NEWSLETTER

National Weather Association

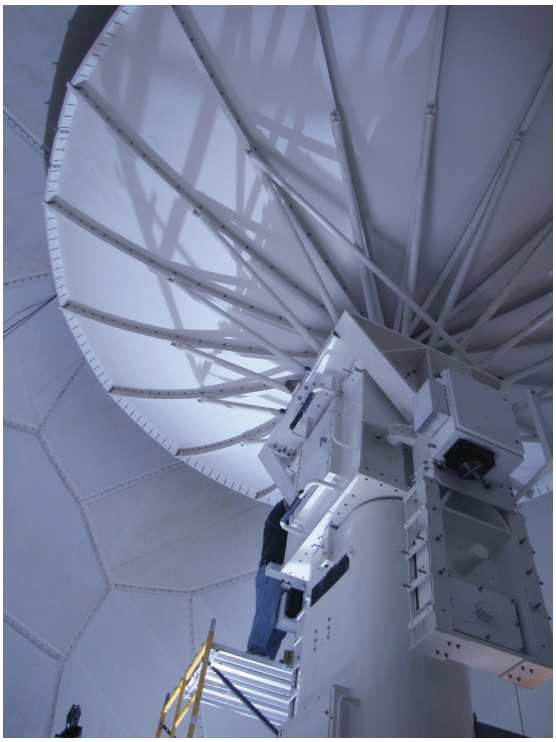
No. 09 – 10 October 2009

Baron Services Installs First NEXRAD Dual-Polarization Upgrade for National Weather Service

Baron Services, in partnership with L-3 Enterprise IT Solutions (EITS), announced in July that the EITS/Baron Services team installed the first of the NWS 171 NEXRAD upgrades in Norman, Okla. A culmination of the team's 12-month design phase and the successful completion of the Critical Design Review last October, this prototype will serve as a test bed for rigorous hardware and software trials until May 2010.

"Not only will this installation demonstrate successful proof of design, but also, it is a prime example of the strategic partnerships Baron Services has created with the National Weather Service and our teammate L-3 Enterprise IT Solutions," said Bob Baron, President and CEO of Baron Services. "Though the installation is a huge accomplishment, we understand the

See BARON, page 6



This image was taken inside the radome during the installation process.

Inside This Edition

President's Message: Big Changes Coming!

September is a wonderful month in Pendleton. The weather is dominated by sunny warm days and clear cool nights. It is a month that I look forward to with anticipation every year as the summer heat breaks and the days of 100+ degree temperatures end for the year. It is a month of transition as we head into the active and exciting winter months.

The NWA is transitioning as well, and it too is an exciting time for the organization. As John Scala described in the September newsletter, we are about to introduce some new services to the membership beginning this fall. Specifically, the NWA will launch a new *members only* functionality on our Web site and offer an electronic membership at a reduced rate. Members will be able to manage and update their personal profiles and receive the *NWA Newsletters* and *Digests* electronically. Voting and dues renewal can be done online as well.

See PRESIDENT, page 7

Trivia: When was the first National Weather Association Newsletter published? (see page 6)

High Resolution Surface Station Network in Severe Weather Forecasting

On the afternoon and evening June 17, 2009, a severe weather event including tornadoes erupted over parts of Minnesota. Critical to forecasting and nowcasting this event was the use of the Mesowest, developed by the University of Utah and the NWS. Mesowest is an online resource which uses a variety of surface reporting stations and reporting networks (NWS, RAWS, SNOTEL, and CWOP) to create a geographic information system (GIS) based high resolution set of frequently refreshing data tailored to a user specified geographic area.

