NWA NEWSLETTER
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PRESIDENT'S MESSAGE

by Bill Read
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Q: Is it all that important for meteorologists in operational positions to conduct applied research?

A: A simple answer would be — yes! As a cursory study of the early history of forecasting will show, most of the advances had a genesis from work done by someone responsible for providing a forecast. Also, prior to the middle of the last century, there were not nearly as many universities and no major laboratories concentrating on applied meteorological research. This question was rather vigorously debated among forecasters when I was working as a shift forecaster in San Antonio during the late 1970s. One school of thought considered the responsibility for research resided in the Universities and research laboratories, because those meteorologists had the education, skills and resources needed to do research. The other school proposed that significant value could be added by having the people doing the work in the field advance the science, the reason being that valuable experiential knowledge would go into the research.

It was my great fortune at that time to have worked with a cadre of meteorologists who were inclined to advance our knowledge of operational meteorology with a perspective from the field — close to the users. Folks such as Gary Grice, Jimmy Don Ward, Alan Johnson, and Bob Maddox instilled in others and myself the value of examining weather events for which, at that time, we had minimal skill in forecasting. Back then, our research focus was on larger scale aspects of mesoscale weather events, including, for example, the diurnal variation in rainfall associated with decaying tropical cyclones, short term QPF, and forecasting MCC's.

Geostationary satellite imagery was rather new then and provided an almost limitless array of case studies to investigate. Many offices produced detailed synoptic climatologies of significant weather in their area. The results of that work brought significant improvements in short term forecasting at the local level.

Moreover, operational research has matured over the past 25 years. Operational and research meteorologists are often collaborating on research issues facing field forecasters. The implementation of the WSR-88D network provides a mother lode of work on smaller scale aspects of local mesoscale weather problems. More powerful workstations, which are capable of analyzing finer scale data sets, will continue to provide a plethora of new avenues to be explored. The Internet and high bandwidth communication technologies have opened up ways of better communicating forecast information — such as graphics — not available as recently as a few years ago. Those of us in operational meteorology must study how to best use these new technologies to improve service to customers.

It should not be a surprise then to have as one of our top priority elements in the NWA Strategic Plan, *"Maintain organizational focus on promoting new forecasting techniques and technology."* This element serves as a reminder of why the NWA exists and to keep us advancing the science and weather support services through our conferences and publications, including our Web site. In learning how to do on-station research, we also learned how to present it to others in the profession. A significant spin-off of the institutionalizing of research by operational meteorologists has been the evolution of the NWA Annual Meeting and more recently regional meetings and workshops where the bulk of presentations and poster sessions were focused on new study results. This year the NWA is either sponsoring or co-sponsoring ten of these more regional or topical conferences. A significant proportion of the people organizing the conferences are operational meteorologists. I view the growth of these meetings with increased participation by the membership as a primary means of implementing this strategic plan element. It is also great to see more cooperation between Universities, research labs and operational forecasting offices so that end-user requirements are considered and research is applied to operations as quickly as possible.

Our Annual Meeting will be in Jacksonville, Florida from 18-23 October. Program co-chairs Pat Welsh, NWS Jacksonville, and Dick Bagby, Embry-Riddle Aeronautical University, Daytona Beach, are off to a great start in organizing our meeting. I encourage all of you to consider sharing your cutting edge work with others this year. Please see articles in this newsletter and on our Web site (www.nwas.org) for details on submitting abstracts.

I am also happy to announce a new scholarship opportunity honoring a charter member and using the funds obtained from last year's annual meeting golf tournament and raffle (see page 3).

GOES-9 and GOES 12 Activate

GMS-5, the Japanese Meteorological Agency's (JMA) geostationary meteorological satellite located at 140E longitude has provided imagery over Japan, the West Pacific Ocean, Australia, and eastern Asia since its launch in 1995, but its orbit has been steadily deteriorating over the past two years. As a result of an agreement between NOAA/NESDIS and JMA, **GMS-5 will be replaced by NOAA's GOES-9 satellite on 26 April 2003. GOES-9 will be at 155E.**

