

# NOAA'S NATIONAL WEATHER SERVICE Western Region Notes

March 24, 2005

# **REGIONAL DIRECTOR'S OFFICE**

<u>Regional Deputy Director to Retire</u>: It is with mixed emotion that we announce the upcoming retirement of WR Deputy Director Jim Campbell. After more than 35 years of service, Jim will retire on April 30.

Jim became the WR Deputy Director in July of 1991. Prior to that, he served as the MIC in Minneapolis, Minnesota. He has held various other positions, including Acting Branch Chief of the Severe Weather Branch in Washington DC, Emergency Warnings Meteorologist, Warnings Preparedness Meteorologist, and forecaster.

Jim will be sorely missed by WRH staff members and many others around the region and beyond. A retirement luncheon is being planned in his honor.

**<u>MIC/HIC Workshop Summary</u>**: The annual MIC/HIC meeting was held at the Embassy Suites in Portland, Oregon on March 15-17.

The first morning of the workshop was devoted to reviewing and discussing the Western Region Budget for FY 2004, FY 2005, and beyond. There was also discussion on the possible impacts of the 37 million dollar shortfall for this year although no further specific actions have been taken at the national or regional level.

Other topics included hydrology issues, future plans for AWIPS, service backup, administrative issues (Quickhire, CAMS, and purchase orders), personnel issues, and safety. A panel of MICs/HICs presented information on staying proficient for rare events, and Sherrie Hebert (Service Hydrologist from WFO Pocatello) presented a seminar on marketing. Several breakout groups focused on how the region should adopt IFPS office procedures, feedback on verification, and improving IFPS collaboration.

## METEOROLOGICAL SERVICES DIVISION

**Statement of the Week**: Our Statement of the Week comes from WFO Billings. They successfully used GHG to compose this WSW product, which included a Heavy Snow Warning for the Big Horn Mountains in north central Wyoming, and Snow Advisories in the other areas indicated. The forecast hit the mark, with Heavy Snow reported in the Big Horns, and lesser amounts in the other two areas. The Warning and Advisories provided good detail in a clear and concise manner, including where the heaviest amounts were expected. Great job to Joe Lester at Billings!

WWUS45 KBYZ 141516 WSWBYZ

URGENT - WINTER WEATHER MESSAGE NATIONAL WEATHER SERVICE BILLINGS MT 816 AM MST MON MAR 14 2005

A SERIES OF UPPER LEVEL DISTURBANCES COMBINED WITH A MOIST AND UNSTABLE NORTHWEST FLOW WILL RESULT IN HEAVY SNOW SHOWERS OVER THE BIG HORN MOUNTAINS AND SHERIDAN FOOTHILLS TODAY AND THIS EVENING. SIGNIFICANT ADDITIONAL ACCUMULATIONS ARE EXPECTED.

WYZ098-142300-/X.NEW.KBYZ.HS.W.0002.050314T1516Z-050315T0400Z/ NORTHEAST BIG HORN MOUNTAINS-INCLUDING THE CITY OF...BURGESS JCT 816 AM MST MON MAR 14 2005

... HEAVY SNOW WARNING IN EFFECT UNTIL 9 PM MST THIS EVENING ...

THE NATIONAL WEATHER SERVICE IN BILLINGS HAS ISSUED A HEAVY SNOW WARNING...WHICH IS IN EFFECT UNTIL 9 PM MST THIS EVENING.

SNOW SHOWERS...HEAVY AT TIMES...WILL CONTINUE INTO THIS EVENING. LOOK FOR ADDITIONAL ACCUMULATIONS OF 6 TO 12 INCHES TODAY AND THIS EVENING FROM BURGESS JUNCTION TO STORY...BRINGING TOTAL ACCUMULATIONS SINCE SUNDAY TO UP TO 2 FEET OVER THE HIGHEST ELEVATIONS.

A HEAVY SNOW WARNING MEANS SEVERE WINTER WEATHER CONDITIONS ARE EXPECTED OR OCCURRING. SIGNIFICANT AMOUNTS OF SNOW ARE FORECAST THAT WILL MAKE TRAVEL DANGEROUS. ONLY TRAVEL IN AN EMERGENCY. IF YOU MUST...KEEP AN EXTRA FLASHLIGHT...FOOD...AND WATER IN YOUR VEHICLE IN CASE OF AN EMERGENCY.