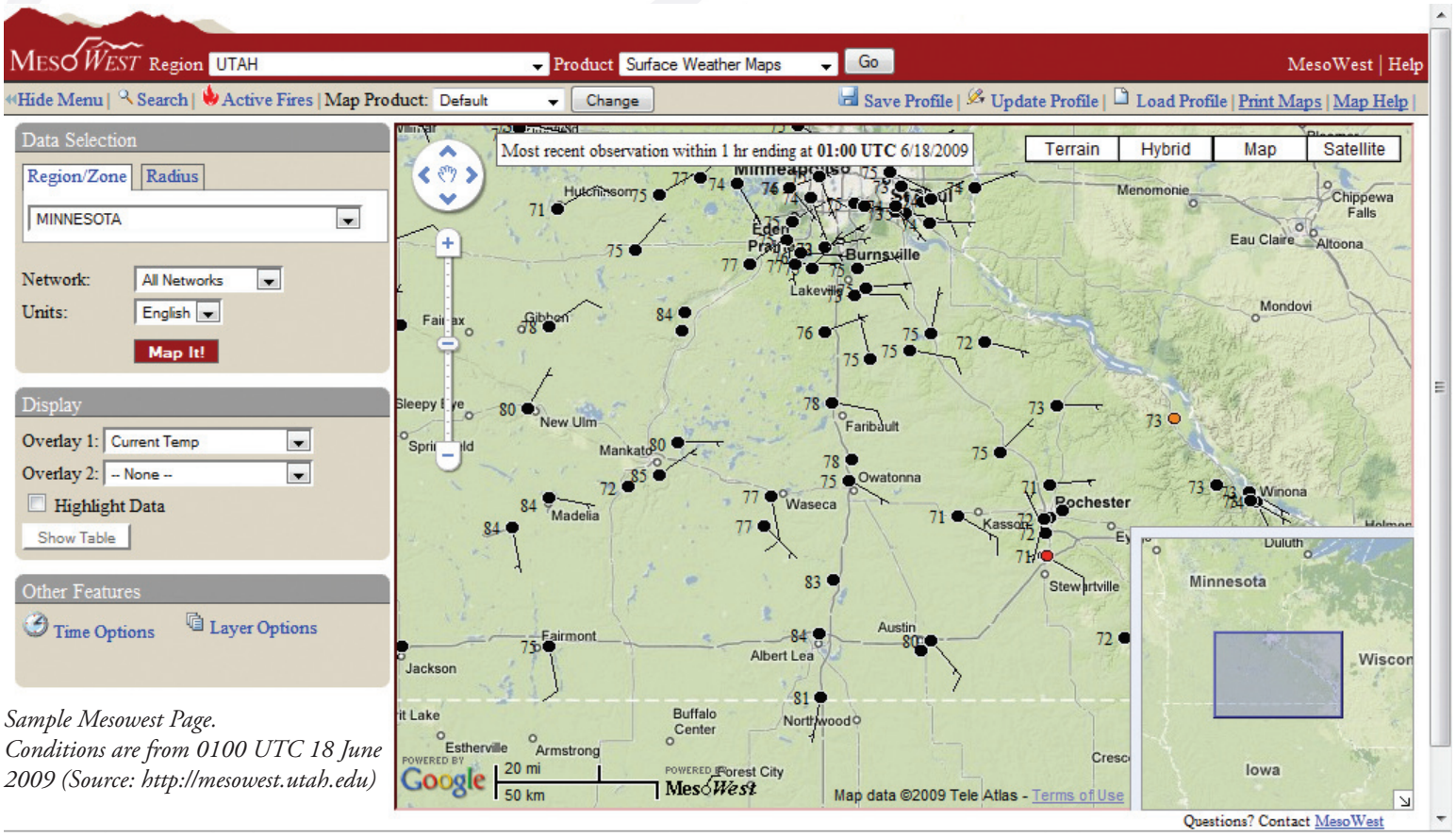
Mesowest utilizes a higher resolution dataset than is available from hourly ASOS (Automated Surface Observing Station) network reports. Station data are available and uploaded to the Internet, with an option a user can specify how often to update the map, with three minutes being the quickest. Mesowest also features the ability to take individual components of a surface station report and allow them to be shown in an overlay format for fast viewing of data such as temperature (see figure below). The ability to use this resource as an accurate data source hinges on making sure any stations are not erroneously reporting data. Mesowest is able to point out which stations are 'suspected' as having bad data by identifying the stations as such on the interactive map, such as the station just north of Stewartville, Minn., (see figure below). Mesowest can also serve as a valuable resource for post storm analysis and case studies. An archive feature is available to obtain surface conditions from a user specified time and date, with all GIS layers available for plotting and subjective analysis.

