

PRESIDENT'S MESSAGE

Can you believe it? *On 16 April 2002, several tornadoes sliced through parts of North Texas, including the Dallas/Fort Worth Metroplex, leveling homes, trees and power lines. No deaths were reported, extending the period the nation has gone into any year without a tornado related death since record keeping began in 1950.*

That is terrific news and I wish I could find the same information regarding *lightning*, but deaths have already occurred this year. For example, *on 19 February 2002, a man in the Ozark National Forest was killed while standing in the back of a truck unloading firewood.*

With the 2nd Annual **Lightning Safety Awareness Week** coming up on **28 April to 4 May**, I asked NWA member and frequent annual meeting presenter, Bill Roeder of the Air Force's 45th Weather Squadron at Patrick Air Force Base in Florida, to write about one of his favorite topics. I think you will find his information extremely useful and worthy to share with others, not only during Lightning Safety Awareness Week, but year round! Bill writes:

Call To Action! NWA members and all meteorologists and those in related fields should concentrate more effort on lightning safety. This is the area of weather safety where the largest improvement can be achieved most cost-effectively. Given the significant impact and relative low cost, we call on all NWA members to conduct lightning safety education. This is especially true for broadcasters and others in the media, who can reach large audiences.

Insights into lightning safety can be gleaned from the physics of lightning, lightning climatology, lightning casualty demographics, and the medical aspects of lightning. The NWA and AMS are reviewing proposals for lightning safety policy statements, which will briefly review each of these aspects of lightning and lightning safety lessons. Help for lightning survivors will also be briefly discussed.

Lightning safety involves several levels of safety that anyone can accomplish. The most important statement for everyone to understand, memorize and to act on is: **NO PLACE OUTSIDE IS SAFE from lightning NEAR THUNDERSTORMS!**

Level-1: Plan your activities around the weather to avoid the lightning strike hazard. If you are going to be outside, know the weather forecast beforehand. Know the local weather patterns.

Level-2: While outside, use the '**30-30 Rule**' to know when to seek a safer location.

- When you see lightning, count the time until you hear thunder. If this time is **30 seconds** or less, go to a safer place. If you can't see the lightning, just hearing the thunder is a good back up rule to use to take cover.
- Wait **30 minutes** or more after hearing the last thunder before leaving the safer location.
- The '30-30 Rule' will not work well for "first-strike" lightning from locally developing thunderstorms. Watch for brewing convection and seek shelter before the first lightning is produced.

Level-3: Go to a safer location when required. Don't hesitate; go to a safer place immediately! The safest place commonly available is a large fully enclosed substantially constructed building, e.g., a typical house. Once inside, stay away from any electrical conducting path from the outside, e.g., corded telephones, electrical appliances, and plumbing. If you can't get to a substantial building, a vehicle with a solid metal roof and metal sides is a reasonable second choice. Avoid contact with conducting paths going outside. Convertibles and open-framed vehicles **do not** count as lightning shelters.

Level-4: If you can't get to a safer location, avoid the most dangerous locations and activities. Avoid higher elevations, wide-open areas, tall isolated objects, water-related activities, and open vehicles. Avoid unprotected open structures like picnic pavilions, rain shelters, and bus stops. **DO NOT GO UNDER TREES TO KEEP DRY DURING THUNDERSTORMS!**

Level-5: **USE THIS ONLY AS A DESPERATE LAST RESORT!** If you are outside and far away from a safer place, proceed to the safest location. If lightning is imminent, it will often give a few seconds of warning: hair standing up, tingling skin, light metal objects vibrating, seeing corona discharge, and/or hearing a crackling or "kee-kee" sound. If you are in a group, spread out so there are several body lengths between each person. Once spread out, use the lightning crouch — put your feet together, squat down, tuck your head, and cover your ears.

When the immediate threat of lightning has passed, continue heading to the safest place possible. Remember, this is a desperate last resort; you are much safer following the previous guidance and avoiding this high-risk situation.

Level-6: The first step in lightning first aid is to call 911. All deaths from lightning are from cardiac arrest or stopped breathing at the time of the strike. CPR or mouth-to-mouth-resuscitation is the recommended first aid.

No lightning safety guidelines will give 100% guaranteed total safety, but these steps will help you avoid the vast majority of lightning casualties.

