



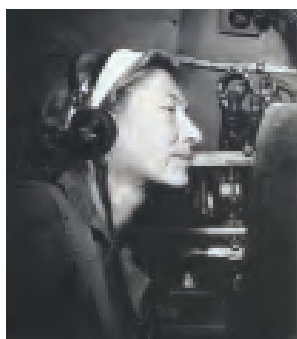
NEWSLETTER

National Weather Association

NO. 10 – 4 APRIL 2010

TRIBUTE TO DR. JOANNE SIMPSON

By John R. Scala
2008 President, National Weather Association



Joanna Simpson (ca. 1970) taking observations from what is most likely an instrumented PB-Y (photo courtesy of NASA).

"This will not do," she told me. "If you want to come here and work then you must state explicitly why this research is important and what we can expect to learn from it."

Th a t conversation introduced

me to Joanne Simpson's doctrine for the pursuit of knowledge: the outcome of a scientific study must result in a quantitative advance in our understanding of the problem and the effort must serve an identifiable and useful purpose. At the time, I was completing my PhD dissertation at the University of Virginia under the direction of Michael Garstang. I applied for a National Research

Council post-doc in early 1990 to continue that research at NASA's Goddard Space Flight Center where Joanne was the Chief Scientist for Meteorology. Her criticism of my proposal was painfully direct but it also contained a short list of suggestions that she felt would lead to its success. She was already mentoring me and I didn't even know it. Her death on March 4, 2010, less than one month shy of her 87th birthday and more than 60 years as a meteorologist leaves behind a record of accomplishment almost without peer and a cadre of grateful scientists who launched their post-graduate career under her tutelage.

Joanne pioneered the use of a cloud model to study cumulus convection but she never strayed more than an arm's length from the fundamental atmospheric state revealed through pointed and timely observations. Her decision to instrument a WWII surplus PB-Y to study cumulus

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EPA Issues New Nitrogen Dioxide Standard: First Time in 35 Years

The Environmental Protection Agency (EPA) announced a new air quality standard for Nitrogen dioxide (NO₂) Jan. 25. It was the first time in 35 years that a new standard for NO₂ had been promulgated. According to the EPA, it will protect millions of Americans from peak short-term exposures, which primarily occur near major roads.

NO₂ is a yellow-brown gas that is part of the family of pollutants referred to as nitrogen oxides (NO_x). Nitrogen oxides are formed almost entirely by high temperature combustion, such as the burning of fuels in power generation plants, industrial boilers, cars, trucks, furnaces and cooking stoves. In agricultural areas, the microbial breakdown of high-nitrogen

fertilizers may also contribute to NO_x levels.

NO₂ is one of several "criteria" pollutants for which a National Ambient Air Quality Standard (NAAQS) has been established. Prior to Jan. 25, there was only one NAAQS for NO₂, 0.053 ppm averaged over one year. And, in comparison to other pollutants like ozone, there are no non-attainment areas in the United States for NO₂ for the one year standard.

The new standard is for a one-hour averaging period and is 100 ppb or .100 ppm. Will there be a problem meeting this standard? EPA is establishing new monitoring requirements in urban areas that will measure NO₂ levels around

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Be Active in NWA!

Nominate someone for the 2010 NWA Annual Awards!

Join us at our 35th Annual Meeting!

Submit an abstract for the Annual Meeting!

NWA Member Contributions in 2009: Thanks your for your support!

\$25-\$99

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Brian Billings
Warren Blier
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Celia A. Miner
Dr. Jose A. Colon
Dr. Kenneth C. Crawford
Ronald D. McPherson

Awareness Weeks & Events

Please help promote safety awareness
by sharing these upcoming dates.

May 3-7: Air Quality Awareness Week
www.epa.gov/airnow/airaware/

May 22-28:
Hurricane Preparedness Week
[www.nhc.noaa.gov/HAW2/english/
intro.shtml](http://www.nhc.noaa.gov/HAW2/english/intro.shtml)

May 22-28:
National Safe Boating Week

May 28: Don't Fry Day
[www.skincancerprevention.org/
Events/DontFryDay/tabid/113/
Default.aspx](http://www.skincancerprevention.org/Events/DontFryDay/tabid/113/Default.aspx)
www.epa.gov/sunwise/dfd.html

June 6-12:
Rip Current Awareness Week
www.ripcurrents.noaa.gov/

June 20-26:
Lightning Safety Awareness Week
www.nwas.org/links/lightning.php

Nominations for the 2010 NWA Awards due July 1

*Submit a nomination online
starting June 1!*

Nominations are now being
accepted for the 2010 NWA
Annual Awards.