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WYZ099-142300-/X.NEW.KBYZ.SN.Y.0003.050314T1516Z-050315T0400Z/ SHERIDAN FOOTHILLS-INCLUDING THE CITY OF...SHERIDAN 816 AM MST MON MAR 14 2005

... SNOW ADVISORY IN EFFECT UNTIL 9 PM MST THIS EVENING...

THE NATIONAL WEATHER SERVICE IN BILLINGS HAS ISSUED A SNOW ADVISORY...WHICH IS IN EFFECT UNTIL 9 PM MST THIS EVENING.

SNOW SHOWERS...HEAVY AT TIMES...WILL CONTINUE INTO THIS EVENING. LOOK FOR ADDITIONAL ACCUMULATIONS OF 3 TO 5 INCHES TODAY AND THIS EVENING...GREATEST ALONG THE NORTH FACING SLOPES FROM DAYTON TO BIG HORN.

A SNOW ADVISORY MEANS THAT PERIODS OF SNOW WILL CAUSE PRIMARILY TRAVEL DIFFICULTIES. BE PREPARED FOR SNOW COVERED ROADS AND LIMITED VISIBILITIES...AND USE CAUTION WHILE DRIVING.

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MTZ038-142300-/X.NEW.KBYZ.SN.Y.0003.050314T1516Z-050315T0400Z/ SOUTHERN BIG HORN-INCLUDING THE CITIES OF...PRYOR...LODGE GRASS 816 AM MST MON MAR 14 2005

...SNOW ADVISORY IN EFFECT UNTIL 9 PM MST THIS EVENING ...

THE NATIONAL WEATHER SERVICE IN BILLINGS HAS ISSUED A SNOW ADVISORY...WHICH IS IN EFFECT UNTIL 9 PM MST THIS EVENING.

SNOW SHOWERS...HEAVY AT TIMES...WILL CONTINUE INTO THIS EVENING. LOOK FOR ADDITIONAL ACCUMULATIONS OF 2 TO 4 INCHES TODAY AND THIS EVENING...GREATEST FROM FORT SMITH AND YELLOWTAIL TO WYOLA.

A SNOW ADVISORY MEANS THAT PERIODS OF SNOW WILL CAUSE PRIMARILY TRAVEL DIFFICULTIES. BE PREPARED FOR SNOW COVERED ROADS AND LIMITED VISIBILITIES...AND USE CAUTION WHILE DRIVING.

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Seattle forecaster Andy Haner works in the King County Emergency Coordination Center

Seattle Supports King County Exercise: WFO Seattle forecasters Carl Cerniglia and Andy Haner participated in a King County (Seattle area) functional exercise on March 2 at the county's new Emergency Coordination Center (ECC). WCM Ted Buehner was part of the exercise control team. This Homeland Security Department-funded exercise involved several simulated explosions, including two explosions on a morning commuter train and one car bomb that impacted two commuter buses, producing over 60 simulated fatalities and 600 injuries.

The main purpose of the exercise was to test a new regional disaster plan, particularly with respect to resource and communication management. Carl and Andy provided current weather observations, as well as spot and short-term forecast updates throughout the event. There were over 200 participants in the ECC, plus 200 additional participants in the 30 other jurisdictions involved in the exercise throughout the region. The exercise gave the NWS valuable exposure to participants, highlighting all-hazards weather support capabilities.



WFO Great Falls journey forecaster Jason Schaumann queries a high school science fair entrant on her project at the science fair.

#### WFO Great Falls "Judgmental" at Regional

<u>Science Fair</u>: Great Falls WCM Rick Dittmann, Service Hydrologist Gina Loss, and Journey forecaster Jason Schaumann judged the high school science fair entries at the North Central Region II Science Fair on March 1 in Great Falls. Contestants were vying for the opportunity to advance to the state science fair in Missoula and an automatic invitation to an international science fair in Alberta, Canada. Besides judging, the three viewed all entries from grade school through high school to determine which entries were related to atmospheric science or hydrology. Those were awarded a certificate of recognition from NOAA's National

Weather Service office in Great Falls.

**Flagstaff Staff Member Featured in Live Call-In Radio Show**: On March 3, Flagstaff SOO Mike Staudenmaier participated in an hour long talk show on KMOG radio (Payson, AZ). This program, called the "Rim Country Forum," provided an opportunity for listeners in the Payson area to phone in weather and climate questions for an "expert" to answer. Several questions were asked about the wet winter pattern and how this would affect the ongoing drought, along with questions about the ongoing El Nino pattern. Questions were also posed relating to how weather forecasts are made, the jet stream, lightning, contrail formation, and predictions for the upcoming southwestern U.S. monsoon season. Mike also discussed IFPS and how to access digital forecasts on the web.