Mesowest has proven its value by contributing to the successful intercept of severe storms on June 17, by allowing the authors to locate mesoscale surface features faster than relying on traditional ASOS sources. The use of Mesowest has also been implemented as a remote sensing forecasting tool for the St. Cloud State Storm Chase Club as a key tool to improve forecasting skills in convective environments. Mesowest also could be of benefit as a forecasting tool for NWA members, broadcast and operational meteorologists particularly in short term forecasting and climatological applications.

Further information about Mesowest can be found at http://mesowest.utah.edu or by contacting Mesowest at atmos-mesowest@lists.utah.edu.

Michael Stanga
NWA Remote Sensing Committee Member

Brandon Bigelbach
NWA Central Minnesota Chapter Member



Sample Mesowest Page. Conditions are from 0100 UTC 18 June 2009 (Source: http://mesowest.utah.edu)

Your Growing Role as a TV Station Scientist

I don't normally use vegetable analogies, but it just seemed to fit this article. We all know the term "getting blood from a turnip," right? I have to wonder just how many broadcast meteorologists feel a lot like – well – a turnip.

Even on a "non-severe" weather day, our workload can be rather mind-boggling. Along with the responsibility of forecasting, producing and performing our on-air broadcasts, we are also graphic artists, Web bloggers, tweeters, speakers and even on occasion, a station tour-guide. Are you feeling like a turnip yet?

So is there room for another role?

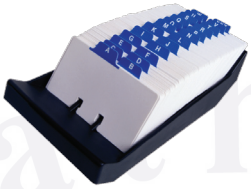
A recent online survey of AMS television broadcasters shows that even with your crazy workload, the majority of you are welcoming your new role as "station scientist" and comfortable with the responsibility. And that's great news, because your viewers want to hear and learn about important science and environmental information, and they prefer to hear and learn about it from someone they trust – you.

Of course, another huge benefit of being your station's science "guru" – job security. As stations continue to slash budgets and streamline to stay in the game, there aren't many newsrooms left that have a dedicated science/environmental reporter. In fact, it's likely there is no one at your station more scientifically trained than you.

What does it mean to be a station scientist?

It means many things....

First, you must do your homework and know the issues. Example: In order to accurately communicate the IPCC's (Intergovernmental Panel on Climate Change) latest report on climate change, you have to take the time and make the time to do the proper research. Be the watchdog. Try to have your producers run any environmental or science-related story by you first. This team-related approach serves many purposes. It will ensure accuracy. You may be able to find more creative ways to present the information, and you will be prepared for the chit-chat and to make comments once the story airs.



Second, you need to be the rolodex of information. Create a key list of Web sites you trust to access information quickly. Let's face it, most of the time you are needed most as the station scientist is in times of breaking weather and breaking news. Having your references ready will reduce your stress level and make you look even smarter when the camera is on and all eyes are on you to deliver.

Third, you need to stay in the loop. Subscribe to feeds and religiously check environmental, space, climate and science related Web sites, journals and newsletters to see what's new.