Awards will be presented
during the Awards Luncheon on
Oct. 6 at the
35th NWA Annual Meeting
in Tucson, Ariz.

Go to
www.nwas.org/awards/
for more information including
details on each of the annual
awards and submission
requirements.

The NWA will be launching
an online nomination option
which will open by June 1.
More information will follow in
the May Newsletter and on the
NWA home page:
www.nwas.org

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major roads and across the community. Monitors must be located near roadways in cities with at least 500,000 residents. Larger cities and areas with major roadways will have additional monitors. Community-wide monitoring will continue in cities with at least 1 million residents. Working with the states, EPA will site at least 40 monitors in locations to help protect communities that are susceptible and vulnerable to elevated levels of NO₂.

The EPA expects to identify or designate areas not meeting the new standard, based on the existing community-wide monitoring network, by January 2012. New monitors must begin operating no later than Jan. 1, 2013. When three years of air quality data are available from the new monitoring network, EPA intends to redesignate areas as appropriate.

For more information, go to: <http://www.epa.gov/air/nitrogenoxides>. *Most of the information in this article comes directly from the EPA's web site.*

*Cecilia Sinclair
Former NWA Councilor
Specialized Operations Committee*

NWA President: Our Vital Role with Volcanoes

I'm devoting this month's column to something most of us rarely deal with: volcanoes and the vital role of meteorology. The mid-April 2010 eruption of Icelandic volcano Eyjafjallajökull, a volcano that last erupted in 1821, and its subsequent adverse impact on global air travel, highlights the importance of meteorology in major volcanic eruptions.

Volcanic ash is extremely hazardous to aircraft in flight. The small ash particles called "tephra" (i.e., microscopic pieces of rock and silica glass ejected during an eruption) can cause engine failure and are abrasive to aircraft surfaces. The small particle size makes the clouds difficult to see. In one of the most famous incidents, on Dec. 15, 1989, a Boeing 747 (KLM Flight 867) descending through 25,000 feet, flew into an ash cloud from Alaska's Mount Redoubt volcano, losing power in all four engines. After a harrowing several minutes of unpowered, uncontrolled descent, the cockpit crew successfully restarted all engines, gained control of the aircraft and eventually made a safe emergency landing in Anchorage with no injuries to passengers or crew. The aircraft, however, sustained \$80 million in damage.

This month, many flights with European destinations or connections were cancelled for safety concerns. The air space over most of Europe and Britain was shut down in response to the location *and* forecasts of volcanic ash movement. The figure below is from an animation of ash plume movement observed by Meteosat sensors, see <http://www.youtube.com/watch?v=qXAP2bWG9K8>.

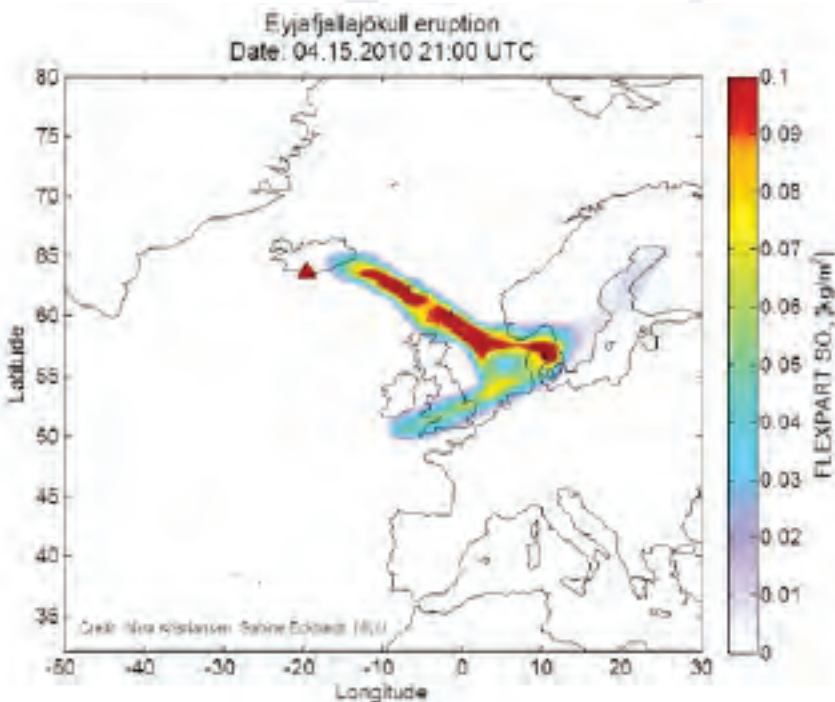
Media reports put the number of cancelled flights just in the first four days of the Eyjafjallajökull eruption at nearly 63,000. During this air space disruption, European air carriers were collectively losing at least \$200 million