Roham Abtahi (HMT) and Shawn Liebl (Met Intern) converse with Elko Rotary Club members.

Outreach Team Formed at Elko: The recently formed Outreach Team at WFO Elko has been enthusiastically spreading the message of NOAA's National Weather Service during the past month. In addition to numerous school visits and office tours, the Outreach Team has given talks to the local Shriners' organization, the Elko Rotary Club, and pilots from Casino Express Airlines. These presentations have covered the NWS' responsibilities, weather safety, aviation products, Elko's web page, and the National Digital Forecast Database.

Some presentations were requested following recommendations from attendees of earlier talks. Discussions with a local school may also lead to developing a mentor program for a gifted elementary school student in the area. This team has been extremely proactive in outreach activities in the local area and has raised the bar in increasing customer awareness of NWS products and services. Several individuals have contributed to the team's success: Roham Abtahi (Hydrometeorological Technician), Ian Morrison (General Forecaster), Shawn Liebl (Meteorologist Intern), Gerry Claycomb (General Forecaster), Brian Fehrn (Senior Forecaster), Larry Whitworth (Senior Forecaster), Greg Lonien (Hydrometeorological Technician) and Jeff Rood (General Forecaster).



#### **IMET Assists in Automated Weather Station**

**Placement**: WFO Salt Lake City IMET Chris Brenchley recently assisted U.S. Forest Service personnel locate a Remote Automated Weather Station (RAWS) in preparation for a large prescribed burn planned for this spring in the western Uinta Mountains. Chris' involvement is a great way to maintain good relations with our land management customers, and it helps ensure representative weather data is available to both the Forest Service and NWS. (Note: U.S. Forest Service personnel pictured here.

Chris Brenchley is not pictured, but was the photographer).



New Zealand's MetService Office in Wellington

#### San Diego Forecaster Visits New Zealand <u>Meteorological Office</u>: Brandt Maxwell, a forecaster at WFO San Diego, vacationed in New Zealand in February. During his vacation, he visited New Zealand's "MetService" in Wellington, which is New Zealand's equivalent to the NWS. He met with

Rod Stainer, the chief forecaster, and several of the forecasters.

Much like the National Weather Service, MetService produces public, marine, and aviation forecasts and also issues warnings and advisories. Most of their forecasts cover New Zealand proper, though they

issue high seas forecasts for most of the non-tropical South Pacific (south of 25 deg S), nearly from Australia to Chile. They are a "backup office" for Fiji's NWS-equivalent, which does forecasting for the tropical part of the South Pacific.

New Zealand's MetService is somewhere in between the public and private sector. They were at one time fully government-funded, like the NWS, but they started privatizing 13 years ago. However, changes in government since the early '90s have stopped further privatization, so they effectively behave similar to many European weather offices -- they receive government funding to provide basic forecasts, yet they have contracts with the private sector for specialized forecasts and/or highly-detailed information. Their employees are mostly still paid by the government, however, and their organization does not expect this to change in the near future.

MetService uses the GFS model and "Quikscat" (satellite-derived) wind data. They find the Quikscat winds to be especially useful in the Cook Strait (between the North and South Islands), as that is an area where strong winds are frequent due to the gap between two mountainous islands. They are currently evaluating NWS' digital forecast products, as they would like to also create "grids" for their marine forecasts.

The biggest difference between meteorologists in New Zealand (at least at MetService) and meteorologists in the U.S. is related to their education backgrounds. Meteorologists in New Zealand receive a BS degree in mathematics or physics, then specialized post-graduate training in meteorology during their first 2 years at MetService. This period serves as their intern program, and includes courses in dynamic and synoptic meteorology, as well as many others familiar to NWS meteorologists. If anyone has questions about the visit to MetService, Brandt (brandt.maxwell@noaa.gov) will be glad to answer them.

**Tucson Outreach Events**: WFO Tucson had a busy week recently, with a science and engineering fair and two safety fairs occurring within four days. At the 50<sup>th</sup> Annual Southern Arizona Regional Science and Engineering Fair, Valerie Meyers (now a Journey Forecaster in Phoenix) and Norm Phelps (ET) served as "Grand Awards Judges". Norm judged the fourth grade physical sciences projects and performed interviews with the middle school kids, while Valerie judged the high school atmospheric sciences and physics projects.