Imaging is expected to begin on or about 16 April 2003, with normal navigation expected after 3 days as the spacecraft drifts westward at about 0.7 deg/day. GOES-9 will reach 155E on or about 26 April 2003, followed by operational transmission of images through GMS-5. GMS WEFAX sectors will originate from GOES-9 at a date to be determined, and users should not have to make any changes to their current configuration to receive the data through GMS-5. WEFAX users in the United States will receive sectors from GOES-9 as a one-to-one replacement of GMS-5 sectors. Imagery will also be available for CONUS users via both GVAR for direct readout, and from DOMSAT. Currently planned schedules and sectors are available at the NOAA/NESDIS Satellite Services Division (SSD) Web site at:

www.ssd.noaa.gov/PS/SATS/GOES/NINE/sched.html

The GOES-9 Sounder will also be turned on and operated in an experimental mode only. Three separate scan areas will be used, which are also described at the SSD Web site above. Images and products will be available from the University of Wisconsin-Madison Cooperative Institute for Meteorological Satellite Studies Web site at:

cimss.ssec.wisc.edu/goes/realtime/realtime.html

GOES-12 is scheduled to become the operational GOES-East for imaging/sounding at 1815Z 1 April 2003. GOES-12 will take over from GOES-8, which has been doing great work since its launch on 13 April 1994 — over three years beyond its life expectancy. GOES-12 is the newest in the series of U. S. geostationary operational environmental satellites. The GOES-12 Imager and Sounder were turned on 17 January 2003, after the spacecraft began drifting eastward at about 0.4 degrees per day from its standby location at 105 degrees West. When the spacecraft reaches 81 degrees West (around 31 March), GOES-12 data will begin flowing operationally, using GOES-8 for communications. When GOES-12 is within 1 degree of GOES-8, its data will be transmitted directly from GOES-12. This process will negate the need for users to reposition their antennas during switch over, and allow NESDIS operations to quickly switch back to GOES-8 in the event of any problems. GOES-12 will reach its final destination of 75 degrees West on 22 April 2003. Details on the transition to GOES-12 are available at the NESDIS Office of Systems Operations Web site at: www.oso.noaa.gov/goes/index.htm

There have been significant changes to the GOES-12 Imager from previous GOES imagers. These were described in detail in a recent *National Weather Digest* article by Schmit et al. (Vol. 25, Numbers 3 and 4, December 2001). However, the Sounder will remain unchanged. Major changes to the Imager include an increase in the resolution of the 6.7 micron IR water vapor channel from 8 km to 4 km, and the addition of a 13.3 micron IR band (8 km) which replaces one at 12 microns. The 13.3 micron IR band will be used for improved height assignment of high level clouds, leading to more accurate cloud motion wind vectors. In addition, GOES-12 features a new Solar X-Ray Imager (SXI) to support NOAA's Space Environment Center in observing solar discharges that can disrupt communications.

Important date in remote sensing history: on 1 April 1960, TIROS-I was launched from Cape Canaveral, Florida and was operational for only 78 days, but proved that satellites could be useful tools for surveying global weather conditions from space.

- Gary Ellrod, Chair Remote Sensing Committee

MEMBER NEWS

The National Weather Service conferred its highest honor, the Isaac M. Cline Award, to NWA member **Joseph B. Sullivan**. Joe is also the new meteorologist in charge of the NWS Forecast Office in Riverton, Wyoming. Each year the NWS recognizes employees for operational excellence in the delivery of products and services in support of the NWS mission. Joe Sullivan received the Cline Award as part of a four-person team in the program management and administration category for pioneering efforts in establishing an effective and efficient teleconferencing system used by NWS offices throughout the continental United States. The NWS will save $113,000 a year using the new system.

Long-time NWA member **Steven D. Schurr** has been named to head the National Weather Service Forecast Office in Omaha/Valley, Nebraska. A 26-year NWS veteran, Steve has held a variety of forecast and management positions in Kansas and Nebraska NWS offices. He earned a bachelor's degree in physics from Kansas State University in 1970, studied meteorology at San Jose State University and did graduate study in business at the University of North Dakota and Washburn University in Topeka. He spent more than 6 years with the U.S. Air Force, serving as a weather officer and as a missile launch officer. Cutting his teeth on forecasting as an intern at the NWS Forecast Office in Topeka, Kansas, Steve advanced through the positions of aviation forecaster, warning and preparedness meteorologist and lead forecaster. In 1992, he was selected as the first warning coordination meteorologist (WCM) at the Wichita, Kansas NWS Forecast Office as part of the National Weather Service's modernization program. Steve has been the MIC at the NWS Forecast Office in Hastings, Nebraska since June 1993.