per day; U.S.-based air carriers had estimated losses of nearly \$20 million a day. And it's unknown when the volcano will quiet down; the last time it erupted in 1821 it spewed ash for months.

Stranded global travelers faced difficulties. In addition to inconvenience and lost wages, the traveler could bear the added cost of extra hotel stays and food, canceled tours and rental contracts, etc., since it's not always clear how airlines should respond in "*force majeure*" events they have no control over (like an eruption). The flow of goods has also been disrupted. Many businesses are suffering. The Air Transport Association estimates direct losses by the aviation industry alone in the first five days after the Eyjafjallajökull eruption at nearly \$1 billion.

With airlines, their customers and many businesses facing huge losses, meteorologists played a critical role in forecasting areas where ash was expected. These forecasts ultimately led to decisions on air space shutdowns. Tracking and forecasting volcanic ash movement is handled through a global network of nine "Volcanic Ash Advisory Centers" (VAACs) established by the United Nation's International Civil Aviation Organization (ICAO). The VAAC in London, run by the UK Met Office, handles the monitoring and movement of volcanic ash over the UK, Iceland, and the North Atlantic Ocean. Their forecasts are based in part on guidance from multiple dispersion models endorsed by the international meteorological community. Although the area the London VAAC monitors is relatively small, a great number of international flights operate within it. The graphic shows a 12-hr ash forecast by the London VAAC coordinated with the Icelandic Meteorological Service showing areas and flight levels bounded by the red (surface to flight level-FL200) lines and green (FL200-FL350) lines, indicating where volcanic ash is expected to adversely impact aircraft.

While few doubt the wisdom of authorities initially grounding all planes, nonetheless, these ash forecasts by the VAACs had serious economic implications. As losses mounted, the aviation industry was eager to resume flying. Test flights were underway four days into the eruption. These flights were aimed at collecting data to better delineate the boundaries of the projected ash cloud to better understand the exact threat posed by the ash. Preliminary data suggested that, in some locations, the extent of the ash cloud measured in-flight didn't match well with the ash forecasts. Some are questioning the scientific reasoning and validity of these forecasts, since they formed the basis by which civil aviation authorities



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Highlights of the 6th GOES Users' Conference

The 6th Geostationary Operational Environmental Satellite (GOES) Users' Conference (GUC-6) was held in Madison, Wisc., Nov. 3-5, 2009. Over 260 participants from government, private industry, academia, and the international community, including representatives from EUMETSAT, the WMO, China, Japan, Korea, India, Brazil and Canada, attended. The conference consisted of oral presentations, poster sessions, panel discussions, a town hall meeting, and breakout sessions, giving an overview of the current, near-term and future GOES systems.

Portions of a detailed report written by James Gurka and Timothy Schmit are included in this article. The entire report is available on the NWA Remote Sensing Committee Web page www.nwas.org/committees/rs/.

In the opening session, the GOES-R System Program Director Greg Mandt welcomed and thanked the participants for joining the GOES-R team in GUC-6 to ensure that the user communities will continue to reap the benefits from the current GOES and will be ready for the transition to the GOES-R Series. Mandt reminded the audience that past GUC recommendations have had a significant impact on shaping the plans for the GOES-R instruments, spacecraft, and ground system. However, he said we still face the important task of ensuring user readiness for the tremendous improvements in observational capability in the GOES-R era.