Lightning is THE underrated weather hazard. Fortunately, the vast majority of these casualties can be easily avoided. Public education is the key! This is one topic where all NWA members can have a cost-effective and large impact in improving weather safety in the U.S. **Please help proactively — engage the public in lightning safety education every chance you get.**

Please see further information on lightning on the NWA Web site (www.nwas.org). A special section has been set up by our volunteer committee members and webmasters on the Meteorology and Science Links page. Thanks to Bill Roeder for this column and for his many briefings on lightning throughout Florida and at many other locations in the US. He is also organizing a session on lightning for the Annual Meeting in October.

- John McLaughlin
johnmc49@ecity.net

GRANTS for K-12 Teachers

The NWA Education Committee needs help from all members to spread the word to teachers in grades K-12 that \$500 grants are available annually. The annual Sol Hirsch NWA Education Fund Grants are available to help teachers improve the education of their students in meteorology. The teachers selected will be able to use the funds to take an accredited course in atmospheric sciences, attend a relevant workshop or conference, or purchase scientific materials or equipment for the classroom. Three grants or more are possible in 2002 thanks to the many members who have contributed to this fund in honor of Sol Hirsch who retired in 1992 after being the NWA Executive Director for 11 years.

Applications can be obtained from the:

NWA Education Committee

P.O. Box 15011

Baltimore, MD 21282-5011

or from the NWA office or Web site (www.nwas.org).

Completed applications are due to the NWA Education Committee by 1 August 2002.

METEOROLOGICAL SATELLITE APPLICATIONS AWARD/GRANT for Undergraduates

The Meteorological Satellite Applications Award has been established by the National Weather Association (NWA) to stimulate interest and foster the study and use of satellite remote sensing data in weather forecasting. *Undergraduate students* are invited to write an original paper on meteorological satellite applications. Themes of the papers may include original research, case studies, or a survey of applications. The recipient of the award will receive *a stipend of \$500* and be invited to present their paper at the NWA Annual Meeting which will be held in Fort Worth, Texas, 19-25 October 2002.

The student must be enrolled as an undergraduate at the time the paper is written and be in good academic standing at the college or university he/she is attending. The student must be a U.S. citizen or hold permanent resident status.

SUBMISSION DEADLINE: 15 JUNE 2002

Submission of Papers: Student papers should not exceed ten (10) pages including photographs and appendices. Candidates should send:

- an **original** and **three** copies of their paper
- a letter of application from the author with the paper title, university affiliation and contact information including mailing address, phone, fax, and e-mail if available
- a letter from the Department Head or other faculty member that confirms that the student was an undergraduate when the paper was written and that the student is in good academic standing. Additionally this letter should highlight the original research and/or special contributions the student has made to this paper.

Submissions should be sent by 15 June 2002 to the National Weather Association, METSAT Award Committee, 1697 Capri Way, Charlottesville, VA 22911-3534. Announcement of the recipient of the award will be made by 1 September 2002.

Pay your annual dues yet?

Overdue notices have been sent to individuals who have not yet renewed their membership for 2002. The NWA Bylaws state, *members shall be considered not in good standing if (dues) payment is not received by mid-May and all voting privileges shall be suspended.*

NWA AWARDS PROGRAM 2002

The National Weather Association began its award program in 1977 to provide deserved recognition to those individuals involved in operational activities and to promote excellence. The Awards Program recognizes the professional as well as the volunteer. The emphasis is on the people who perform the day-to-day jobs of providing meteorological information and weather support services to the public. Names of previous winners and additional award information are available on the NWA Web site (www.nwas.org).

Award Categories are:

- **Operational Achievement Individual Award:** The award is presented to an NWA member who has made a significant contribution to operational meteorology (e.g., an accurate and timely forecast for one or more significant weather events or for long-period achievement).
- **Operational Achievement Group Award:** The award is presented to a group of two or more individuals for a significant contribution to operational meteorology. **At a minimum, a majority of the group (greater than 50%) must be NWA members.**
- **T. Theodore Fujita Research Achievement Award:** This award is presented to an NWA member whose research has made a significant contribution to operational meteorology.
- **Walter J. Bennett Public Service Award:** This award is presented to an individual or organization directly assisting the meteorological community in providing weather-related information to the public. *Individuals and organizations in the meteorological profession are ineligible for this award.*
- **Public Education Award:** This award is presented to an individual or organization providing significant contributions to increase the public's weather awareness.
- **Broadcaster of the Year Award:** This award is presented to an NWA member who is a Radio or Television weathercaster, or other member of the broadcast media, whose activities have significantly contributed to the development and presentation of weather information to the public service.
- **Aviation Meteorology Award:** This award is presented to an individual or group to recognize significant contributions to aviation meteorology such as impact of operational forecasts on aviation operations or advances in aviation meteorology including research in detection and forecasting of aviation hazards.
- **Local Chapter Award:** This award is presented to a Local Chapter of the NWA whose activities have significantly increased awareness of the weather and of the NWA in their local area.

