



# NOAA's NATIONAL WEATHER SERVICE Western Region Notes

August 1, 2009

## REGIONAL DIRECTOR'S OFFICE

**LIFT V Students Selected:** Students have been selected to participate in the fifth WR LIFT class, which will start on September 20 with the LIFT V Workshop. The LIFT applicant evaluation committee had a difficult time deciding on only 13 WR participants from the many well qualified candidates. Alaska Region will be sending two students to join the Western Region participants. The students come from fourteen different offices, and represent a wide spectrum of job classifications. At the conclusion of the LIFT Workshop, 76 students will have had the chance to participate in this leadership development opportunity. Thanks to all who applied for the program and congratulations to those who were selected!

Brent Bower, Senior Service Hydrologist, WFO Seattle  
Andrew Brown, Lead Forecaster, WFO Anchorage  
Andrew Bryant, Senior Service Hydrologist, WFO Portland  
Michael Doney, Information Technology Specialist, WRH SSD  
Steven Duaine, Electronic Technician, WFO Flagstaff  
Frederick Fritsch, Forecaster, WFO Juneau  
Treena Hartley, Forecaster, WFO Eureka  
Mary Johnson, Lead Forecaster, WFO Pendleton  
Michael Kennedy, Forecaster, WFO Las Vegas  
John Keyes, Forecaster, WFO Pocatello  
Greg Koch, Lead Forecaster, WFO Spokane  
Jennifer Pallister, Forecaster, WFO Missoula  
Cynthia Palmer, Forecaster, WFO Sacramento  
Matthew Solum, Forecaster, WFO Billings  
Shawn Weagle, Forecaster, WFO Portland

**Republic of Georgia Film Crew visits WFO Portland and NWRFC:** On June 29, WFO Portland and the NWRFC hosted a group from Georgian Public Broadcasting Television based in Tbilisi, Georgia. The group was visiting the U.S. to gather information for a television commentary on "Emergency Preparedness in the U.S." The film crew was in the U.S. to focus on disaster response, civil preparedness efforts and the role of public-private partnerships in emergency preparedness. They interviewed the MIC at WFO Portland (Steve Todd) and the Development and Operations Hydrologist (DOH) at the NWRFC (Don Laurine) to gather information on the role the NWS has in emergency preparedness and working with our partners. They also visited Oregon Emergency Management and an Oregon Coastal Community to gather information about community preparedness. The commentary will be aired on television in the Republic of Georgia later this year to inform viewers on best practices

in the coordination efforts between government, the private sector and local communities, as well as promote community and individual preparedness.



*Don Laurine explains NWRFC hydro operations to Nana Kiknadze, Information Officer with the US Embassy in Tbilisi, Georgia.*

**Featured Decision Support Service:** On July 10, a line of thunderstorms developed along the Cascade foothills in Northwest Oregon and the staff of WFO Portland were aware of an outdoor concert being held in the Clark County Amphitheater with 18,000 people in attendance. It looked like the winds aloft would carry the storms directly over the concert site. Lead Forecaster, Dave Willson, saw this as a decision support opportunity and contacted the emergency manager in Clark County about the potential for a lightning event moving over the concert area. He and the others on shift, Jonathan Wolfe and Dan Keirns, also followed up with additional information. It turned out there were some lightning strikes nearby, but luckily the storms went just west of the concert site. The Emergency Manager of Clark County had this to say, "A special thanks to Dave Willson and the team that were working on Friday afternoon for letting us know about the potential for lightning/thunderstorms that evening. They were aware of the sold out concert we had at the Amphitheater that night and so were justifiably concerned about it. I had our dispatch let the Sheriff's Office person-in-charge at the Amphitheater know about this threat. I also got another phone call with an update from Dave at about 5:30 pm. We were well-informed throughout. Contacting us directly about this weather potential was very thoughtful and proactive. Please pass on our appreciation." Great job, WFO Portland!

## **METEOROLOGICAL SERVICES DIVISION**

**Civil Air Patrol Cadets Visit WFO Elko:** The National Weather Service in Elko was host to the White Pine County Civil Air Patrol Cadets on Saturday, July 11. Jeffery Rood (General Forecaster) and Michael Fitzsimmons (WCM) provided a detailed presentation on the history of the National Weather Service upper air program and the relationship with our numerical models, and seven day forecasts. The Cadets were also given an overview of the Aviation

Weather Center (AWC) web page. Specifically, the focus was on the preparation, dissemination and access of the 30-hour TAF forecasts for the four sites within the county warning area: WMC, EKO, ELY and TPH. In addition, the Cadets were shown how to access short range convective forecasts from the Aviation Digital Data Services (ADDS) page. The Cadets visit culminated with observing the afternoon upper air launch. After the launch, a brief summary was given tying together all the afternoon activities. Prior to departing, the Director of the White Pine County Civil Air Patrol praised WFO Elko for exceptional aviation services and for the program they received.