Don Berchhoff, Director of the NWS Office of Science and Technology, presented the keynote address titled: "Leveraging GOES Capabilities to Maximize Response to User Needs." He started with a review of the progress made in improving the capabilities of GOES from the launch of GOES-1 in 1975 to the present. GOES observations are a critical part of NWS operations. To fully realize the potential benefits of GOES-R, we have many challenges to overcome, including increased data volume. As the data volume increases, time to digest the information and make critical decisions is decreasing making the demand for decision support tools even more critical. Another challenge is to develop integrated observing systems based on the unique strengths inherent to each observing system. He outlined the strategic goal as taking observations from a variety of sources and combining all observations into a single merged source, the "weather cube," whether the data are from radiosondes, polar orbiting satellites, geostationary satellites, radar, or Numerical Weather Prediction. He challenged the group to translate these improved observations into societal benefits by building enabling technologies and architectures and by forging strong partnerships.

Session 2 focused on the current GOES constellation and the GOES-13/14/P series, including launch schedules, and an overview of user services and benefits. This included that GOES-14 was then in post-launch testing. A lunch panel covered the status and plans for geostationary and High Earth Orbiting Satellites (HEO) in the international communities.

Session 3 covered the GOES-R Program Status including the development schedule and status for the spacecraft. Current plans are for a late 2015 GOES-R launch, to be operational in early 2017. Additional topics included the benefits and development status of the Advanced Baseline Imager (ABI) and

the Geostationary Lightning Mapper (GLM).

Session 4 focused on the GOES-R Ground Segment architecture, and planned GOES-R products and algorithms. Additional topics included the High Rate Information Transmission (HRIT), Emergency Managers Weather Information Network (EMWIN), and the benefits of solar and space environment data products. The evening session on Tuesday, showcased more than 80 posters on topics including hazards, user readiness, user education, hydrology, atmospheric applications, ocean applications, land applications, solar and space observations, instruments, data processing and distribution, and climate applications.

Session 5 focused on GOES-R User readiness

with presentations on the GOES-R Proving Ground activities, user education and training, direct readout systems, and CLASS.

The luncheon town hall meeting provided the opportunity for lively discussion on "The Need for an Advanced Sounder on GOES." This is a topic that sparked considerable interest in the NWA. In August 2006, the NWA president with the endorsement of the NWA Council sent a letter of advocacy to its members and to NOAA for the inclusion of an advanced sounder on the GOES-R series (www.nwas.org/committees/rs/HES_Letter_of_Support.pdf).

The luncheon panel consisted of five members broadly representing the potential advanced sounder user community, along with an introduction and summary given by Abby Harper, the NOAA/NESDIS Deputy Assistant Administrator for Systems. Tim Schmit, NOAA/NESDIS, served as the session moderator.

Dr. Hank Revercomb, Director of UW/SSEC provided an overview of hyperspectral sounding opportunities. He showed how the advanced GEO sounder concept represents a dramatic new capability to provide longer lead times for severe weather. He pointed out that one of the National Research Council's (NRC) Decadal Survey recommendations was that NOAA/NASA should "Develop a strategy to restore the previously planned capability to make high-temporal- and high-vertical-resolution measurements of temperature and water vapor from geosynchronous orbit," and called this the "forgotten" recommendation. Dr. Revercomb strongly suggested that plans for a NOAA/NASA advanced geostationary sounder need a fresh look.

The session was adjourned by Abby Harper, who ended with an optimistic, but also realistic tone: that NOAA/NESDIS is very focused on getting the currently planned instrumentation into space as soon as possible, and that new or higher-risk options are much lower on the radar screen. However, if the science and user communities feel strongly about the GEO sounder then the push should continue.

The breakout sessions followed the town hall meeting with the opportunity discussion between NOAA/NESDIS and the user communities. NOAA/NESDIS responses to the user recommendations and questions will be posted to the GOES-R web site www.goes-r.gov. (Continued at the right)

Presentations from GUC-6 are at:
http://cimss.ssec.wisc.edu/goes_r/meetings/guc2009/
(Click PDF under Final Agenda to the right; then click a presenter's name to access the presentation.)