For the safety fairs, Valerie Meyers and Dawn Fishler (Student Intern) participated in "Aviation Day" at Ryan Airfield, and Bonnie Maguire (ASA) and Tom Evans (WCM) tended a booth at Tucson Medical Center's "Be Safe Saturday". The focus at "Be Safe Saturday" was lightning safety for kids, while the focus at "Aviation Day" was thunderstorm awareness for pilots.



Valerie Meyers and Dawn Fishler host a booth at Ryan Airfield's "Aviation Day"



Bonnie Maguire tends a booth on lightning safety at Tucson Medical Center's "Be Safe Saturday"



(*R* to *L*) Clinton Rockey (WFO Portland), Danny Mercer (WFO Seattle, sitting), Julie Holcombe (WFO Seattle), and a pilot

#### Northwest Aviation Conference and Trade

**Show**: On February 26-27, WFO Seattle participated in the "Northwest Aviation Conference and Trade Show." The Northwest Aviation Conference is the largest non-Air Show pilot event in the Pacific Northwest, which annually draws over 10,000 pilots. This year, the event drew approximately 10,800 pilots.

WFO Seattle operated a booth, complete with internet access, informational displays, and many types of handouts. The ability to demonstrate [WFO] web-sites and show pilots how to access weather information over the Internet was a highlight of the event. Staffing for the booth was

provided by Allen Kam, Jay Albrecht, Danny Mercer, Julie Holcombe, and Jay Neher (all from WFO Seattle), and Clinton Rockey (from WFO Portland).

### SCIENTIFIC SERVICES DIVISION

<u>Annual Web Site Certification</u>: The annual web site certification is expected to be due April 1. All MICs/HICs will need to certify that their web pages are compliant with Department of Commerce policies. For more information, go to: <u>http://www.osec.doc.gov/webresources/DOCWebPolicies\_BestPractices.html</u> While we have not received final instructions from DOC, SSD issued instructions to the offices to help prepare for the deadline.

**<u>Bi-annual PD&T and Intern Progress Reports</u>**: The bi-annual Western Region Professional Development and Training and Intern Progress Reports are due from each WFO and RFC on April 15, 2005.

**New Technical Attachment**: The Effects of Wildfire in the Mountainous Terrain of Southeast Arizona: An Empirical Formula to Estimate 5-year Peak Discharge from Small Watersheds (TA 05-01) is being added to the web this week. It was authored by Bill Reed (CBRFC) and Mike Schaffner (WFO Tucson).

#### Advanced Warning Operations Course (AWOC):

#### AWOC IC Completions as of March 11, 2005

Region	WFO ID	Description	<b>IC Completions</b>
WR	MSO	MISSOULA WFO MONTANA	161
WR	PQR	PORTLAND WFO OREGON	149
WR	TFX	GREAT FALLS WFO MONTANA	137
WR	BOI	BOISE WFO IDAHO	127

Region	WFO ID	Description	<b>IC Completions</b>
WR	MFR	MEDFORD WFO OREGON	124
WR	EKA	EUREKA WFO CALIFORNIA	123
WR	TWC	TUCSON WFO ARIZONA	123
WR	BYZ	BILLINGS WFO MONTANA	121
WR	PDT	PENDLETON WFO OREGON	121
WR	MTR	SAN FRANCISCO BAY AREA WFO (MONTEREY) CA	113
WR	LOX	LOS ANGELES WFO (OXNARD) CALIFORNIA	110
WR	FGZ	FLAGSTAFF WFO ARIZONA	101
WR	VEF	LAS VEGAS WFO NEVADA	98
WR	PSR	PHOENIX WFO ARIZONA	96
WR	PIH	POCATELLO WFO IDAHO	92
WR	GGW	GLASGOW WFO MONTANA	91
WR	REV	RENO WFO NEVADA	91
WR	HNX	SAN JOAQUIN VALLEY WFO (HANFORD)CALIFORNIA	88
WR	SEW	SEATTLE WFO WASHINGTON	88
WR	STO	SACRAMENTO WFO CALIFORNIA	88
WR	ΟΤΧ	SPOKANE WFO WASHINGTON	84
WR	WRHQ	WESTERN REGION HEADQUARTERS	82
WR	SGX	SAN DIEGO WFO CALIFORNIA	77
WR	SLC	SALT LAKE CITY WFO UTAH	77
WR	ZSE	AUBURN CWSU WASHINGTON	26
WR	ZOA	FREMONT CWSU CALIFORNIA	14
WR	ZLC	SALT LAKE CITY CWSU UTAH	12
WR	ZLA	PALMDALE CWSU CALIFORNIA	10
Total IC	Comple	tions for Western Region	2639
Total IC	12797		