- **The Larry R. Johnson Special Award:** This award is presented to an individual or a group to recognize unique events or extraordinary accomplishments, which significantly contributed to operational meteorology.
- **Member of the Year Award:** is presented to an NWA member in good standing who has made significant contributions to the organization over a period of time.

Narrative nominations (no more than two pages) with additional endorsements should be forwarded by 1 July 2002 to:

**NWA Awards Committee
Andrew Horvitz, Chairperson
1697 Capri Way
Charlottesville VA 22911-3534**

Although there is no rigid time requirement for the awards, the awards committee prefers that the accomplishment, if not on a continuing basis, occur within 18 months prior to the nominations. Please consider the appropriate category in your nomination. Self-nominations will not be accepted. If the nomination is not selected as the winner this year, it will remain valid for two additional years and the nominator(s) may update the submission if they desire. Winners will be honored at the NWA Annual Meeting Awards Luncheon, 23 October 2002, at the Radisson Plaza Hotel in Fort Worth, Texas.

- Andy Horvitz, Awards Committee Chair

LIGHTNING STRIKE AND ELECTRIC SHOCK SURVIVORS, INTERNATIONAL

Dr. Mary Ann Cooper, a Professor at the University of Illinois at Chicago, has submitted two articles on lightning to be published in the *National Weather Digest* due out next month. She mentions that lightning strike victims who survive may have disabilities and these can cause pervasive changes to the victims' families.

She introduces readers to a support group for those who have suffered these types of injuries. LSESSI is a non-profit, 501c(3) organization specifically founded by Steve Marshburn Sr., a survivor of a lightning strike, to provide support for lightning-strike and electric-shock survivors, their families, physicians, and counselors.

Lightning Strike and Electric Shock
Survivors, International, Inc.

P.O. Box 1156

Jacksonville, NC 28541-1156

Phone and FAX: 910-346-4708

e-mail: lightnin@nternet.net

<http://www.lightning-strike.org>

I Had A Terrible Show Last Night...

Have you ever had one of those days at work when you just didn't feel like you were "on"? Or worse, have you been through a slump that lasts a week, a few weeks or a month? You can't get energized about your show and the weather pattern has been tranquil, so there's nothing to get excited about. The graphics seem fine, but they're the same for each weathercast. How about those times when you finish, then wonder if the words you uttered made any sense to the viewers? Or maybe you had trouble just getting the words out and it threw your rhythm completely off. Don't worry, it has happened to everyone who has spent any time in the weather broadcasting business, and it will happen again.

We all have good times when each show seems better and we actually look forward to going to work. Times are great when the story flows from our lips like it was being told by Mark Twain, full of energy and passion and with good information. Then, like a bolt from the blue, one day it comes crashing down and we look back, wondering what just happened. It's a natural cycle. We can't always be in top form. Even Michael Jordan had bad games during his years with the national champion Chicago Bulls and now with the Wizards. However, we are still impressed with his actions and in knowing he still has the potential to soar again.

In any given newscast, you may think you had a lousy show, but the viewers likely didn't notice and they probably still enjoyed your personality and graphics, and will even trust your forecast. So, like Michael, you need to forget the bad performance and get ready for the next game. The next time you're on the air is a chance to smooth out your presentation, or to at least get your energy up so you can show a sincere smile when you're looking into the camera.

However, it may be more than a mental thing. It may well be that you need to try some new graphics and change your routine a little. Sometimes I try something as simple as tweaking my satellite and radar color tables to see if new combinations will look better. It's kind of like a new coat of paint on the same old walls. The fresh look can make a world of difference. Or, change the basemaps you use under the satellite, radar and forecast maps. Since summer storms are associated primarily with short-lived systems, I will use tighter satellite and radar maps, whereas in the winter I do just the opposite. These may seem like small changes, but quite often that's all it takes to get you out of a slump and feeling good about your on-air performance.