Past conferences information is at:
<http://www.goes-r.gov/pastconferences.html>

The NWA, You, and the Future of Operational Meteorology Part I – An Introduction to this Series

*How to get the most out of your National Weather Association membership;
first-hand experiences from a student, for students*

At the start of the year, there was a buzz surrounding the job market for meteorologists when the U.S. News and World Report (USWR) picked up on new estimations from the United States Bureau of Labor Statistics (BLS), which projected faster than average job growth within the field during the upcoming eight years. Thus, USWR chose meteorologist as one of 50 top careers for 2010.

Students may think this is great news, but USWR failed to add that the BLS believes that applicants for these jobs will face “keen competition.” As John Knox pointed out in an article that should be mandatory reading for all atmospheric sciences and meteorology majors before they declare, our academic institutions are graduating roughly 600 annually to fill less than a third of that amount of openings (under 200).

With large numbers vying for limited job opportunities, it is more important now than ever before for students to put in the extra effort to leave their impression on the field early and often. As a graduate student at the University of Wisconsin, I write with hopes of providing some insight to students looking to start their career in stride.

As I began a long-awaited journey toward an undergraduate degree in the atmospheric sciences, I was hired within a week of arriving on campus at the University of Wisconsin in September 2005 to adapt the Advanced Weather Interactive Processing System (AWIPS) to run in a research capacity and have been working with emerging science and technologies within the field ever since. My connections to operational meteorology as



CIMSS/SSEC/University of Wisconsin booth staffers Jordan Gerth (center) and Kaba Bah (right) visited with 2009 Annual Meeting attendees in Norfolk.

well as experience with multiple computing platforms have greatly aided my early professional growth. At the current time, I am affiliated with the GOES-R Proving Ground, an orchestrated, government-sponsored forecaster readiness effort ahead of the launch of the next-generation geostationary satellite. This is an exciting project which allows me to explore ways to connect satellite imagery into weather forecasts and numerical weather prediction and interact with National Weather Service (NWS) forecasters. It also has afforded me travel opportunities to the NWA Annual Meeting to present my research, connect with colleagues, and learn.

My membership in the NWA dates back to 2002, when I joined as a high school student to understand more about the meteorological community I would be joining upon graduation from college. The NWA offers many benefits to

members, especially student members, and these benefits are most realized at an annual meeting, where presenting, networking, and learning more about the field are extremely beneficial personal professional development gains. In 2007, I was humbled when I won the NWA Meteorological Satellite Applications Award Grant (METSAT), attended my first NWA Annual Meeting in Reno and gave my first oral presentation to the NWA. It was also when I met Ken Carey, then chair of the Remote Sensing Committee, and recognized the benefits of NWA membership. A year later in Louisville, where I participated in the first student session of the NWA Annual Meeting, Ken asked me to join the Professional Development Committee, which I gladly accepted.

I realized early on that the NWA has many opportunities which students and the general membership should exploit to advance their careers, the organization, the community and the field. With unprecedented computing power now increasingly available at limited cost, the field will evolve faster than ever with new research leading to better forecasting tools.

In the two remaining parts of this three-part series, I will address the intersection of technology, customers, and operational meteorology in concert with ways to leverage the NWA to improve fledgling careers—from my perspective.

Jordan Gerth

Professional Development Committee

Highlights GOES Conference

The final sessions included a summary of the breakout session discussions, a session on a “Look into the Future” included a preview of future NASA missions, a roadmap for satellite data in AWIPS, and a luncheon presentation by Dr. Steve Ackerman “Imagining the Future.” The final event of the conference was a demonstration of McIDAS-V.