Our US Air Force and Navy members are deployed to many parts of the Globe. Those in fixed locations are no doubt working long hours. The NWA Council and staff send *best wishes to you and your families in all endeavors.*

ANNOUNCING: The NWA David Sankey Minority Scholarship in Meteorology

To increase diversity and the numbers of students from underrepresented ethnic groups pursuing studies in meteorology, the elected National Weather Association Council members for 2002 developed a college scholarship fund.

Offering: One scholarship per year in the amount of $1000.

Starting Date: This year (2003) is the inaugural year for the scholarship.

Administration: The NWA Education Committee will administer the scholarship selection. The NWA office will announce the call for applications in January each year, applications will close 15 May and the scholarship designee will be notified by mid-June.

Eligibility: Any minority undergraduate or graduate student going into their sophomore year or higher grade and majoring in meteorology may apply. If the undergraduate student is classified as a senior they must either have one more fall (Sep. - Dec.) semester to complete after the scholarship is awarded, or they must document that they have been accepted to graduate school.

Award Criteria:
The scholarship will be awarded based on: a) official college transcripts (academic achievement), b) two letters of recommendation (at least one from a current or former meteorology professor), and c) a letter (not longer than one page) from the applicant describing their involvement/interest in meteorology.

Logistics: Scholarship money will be transferred following the financial guidelines of the college or university involved. If there aren't any financial guidelines from the school, NWA will make the $1,000 check payable to both the student and the education institution at the beginning of the September - December school term.

Applications for the NWA David Sankey Minority Scholarship in Meteorology to be awarded in 2003 must be submitted to the NWA office by 15 May 2003. The application form is available to copy from the NWA Web site at: www.nwas.org/dsscholarshipform.html or it can be obtained from the NWA office (434) 296-9966.

For more information on NWA scholarships, grants and awards browse to Web page: www.nwas.org/award.html

About David Sankey: DAVID A. SANKEY (1946-2000) was a charter member of the National Weather Association, a private pilot and built up a wealth of operational meteorological experience in the public and private sectors. He was a mentor, a great team leader and a friend to all those he met. He received a BS in Meteorology from Florida State University in 1968 and later earned an MBA in Program and Financial Management from West Coast University in Los Angeles. He began his operational meteorology career as a weather officer in the United States Air Force supporting base and flight operations at George Air Force Base, California. In 1972, after his military commitment, he joined Oceanroutes, Inc., as a meteorologist supervising a small support group in providing data, analyses and forecasts for the ship routers. In 1974, he became a Computer Systems Analyst for a semi-conductor manufacturing company and in 1975 he became an Air Traffic Controller in Palo Alto, California. He supervised all weather observing functions, quality controlled the observations and trained tower observers. He joined Continental Airlines as a Meteorologist in 1979 responsible for flight forecasting over the United States, Mexico and Pacific Ocean areas. In 1982, he joined a small group forming The Weather Channel and succeeded there as Deputy Director for Meteorological Operations. In 1986, he moved on to TRW, Inc., as a meteorological consultant supporting the National Weather Service modernization and restructuring program and in 1991, he saw the chance to use all of his experience in the FAA aviation weather development programs. One of Dave's most significant accomplishments was the creation and leadership of the Integrated Terminal Weather Systems (ITWS) Matrix team, a group composed of representatives from every FAA office involved with the development of ITWS. Using his leadership and facilitation skills he led this team through the acquisition process. Most important, was the way Dave promoted open and honest communication among all the team members. Dave led that team to success with his style of perseverance and patience. This was not an isolated event. Dave applied his team skills again when he established the FAA Aviation Weather Research Program and its leadership team. Dave also supported professional associations. He was the volunteer NWA secretary for many years, and led the NWA office into the computer age developing an online computer bulletin board system in the late 1980s. He earned the respect and friendship of all those he met with his great personality and his dedication to improving operational meteorological services. He died in a airplane accident on November 9, 2000. He is survived by his wife, Sheri, and two daughters, Kyla and Sara.

WEATHER INFORMATION FOR SURFACE TRANSPORTATION

On 3 February 2002, the Office of the Federal Coordinator for Meteorology (OFCM) released the *Weather Information for Surface Transportation (WIST) National Needs Assessment Report*.

The WIST report sets the stage for revolutionary improvement in the way weather information is applied to surface transportation across the Nation. The report recommends next steps to incorporate current and future results from science and technology innovations into surface transportation activities that bear on the safety and economic welfare of all citizens.