Send your thoughts on improving weather broadcasts to me at skyeeye@fuse.net

- Rich Apuzzo, *Broadcast Meteorology Committee Chair*

• **Mesonet 2002 Institute 23-26 June 2002, Oklahoma City, Oklahoma.** In recent years, many states and countries have contacted the Oklahoma Mesonet for advice and information on how to run a successful Mesonet. This year, the OK Mesonet leaders are inviting all interested to come to Oklahoma City for Mesonet 2002: An International Institute Presented by the Oklahoma Mesonet. It will feature the experiences, programs and strategies from the Oklahoma Mesonet's 15-year run from drawing board to internationally-recognized network, as well as those success stories from several other Mesonets. The Oklahoma Mesonet's leadership at Oklahoma State University and the University of Oklahoma invite all interested parties to attend. For more information, please visit Web site: www.mesonet.org

• **The 2002 Southwest Weather Symposium will be held at the Monte Carlo Hotel and Casino in Las Vegas, Nevada on 4-5 September 2002.** The purpose of the Southwest Weather Symposium is to bring together operational forecasters, academic professors, researchers and climatologists interested in the weather and climate of the southwestern U. S. and northwestern Mexico. Symposium sessions will include presentations on the following topics:

- Applications of Multiscale Numerical Models to Forecasting
- Climatology of the North American Monsoon Circulation
- Quantitative Precipitation Monitoring and Forecasting
- Low-Level Moisture Surges from the Gulf of California
- Severe Thunderstorm and/or Flash Flood Forecasting
- Hydrological Applications to Forecasting
- Remote Sensing Applications
- Winter Weather Forecasting
- Fire Weather Forecasting

The two-day symposium will include several invited speakers, oral and poster presentations, and open discussions. **Abstracts for poster or oral presentation should be submitted no later than 1 July 2002 via the symposium web page at:**

<http://www.wrh.noaa.gov/lasvegas/swws.shtml>

• **The Sixth Annual Great Divide Workshop will be held 10-12 September 2002 in Great Falls, Montana,** hosted by the National Weather Service in Great Falls, Montana.. The workshop will begin at 1 p.m. on September 10 and conclude at 11 a.m. on September 12, allowing for travel the morning of the 10th and the afternoon of the 12th. The Great Divide Workshop provides a forum for participants to share information and to discuss ideas involving new tools and techniques for providing weather forecasts for the Inter-mountain West and Western High Plains, across the U.S. and Canada. In addition to formal presentations, time will be reserved for poster sessions. A distinguished group of invited speakers will be participating, and there will be an evening banquet. This year's workshop will be held at the Town House Inn (telephone 1-800-442-4667). Town House Inn offers a shuttle service to and from the airport and is located within walking distance of a variety of restaurants and a shopping mall. A block of rooms has been secured for the workshop. Please mention the National Weather Service when making your room reservation. Additional information and registration forms for the workshop are available on the Internet at: <http://www.wrh.noaa.gov/Greatfalls>.

All participants are asked to provide a presentation topic no later than 1 July 2002, and a short abstract no later than 1 August 2002 for inclusion into a workshop preprint. Topics and abstracts may be e-mailed to gina.loss@noaa.gov. They may be mailed to: Weather Forecast Office, 5324 Tri-Hill Frontage RD, Great Falls, MT 59404-4933, Attn: Gina Loss. For questions, please contact Gina Loss: Telephone: 406-453-2081; Fax: 406-453-3812

• **Air Weather Association Reunion will be held in Dayton, Ohio, 18-22 September 2002** along with the Air Weather Reconnaissance Association and other Air Force Weather alumni associations. The reunion hotel will be the Dayton Marriott Hotel. Activities will include tours of the Air Force Museum at Wright-Patterson AFB and banquets. It will conclude with Brunch at the hotel on Sunday morning, 22 September. For more information see Web site: <http://www.airweaassn.org> or e-mail: AirWeaAssn@aol.com.