James Gurka and Timothy Schmit
NOAA/ NESDIS

Related Resources to Operational Meteorology

National Weather Association Meteorological Satellite Applications Award Grant Flyer:

- http://www.nwas.org/committees/rs/2010_NWA_MetSat_Award_Flyer.pdf

Associated Links (in order of article reference):

- U.S. News and World Report. “Meteorologist”
 - <http://www.usnews.com/money/careers/articles/2009/12/28/meteorologist.html>
- Bureau of Labor Statistics. “Atmospheric Scientists”
 - <http://www.bls.gov/oco/ocos051.htm>
- Knox, John A. “Recent and Future Trends in U.S. Undergraduate Meteorology Enrollments, Degree Recipients, and Employment Opportunities”
 - <http://ams.allenpress.com/>

over the warm oceanic waters was not only a profound utilization of available tools, it also emphasized the importance of these unique data sets for studies of equatorial energy exchange. Cloud penetrations by a suite of instrumented aircraft are now considered essential components of many field programs. This unforeseen, yet unmistakable consequence of those first landmark flights, guarantees her legacy will be ever present whenever aviation and meteorology intersect. Joanne's work on air-sea interaction in the tropics with Herbert Riehl remains the seminal work on heat transport and the basis of our knowledge of the dynamics of the tropical atmosphere.

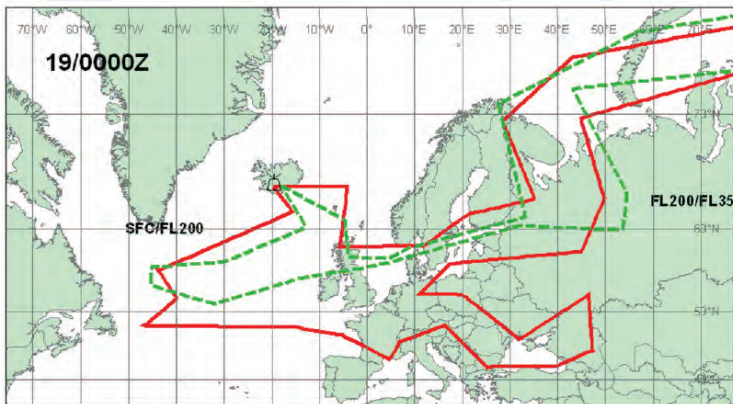
Joanne earned the adulation of her peers and the respect

of her colleagues while receiving numerous national and international awards. She also advanced the cause of women in science beyond what anyone has or may ever accomplish. Her colleagues paid tribute to her remarkable career by organizing a special symposium "Celebrating the First Fifty Years of Dr. Joanne Simpson's Career" at the Goddard Space Flight Center, Dec. 1-3, 1999. I was invited to give the evening talk following the symposium dinner at the University of Maryland. My concluding remarks then are even more appropriate now: "The road one travels to reach professional success is often circuitous, filled with potholes, and pitfalls and no shortage of frustration and discouragement. However, for those of us who were fortunate enough to have worked with or been mentored by Joanne, these career goals of which I speak not only exist, but are in fact attainable. Thank you, Joanne."

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drastically limited air operations throughout Europe.

In the months ahead, a big story will likely be a debate between the aviation industry and the various VAACs on the accuracy of their ash forecasts; and whether the air space restrictions implemented during the first six days after initial eruption were necessary or justified. This debate might well end up in court. That would be interesting if it does, especially when matters of model uncertainty and validation arise. It gives one pause to consider how we use model guidance here to forecast significant weather events (like snowstorms) having major financial implications to a wide host of users.



VA ADVISORY
DTG: 20100418/1200Z
VAAC: LONDON
VOLCANO:
EYJAFJALLAJOKULL
PSN: N6338 W01937
AREA: ICELAND

SUMMIT ELEV: 1666M
ADVISORY NR: 2010/018
INFO SOURCE: ICELAND MET OFFICE
AVIATION COLOUR CODE: RED
ERUPTION DETAILS: SIGNIFICANT ERUPTION
IS CONTINUING. PLUME HEIGHT VARYING
BETWEEN FL150 AND FL250.

So, can volcanic ash affect the United States as it did in Europe and Britain? Yes, especially across Alaska, Hawaii and the Pacific Northwest. Volcanic eruptions in North America could (and do) adversely impact U.S. aviation operations. The massive eruption of Mount St. Helens in 1980 disrupted aviation operations in portions of the U.S. for weeks. Over \$100 million in losses were experienced by the aviation industry when Alaska's Mt. Redoubt erupted from December 1989 through the first part of 1990.