**Southwest Fisheries Science Center Returns the Visit:** In May, members of the staff of WFO San Diego visited the Southwest Fisheries Science Center (a part of the National Marine Fisheries Service) in La Jolla. In July, five people from the SWFSC returned the visit to WFO San Diego. The intent of the visit was to attend a seminar, given by Brandt Maxwell, meteorologist at WFO San Diego, about numerical models. The five people who visited were involved in areal surveys of marine wildlife and wanted to know how output from numerical models can help them understand the flying conditions that they encounter along the Pacific coastlines of California, Mexico and Central America.



*Standing, left to right:  
Rachel Struch  
(SWFSC), Brandt  
Maxwell (WFO San  
Diego), Tomo Eguchi  
(SWFSC)  
Sitting, left to right:  
Jim Gilpatrick  
(SWFSC), Eric Archer  
(SWFSC), Mark Lowry  
(SWFSC)  
Photo taken by Mark  
Moede (WFO San  
Diego).*

**WFO Glasgow Participates in Lightning Safety Awareness Week:** Lead Forecaster, Ted Jamba, recently spent an afternoon at the USACE Fort Peck Interpretive Center for the Nature Blitz! event. He promoted lightning safety, and had the new lightning brochures and “When the Thunder Roars, Go Indoors!” stickers. Other topics included cloud types, and how tornadoes form, using the Teaching Tornado. MIC Steve Apfel, general forecaster Rob Smith and intern David Shallenberger also attended the Wild West Days in Poplar, MT on the Fort Peck Reservation. The annual street fair is a way for the NWS to get safety information out to the very large Native American population. The event draws in several hundred people from around the area.



*Two young boys learn about lightning and lightning safety with the hand-cranked Van De Graaf Generator at the Nature Blitz! event*

**CWSU MIC Wins Soaring Award:** Walter Rogers, MIC of the Los Angeles Center Weather Service Unit, was the winner of one of the most unique prizes in all of the sport of soaring – the Barron Hilton Cup week-long soaring camp held June 18-24, 2009. Only pilots who complete the longest triangular flights in five regions of the world are eligible for this honor. The camp took place at Baron Hilton’s Flying M ranch located in Western Nevada. The flight that awarded Walt the Western U.S./Central and South America regional award was a 966 km triangle flown in his Discus 2A



sailplane over the Owens Valley and Western Nevada in August 2008 (eight hours thirty minutes). Walt has competed in his own racing sailplane for 29 years winning numerous regional championships throughout the U.S.

#### **Walt Rogers' Flight:**

<http://www3.onlinecontest.org/olc-2.0/barronhilton/flightinfo.html?flightId=-942608239>

## **HYDROLOGY AND CLIMATE SERVICES DIVISION**

**ESRI GIS Users Conference:** Approximately 15,000 GIS users were in attendance at the ESRI GIS Users Conference, which was held at the San Diego Convention Center the week of July 12. The NOAA booth had displays of and information about NOAA GIS products, as well as other NOAA data. Those who staffed the booth talked to key partners who use our data, including some from LA County Fire, Cal Fire, and Anza-Borrego S.P.



*Back row: Paul Kirkwood (SRH), Jayme Laber (LOX), Kari Sheets (NWSH), Andrew Murray (WRH/HCSO); front row: Jenna Meyers (NWSH), Ira Graffman (NWSH), and Stefanie Sullivan. (Jack Settlemeier and Ken Waters are not pictured).*