The WIST report is the product of an extensive 3-year interagency effort and represents a historic achievement. **The report is the first-ever compilation of weather support needs across the six surface transportation sectors: roadway, railway, transit, marine transportation, pipeline systems, and airport ground operations.** The report documents the results of a wide range of activities:

- an interagency joint action group which addressed meteorological requirements for surface transportation via questionnaires and surveys;
- WIST symposia conducted jointly by the Office of the Federal Coordinator for Meteorology and the Federal Highway Administration;
- numerous meetings and direct conversations with railroad, pipeline, and emergency managers; and
- panel discussions on public-private partnerships in transportation and Intelligent Transportation Systems.

The report makes clear that by meeting these requirements and providing weather information for surface transportation, users can often increase safety and realize economic benefits at the same time. A good example of costs versus benefits is the provision of roadway weather. Annually in vehicle crashes, adverse weather plays a role, directly or indirectly, in 800,000 injuries and 7,000 fatalities. This represents approximately 28 percent of all highway crashes and 19 percent of all fatalities. The estimated annual economic cost, just from weather-related crashes (deaths, injuries and property), amounts to nearly $42 billion. A 1999 study of the effects of snow, ice, and fog estimated that these weather conditions caused 544 million vehicle-hours of delay on highways. The report also makes clear the importance of environmental support to homeland security. Without a doubt, providing better weather information in support of disasters and emergency responders can help mitigate the overall impacts that are inflicted on our communities by those who would do us harm. The report is available on-line at: www.ofcm.gov/wist_report/wist-report.htm

- Samuel P. Williamson, Federal Coordinator

NOS NEWS

The ***Port of New York and New Jersey Operational Forecast System*** **(NYOFS**) became operational at NOAA's National Ocean Service in Silver Spring, MD on 10 February 2003. NYOFS was developed by NOS's Coast Survey Development Laboratory (CSDL) and is maintained and monitored by NOS's Center for Operational Oceanographic Products and Services (CO-OPS). NYOFS generate hourly nowcasts and hourly forecast guidance out to 30 hours of currents and water levels for the Port region including Raritan, Newark, and Upper Bays, Kill Van Kull, Arthur Kill, the Lower Hudson River and East River.

NYOFS products include time series plots and animations of water levels and currents that are disseminated through a NOS Web site at: co-ops.nos.noaa.gov/NYOFS/nyofs.shtml. Presently, gridded forecast fields are not disseminated to users.

NYOFS was developed by Dr. Eugene Wei of CSDL. The nowcast / forecast system uses the 3-D Princeton Ocean Model with a nested-grid configuration. A high-resolution grid is embedded in a coarse grid to provide detailed current shears and eddies in the navigation channels of the Kill Van Kull leading into the Port of Elizabeth and Newark Bay. The spatial resolutions of the coarse and fine grids are approximately 350-1000 m and 120-250 m, respectively. There is one-way coupling from the coarse to the fine grid. The model is run in three-dimensional barotropic mode.

NYOFS has a hourly nowcast cycle and 4 times per day forecast cycles (5, 11, 17, and 23 UTC). In the nowcast cycle, the model is driven by real-time water levels and surface wind velocities from observing stations of NOS' Physical Oceanographic Real-Time System (PORTS) for the Port of New York/New Jersey. The nowcasts are available at approximately 15 minutes past the top of the hour. In the forecast cycle, surface forcing is provided by surface wind forecast guidance from the NWS / NCEP Eta-12 mesoscale weather forecast model. For the open boundary conditions, NYOFS is driven by sub-tidal water level forecast guidance from the NWS Extra-Tropical Storm Surge model along with the NOS tidal harmonics. In addition, the NYOFS nowcast serves as the initial conditions for each forecast cycle. The NYOFS forecast guidance is available at approximately 40 minutes past the top of the hour.

NYOFS has been extensively calibrated with observations and has gone through a validation process to pass specific NOS criteria. NYOFS forecast guidance allows port managers and shippers to make sound decisions regarding maximizing tonnage (based on available bottom clearances) and limiting passage times, without compromising safety. The system has been incorporated into NOS' New York/New Jersey PORTS. Both NYOFS and the Port of New York/New Jersey PORTS are monitored 24/7 by CO-OPS' Continuous Operational Real-Time Monitoring System for quality assurance, monitoring of NYOFS inputs and products dissemination.