There are a growing number of resources out there to help you keep up with the latest science and environmental news. For example, the National Environmental Education Foundation (NEEF) is a great resource. It's a non-profit government organization that caters to the broadcast community to educate the public about the environment. NEEF has partnered with the AMS to create Earth Gauge. A subscription service that provides different types of quick-access environmental and science information broadcasters can use both on the air and on the station's Web site. Both the Society of Environmental Journalists (http://www.sej.org/) and Science News magazine (http://www.sciencedaily.com/) post excellent daily science news email blast. Once a week, the Science News magazine posts an email as well (http://www.sciencenews.org/). There are of course email posts from NASA too. StormCenter Communications (http://www.stormcenter.com) is also a pioneer in the business of providing broadcast meteorologists quick and easy ways to educate viewers about weather and climate news. Check out their Envirocast® suite of products that are specifically developed for on-air and on-line use by providing environmental and remote-sensing imagery, graphics and information for the television industry and others.

COMET has many interactive and educational modules available that you can access straight from their MetEd Web site. Of particular interest is the Broadcast Meteorologist community page (www.meted.ucar.edu/broadcastmet.php) that has many relevant modules, including the newest release: "Climate Change: Fitting the Pieces Together." By taking these modules you also earn CEUs which can be used to keep your NWA and/or AMS certification current.

Fourth, Think KISS (Keep It Simple Sam). Even if your name isn't Sam, you are a broadcaster, and you got the job because you have the gift of being able to take complicated scientific information, make it easy to understand, AND fit into a 30-second news story.

Finally – have fun with it! When you are passionate about the information you are delivering and finding creative ways to deliver it, your viewers can sense that. You feed them information they want and they'll come back for more. It's a recipe that can help you and your station win the ratings game together.

So all you TV station scientists/gurus/turnips out there: get ready – get pumped – get that blood flowing. It's not just about the weather anymore.

It's your time to shine!

Our thanks to Mish Michaels for her contributions to this article.

Kristine Kahanek
Veteran and Former Broadcaster
CBS 11 KTVT

Greg Byrd
Professional Development Committee

Vanessa M. Vincente Awarded the David Sankey Minority Scholarship in Meteorology

Vanessa Vincente of Chicago, Ill., is a junior at Valparaiso University in Indiana. She is awarded the David Sankey Minority Scholarship in Meteorology. Vanessa has excelled in a wide variety of endeavors including academics, leadership and initiative. Not satisfied to just shine in the classroom, she actively searches for activities to benefit her education while also helping others — both in and out of the classroom. Vanessa has been awarded numerous awards and scholarships including nomination to serve as an observer and future undergraduate student representative for the AMS Board on Outreach and Pre-College Education.

She strives to attend additional university lectures and conferences. She is a volunteer for an environmental organization teaching grade-school students about snow. She is a CoCoRaHS observer and actively involved in the student chapter of the AMS and NWA.

She values leadership and teamwork which has been recognized by her professors. Her well rounded approach to college life is preparing her well for a very successful career in the science after graduation.

The NWA Education Committee received four applications for this annual scholarship award.

Richard L. Scott Awarded Meteorology

Richard Scott of Linden, Ala., was awarded the first NWA Broadcast Meteorology Scholarship. Richard is a senior at Mississippi State University who aspired to become a broadcast meteorologist from a very early age. While in high school, he realized that he could become an on-air meteorologist through a college degree in meteorology. He reached out to experienced on-air meteorologists for advice including James Spann of ABC 33/40 in Birmingham.

After graduating from high school, Richard approached Chief Meteorologist Wes Wyatt at WVUA-TV in Tuscaloosa, Ala., and was rewarded with an opportunity to learn the behind the scenes aspects of broadcasting at the station. Based on his talents, he then was offered the opportunity to become the weekend weather anchor. While attending Mississippi State, Richard drives the 80 miles to Tuscaloosa each weekend to anchor the weather broadcasts.

Elizabeth J. Thompson Awarded the Arthur C. Pike Scholarship in Meteorology

Elizabeth Thompson of Norman, Okla., is a senior at Valparaiso University in Indiana. She is awarded the Arthur C. Pike Scholarship in Meteorology.