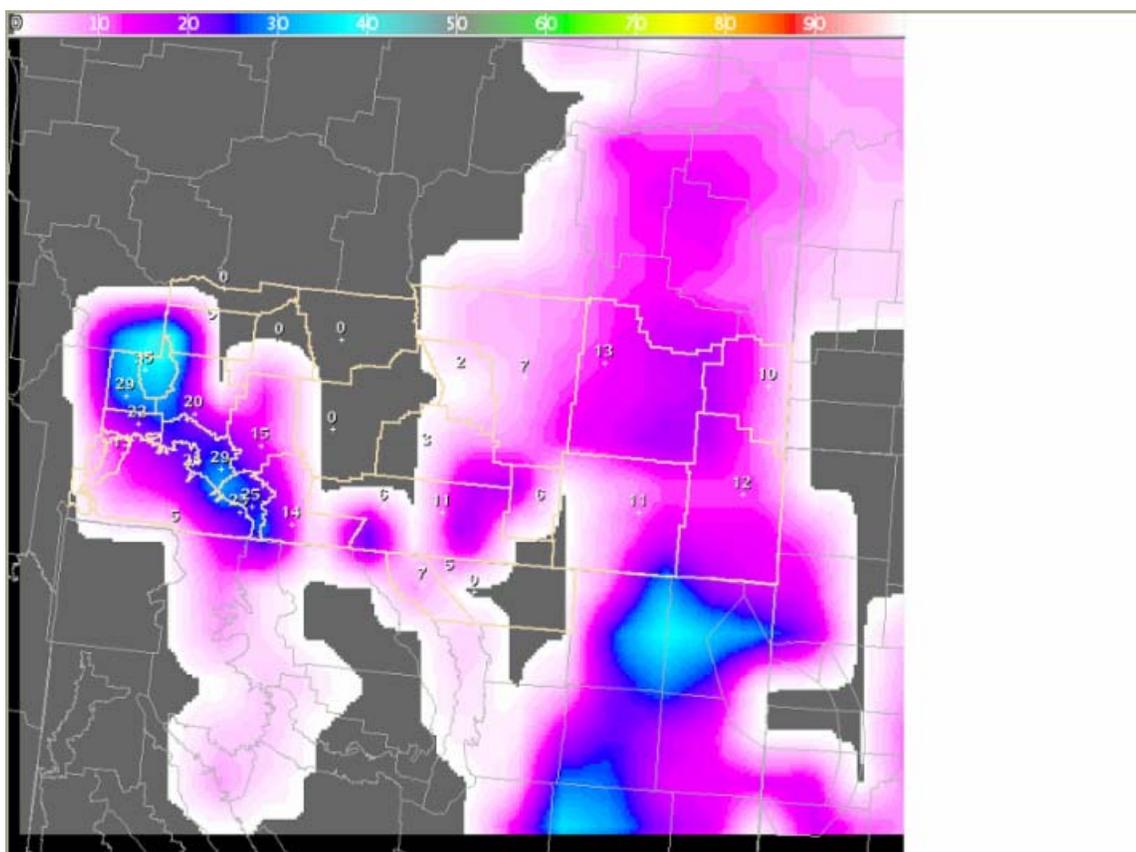
## **SCIENTIFIC SERVICES DIVISION**

### **Upcoming Science Meetings:**

- **AMS Conference on Mesoscale Process** – Aug 17-20, Salt Lake City, UT – additional information available on the AMS web site
- **AMS Symposium on Fire and Forest Meteorology** – October 13-15, Kalispell, MT – additional information available on the AMS web site
- **Great Divide Workshop** – October 19-21, Missoula, MT – contact Chris Gibson

### **Activities:**

**Update on the summer lightning project: From Chris Gibson (Missoula SOO)**



3 hour grid from 00Z to 03Z on the evening of June 20<sup>th</sup>, 2009

Work has been proceeding on many fronts with the SPC lightning project.

WFO Billings sent SSD some good feedback on their initial impressions of the SPC forecasts. They felt the probability of 100 or more strikes might be useful to delineate the big days from the normal days. Chris should be able to share that data with the WFO's through ISC once we get the 12 km data flowing (as well as 1 and 3 strike probabilities). The push right now is to get the 12 km data going rather than trying to do new things with the 40 km forecasts. These forecasts are certainly deterministic in nature and if the NAM12 goes off on it's own as far as solutions, the SPC forecasts will follow.

Where is the 12 km data?? Phillip Bothwell at SPC has been working on getting quality 12 km probability forecasts going. He ran into some issues with the 12 km NAM fields feeding the perfect prog equations. He narrowed it down to high frequency NAM fields for derived fields like vorticity advection, T advection, etc. Work is proceeding but distribution is obviously delayed.

The regional page was disabled on [www.wrh.noaa.gov](http://www.wrh.noaa.gov) due to issues raised by NWSEO and WR. More information will be coming.

Chris is collecting the observed lightning counts on the 12 km grid. We hope to stand up a web page with a graphical look at observed and forecast lightning soon. More sophisticated

verification will come later and will be based on 12 km forecasts only, if we can get them running correctly.