- John Kelley, NOS

Next NWA Annual Meeting — 18-23 October, Jacksonville FL

Call for Abstracts

The National Weather Association's 28th Annual Meeting will be held at the Adam's Mark Hotel, 225 Coastline Drive, Jacksonville, Florida 32202, 18-23 October 2003.

The Annual Meeting will include:

19 October: WEATHER BROADCASTER WORKSHOPS 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.

20-23 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 Committee Co-Chairs are: Patrick T. Welsh, Science and Operations Officer, National Weather Service Forecast Office, 13701 FANG Road, Jacksonville, FL 32218; pat.welsh@noaa.gov and **Richard Bagby**, Associate Professor, Department of Applied Aviation Sciences, Embry-Riddle Aeronautical University, 600 S. Clyde Morris Boulevard, Daytona Beach, FL 32114-3900; bagbyr@erau.edu. **Broadcaster Workshop Program Chair is Bryan C. Karrick**, KCCI-TV, 888 Ninth Street, Des Moines, IA 50309-1288; bkarrick@hearst.com. Contact them with your suggestions and to volunteer to help with the program.

ABSTRACT SUBMISSION: The deadline for submission of abstracts is 1 June 2003. Abstracts can be sent via e-mail to Richard Bagby at bagbyr@erau.edu. 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/2003abstracts.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 Richard Bagby at (386) 226-6858 or by FAX (386) 226-7739. Presenters will be notified regarding the disposition of their abstracts by 15 August 2003.

ANNUAL MEETING HOTEL INFORMATION:

The Adam's Mark Hotel is at 225 Coastline Drive, Jacksonville, FL 32202. It is a full-service hotel located downtown along the St. John's Riverfront. The NWA discount room rates are $81 for a single room and $101 for a double room. Please call the Adam's Mark Hotel at 904-633-9095 (reservations department) between 8 AM and 5 PM Monday-Friday or call their Central Reservation Department at 1-800-444-ADAM at anytime and request the National Weather Association 28th Annual Meeting group rate. Please reserve rooms by 18 September to be able to obtain the discount rate.

A Golf Tournament is also being scheduled for Saturday, 18 October to benefit NWA Scholarship Funds. The NWA Annual Awards Luncheon will be at the Adam's Mark Hotel on Wednesday, 22 October. For information on exhibits, special accommodations, registration and the overall meeting program, please contact the NWA office at Tel/FAX: (434) 296-9966 or e-mail: NatWeaAsoc@aol.com. Current information will also be on the NWA Web site at: www.nwas.org

MEETINGS OF INTEREST

• **The Seventh Annual Ohio Severe Weather Symposium**, hosted by The Ohio State University Department of Geography, in conjunction with the National Weather Service Forecast Office and the Ohio River Forecast Center of Wilmington, Ohio, is scheduled for **Friday, 25 April 2003, at the Fawcett Center on the OSU campus**. A diverse range of speakers working in the operational and academic fields of meteorology will give presentations on topics such as lightning, model simulations of lake-effect snow, fire weather, and the recent (10 November 2002) F4 tornado in Van Wert, OH. An up-to-date listing of speakers, the schedule of events, and directions to the Fawcett Center can be accessed through a link from OSU weather Web site at: http://twister.sbs.ohio-state.edu. The event is free and open to the public. Those interested in attending should contact Zack Schmiesing with their name, affiliation, and address at schmiesing.13@osu.edu or by phone at (614) 292-1597.

• **The 7th Annual Northern Plains Convective Workshop will take place 8-9 May 2003**, in Rapid City, South Dakota. The NWS in Rapid City, the Black Hills Chapter of the AMS, and the Institute of Atmospheric Sciences, South Dakota School of Mines and Technology, are jointly hosting this workshop. The workshop will begin at 8 AM on 8 May and conclude around 1 PM on 9 May. There is no conference fee. The workshop will provide a forum that will focus on analysis, interpretation, and forecast applications, with an emphasis on *learning vs. presentation*. Working in an interactive setting, attendees will be engaged in problem solving activities such as surface, satellite, and radar analyses relating to convective scenarios. All persons interested in analysis and diagnosis of convective weather are encouraged to attend. Two distinguished veterans of weather analysis will be instrumental in the workshop: Dr. Robert Maddox (University of Arizona), and Mr. Don Burgess (National Severe Storms Laboratory). Dr. Phillip Bothwell (Storm Prediction Center) will also be a featured speaker on lightning. This year's Northern Plains workshop will be at the Ramada Inn (telephone: 1-866-742-1300), located just off I-90 on the north side of Rapid City. The Ramada Inn is located within walking distance of a variety of restaurants, and several rooms have been set aside specifically for attendees of this workshop. Additional information on the agenda and registration can be found at: http://rap.midco.net/7thworkshop. If you have questions, please contact Brian Klimowski at phone 605-341-9271 or e-mail: Brian.Klimowski@noaa.gov.