Elizabeth is an outstanding student who excels both inside and outside of the classroom. Her GPA is a powerful 3.986 and she has been recognized for academic excellence on numerous occasions. This includes being the first place winner of the NWA Annual Meeting Undergraduate Student Poster Presentation Contest held at the 2008 meeting in Louisville. Of special note: she was a NOAA Hollings Scholarship awardee in 2008.

Her professors speak very highly of her, noting her strong work ethic, great attitude, and maturity. Elizabeth seeks out additional responsibilities and professional experiences. She has served as a volunteer at the Baltimore-Washington NWS office and participated as an undergraduate in an inter-disciplinary air-quality research project. She is an active member of several organizations including excelling on the university swim team.

Perhaps the best observation of her abilities and performance is summed up in a letter of recommendation received from a Valparaiso meteorology professor. In his letter he states, “Elizabeth is one of the most talented students we have ever had in our program.”

The NWA Education Committee received 14 applications from outstanding students across the country for this annual scholarship award.

the First NWA Broadcast Scholarship

The Committee received five applications from outstanding students for this first annual scholarship award.

Lindsey R. Day Awarded the Dr. Roderick A. Scofield Scholarship in Meteorology

Lindsey R. Day of Sanford, Fla., is a junior at Florida State University. She is awarded the Dr. Roderick A. Scofield Scholarship in Meteorology.

Lindsey is an outstanding student who was acknowledged by the faculty as the best student in her sophomore meteorology class. A 4.0 student, she strives to excel in her studies. She is focused in her interest in the science wishing to concentrate on improving tropical cyclone forecasting results, especially in the realm of storm intensity forecasting. She also has been awarded numerous FSU honors for outstanding student performance.

Lindsey is far from being a one-faceted student. She has served as a resident assistant in a university dormitory where she has excelled as a leader. The position required attention to detail, a compassionate and caring personality and the ability to juggle multiple projects while supervising 38 students in the residence hall. Additionally, she has sought out additional professional experiences in the meteorology department by volunteering

to produce a university television weather show, participating in forecasting competitions, and accepting an invitation from one of her professors to participate as an undergraduate in a meteorological research project.

There were 21 applications for this annual scholarship award.

Best wishes to all of the 2009 applicants on behalf of the NWA Education Committee

Joseph M. Battalio Awarded the AccuWeather, Inc. Undergraduate Scholarship in Meteorology

Joseph Battalio of Vicksburg, Miss., is a senior at Mississippi State University. He is awarded the AccuWeather Inc., Undergraduate Scholarship in Meteorology.

Joseph is a talented, double major student at Mississippi State. He entered college with a great fascination for physics in which he decided to major. However, he also had a great interest in meteorology so he decided to major in both! He has earned a remarkable GPA of 3.98 in his college studies. His academic talents have earned him numerous awards, honors and scholarships. He has received high recommendations from the faculty. One described Joseph in the following way: "In my ten-years at MSU, there has not been a better student in the classroom."

Joseph was selected as one of the few undergraduates involved in a normally graduate-only seminar in Advanced Computer Applications in Meteorology. This as a result of his striving to conduct research in computer modeling, concentrating on ways to improve the visulation of model output using three-dimensional surfaces instead of the standard two-dimensions.

The NWA Education Committee received 28 applications for this scholarship award.

High Plains Chapter News

The High Plains Chapter met during the 13th Annual High Plains Conference (HP13), at the end of the first day Aug. 27. Twenty-four members were present. President Mike Umscheid stated how pleased he was with the on-going conference. We had viewed numerous presentations covering a wide variety of meteorological topics. Secretary Tim Burke read the minutes from the previous July 20 meeting.

Thanks went out to our five volunteers who worked together to select the Jim Johnson Scholarship winner. The committee consisted of Jennifer Ritterling, Chris Foltz, Teresa Keck, Aaron Johnson and Bill Eckrich. The winner was Jennifer Uhrich, a senior at North Platte High in Nebraska. She is planning to major in Meteorology at the University of Nebraska in Lincoln.