• **Mid-Atlantic States Winter Storms Regional Conference 3-5 October 2002.** The AMS Board for Operational Government Meteorologists, D-C AMS Chapter, AMS Board of Private Sector Meteorology, and the NWA Weather Analysis and Forecasting Committee are co-sponsoring an operations- and community-focused regional conference on Mid-Atlantic States Winter Storms to be held in the NOAA Auditorium and Science Center, Silver Spring, Maryland, on 3-5 October 2002. The NOAA Auditorium and Science Center is adjacent to the National Weather Service Headquarters. The theme of the conference is "Improving Mid-Atlantic Winter Storm Forecasts, Warnings and Decision Making." Invited papers will be presented on: Operational Forecasting Techniques and Procedures; Emerging Research and Operational Applications; Communicating and Using Uncertainty; Community Interaction; and Public Awareness and Education. For more information or to provide suggestions to enhance this conference, please contact Major Ken Carey, Air Force Studies and Analyses Agency, 1570 Air Force Pentagon, Washington DC 20330-1570; Kenneth.Carey@pentagon.af.mil or see Web site: www.dc-ams.org.

• **Sixth Annual High Plains Conference will be held in Dodge City, Kansas, 9-11 October 2002** sponsored by the High Plains Chapters of the NWA and AMS. The conference theme will be fairly broad. The major emphasis will be on severe storms in the plains with mini sessions on aviation forecasting, winter storms, and a special session for storm chasers, spotters and emergency managers. For the latest information, please check Web site:

<http://www.crh.noaa.gov/lbf/hpams/main.htm>

More on the NWA Annual Meeting: For information on exhibits, accommodations, registration and the overall meeting program, please contact the NWA office at Tel/FAX: (434) 296-9966 or e-mail: NatWeaAsoc@aol.com.

Attendees interested in playing golf on Saturday before the meeting begins, please contact the NWA office at Tel/FAX: (434) 296-9966 or e-mail: NatWeaAsoc@aol.com.

Next NWA Annual Meeting — 19-25 October, Fort Worth TX

Call for Abstracts

The National Weather Association's 27th Annual Meeting will be held at the Radisson Plaza Hotel, 815 Main Street, Fort Worth, Texas 76102, 19-25 October 2002. The Theme is *Building Partnerships to Meet the Challenges of 21st Century Weather*.

The Annual Meeting will include:

19-20 October: WEATHER BROADCASTER WORKSHOPS beginning Saturday afternoon and continuing all-day Sunday will include special presentations, exhibits and hands-on workshops appropriate to continuing education for weathercasters, but open to all interested. The annual TAPE SWAP will be on Sunday evening. A separate TAPE SWAP for mentoring students is being considered for Saturday evening.

21-25 October: ANNUAL MEETING GENERAL SESSIONS will include a mix of formal presentations, poster sessions, training workshops, and exhibits on a wide variety of topics relating to OPERATIONAL meteorology, hydrology, weather broadcasting, new research applications, and related activities.

The Annual Meeting Program Chairperson is Michael Vescio, National Weather Service Forecast Office, Fort Worth, Texas e-mail: Michael.Vescio@noaa.gov. The broadcaster workshop program chair is Dan Threlkeld of KFOR-TV in Oklahoma City, e-mail: ilikeweather@yahoo.com.

ABSTRACT SUBMISSION: The deadline for submission of abstracts is 1 June 2002. Abstracts can be sent via e-mail to the Program Chairperson at Michael.Vescio@noaa.gov. Please write "NWA Abstract" in the subject box. The abstract may be included within the body of the e-mail or as a WordPerfect or Microsoft Word attachment. Please include the following information in the e-mail message: full abstract title, author(s) name(s) and affiliation(s)/address(es) [designate which author(s) will be giving the presentation and whether poster or oral presentation is preferred], audio/visual requirements including software (e.g., PowerPoint, Corel, Internet access) and equipment (e.g., laptop, PC, overhead projector), and list the primary contact with their phone number and e-mail address.

ABSTRACTS may also be sent via an Internet online form on the NWA Web site: www.nwas.org/2002abstracts.html. Simply fill out the form in its entirety (you may cut-and-paste your abstract from your word processor into the form), and click on the "Submit Query" button at the bottom of the form.

If you are unable to submit your abstract via e-mail or the online form, please contact Mike Vescio or the NWA office. Presenters will be notified regarding the disposition of their abstracts by 15 August 2002.

