



NOAA Flies High at EAA AirVenture 2010



Each afternoon visitors are treated to an air show featuring stunts, historic planes and amazing pilots.

The EAA AirVenture in Oshkosh, WI drew over 535,000 spectators during the week of Monday, July 26 through Sunday, August 1. EAA (Experimental Aircraft Association) is an organization comprised of members with a wide range of aviation interests and backgrounds. Each year, pilots, general aviation enthusiasts and anyone interested in watching planes do amazing stunts and fly-bys at daily air shows gather in droves at AirVenture. AirVenture is the largest aviation event of its kind in the world. During the week, the Wittman Regional Airport in Oshkosh becomes the busiest airport in the world.

FEDERAL AGENCIES SUPPORT AVIATION. The Federal Pavilion, one of the many buildings on the AirVenture grounds, hosts numerous federal agencies from the United States, Canada and the Bahamas. The agencies, including U.S. Customs and Border Protection, FAA Aeronautical Navigation Services, National Guard Counterdrug Program, Transport Canada, U.S. National Park Service, Bahamas Customs and Civil Aviation Authority, NOAA Search and Rescue Satellite-Aided Tracking (SARSAT) System, NOAA National Geodetic Survey (NGS), and NOAA National Weather Service (NWS), are members of the International Federal Partnership, which all support the aviation community in various ways.

NOAA WELL REPRESENTED. Representatives from different areas of NOAA attend the EAA AirVenture each year. NGS, SARSAT, and NWS showcase their booths next to each other in the Federal Pavilion. SARSAT provides information about beacons and search and rescue, along with capabilities for aviators to register their search and rescue beacons on site. NGS shares information and materials about their airport survey work. NWS uses the opportunity to demonstrate online aviation products and to inform the aviation public about what NWS does to support general aviation. The NWS booth contains brochures explaining aviation services provided by the NWS, as well as two computer kiosks so people can access numerous NWS weather websites. The NWS booth also has a hurricane simulator and a tabletop tornado machine, which attracts many visitors.



NOAA National Weather Service staff answer questions from various customers and promote numerous resources for the public and aviation communities.

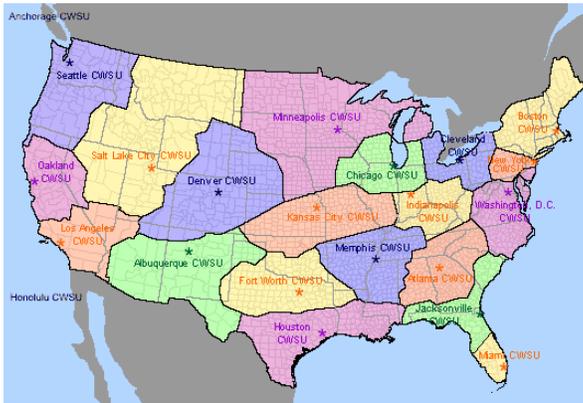
Manning the booth were employees from the Wisconsin NWS Weather Forecast Offices, including Milwaukee/Sullivan and Green Bay, as well as staff from the Aviation Weather Center and NWS Central Region Headquarters from Kansas City, MO, NWS Headquarters, and the NOAA Central Region Collaboration Team. One of the most important aspects of the event is that AirVenture's many visitors provide direct feedback about the aviation services NWS provides - what they like, what they don't like, and what needs improvement.

INFORMING AND EDUCATING. Additionally, several NOAA participants gave forum presentations in the Federal Pavilion. These presentations qualified pilots in attendance to FAA "WINGS Safety Program" credits. NOAA staff also conducted radio interviews, which provide outlets to inform and educate the public about the weather support NWS provides to aviation.



Visitors feel category 1 hurricane strength winds up to 79 mph in the Hurricane Simulator.

Collaborating in Chicago for Safer Airspace



Beginning in early 2010, the National Weather Service (NWS) Weather Forecast Office (WFO) and Center Weather Service Unit (CWSU) in the Chicago area embarked on an initiative to enhance aviation services to benefit the National Airspace System (NAS) efficiency and safety for the flying public. The WFO produces Terminal Aerodrome Forecasts (TAFs) for Chicago O'Hare and Midway, along with other airports across northern Illinois in their area of responsibility. TAFs are specialized, detailed forecasts that look ahead over the next 24 to 30 hours to predict visibility, cloud ceiling heights, wind speed and direction, and any weather such as light rain, thunderstorms, or snow. These forecasts help the Federal Aviation Administration (FAA) and the airline industry determine weather impacts on air traffic including runway configurations and the number of planes that can take off and land at any given time.