Congratulations Jennifer Uhrich

Recipient of the 2009 Jim Johnson Scholarship

The HP13 was quite a success, with over 77 attendees, and a great time was had by all. Dodge City will host the 2010 High Plains conference. Christina Henderson and President Mike Umscheid will work on putting a poster together for anyone who might attend the NWA Annual Meeting, and any other upcoming NWA national gatherings through 2010. The next chapter meeting will be around the first week of November.

Tim Burke
Secretary

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Bob Baron, President and CEO of Baron Services

greater magnitude of this project, and the team is focused on meeting our customer's requirements."

The EITS/Baron team was awarded the five-year NEXRAD contract in October 2007 and is providing design, development and production of a comprehensive, system-wide upgrade of the 171 NWS, Federal Aviation Administration (FAA) and Department of Defense (DOD) NEXRAD radars to dual-polarization. Awarded based on the best technological solution and overall value, the contract's implementation will vastly improve future forecasting for critical weather such as flash floods.

Jenna Shepard
Public Relations Specialist
Baron Services

NWA Income and Expenses for 2008

Income	
Dues Total	119,170
Annual Meeting Total	103,747
Broadcaster Seal Total	16,975
Total Contributions	14,786
Digest Total	7,587
Total Misc	20,308
Total Income	282,574
Expenses	
Annual Meeting	65,843
Printing	44,178
Postage/Shipping	33,560
Communications	3,909
Salaries/Taxes	93,818
NWA Operations	19,479
Office Expenses	18,521
Financial Operations	5,130
Other (Grants, Awards, etc.)	12,872
Expenses	297,310
Expenses over Income	-14,428

NWA expenses exceeded income by almost $15,000 during 2008 primarily as a result of increased printing/postage costs associated with the full implementation of full color publications.

Additionally, as a result of the severe financial downturn in late 2008, NWA investments suffered a loss. Net NWA fund balances at the end of 2008 were $242,348 down from $308,415 at the end of 2007.

National Weather Association Trivia:

The first edition of the NWA Newsletter was published in September 1976!

See the next *Newsletter* for highlights from the 34th NWA Annual Meeting held in Norfolk in mid-October!

What a great opportunity it was ...

The Future is Now: New Technologies and Techniques to Support the Weather Enterprise and Society: 2010 and Beyond

Professional Development Opportunities in 2009 - 10

6th GOES Users' Conference: Nov. 3-5

"Bringing Environmental Benefits to a Society of Users" will be at the Monona Terrace Convention Center in Madison, Wisc., organized by NOAA with support from CIMSS at the University of Wisconsin-Madison. For more information: http://cimss.ssec.wisc.edu/goes_r/meetings/guc2009. The conference co-chairs are Dick Reynolds, 410-268-5360; Dick.Reynolds@noaa.gov; or James Gurka, NOAA/NESDIS at: james.gurka@noaa.gov

Multifunction Phased Array Radar Symposium II: Nov. 17-19

This symposium will be held at the National Weather Center, on the Oklahoma University Campus, Norman, Okla.. The format will be a keynote address, followed by a series of panels and invited speakers from government, academia, and the commercial sector. For those interested in learning the basics of Phased Array Radar (PAR) technology or just needing a refresher, a short course will offered the morning of Nov. 17. There will also be an exhibit area for industries to present the latest PAR technology as well as a time for evening ice breakers. Following adjournment of the symposium at noon on Nov. 19, tours of the National Weather Radar Testbed will be offered. Additional information is online at www.ofcm.gov/mpar-symposium/.

90th AMS Annual Meeting: Jan. 17-21, 2010

The 90th AMS Annual Meeting will be held in Atlanta, Ga. Visit Web site http://www.ametsoc.org/meet/annual/index.html for more information.