• **Mid-Atlantic Regional Conference on the Inland Effects of Tropical Weather Systems will be held 11-13 May 2003 at the Holiday Inn Brownstone, Raleigh, NC.** The Central North Carolina AMS Chapter is sponsoring this operational and emergency management focused regional conference. It begins on Sunday evening, 11 May, with a reception and presentation from Dr. Steve Lyons of The Weather Channel. More information on the conference may be found at Web site: http://www.nc-climate.ncsu.edu/ams/conference.

• **NESDIS Data Users Workshop on 11-12 June 2003 in Boulder, Colorado.** Workshop goals are to solicit users' opinions on current NESDIS data and information products and services (e.g., How can we improve?); inform users of future capabilities, plans, and data sets; review & update user needs for new products, data archiving and access to stored data; assess users' needs and societal benefits; improve communications and rapport with users. More information is available at Web site: http://www.osd.noaa.gov/datausers.

• **University of Northern Iowa STORM Project Short Course 22 June - 3 July 2003.** The Science center for Teaching, Outreach, and Research on Meteorology (the STORM Project) at the University of Northern Iowa is sponsoring an applied weather analysis and forecasting course designed for undergraduate atmospheric science students. STORM is a cooperative program between the National Oceanic and Atmospheric Administration (NOAA) and the University of Northern Iowa (UNI). The course will explore the forecast process through the use of case studies and hands-on forecasting. Participants will gain experience with FX-Net, a software package developed at NOAA's Forecast Systems Laboratory that emulates the Advanced Weather Interactive Processing System (AWIPS). AWIPS is the data analysis system used in National Weather Service forecast offices to examine surface and upper air observations, satellite and radar imagery, and numerical weather prediction model output. An added focus of the course will be on how end users (e.g., emergency managers, school superintendents) use weather forecasts in their decision making process. The STORM Project will provide housing, meals, course materials, and 3 hours of academic credit (undergraduate or graduate) from the University of Northern Iowa. Participants are responsible for a refundable application fee [$50], a non-refundable admission fee [$30], as well as their own travel to Cedar Falls, Iowa.
For more information and application procedures, please browse to Web site: http://www.uni.edu/storm/swaf2003/index.shtml **Applications received by 11 April 2003 will be given first consideration.**

• **The Seventh Annual Great Divide Workshop will be held in Glasgow, Montana 26-28 August 2003**, hosted by the NWS in Glasgow. The workshop will begin at 1 PM on 26 August and conclude at about 11 AM on 28 August. 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. This year's workshop will be held at the Cottonwood Inn (telephone 1-800-321-8213). Cottonwood Inn offers a shuttle service to and from the airport and is located within a short distance to a few restaurants. A block of rooms has been secured for the workshop. Please mention the National Weather Service when making your room reservation. **All presenters are asked to provide a presentation topic before 1 June 2003.** Abstracts will be taken through 1 August 2003, and can be e-mailed to Thomas.Salem@noaa.gov or mailed to: NWS Weather Forecast Office, 101 Airport Road, Glasgow, MT 59230, Re: Great Divide Workshop. For further information, call (406) 228-4042.

• **The Seventh Annual High Plains Conference will be held in Hastings, Nebraska, 8-10 October 2003.** It is sponsored by the High Plains AMS/NWA Chapter. Oral presentations are currently being solicited for the conference, with an emphasis on the weather of the High Plains region. **One page abstracts may be submitted until the 15 August 2003 deadline**. The conference will be of interest to not only public and private meteorologists, but broadcast meteorologists, meteorology students, emergency managers, storm chasers, and other weather enthusiasts as well. Keynote speakers will be announced at a later date. The High Plains Chapter is proud to once again sponsor a student paper competition for both undergraduate and graduate students. Two monetary scholarships will be awarded, with the top finisher receiving $500 and a free one-year membership to the chapter. Registration for the conference is $50, while student registration is only $25. Conference fees will include lunch and refreshments. The banquet dinner on Thursday evening (October 9) is an extra nominal fee. Provisions for vendors will be made available at little or no extra charge. The latest conference information, including local lodging and pre-registration, can be found at the High Plains Chapter website: http://www.highplains-amsnwa.org. Any questions or abstract submissions may be sent to the co-chairs: Michael.Moritz@noaa.gov and Jared.Guyer@noaa.gov or by regular mail to: 7HPC c/o National Weather Service, 6365 Osborne Drive West, Hastings, NE 68901.
Phone: 402-462-2127; Fax: 402-462-2746

