

STORMBUSTER

A Newsletter for Emergency Managers & Storm Spotters

Winter Edition, 2001



SKYWARN RECOGNITION DAY 2001

by: Steve Pertgen, W2FXJ

The third annual NWS/ARRL Special Event took place nationwide on 1 December. There were 96 National Weather Service offices participating in this event to recognize the many contributions of ham radio operators to the National Weather Service's SKYWARN program, by being our eyes and ears where the weather is.

Locally, the event took place at the National Weather Service office in Albany, at the CESTM building on the campus of the University at Albany. The SKYWARN station, WX2ALY was staffed by volunteers from the area. We utilized the APRS station and a Kenwood TS-570D with a multi-band dipole which is part of the permanent equipment at the station.

Overnight, activity was sparse due to propagation. The bands were especially noisy with a strong cold front moving through the eastern part of the country. During the early morning hours, signals improved, so that by sunrise, we were handling continuous QSO's. As the morning progressed, we set up another station, utilizing a G5RV and a Ten-Tec Delta II and an MFJ Versa Tuner on 20 meters. Another station located in the parking lot, worked 15 and 10 meters. We also established a presence on VHF utilizing an ICOM IC-2340H, another permanent piece of equipment at WX2ALY. The TS-570D was used on 80 and 40 meters for much of the day.

Those who volunteered their time and equipment to the effort included Paul Sheldon, N1LJA; Dennis Hudson, N2LBT; Bill Patmos, W2DHT; Raleigh Keeter, K2RI; Dennis Bulger, N2USN; Donald Bulger, WB2VJC; Dave Kinerson, WB2VXS; Tony Pazzola, W2BEJ; Jim Norton, N2BGK; and Glenn Lasher, KC2IDF. A hardy thank you for spending a beautiful Saturday with us.

The workshop attracted 60 participants over a

When the dust settled, WX2ALY made a respectable showing among the National Weather Service offices. The concerted effort by all yielded 320 QSO's, with 37 states worked and 33 NWS offices contacted. We also had QSO's with hams in 4 provinces of Canada, as well as in Belgium, Sweden, Slovakia, Finland, the Czech Republic and Japan. More information on the final results of the event can be found on the internet at <http://hamradio.noaa.gov>.

We hope that next year's event will be bigger and better planned here at Albany. I will keep everyone informed. However, if you can plan that far ahead, I'll gladly accept messages expressing interest in helping out with next year's event at stephen.pertgen@noaa.gov. If we have enough volunteers, we would like to break up the activity into shifts and perhaps, with equipment being the major factor, split the individual bands between operators.

In summary, everyone involved enjoyed themselves. Events of this magnitude would not be possible were it not for the dedicated SKYWARN volunteers. The National Weather Service thanks you for all of your assistance in accomplishing our mission of protecting life and property.

Third NE Regional Operational Workshop

by Eugene P. Auciello

The Third Northeast Regional Operational Workshop was held at the University at Albany's Center for Environmental Sciences and Technology Management, Albany, New York, on November 6-7, 2001. The workshop was hosted by the National Oceanic and Atmospheric Administration (NOAA)-University at Albany Cooperative Institute for the Prediction of Hydrometeorological Hazards in the Northeastern United States in cooperation with the American Meteorological Society. two-day period including National Weather Service

(NWS) meteorologists and hydrologists representing numerous field offices from across the Northeast, and scientists from the National Centers for Environmental Prediction and Eastern Region Headquarters. University researchers, faculty, and students represented the University at Albany's Department of Earth and Atmospheric Sciences and the Atmospheric Sciences Research Center; McGill University; and the University of Toronto. Representatives from New York State agencies, including the Department of Environmental Conservation and State Emergency Management Office, were in attendance. Workshop participants also included meteorologists from the private sector.

One of the goals of this workshop was to provide the hydrometeorological community with a forum for the transfer of scientific and technological knowledge into the operational environment for the improvement of NWS warnings and forecasts. Workshop sessions focused on cold season events, warm season events, numerical modeling, and operational techniques pertinent to the northeastern United States. The growing overlap between the academic and operational meteorological communities provides an unprecedented opportunity to achieve major rapid improvements in weather forecasts over the next decade. The NOAA-University at Albany Cooperative Institute for the Prediction of Hydrometeorological Hazards in the Northeastern United States will continue to facilitate the improvement of NWS warnings and forecasts by accelerating the collaborative efforts of the university and operational meteorological communities.