**AWOC Training Deadlines**: It is important that offices keep up with the training schedule. In WR, we have broken the two track deadlines up into first and second half of FY05. Completion will be tracked by LMS and reported in the WR Professional Development and Training plan.

March 31, 2005: Complete Core Track (WFO and CWSUs) August 31, 2005: Complete Severe Weather Track (WFO and CWSUs) TBD (probably March, 2006): Winter Weather Track (WFO and CWSUs)

For more info on AWOC and LMS go to: http://wdtb.noaa.gov/courses/awoc/index.html

**RFC and WFO QPF grids**: During the last 6 months, SSD has been transmitting the CNRFC HAS QPF grids to the WFOs under the CNRFC umbrella. The grids are used as a first guess for the NDFD QPF grids, which can then be edited by the WFO forecasters. This emerged as a best practice during the WR SOO/DOH workshop.

Kirby Cook has been working with the CBRFC and NWRFC to disseminate their grids. Testing at a few WFOs has begun and the grids will be available soon.

**NOAA's Hydrometeorology Testbed**: NOAA's Hydrometeorology Testbed (HMT) project is planning to deploy an array of sensors in the American River Basin to study cold season precipitation processes during the 2005-2006 winter season. HMT is designed to advance the state of science in hydrology and meteorology in a way that benefits operational offices in the NWS. A meeting was held in Sacramento on March 18 to discuss the upcoming deployment with the CNRFC and the Sacramento WFO. The western HMT is the first of NOAA's "research to operations" efforts. Eventually, there will be a HMT established for the east coast and central U.S. For more information about the HMT, visit their website at <a href="http://www.hmt.noaa.gov">http://www.hmt.noaa.gov</a>.

**Teletraining Session for March**: The Virtual Institute for Satellite Integration Training (VISIT) and the Integrated Sensor Training Professional Development Series (ISTPDS) sessions are listed below. Offices can register for the teletraining sessions by sending email to: visit@comet.ucar.edu.

The teletraining calendar is at: http://www.cira.colostate.edu/ramm/visit/ecal.asp

The sessions for April are:

- Predicting Supercell Motion in Operations (Intermediate, Apr 11, 25)
- Modern Severe Weather Parameters (Basic/intermediate, Apr 5, 19)
- Forecasting Convective Downburst Potential Using GOES Sounder Derived Products (Basic, Apr 14, 28)
- Water Vapor Channel Satellite Imagery (Basic, Apr 21)
- RSO imagery with other Remote Sensor Data for Diagnosing Severe Weather across the CONUS(RSO 3)
  - (Intermediate, Apr 12, 13, 26, 27)
- Mesoscale Analysis of Convective Weather Using GOES RSO Imagery (Basic, Apr 5)
- Lightning Meteorology I (Basic, Apr 6)
- Lightning Meteorology II (Advanced, Apr 7)
- Enhanced-V: A Satellite Severe Storm Signature (Basic, Apr 12)

# SYSTEMS OPERATIONS DIVISION

**<u>Snow Cat Training</u>**: Son Nguyen, Mike Belarde, and several Electronic Technicians who use snow cats for radar access attended a week long snow cat training class in Auburn, CA. The training included snow survival and operation of the snow cat.

**DX's are on the way**: Dwight Williams recently sent out notification to each office on the scheduled delivery of the new DX/NAS hardware. The schedules are tied to the delivery truck routes. Sites will start receiving the hardware in April, starting with Missoula on the April 28. Offices will then call Dwight to schedule the install once the site takes delivery of the hardware.



Outreach at the Sportsman Show: The 2005 International Sportsman Expo has come and gone. Craig Schmidt, Joe Lachacz, Kevin Barjenbruch, Dwight Williams, Kevin Bolton, Merri Richmond, Son Nguyen, Gene Vancor, Todd Hall, and Scott Birch helped staff the NWS booth for 4 days. Over 50,000 people attended the Sportsman Show.