• **Symposium on the 50th anniversary of the Joint Numerical Weather Prediction Unit: The foundation for operational numerical weather prediction, will be held 24 – 27 May 2004 in College Park, Maryland.** Please indicate your interest in participating and/or presenting a paper by contacting Eugenia Kalnay at ekalnay@atmos.umd.edu and Kenneth Carey at kcarey@mitretek.org. Preliminary programs, registration, hotel, and general information will be posted on the AMS Web site: www.ametsoc.org/AMS in mid-September 2003.

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Submit newsletter items directly to: Editor NWA Newsletter, Frank Brody at NewsletterNWA@aol.com 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. Contact the NWA office or view the Web site for membership information. 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.

MEASURING HURRICANE WINDS

A research instrument the size of a 27-inch television set that is carried aboard NOAA Hurricane Hunter aircraft has been determined to be the most accurate and reliable remote sensing device available for measuring hurricane force winds at the sea surface. The results come from a study by scientists from NOAA and the University of Miami's Cooperative Institute for Marine and Atmospheric Sciences. The stepped-frequency microwave radiometer (SFMR), an instrument carried on NOAA hurricane hunters, is a top performer in measuring hurricane force winds at the sea surface.

It is the surface winds that impact coastal areas when hurricanes make landfall and one of the most important pieces of information gathered for hurricane forecasters and the emergency response community.

The study, published in the January 2003 issue of the *Journal of Atmospheric and Oceanic Technology*, determined that surface winds measured by the SFMR are comparable to the Global Positioning Systems dropwindsonde measurements that are the current standard. GPS dropwindsondes are instrument packages designed to measure wind speed, temperature and humidity as they drop from the aircraft to the surface. **The benefit of the SFMR is that winds are continuously measured during flights, allowing for more complete mapping of the hurricane surface wind structure.**

NOAA's Hurricane Research Division and the University of Massachusetts each operate an SFMR attached to the fuselage of NOAA's two WP-3 Orion hurricane hunter aircraft. NOAA's Office of the Federal Coordinator for Meteorology is in the process of funding an additional newly redesigned SFMR to be located under the wing of one NOAA WP-3.

The SFMR allows for improvement in surface wind studies as it takes continuous measurements of surface winds, as compared to single point measurements from Global Positioning Systems (GPS) dropwindsondes. In addition, the SFMR measurements are not hindered by mathematical errors, for example, when winds at flight level are extrapolated to estimations of the surface.

- NOAA Public Affairs

Q: Interested in doing more for your NWA?

A: The committee chair's list in the February Newsletter provides contact information. Send a message to a committee chairperson indicating your interest in volunteering to help or submit an article or a news story to an editor.

US AIR FORCE WEATHER AGENCY sees end of an era

After decades of issuing forecasts, two sections within the Air Force Weather Agency (AFWA) at Offutt AFB, Nebraska will no longer provide weather support to Air Force and Army decision makers. The Continental United States (CONUS) Severe Weather Section and the Strategic Weather Section issued their last weather forecasts on 15 January 2003.

For the past 33 years, or more than 37,000 shifts, CONUS Severe Weather Section (as part of AF Global Weather Central and later AF Weather Agency) provided Point Weather Warnings for as many as 400 locations across the Continental United States. The Military Weather Warning Center had previously been at Kansas City collocated with the NWS National Severe Storms Forecast Center. Col (Ret.) Robert C. Miller moved from Kansas City to Offutt when the Air Force Global Weather Central assumed the severe weather forecasting/warning function. There, he continued to be a leader in severe weather forecasting and a mentor to many military meteorologists until he retired in the mid-70s. CONUS Severe also provided Military Weather Advisories since 1970, issuing over 100,000 advisories.

The Strategic Weather Section provided forecasts of upper-level flight hazards for essentially the entire world for the last 46 years. The section issued 620,865 forecasts during its mission's life cycle.