A Look Back At Our Dry Autumn Of 2001

By Hugh Johnson, Evan Heller and Robert Kilpatrick

The dry weather experienced during the end of the summer carried on into the fall season across the Capital Region. September was a sunny month, in fact the sunniest month of the entire year, as we received 66 percent of the possible sunshine. Temperatures started out a little on the cool side but rebounded back to summer levels, cresting at 86° three days in a row, from the 7th to the 9th. While the colder spots north and west did experience the not too unusual September frost, the coldest reading

November opened on a warm note, and it stayed warm most of the month. In fact, the monthly average temperature was 44.8°, 5.1 above normal. That was our sixth mildest November on record!

at Albany International Airport was 39°, on the 30th, which, although a few degrees below normal, was still well enough above freezing to avoid frost altogether. The monthly mean was 62.4°, 1.1 above normal. Rainfall, overall, was sparse, despite some amount of measurable rain falling on nearly half the days. The monthly total was 1.71 inches, 1.24 below normal. Higher amounts of rain fell to the north and west of the Capital District, especially across the Adirondacks. At the airport, there were no thunderstorms observed during the month. It's normal for there to be a couple of days with thunderstorms during the month.

October featured almost as much sunshine as September, with 62 percent of the possible amount. The first week of the month saw temperatures rise to 80° or more for three days in a row, the warmest reading being 83° on the 4th. This was our warmest October reading since 1990. A brief cold snap had followed by the Columbus Day weekend, which brought us not only our first hard freeze of the fall season, but also, for the second consecutive year, a record low temperature on the 9th, 27°. On the 7th, there were some reports of graupel or icy precipitation, and even snowflakes, across the hill towns. The cold spell did not last long, though. In fact, our first of several intervals of Indian Summer began later that week, with temperatures rebounding to 78° by the 13th. The monthly average, once again, finished a little above normal, despite a cold finish to the month, with a bone-chilling 23° low temperature on Halloween, the lowest reading for the month. Some sleet fell on Halloween as well, marking the first day of the season with solid precipitation. October averaged 1.7° higher than the 30-year normal of 50.7°. The only significant rain event during the month took place on the 15th and 16th, when 0.77 inches fell. Despite the damp Halloween, rainfall for the remainder of the month was scarce, and the monthly total was just 1.26 inches, the driest month of the fall season and of the year. On the evening of the 17th, gusty winds were strong enough to bring down a couple of trees in the Litchfield Hills, and across the higher elevations of Windham County, Vermont.

There was a brief cooldown during the first week, and again at mid-month. However, only two days during the second half of the month averaged below normal. The temperature soared to 71° on the 2nd,

while the coldest morning was 19° on the 13th. During the first cooldown, a little snow fell in the highest mountains of southern Vermont, enough to send some cars spinning. Locally, some areas reported a dusting of snow on the morning of the 21st. But officially, no snow fell during the entire month at Albany. Two daily temperature records were set during the month, both on the same day. On the 25th, the temperature reached 64°, breaking an 11-year-old record high by two degrees. But a low of 52° on that same day was warm enough to also break a 22-year-old high minimum temperature record by six degrees. For the fourth straight month, rainfall was well below normal. The monthly total was a relatively paltry 1.38 inches, less than half of the normal value of 3.43. It was so dry that numerous brush fires erupted, the most notable being at Thatcher Park. Flames threatened a nearby development there, but luckily the fire was contained before it could spread too far. Some beneficial rains fell during the last week, which helped dampen the ground and reduce the brush fire threat. Sunshine was abundant by November's standards. Normally we receive only about 30 percent of the possible sunshine, as November is usually our cloudiest month. This year, however, we enjoyed 45% of the possible sunshine. And the amount would have been even higher had it not been for the cloudy finish.

The fall season as a whole was officially the driest in Albany since 1964! Only 4.35 inches of rain fell during this time frame, and only 6.45 inches since August, when the dry regime began. This is only a little more than half of the normal. The persistent dry weather has taken its toll. Local rivers have been reduced to a trickle. The Schoharie Creek and Reservoir have become practically empty.