NWA ANNUAL MEETING HOTEL INFORMATION: The Radisson Plaza Hotel is in downtown Fort Worth. The NWA discount rates are \$94 for a single room and \$114 for a double room. Please call Radisson Central Reservations at 1-800-333-3333 or the Reservations Department of the Radisson Plaza Fort Worth at 817-870-2100 and request the National Weather Association 27th Annual Meeting group rate.

- Mike Vescio, Program Committee Chair

AWIPS SYMPOSIUM

An AMS and NWA Partnership Success by Ken Carey

In recent years two professional organizations--the American Meteorological Society (AMS) and National Weather Association (NWA)--have worked to support operational meteorologists. In January 2002, at the 82nd AMS Annual Meeting in Orlando, these two organizations worked closely together to successfully achieve another milestone together toward meeting this common goal.

Members of the AMS and NWA teamed up to plan, publicize, and conduct a symposium on the Advanced Weather Interactive Processing System (AWIPS) for 13-17 January 2002 at the AMS annual meeting.

This symposium could not have happened without the participation of the NWA. In many respects, the collaboration with NWA was an obvious thing to do. Its mission to support and promote excellence in operational meteorology is one of the implied goals of the AWIPS Symposium. And since many AMS members are operational meteorologists and also members of the NWA, this partnership was natural. From the very beginning both AMS and NWA members and senior management were involved and supportive. The AWIPS Symposium program committee was deliberately a balanced mix of AMS and NWA members.

We sought input from NWA members in developing the call for papers. In addition, the symposium was publicized and marketed aggressively by rank and file of both the NWA and AMS via newsletters; AMS and NWA Internet web sites; AMS, NWS, and NWA e-mail distributions; and, last but not least, word of mouth. The organizers pursued presentations from operational meteorologists, including members of the NWA. For example, James Hayes presented "Applying D3D in an Operational Environment" that demonstrated the new visualization package and its role in diagnosing model forecasts as an integral component of AWIPS. In an education and training joint session, Elizabeth Page demonstrated an innovative new means of archiving of AWIPS data in NWS offices. Session chairs were carefully chosen to reflect both AMS and NWA involvement. For example, Alan Gerard demonstrated tremendous leadership of a key joint session on "Using the Internet to Enhance Product Delivery and Decision Making."

The concept for the AWIPS Symposium was originally proposed by Daniel McCarthy of the AMS Board for Operational Government Meteorologists (BOGM). Dan also is a very active NWA member. Ultimately, nearly every member of the BOGM played a key role in fulfilling Dan's vision to have an operationally focused venue to showcase AWIPS capabilities. The symposium aimed to be a forum for the exchange of status, plans, and concepts for AWIPS in operational use; increase communication and collaboration among operational users of AWIPS and

the hydrometeorological community; and demonstrate AWIPS capabilities.

It was also very clear, from the beginning, that several other organizations and AMS committees would be crucial for the symposium's success. The AMS Committee on Interactive Information and Processing Systems played a big role. Given that AWIPS is the centerpiece of the NWS modernization, it is not surprising that the NWS was absolutely critical to formulating and deploying the hardware and software deployment plan, developing sessions, and ensuring presenters focused on the operational capabilities of AWIPS. We were also very thankful for the vast experience and expertise that AMS Weather Analysis and Forecast Committee brought to our AWIPS Symposium program committee.

The BOGM is seeking to replicate this close cooperation in other initiatives with the NWA. The AMS, NWA Weather Analysis and Forecasting Committee, and District of Columbia Local AMS Chapter are jointly sponsoring a 2 ½ day conference on Mid-Atlantic Winter Storms on 3-5 October 2002. Check out the NWA and AMS Web sites for details. Other initiatives include jointly participating in operationally-oriented publications, such as the NWA-sponsored *Electronic Journal for Operational Meteorology*; convening regional conferences and workshops; encouraging combined AMS and NWA local chapter meetings (and other collaborations between local chapters of the two organizations); and developing short articles in the new BAMS that focus on forecast challenges and unusual weather events.

As chair of BOGM, I want to thank the numerous AMS and NWA members for their hard work in achieving the AWIPS symposium, which should result in improved operationally oriented products and services. A similar article to this was printed in the January 2002 *Bull. Amer. Meteor. Soc.* Please visit Web site: www.ametsoc.org/ams/boardpages/bogm/ to find out more information and to review other joint operational initiatives between the AMS and NWA. You can contact me at (703) 588-8628 or Kenneth.Carey@pentagon.af.mil.