The U.S. Geological Survey (USGS) is the government agency responsible for issuing timely warnings of potential volcanic eruptions in the United States and its territories (for more information, go to: <http://volcanoes.usgs.gov/>). They note the U.S. is volcanically active, with 169 active and dormant volcanoes in the Western U.S., Alaska, Hawaii and Guam. Alaska is home to most of the active volcanoes. Within the conterminous U.S., the Cascade Range has more than a dozen large, active volcanoes. As of mid April, all U.S. volcanoes, with the exception of Kilauea in Hawaii, are at normal levels of background seismicity.

If a volcanic eruption should occur here, preparation and planning among various U.S. government agencies is in place to deal with it. The Office of the Federal Coordinator for Meteorological Services and Supporting Research (OFCM) is responsible for interagency coordination and planning within the Federal Government. The latest OFCM interagency plan entitled "National Volcanic Ash Operations Plan for Aviation and Support of the ICAO International Airways Volcano Watch" (August 2007) is available online: <http://www.ofcm.gov/p35-nvaopa/pdf/FCM-P35-2007-NVAOPA.pdf>. Unlike what happened in Europe this past month, the U.S. airline industry has slightly more latitude on whether to fly near volcanic ash zones, based on a risk assessment, which is unlike the process used in Europe and Britain. Now might be a good time for all to review this document, as it contains details of what to expect from agencies like the National Weather Service and the Federal Aviation Administration during a volcanic episode. Alaska's Mt. Redoubt last eruption was only a little more than a year ago (March 2009).

So, as the Icelandic volcano showed, meteorologists play a large role in providing key information used by decision-makers and regulators within the aviation industry on where it is or is not safe for aircraft operations. In short, be prepared should a volcano erupt, especially if you travel through volcano-prone regions.

Questions/comments, please feel free to send email to me: President@nwas.org.

Steve Zubrick
NWA President

35th NWA Annual Meeting – Oct. 2-7, 2010

Fire and Ice: Science and Society

Where:

Marriott Tucson University Park, University of Arizona, 880 E. 2nd Street, Tucson, AZ 85719

Our Theme ~ Fire and Ice: Science and Society

The 2010 meeting will emphasize ongoing and emerging interaction between the branches of the weather and water enterprise, including the private sector, media, academia and government. Topics will also include: societal impact research and public policymaker interaction with weather forecasters; tropical cyclone forecasting, particularly in the eastern Pacific; wildfire forecasting; hydrometeorology, precipitation forecasting and estimation; innovative uses for lightning data; winter and severe convective storms, with emphasis on high plains and western U.S. geography issues; data denial and how operational forecasters cope with key data losses; and climate variability and forecasting, particularly on the intra-annual level.

Professional Development Opportunities:

The 2010 Annual meeting will include the annual Broadcasters' Workshop and DVD swap, and the Third Annual Students' Session at the University of Arizona Student Union – both on Sunday, Oct. 3. Student presentations will be reviewed by the NWA Weather Analysis and Forecasting Committee members, and monetary awards will be presented to the best presentations and posters in undergraduate and graduate student categories. The general session will be Oct. 4-7; the annual awards luncheon is Wednesday, Oct. 6.

Abstract Submission:

The deadline for submissions of abstracts is June 1, 2010. Abstracts should be sent via the online form on the NWA Web site at: www.nwas.org/2010abstracts.html. Abstracts will be published in the Meeting Agenda as submitted, so please make sure that they have been carefully reviewed and edited before submission. If you are unable to submit your abstract via the online form, please contact the NWA office at (919) 845-1546 or email: exdir@nwas.org. Presenters will be notified regarding the disposition of their abstracts by Aug. 15.

Annual Meeting Hotel Information:

Marriott Tucson University Park

NWA room rates (reserve by Sept. 1 to get these rates!):

Single & Double room rate: \$106.00

Standard Suites: \$139.00

Call 1-800-228-9290 and request the National Weather

Association 2010 Annual Meeting rate to reserve your room.

www.marriott.com/hotels/travel/tusup-tucson-marriott-university-park/

Still Need More?

The Annual Meeting Program Committee Chair is Erik Pytlak, Science and Operations Officer, NOAA/NWSFO, 520 North Park Ave, Tucson, AZ 85719; (520) 670-5156; annualmeeting@nwas.org.