**Debris Flow Project:** A joint NWS/USGS/OAR meeting was held on June 17-18 at WFO Oxnard to review last winter's southern California debris flow prototype program results and plan for the upcoming winter season. Staff from the Monterey, San Diego and WRH offices also attended. The results were:

- Monterey WFO was added to the project due to the last fall's fire activity.
- After a very active fire weather season, last winter/spring was characterized by a number of weak precipitation events. Debris flow activity was reduced with only several minor events and only 1 significant event reported (Monterey CWA)
- Community preparedness was improved. The USGS post fire threat maps allowed the WFO to raise local community's awareness after the fires. Where possible, communities were more aggressive in implementing mitigation structures (building k rail diversions, debris flow traps, etc) and pre-positioning resources during the events.
- Warning skill scores for debris flow events remain low and more work needs to be done in this area to improve guidance to the forecasters. In response, the USGS will be using a new application to refine the debris flow thresholds and San Diego and Oxnard WFOs will finish the local installation of MPE to improve QPE. Most felt the awareness raised by adding the debris flow threat to the appropriate flash flood watches was effective.

### **Training Updates:**

#### **NWSTC**

The "Data Acquisition for Managers" course is newly available from the NWSTC and can be accessed in the NWS Learning Center (<https://doc.learn.com/noaa/nws>) on the "New Training" page.

The course provides knowledge and awareness of the importance of the Data Acquisition Program in a NWS office. Main topics in the module include:

- 1) Value of NOAA/NWS Observations,
- 2) Quality Assurance and Quality Control,
- 3) Surface Observing Programs,
- 4) Upper-Air Program,
- 5) Cooperative Observer Program,
- 6) Observing Equipment Maintenance.

Target Audience: WFO MICs, RFC HICs, WSO OICs, and regional managers who have supervisory oversight of NWS personnel who directly manage Data Acquisition Programs. \*NOTE: This course does not replace residence COOP and DATAC training for DAPMs, OPLs, COOP program managers, surface program managers or others directly managing Data Acquisition Programs.

## WDTB

- [WES 9.0 Update 1](#) now available!
- [AWIPS OB 9.0 Training](#)
- [WDTB Training Disk Inventory](#)
- [WDTB's FY09 Training Schedule](#)
- [Advanced Storm-Based Warning Training](#) now available!

**COMET** You can access all COMET modules through the LMS.

- [Satellite Feature Identification: Blocking Patterns](#)
- [Jason-2: Using Satellite Altimetry to Monitor the Ocean](#)
- [S-290 Unit 2: Topographic Influences on Wildland Fire Behavior](#)

**Teletraining Sessions for August:** The teletraining calendar link: <http://rammb.cira.colostate.edu/visit/ecal.asp> Offices can register for the teletraining sessions by sending email to: [visit@comet.ucar.edu](mailto:visit@comet.ucar.edu). All previous sessions including those with recorded instructor audio and annotations are available at: <http://rammb.cira.colostate.edu/visit/ts.html>

August 2009						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						<b>1</b>
<b>2</b>	<b>3</b>	<b>4</b> <a href="#">Coastal Effects</a> 9:30 AM MDT 15:30 UTC	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>16</b>	<b>17</b> <a href="#">Utility of GOES Imagery for Severe Weather</a> 1:30 PM MDT 19:30 UTC	<b>18</b>	<b>19</b> <a href="#">Convective Downbursts</a> 11:00 AM MDT 17:00 UTC	<b>20</b>	<b>21</b>	<b>22</b>
<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>
<b>30</b>	<b>31</b>					
<-- <a href="#">View July</a>   <a href="#">View September</a> -->						

## SYSTEMS OPERATIONS DIVISION

### Another SOD Barbecue:



This time it was cooked electronic components in our AHPS back end data processor. Due to this failure AHPS hydrographs on our AHPS web service were stale for the entire Region. SOD staff arrived on the scene with hot dogs, buns, mustard and pickle relish, but quickly realized that what we really needed was a spare Penguin Relion 1300 chassis into which we could install the good drive from the failed system. We took the closest model Penguin chassis available, removed the installed hard drive, and then installed the hard drive from the cooked Penguin into the spare chassis. We rebooted the system, removed hardware support for devices not recognized during boot and added hardware support for the new devices found, fussed around with NIC settings and

other system configuration information and voila, just like that we had the system up and running.