SERVING AIR TRAFFIC PERSONNEL. CWSUs are co-located in FAA Air Route Traffic Control Centers (ARTCCs) in order to provide weather information to air traffic managers and controllers. The team provides these services through regularly scheduled weather briefings and frequent face-to-face weather updates with FAA officials. They also produce specific aviation weather products that focus on aviation weather hazards important to ARTCC personnel.

The WFO and CWSU rely on each other's expertise to produce closely collaborated forecasts. For example, the coordination and collaboration with the TAFs are a two-way street involving several written discussions. Coordination also takes place by a telephone call or online chat software to further refine any details to the forecast.



DEMONSTRATING COLLABORATION. Although the CWSU and WFO have always worked together, they teamed up to expand aviation services and produce enhanced information. They collaborated on the creation of tactical decision aids for the CWSU website along with a total redesign of the layout and

information that is available. The project as a whole was an exemplary demonstration of the power of intra- and interagency collaboration. In addition to the NWS collaboration that took place, there were a series of meetings with FAA, industry, and other aviation partners to ensure services were specifically tailored to their needs. Any changes made had to be usable and understandable for those that needed it most.

The work isn't over yet. The collaborative process will continue to enhance future aviation services in the Chicago area over the long term and seek ways to reduce weather-related flight delays. A Chicago Aviation Weather Forum brought NWS, FAA, general aviation, industry and researchers together last March to kick-off this process, and it will continue with another forum set for February 2011. These exchanges will ultimately help reduce flight delays due to weather impacts. This team approach and focus on aviation weather impacts helps evolve and contribute to a safe and efficient National Airspace System.

ate	Sched	Status
6	8:37P	Now 10:49
1	6:26P	Cancelled
2	6:14P	Now 8:45
8	8:18P	Now 8:56
01	5:59P	Now 8:25
-1	7:55P	Now 8:57
04	6:14P	Now 9:04
C12	6:22P	Now 8:40
C11	6:52P	Now 9:12
D6	7:22P	Now 9:30
C9	7:25P	Now 9:42
	8:20P	Cancelled
	8:31P	Cancelled
A1	6:41P	Now 8:45

Central Regional Collaboration Team Holds Annual Meeting in Asheville, North Carolina



The NOAA Central Region Collaboration Team visiting the North Carolina Arboretum

On September 1-2, the NOAA Central Regional Collaboration Team held its annual meeting in Asheville, North Carolina. The location was chosen to provide the team members an opportunity to interact directly with climate researchers and communicators from the National Climatic Data Center on numerous climate issues and research. The Team also welcomed the two regional climate service directors who have responsibility in the NOAA Central Region, Doug Kluck and Dave Brown.

In addition, the Team visited the North Carolina Arboretum and met with staff to hear about several collaborative efforts. Finally, the team discussed internal business and finalized their FY 2011 Activity Plan, which aligns with goals and objectives from NOAA's Next Generation Strategic Plan.

IWT Improves Severe Weather Warnings

Communication and teamwork during a high impact weather or water event can often be the most critical aspect of fulfilling the mission of NOAA's National Weather Service. While the NWS provides the backbone of information regarding such severe events, the agency is just one player in the entire Integrated Warning Team, which ultimately works together to save lives.

TEAM OF THREE. The Integrated Warning Team, or IWT, is defined by three key players: the NWS, broadcast media, and emergency management – inclusive of emergency managers, first responders, and amateur radio operators. Andy Bailey, Warning Coordination Meteorologist at the NWS Weather Forecast Office at Pleasant Hill, Missouri, developed a concept in 2008 to bring these three groups together at a workshop. The purpose of the workshop was to open a dialog on how the IWT could work together more effectively during a high impact event, and to discuss and educate IWT team members on how to infuse cutting edge social science research into effective communication of emergency information.

ESTABLISHING STANDARDS. The NWS and local emergency management sponsored a three-day workshop in Kansas City in January, 2009. One key deliverable from the Kansas City IWT workshop was that local broadcast media partners all agreed to standardize the color palette used for on-air display of NWS watch and warning information. A second deliverable was an open dialog amongst the dozens of metropolitan area cities regarding the siren policies used during a high impact weather event.