PRESIDENT from page 1

For the vast majority of our members, the dues structure (electronic copies) will be as follows:

- $38 Regular Member
- $18 Student/Retired/Military/Spouse/First year after graduation
- An additional $12 Fee for Printed Publications (USA)

To provide some examples: A member who is interested in receiving electronic versions of the newsletters and Digests would only pay $38. If that member also wanted printed publication, they would pay $50 ($38 + $12). Someone who just graduated would still pay the student rate of $18 for electronic publications for the first year after graduation. A couple would pay $56: $38 for the first member and $18 for the second. Electronic delivery of the publications results in a cost savings to the organization and the NWA leadership is passing on a portion of that savings to its members. The remaining savings will be used to balance our budget which has been operating in the red the past few years. This is a win-win situation for the NWA. Members receive enhanced services, an opportunity for paperless membership (and still paper if you want it), and the overall health of the organization is improved.

One more membership feature is being introduced for 2010. The NWA is moving from a fixed calendar year membership to a rolling membership. This will have little impact on existing members who renew their memberships on time in the fall. Their membership will still run January through December. However, new members who join will have a membership that runs a year from the date that they join. For example, if a new member joins on April 1, 2010, their membership will run through March 31, 2011. The rolling membership makes more sense than the current setup and it eliminates the need for providing back issues of newsletters and Digests.

These new initiatives are merely the beginning of a longer range plan to improve member services. Additional enhancements are planned as our finances allow. One thing is certain, the NWA leadership is committed to providing the best possible experience for our members. So if you are a member I hope you stay a member; and if you know someone who is thinking about becoming a member, there is no better time to encourage them to join!

Mike Vescio
President

Generous Donation Supports New Weather Facility at Penn State

Joel N. Myers, the founder, president and chairman of AccuWeather Inc. and current Penn State trustee and alumnus, committed $2 million to help ensure Penn State's continued international leadership in meteorology. AccuWeather is a NWA Corporate Member headquartered in State College, Penn.

The gift is the largest gift ever made to the department and among the largest ever received for programs in the College of Earth and Mineral Sciences. It will support the Department of Meteorology's weather center including a new facility, "The Joel N. Myers Weather Center," which will be in the Walker Building on the University Park campus.

"AccuWeather's success has been tied to the Penn State experience in many ways and for many decades. What I learned from this great University as an undergraduate and graduate student, as a faculty member for 17 years, and then for the past 28 years as a member of the Board of Trustees, has been a major factor in my success, in AccuWeather's success, and in the success of many people who have been affiliated with Penn State," said Myers. "This donation is one way in which I want to say 'thank you' for what Penn State has meant to me throughout my life."

"The Weather Center also serves as a place to nurture camaraderie among future generations of Penn State meteorologists, a place where they can develop the friendships and shared experiences that contribute to the unique, lifelong bond among our alumni."

Students and faculty at the center record comprehensive weather observations and data. The center features an electronic map wall consisting of 36 large computer monitors, a computer lab with 36 individual workstations, a high-tech classroom, conference rooms, student lounge and weather-graphics preparation area. It houses the Campus Weather Service and the Weather Communications Group, both of which produce forecasts for the public.

Myers, too, expressed a hope that his own commitment would serve as a "spark" for further giving by other Penn Staters. See http://live.psu.edu/story/41476 for more.

Penn State Department of Meteorology

Dates 2 Remember

Nov. 3-5: 6th GOES Users' Conference. Madison, Wisc.

Nov. 17-19: Multifunction Phased Array Radar Symposium II

Jan. 17-21, 2010: 90th AMS Annual Meeting. Atlanta, Ga.

See page 7 or www.nwas.or/events.php for further details!

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Submit newsletter items directly to the NWA office or to nwanewsletter@nwas.org. Material received by the 25th will be considered for the next month's issue.

Members receive the Newsletter and *National Weather Digest* as part of their regular, student or corporate membership privileges. Newsletter subscriptions are available for $18 per year plus extra shipping costs outside U.S. Single copies are $1.50. **Please send address, phone number, email and affiliation changes to assist@nwas.org.**

Supporting and promoting excellence in operational meteorology and related activities since 1975.

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