NASA Research News

NASA Pinpoints Where Rain Comes From and Where it Goes

A new NASA computer model can now tell exactly where in the world rain or snow that provides local water originated. Scientists can use this "water vapor tracer" to improve rainfall and drought forecasts and gain a deeper understanding of climate change. The model simulates water movement in the atmosphere around the world, and traces it from the places where it evaporates to the places where it falls back to Earth. By identifying water vapor movement in the atmosphere, weather forecasters will

better understand how evaporation from a particular place contributes to local and regional precipitation, leading to more accurate weather forecasts. The model can actually pinpoint individual regional sources of atmospheric moisture, rather than combining them.

According to NASA, if scientists can understand how geographic sources of atmospheric moisture fluctuate from year to year, they also will have a clearer picture of how climate changes in the long term.

The work is supported by grants from the joint NASA-NOAA Warm Season Precipitation Initiative and NASA's Earth Science Enterprise. Additional information: www.gsfc.nasa.gov/topstory/20020401watervapor.html.

- NASA / Goddard Public Affairs

HURRICANE AWARENESS WEEK 19 - 25 MAY 2002

Max Mayfield, the Director of the National Hurricane Center and a NWA charter member says,

"We act not on history,
but our perception of history."

History teaches that hurricane disasters have occurred in the past and will again in the future. A lack of hurricane education and planning are common threads among all major hurricane disasters. By knowing your vulnerability and what actions you should take, you can reduce the effects of a hurricane disaster.

The goal of the **NHC Hurricane Awareness Web site** you can find at <http://www.nhc.noaa.gov/> is to educate the public about the hazards of hurricanes and provide them with knowledge, which can be used to take ACTION.

Hurricane hazards come in many forms: storm surge, high winds, tornadoes, and flooding. Unless you live in a coastal or low-lying area, an area that floods frequently or in manufactured housing, it is unlikely that emergency managers will ask you to evacuate. That means that it is important for you and your family to have a plan that makes you as safe as possible in your home. [Red Cross offices also have brochures to help families plan ahead.]

So please start planning well before the birth of the twelve Atlantic storms expected for the June through November 2002 season by Dr. Gray et al.

Names will be:

Arthur, Bertha, Cristobal, Dolly, Edouard, Fay, Gustav, Hanna, Isidore, Josephine, Kyle and Lili, and hopefully not needed -- Marco, Nana, Omar, Paloma, Rene, Sally, Teddy, Vicky and Wilfred.

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.

THE WEATHER CHANNEL

Consultation / Graphics Meteorologist

Location: Atlanta, GA

Duties: Provide meteorological consultation, graphics and advanced animations that meet quality design and meteorological standards using all relevant meteorological and presentation systems and subsystems. Proactively utilize systems, software, and existing data and graphics to create unique graphics and animations that enhance the ability to cover a weather situation in the most pertinent and relevant manner. Recommend and implement improvements to products and processes. Prepare, communicate, and document all procedures and changes. Assist in system support and training. Main purpose of product development is for The Weather Channel core product, but leveraging of these products in other formats for other media outlets is also a requirement.

Qualifications: Bachelors Degree in Meteorology or equivalent educational background. At least 3 years of full-time operational experience or a Masters Degree in Meteorology plus at least 1 year operational experience desired. For skills required, please see NWA Web site.

Contact Information: Apply online at: <http://www.weather.com/jobs> -- or by mail to: HR / Re: Meteorology Jobs, The Weather Channel, 300 Interstate North Parkway, Atlanta, GA 30339

THE WEATHER CHANNEL

Climate Program Manager

Location: Atlanta, GA

Duties: Serving as a climate expert on The Weather Channel video network and for other business units as appropriate. Working with The Weather Channel departments in climate-related efforts. Coordinating meteorological continuing education initiatives. Speaking engagements; availability for interviews by other media; liaison with academic and government sectors. Staying abreast of latest developments in climate and related sciences; doing research and publishing is encouraged as time allows.

Qualifications: Distinguished in field; Ph.D. in atmospheric or related science; teaching experience; experience in developing seasonal outlooks is a plus. For skills required, please see NWA Web site.