Based on the success of this workshop, the NOAA Central Regional collaboration team adopted and sponsored Andy's work as an annual component of the team work plan. Since the fall of 2009, the NOAA Central Regional team has sponsored IWT workshops in Omaha, Nebraska; Cedar Rapids, Iowa; and Wichita, Kansas. The NOAA Central Region provides a \$4,000 stipend and administrative support to the local office to host the event. The draft workshop agenda focuses discussion to a one or two day event that achieves the following objectives:

1. Building and fostering closer relationships between the key IWT players
2. Developing action plans for improving warning communications to the public and key stakeholders
3. Infusing concepts of social science into local IWT operations

The Cedar Rapids IWT workshop was held in August, 2010. Key deliverables that the IWT in Iowa will be working towards include:

- Exploring ways to integrate the Health Alert Network at NWS offices
- Conducting an NWS Chat training webinar (or multi-media training) for new users
- Partnering with the State Department of Transportation to add weather content to annual refresher training for telecommunicators
- Conducting training session with news room staff about information to ask when taking severe weather reports
- Exploring options for a local severe weather information "clearinghouse," as a minimum between NWS, EMA, and media in Linn County

The Kansas IWT workshop was held in September. The after-action plan from this workshop remains under development, but the NWS has partnered with emergency management to catalog their action plan and results at <http://www.readytohelp.org/>.

If your community is interested in sponsorship of an IWT workshop in your local area or more information, please contact Mike Hudson, NOAA Central Regional collaboration team member, at michael.hudson@noaa.gov.



Welcome Doug Kluck & Dave Brown: NOAA Regional Climate Services Directors

To more effectively meet the rising public and private demand for climate products and services, NOAA selected six new NOAA regional climate service directors. The new directors will work to build and strengthen regional partnerships, resulting in the ability to better assess and deliver regionally-focused climate science and information products and services that help people make informed decisions.

Two of these new directors will work with the NOAA Central Region Collaboration Team, Doug Kluck (Kansas City, MO) and David Brown (Fort Worth, TX). The directors are employed by NOAA's National Climatic Data Center and based at NOAA's National Weather Service regional headquarters offices.

To see the official announcement from Secretary Locke and read profiles of each director, visit http://www.noaanews.noaa.gov/stories2010/20100914_climatedirectors.html#brown



Doug Kluck (left) and Dave Brown (right) visiting the National Climatic Data Center's Archive with over 150 years of weather data on hand.

EMPLOYEE SPOTLIGHT: *Rich Webber*



Your job title is a pretty long acronym.

I'm a CWSU MIC – Center Weather Service Unit Meteorologist-In-Charge. I lead a staff of four meteorologists who provide meteorological information to an FAA regional air route traffic control center. I enjoy my job. I get to pick up leadership and management skills and still be quite involved in operational meteorology.

What does operational meteorology look like on a daily basis?

We analyze NOAA satellite, radar and model data, generated by supercomputers in Washington D.C., to forecast aviation hazards such as thunderstorms, turbulence and icing. Then we report to senior FAA air traffic managers and planners, so they can plan smooth aircraft routes across the middle part of the U.S.

It can be challenging and it's always interesting. . The atmosphere is chaotic, and we have to keep up with constant changes using computer models that aren't exact.

What have you learned on your job?

I've learned to be a better listener. When dealing with people from two different agencies – FAA air traffic controllers and NOAA meteorologists – communication is essential. I've learned that to be an effective communicator, you must be a good listener.

Any stories?

A couple of years ago, there was an explosion in a factory in downtown Kansas City that released a toxic cloud near the downtown airport. Nearby aircraft experienced corrosive effects. We had to figure out the cloud's altitude and where it was going so we could advise aircraft how to avoid it. It really got us going here.

I was also on duty the morning the space shuttle Columbia disintegrated over Texas. On our radar, we could see the path of the debris. It was really tragic, but also interesting to see the FAA response.

What's next in your field?

The next big thing is called Dual-Pole Radar. It's the next step up from Doppler Radar, and it'll come out in the next few years. It will provide more information inside storms and on storm structure to improve warning times.

What don't your coworkers know about you?

I had a hole-in-one playing golf years ago,. It was a 90-yard par three, the ninth hole – it landed on the green and rolled into the cup.

How can people contact you?

I'm at Richard.Webber@noaa.gov.

Email noaa.centralregion@noaa.gov and share your ideas on the next employee to feature.