 January 2004. Extended manuscripts will be due by 6 March 2004. Preliminary program, registration, hotel, and general information will be posted on the symposium Web site: http://wwwt.ncep.noaa.gov/JNWPU50/ For more information or to provide suggestions to enhance this symposium, please contact Ken Carey (tel: 703-610-1933; fax: 703-610-1767; kcarey@mitretek.org) or Eugenia Kalnav (ekalnay@atmos.umd.edu).

For more meetings of interest, browse to: www.nwas.org

# NOAA DEVELOPS EL NIÑO / LA NIÑA INDEX AND DEFINITIONS

El Niño and La Niña may have fizzled this year, but for NOAA scientists, their quest to better understand and define these climatic twins is a step closer to resolution. After more than a year of study, NOAA announced on 30 September 2003 that it has reached a consensus among experts in the federal government and academia for an operational index and definitions for El Niño and La Niña, which are extremes of the El Niño/Southern Oscillation (ENSO) cycle.

NOAA, in collaboration with experts at the Scripps Institute of Oceanography, the Center for Ocean-Land-Atmosphere Studies (COLA), the Center for Ocean-Atmospheric Prediction Studies (COAPS), the International Research Institute (IRI) for Climate Prediction, the National Center for Atmospheric Research (NCAR), and the University of Washington, has agreed on a primary index for assessing the state of the ENSO cycle. Based on the index, NOAA has developed operational definitions for El Niño and La Niña.

"Before now, no widely accepted operational definition of El Niño or La Niña existed," said retired Navy Vice Admiral Conrad C. Lautenbacher, Jr., Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator. "This effort provides for greater consistency of communication between scientists, who monitor and study the ENSO cycle and more uniformity in our message to the public through the media," he added.

The index is defined as three-month averages of sea surface temperature departures from normal for a critical region of the equatorial Pacific (Niño 3.4 region; 120W-170W, 5N-5S). This region of the tropical Pacific contains what scientists call the "equatorial cold tongue," a band of cool water that extends along the equator from the coast of South America to the central Pacific Ocean. Departures from average of sea surface temperatures in this region are critically important in determining major shifts in the pattern of tropical rainfall, which influence the jet streams and patterns of temperature and precipitation around the world.

# NOAA's operational definitions for El Niño and La Niña, based on the index, are:

**El Niño:** A phenomenon in the equatorial Pacific Ocean characterized by a positive sea surface temperature departure from normal (for the 1971-2000 base period) in the Niño 3.4 region greater than or equal in magnitude to 0.5C, averaged over three consecutive months.

**La Niña:** A phenomenon in the equatorial Pacific Ocean characterized by a negative sea surface temperature departure from normal (for the 1971-2000 base period) in the Niño 3.4 region greater than or equal in magnitude to 0.5C, averaged over three consecutive months.

NOAA began using the index and definitions operationally for monitoring and predicting El Niño and La Niña conditions on 1 September 2003. NOAA issues assessments of ENSO's status in the Monthly Climate Diagnostic Bulletin, the ENSO Diagnostic Discussion, and the Weekly ENSO update. Currently, NOAA is engaged in dialogue with the international meteorological community for global acceptance of the index and definitions. All ENSO products are available online at: www.cpc.ncep.noaa.gov. - NOAA Public Affairs

# **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 more complete announcements and job links. Members who do not have Internet capability may request announcements from the NWA office at (434) 296-9966. Employers should send job announcements via e-mail to NatWeaAsoc @aol.com.

THE WEATHER CHANNEL® is seeking outstanding candidates to fill potential future openings for behind-the-scenes meteorologist positions. Necessary attributes include experience with TV weather graphics/animations, leadership ability, and computer expertise. A passion for communicating weather information through graphics, verbally, and/or in writing is desired. Proficiency in weather analysis and forecasting is expected. Optimum qualifications include a Bachelor's degree in Meteorology or equivalent educational background plus at least 3 years full-time operational experience, or a Master's degree plus at least one year of operational forecasting experience. All of the following are also essential: working well in a team environment, strong interpersonal skills, being open to change, creative thinking, self-initiative, attentiveness to detail, flexibility, and the ability to focus on customer needs and meet critical deadlines. Weekend, night and/or early morning work may be required to help support our 24 hour a day, 7 day a week operation. The Weather Channel's forecasts and other weather information are now received by consumers via numerous distribution platforms. The meteorological staff now numbers well over 100 including several top experts in the field. If you'd like to join our team, please send your resume to: Kathy Strebe, Director, Operational Weather Graphics, The Weather Channel, 300 Interstate North Parkway, Atlanta, GA 30339. No phone calls please. EOE.