Many wells in the Mohawk Valley have run dry. The Ashokan Reservoir was at only 50 percent of capacity by the end of November. On November 6th, the New York State Conservation Department declared a drought watch for Schoharie, Greene, Ulster and Dutchess counties. The watch was extended across most of the remaining region by the first week of December.

Part of the reason for the persistently dry, mild weather this year, compared to the much wetter and cooler year before, has been the reversal of a long wave pattern over the Atlantic Ocean known as the North Atlantic Oscillation (NAO). When the NAO is in a negative phase, high pressure is found over

Iceland with low pressure near the Azores Islands in the South Atlantic Ocean. This pattern tends to keep cold air locked in over the Eastern United States, and often paves the way for low pressure to be squeezed up along or near the east coast, thereby keeping our weather wet (or white). However, when the NAO is in a positive phase, as it was virtually all through fall, low pressure persists over Iceland while high pressure remains anchored near the Azores Islands. Under this scenario, the polar jet is often displaced further north, "whisking" cold arctic or polar air away from the Northeast with little opportunity for coastal low development. Unlike the El Niño/La Niña phases of the Pacific, the NAO phase is more difficult to predict over the long term. Therefore, it is uncertain at this point whether or not this pattern will persist well into the winter months.

WCM Words

by Dick Westergard

As usual, the mailing label on your copy of StormBuster contains the date of your last training. If that date is more than 2 years ago, you should plan to attend another training session soon. Once that date is more than 5 years in the past, your name will be purged from our database.

The Fall advanced SkyWarn Spotter Training sessions saw a turnout of 166 trainees, at 9 sessions, averaging 18 people per session. Next year, I encourage more of you to attend. It is a session which branches out from the basic spotter training, for a little variety and extra information.

This issue we have a poem from Elizabeth Caffrey, spotter/poet from West Dummerston, VT.

Reader articles, or suggestions for articles, are always welcome. Do you have any questions you'd like to ask a meteorologist? Maybe a question and answer section of StormBuster would be of interest.

Weather Hazards Awareness Week in New York and Vermont is March 17 through 23. We invite you to exercise your severe weather plans with us, as we test our communications systems that week. There will be a test thunderstorm warning on Tuesday and a test tornado warning on Thursday.

Another reminder of winter reporting criteria -

- 1) Snowfall of 4 inches or more in 24 hours.
- 2) Any Freezing rain or drizzle.
- 3) One inch or more of rain in 4 hours or less.
- 4) Ice jams or Flooding.
- 5) Damaging winds.
- 6) Measured rainfall - 1.5 inches or more in 4 hours.

Get your reports to the

National Weather Service by the quickest means possible.

Remember that, should the telephone line be busy, you can report your severe weather observations to the Weather Service at:

<http://web.nws.cestm.albany.edu/Severe%20Wx/severereport.htm>

E-Mail: RICHARD.WESTERGARD@noaa.gov

Supplemental Weather Information Network (SWIN)

by: Steve Pertgen, DAPM

The SWIN is alive and well at Albany. Now that the winter is upon us, let me remind everyone that if you have weather equipment and would like to provide real time information to the National Weather Service, we would be more than happy to accept your email expressing your interest. The first step in becoming a volunteer SWIN observer is the information phase where you are provided with the specifics of measuring precipitation. Since the snow season is upon us, that would be the most beneficial report we could receive from you. Last year, our corps of 36 SWIN observers responded on average of 90 percent of the time with measurements during snow events. This realtime information is utilized for fine-tuning our forecasts and warnings and the measurements also are included in official statements that the broadcast media use. If you are interested in becoming part of the SWIN team, please send me an email at stephen.pertgen@noaa.gov

Winter Evening



by Elizabeth Caffrey

At the window icicles - make new constellations. Sunset is drying - on the line. Big snow. The sky is dark with it. Everything else - is light with it. It fills the graveyard - in its pearl necklace - and the brook - escaping under the ice. It fills in the diamonds - in the bark of the ash tree. Dogs bark at nothing: deer pass - here - where the traffic can't hear them.

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StormBuster is a publication for Emergency Management Officials and Skywarn Spotters in the Albany, New York National Weather Service Forecast Office County Warning Area. For all of your weather information needs, visit our homepage at: <http://web.nws.cestm.albany.edu>