Contact Information: Apply online at: <http://www.weather.com/jobs> -- or by mail to: HR / Re: Climate Program, The Weather Channel, 300 Interstate North Parkway, Atlanta, GA 30339

WEATHER SERVICES INTERNATIONAL (WSI)

Scientific Programmer

Location: Billerica, MA

Duties: Join the WSI Forecasting Systems Engineering group and help develop WSI's global weather forecasting system -- a model that generates weather forecasts that are of vital importance to customers and consumers around the world. This position involves working with WSI senior scientists to develop new scientific algorithms, to improve upon WSI's existing algorithms and to implement these algorithms in C++. You will also analyze the forecasting system output, identify potential problems or areas for improved forecasting accuracy, and devise and evaluate potential solutions to these problems.

Qualifications: Specific requirements are 2+ years of experience with C/C++, a background, or strong interest in Meteorology or related field, experience developing scientific algorithms, and using software tools to analyze numerical output. Experience with Perl, Python, Fortran 90,

NetCDF and/or Statistical Analysis would a plus. WSI develops and delivers data and software solutions to media, transportation, energy, and Internet companies whose businesses are weather reliant. The company employs 180 individuals, many of whom have meteorological backgrounds (including Ph.D. level). WSI is a wholly-owned subsidiary of Landmark, Corp.

Contact Information: Interested candidates, please send your resume and salary requirements to: WSI Human Resources, Attn: Holly Heretz 900 Technology Park Drive, Billerica, MA 01821-4167
Fax: 978-262-0700; e-mail: hheretz@wsi.com

University of North Dakota
Assistant/Associate Professor

Location: Grand Forks, ND

Description: The University of North Dakota is seeking qualified applicants for a tenure-track faculty position within the Department of Atmospheric Sciences. This faculty member will be expected to teach courses at the graduate and undergraduate levels, maintain a program of externally-funded research and direct graduate student research. A Ph.D. in atmospheric sciences or a related discipline is required, along with a proven record of publication and external funding. Demonstrated expertise in teaching is highly desirable. This position will be filled at the Assistant/Associate Professor level, depending on qualifications. Faculty expertise is in the areas of cloud microphysics, weather modification, numerical weather prediction, convective dynamics, objective analysis, hydrometeorology, statistics, instrumentation, weather forecasting, weather radar, surface transportation weather, aviation meteorology, and atmospheric turbulence. Facilities include a Cessna Citation jet aircraft, owned and operated by UND for weather research and a 5-cm wavelength Doppler weather radar. The program is affiliated with the University's Regional Weather Information Center and cooperative programs are ongoing with the NWS Forecast Office in Grand Forks. A review of applications will begin 1 May and the position will remain open until filled. Salary will be commensurate with experience.

Contact Information: Please send a curriculum vitae, statement of professional goals and the names and addresses of at least three professional references to: Prof. Michael Poellot, Chair of Search Committee, Department of Atmospheric Sciences, P.O. Box 9006, Grand Forks, ND 58202-9006; fax: 701-777-5032; e-mail: poellot@aero.und.edu.

NWA Newsletter (ISSN 0271-1044)

Editors: Frank Brody, Larry Burch and Eli Jacks
Publisher: Kevin Lavin, Executive Director
Published monthly by the National Weather Association (NWA), 1697 Capri Way, Charlottesville, VA (USA) 22911-3534
Tel/FAX: (434) 296-9966; e-mail: NatWeaAsoc@aol.com
Web site: www.nwas.org

Submit newsletter items directly to: Editor NWA Newsletter, Frank Brody at NewsletterNWA@aol.com; Eli Jacks at Elliott.Jacks@noaa.gov; Larry Burch at Larry.Burch@noaa.gov 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.

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IMPORTANT DATES AND EVENTS

28 April - 4 May — National Lightning Safety Awareness Week. See: www.lightningsafety.noaa.gov and www.nwas.org

19 - 25 May — National Hurricane Awareness Week (pg 7).

1 June — **Abstracts due for NWA Annual Meeting (pg 5).**

15 June — Nominations due for the NWA METSAT Award and Grant (pg 2).

1 July — **NWA Annual Award nominations due (pg 3).**

1 August — Sol Hirsch NWA Education Fund Grant nominations for K-12 teachers due (pg 2).

19 - 25 October — **27th Annual NWA Meeting, Radisson Plaza Hotel, Fort Worth, Texas. See page 5.**

NATIONAL WEATHER ASSOCIATION

1697 CAPRI WAY
CHARLOTTESVILLE VA 22911-3534