US Air Force Operational Weather Squadrons, located around the world, will now provide tailored regional products and warnings. "It will still be the same product, just a different source," said Senior Master Sgt. Rick Keil, Superintendent of the AFWA Global Weather Center Production Branch.

The changes made to these sections were part of a larger re-engineering of Air Force Weather. "The changes allow us to concentrate people into positions that can provide direct support for the war fighter," said Keil.

These two sections provided back-up support for civilian weather agencies as part of their routine mission. AFWA will still provide back-up forecasting responsibilities for the NWS Aviation Weather Center and Storm Prediction Center if either of these agencies are unable to perform their support.

"The men and women who have worked in these two sections, both military and civilian, did so with class, style and professionalism. They provided top-notch forecasts for military leaders around the world," said Col. Bill Burnette, vice commander, Air Force Weather Agency.

- Jodie Grigsby, AFWA 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 complete announcements and job links. Members who do not have Internet capability may request announcements from the NWA office at (434) 296-9966.

The University of Alabama in Huntsville (UAH) announces an exciting opportunity for a talented and visionary individual to collaborate with NASA and UAH scientists, and NWS forecasters. Together, they are pioneering the transition of the next-generation observing systems, models, tools, and techniques to improve weather forecasting for the Nation. We are seeking a highly motivated science and technology transition meteorologist to serve as a liaison between the operational and research communities. The individual will provide scientific and technical expertise in support of on-going collaboration between the Huntsville NWS Forecast Office (HUN) and the NASA Short-term Prediction Research and Transition weather forecasting improvement project in Huntsville, Alabama. Under the guidance and direction of NASA and UAH investigators, the liaison will evaluate, demonstrate, and document the operational and public benefit of NASA technologies for short-term weather forecasting. The position is located at the National Space Science and Technology Center (NSSTC) in Huntsville, a research center, where NASA and university scientists are collocated with the NWS WFO. The successful candidate must have a meteorology or atmospheric science background, with more detailed knowledge of mesoscale meteorology, numerical weather prediction, physical meteorology, statistical methods, and remote sensing; a minimum of a B.S. degree in a Science discipline with 2 years of related experience or a M.S. degree in a Science discipline with at least 1 year experience, excellent written and oral communication skills, and the ability to foster collaboration and interaction within a combined research and operations team. The starting salary is negotiable, with an excellent benefits package. Qualified applicants should apply at the UAH Staff Employment Office, 135 Madison Hall, from 2-5 p.m. or visit UAH's Web site at www.uah.edu to obtain an application on-line. Applicants may call (256) 824-6381 to request an application set be mailed to their home. AA/EOE

WeatherBank, Inc., has immediate openings for entry-level meteorologists. Successful candidates will be responsible for forecasting a variety of weather parameters and issuing alert statements for industrial and commercial clientele across North America. Each applicant should have at least a B.S. in Meteorology or a related field. Pending degrees are reviewed on an individual basis. Professional forecasting experience, a strong and positive work ethic, and working knowledge of Microsoft® dos, Windows® 98/2000/NT, and Microsoft Excel® is desirable. Most openings are full-time, salaried positions and include WeatherBank's full compliment of benefits including: life, disability, dental and health insurance packages; Cafeteria 125 and 401K plans; paid sick leave, vacations and holidays. Please send your resume, and include a copy of your transcripts (if recently completing school) and a minimum of three references, in order to be considered and for application processing to begin. Send your packet via fax or E-mail to the attention of:
Mr. Michael Silva, Senior Meteorologist/Consulting Shift Supervisor
WeatherBank, Inc.
1015 Waterwood Pkwy, Suite J
Edmond, OK 73034
Fax: 405-341-0115
Email: mps@weatherbank.com

IMPORTANT DATES AND EVENTS

15 April 2003 – NWA Pike Scholarship applications due. See Jan Newsletter or www.nwas.org/scholarship_app.html.

15 May 2003 – NWA David Sankey Scholarship nominations due. See www.nwas.org/dsscholarship.html or page 3.

1 June 2003 – Abstracts due for NWA Annual Meeting (pg 5).

22-28 June 2003 – National Lightning Safety Awareness Week www.nwas.org/links/lightning.html

18-23 October 2003 – NWA 28th Annual Meeting (pg 5).

Please see **MEETINGS** on pages 5-6 for additional dates.

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

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