WORLD WEATHERWATCH is a Toronto based weather forecasting company, that has been providing specialized weather forecasts for industry, media and government for the past 20 years. Successful candidates will have a B.Sc. in Meteorology and 1-2 years experience. Some entry level and seasonal positions are available. Strong verbal and written communication skills are required. The positions require shift rotation covering 24 hours a day, 7 days per week. The ability to work under pressure and meet critical deadlines is important. An excellent opportunity to get diversified experience in weather forecasting. The Company offers a competitive salary, which includes complete medical and dental coverage. Interested candidates should send their resume along with three references to: World Weatherwatch, Attn: Mory Hirt, 401 Bentley Street, Markham, Ontario, L3R Canada 9T2. E-mail: Mory@worldwx.com or Fax: 905-477-9404.

#### JOB CORNER Continued

METEORLOGIX, LLC is now accepting applications for its Forecast Operations Division in Lexington, MA. The Forecast Division is a 24 x 7, state of the art forecasting team that utilizes its own pioneering, in-house technology to create custom forecasts and graphics for its vast client base. The primary focus of the forecast operation is geared toward the Energy industry, however other industries such as agriculture and transportation are also serviced. A Bachelor's degree in Meteorology or Atmospheric Sciences is essential in applying. Successful applicants must display keen synoptic analysis and forecasting skills. Excellent computer skills are also essential. Rotating shift-work is a requirement for this position. Meteorlogix offers excellent benefits including health/dental insurance plans, life and disability insurance, and a 401(k) plan. To be considered for this position, please send your detailed resume to: Meteorlogix, LLC, Attn: Human Resources, 11400 Rupp Drive, Burnsville, MN 55337-1279, Fax: (952) 882-4453 email: abby.Siemers@meteorlogix.com.

3D RESEARCH CORPORATION has immediate openings for weather forecaster at Fort Huachuca, AZ. Applicants MUST meet the following criteria: Been previously granted security clearance (SECRET); be able to re-locate; willingness to work shift work; be familiar with quality control standards, safety management programs, and training programs; have a minimum of 3 years of forecasting experience in support of DOD, AF, Navy, Marines, or Army operations; have a minimum of 2 years experience in the operation and interpretation of NEXRAD and associated products; have at least 2 years of manual observing experience; be able to operate meteorological communications equipment. Please include the following information on your resume: Locations of weather training; locations of experience; date of availability; dates of previous security clearance; current address, phone number, and e-mail address. 3D Research provides competitive wages, retirement and 401k plans. Please send all resumes or inquiries to the following point of contact: Rocco Calaci, 923 Holbrook Circle, Fort Walton Beach, FL 32547; e-mail: rjsm99@cox.net AND djwhite45@cox.net.

#### NATIONAL WEATHER ASSOCIATION

1697 CAPRI WAY CHARLOTTESVILLE VA 22911-3534

#### NWA Newsletter (ISSN 0271-1044)

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**Submit newsletter items directly to**: Editor NWA Newsletter, Frank Brody at **NewsletterNWA@earthlink.net** or to the NWA office. Material received by the 5th will be considered for that month's issue. If submissions are not received, the Newsletter may be delayed.

Members receive the monthly NWA Newsletter and quarterly *National Weather Digest* as part of their regular, student or corporate membership privileges. Newsletter subscriptions are available at \$18.00 per year plus extra shipping costs outside USA. Single copies are \$1.50.

Contact the NWA Executive Director's office (listed above) with **address changes** by phone, regular mail or e-mail.

#### IMPORTANT DATES AND EVENTS

18-23 October 2003 – NWA 28th Annual Meeting

1 November 2003 – Southern New England Weather Conf.

**5-6 December 2003** – Second Conference on Weather Analysis and Forecasting Issues in the Central United States

16-18 January 2004 – Southeast Severe Storm Symposium

**3-5 June 2004** – World Conference on Broadcast Meteorology

**14-17 June 2004** – Symposium on the 50<sup>th</sup> Anniversary of NWP

Please see **MEETINGS** on page 6 for additional dates and information.

Also check www.nwas.org/meetings/meetings.html and - www.nwas.org/awardsgrants.html

Join the NWA to support and promote excellence in operational meteorology and related activities.

Contact the NWA office or view the Web site for membership information.