### Happenings in Hanford:

SOD staff (Joe Lachacz, Son Nguyen and Gerry Deiotte) visited the WFO in Hanford, CA to conduct an SOD Program Review. The 88D radar site, several ASOS sites, and NOAA Weather Radio sites were visited. The sites were in excellent condition and were well maintained; *KUDOS to the WFO electronics team at Hanford.* While at the program review, the EPM (Joe Lachacz) attended a local Skywarn meeting of local amateur radio operators. Other activities during this



review included; 1) devising a plan to improve the antenna layout on the tower and equipment placement at the WFO, 2) replacing all RF cables and adding grounding to cables entering the building, and 3) installed several new antennas on the tower. These activities were jointly done by the local Hanford electronics staff and Gerry Deiotte. Gerry left early the following week to assist WFO Oxnard with the Santa Barbara ASOS relocation.

**OCIO Detail:** Deputy Chief of SOD, Sean Wink, recently completed a 30-day detail at NWSH Office of the CIO (Chief Information Officer). While on detail, Sean worked on several high level objectives. Sean worked on improving customer (Regions and Fields) satisfaction; improve responsiveness and efficacy within the OCIO by bringing a field perspective and enhancing field participation/representation. He also evaluated best practices across HQs and the field for OCIO implementation. Sean facilitated and will continue to facilitate Certification & Accreditation of the Consolidated Internet Farms. Other benefits of this detail were to enhance Leadership, Communication, and Presentation Skills and gain a much wider perspective of the NWS/NOAA operations, challenges, and issues. The detail was very rewarding and beneficial. Sean continues to work closely with the OCIO on several projects and initiatives.

**Fischer Porter Gauge Relocation:** Jim Chaisson helped relocate a cooperative observing station in Cooke City, Montana. Due to the amount of snow the Cooke City area receives each year, the Fischer Porter gage is located on a platform, set on a 4 foot tower, so the top of the gage is about 9 feet above the ground. The new location is on an incline, where footing, leveling, and keeping things from rolling down the mountain needed to be addressed.

Since that spot was the only location on the observer's property suitable for the Fischer Porter, the tower needed to be secured with anchor bolts, and concrete. The platform, due to weathering, was also rebuilt. The Fischer Porter tower and platform, the temperature sensor, cabling, snow stake and elevated 8" rain gage holder were all professionally installed.



**Radar Facility Snow Shelter Upgrades:** Randy Miller and Dean Rackam have been working on the four snow shelters that exist at the Doppler radar sites in Western Region (Elko, Reno, Cedar City, and Flagstaff). There are only five in the country, the fifth being in Central Region (Grand Junction, CO). A snow shelter is a steel building built over the normal concrete buildings that house the Doppler equipment. This configuration was established in order to maintain winter access at the high snow level sites.

As the photograph from Battle Mountain, NV shows, there are three entrances to the building based on snow depth as the building becomes buried in snow. The other Doppler sites (without snow shelters) throughout the region received renovations in 2008. The ventilation components (seven of them) were changed out, doors, ventilation hoods and trim repainted, leaks sealed on walls and roofs, fence and gate repairs, signs installed, weed control for fire hazard, fuel tank leak detection systems repaired, as well as fuel tank repainting were some of the updates accomplished.



In the past month the facilities at Cedar City, UT, Flagstaff, AZ, and Elko, NV were retrofitted as described. The facility at Reno is scheduled to have the same work accomplished this summer.

**Danger Zone - The Office:** Compared to an industrial work environment, an office can seem like a safe place to work. However, many serious accidents and injuries occur on a regular basis in offices. Slips, trips and falls are one of the most common causes of workplace injuries. Office workers are injured by falls, fires and electric shock. They receive cuts and bruises from office tools and furniture. They can develop long-term injuries from repetitive work.

So, as you go through your day, use these safe work practices:

- **Watch for obstructions** which can cause tripping accidents
- **Materials should be stored in designated storage areas** not in boxes on floor
- **Store personal items in designated storage areas**, such as briefcases, handbags, and backpacks
- **Keep drawers of desks and cabinets closed and load file cabinets from the bottom up** – serious accidents can occur if cabinets are top-heavy
- **Clean up any spills**, such as coffee or water, right way

- **Use safe lifting techniques** – it is just as easy to receive a back injury in the office as it is in the warehouse. To pick up heavy items, squat down beside it, use the strength in your legs (not your back), and bend your knees, not your back
- **Be alert to electrical hazards and don't overload electrical circuits** – check for any frayed or damaged cords or plugs, and extension cords are meant to be used only temporarily, so make sure the area is wired adequately for all of the electronic equipment such as computers, copiers and printers.