The Broadcaster Workshop Program Chair is Mike Goldberg, PO Box 2491

Glen Allen, VA 23058-2491; mike@mike-goldberg.com

For more information on exhibits, special accommodations, registration and overall meeting program, go online to www.nwas.org or contact the NWA office at (919) 845-1546 or by emailing: exdir@nwas.org.

NWA Sponsored Annual Meetings, Conferences and Special Events for 2010

14th Annual High Plains Conference: Aug. 12–13

This conference sponsored by the High Plains AMS/NWA Chapter will be held at the Student Union Building on the campus of Dodge City Community College in Dodge City, KS. Abstracts including student competition entries are due 15 July. Details at: <http://www.highplains-amsnwa.org/>.

35th Annual Meeting of the National Weather Association: Oct. 2–7

See above for details.

The National Flood Workshop: Oct. 24-26

This conference, sponsored by many agencies including the NWA, will be held in Houston, Texas. Go to www.nationalfloodworkshop.net for more information.

Other Meetings, Conferences and Special Events

NOAA/NWS Eastern Region Flash Flood Conference: June 2-4

Aimed at how to improve flash flood forecast and warning performance and public action response, this conference will be held at the Woodlands Inn and Resort, Wilkes-Barre, Penn. Sponsored by the NOAA/NWS Eastern Region, NOAA/NWS Weather Forecast Office in Binghamton, N.Y. and the Susquehanna Flood Forecast and Warning System. Details at Web site: <http://www.erh.noaa.gov/bgm/research/ERFFW/>.

17th Conference on Satellite Meteorology and Oceanography: Sept. 27-30

This conference sponsored by the American Meteorological Society will be held in Annapolis, Md. For more information see Web site: <http://www.ametsoc.org/MEET/meetinfo.html>.

14th Annual Great Divide Workshop: Nov. 2-4

This workshop will be held at the Crowne Plaza in Billings, Mont. Send abstracts to Wr.Great.Divide.Workshop@noaa.gov by Oct. 1. www.wr.noaa.gov/byz/greatdivide/welcome.php.

Update on Converting WSR-88D Radars to Dual Pol

The WSR-88D Dual Polarization (Dual Pol) Program is in progress and headed for formal testing. The WSR-88D test bed in Norman, Okla., has been modified and will serve as the initial Dual Pol test bed. The present goal is to begin a Beta Test of the modification at Wichita, Kan., in November 2010 - the first of 5-single thread test sites. Deployment is slated to begin in March 2011 and conclude in December 2012. The NWS has published a Public Information Statement (PNS) on the Dual Pol products the NWS intends to centrally collect and distribute. This PNS and additional information is and will be posted on the Dual Polarization portion of the Radar Operations Center Web site: <http://www.roc.noaa.gov/WSR88D/>.

A site-specific deployment schedule has not yet been coordinated among the NWS Regional Headquarters, the Department of Defense nor the Federal Aviation Administration. Those developing the deployment schedule will take weather conditions into account, and also look for ways to minimize the

cost to the government when moving the five installation teams through the radar network.

Regarding training, the NWS Warning Decision Training Branch (WDTB) is working on providing a host of Dual Pol training materials. The Dual Pol radar operations course for NWS forecasters will be released in September 2010. NWS staff will complete the training using the NWS Learning Management System (LMS). In addition, WDTB will make this training available to everyone via access to the WDTB Web site: <http://www.wdtb.noaa.gov/modules/dualpol>. Other outreach training is being developed by WDTB and will become available in the fall of 2010.

**Dr. Tim Crum, NEXRAD Operations Focal Point, NWS
Radar Operations Center
Ed Mahoney, Branch Chief, NWS WDTB**

Dates **2** Remember

May 15: Application period ends for NWA AccuWeather and Scofield Scholarships

June 2-4: NOAA/NWS Eastern Region Flash Flood Conference, Wilkes-Barre, Penn.

June 15: Application period ends for Meteorological Satellite Applications Award Grant

June 21-27: Lightning Safety Awareness Week

Oct. 2-7: 35th National Weather Association Annual Meeting, Tucson, Ariz.

Oct. 24-26: National Flood Workshop, Houston, Texas

See page 7 for more Professional Development Opportunities and details about attending the 35th NWA Annual Meeting!

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