



The Microburst



*The Official Newsletter of the National Weather Service
Upton NY and the Tri-State SKYWARN Program*

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NWS Open House 2004!

Would you like to know just how the National Weather Service makes that forecast? Have you ever wanted to see a live weather balloon launch? Well, here's your chance!

On Sunday August 8th, your National Weather Service in Upton will host their annual Open House as part of the Brookhaven National Laboratory's Summer Sunday Tours. The doors will be open from 10:00 am to 3:30 pm with tours of the NWS facility, presentations on hurricanes and tornadoes, and information tables staffed by Amateur Radio volunteers, the local chapter of the American Meteorological Society, and the local chapter of the American Red Cross. The ARC will also have their emergency response vehicle on site, and there may be a Special Event Station operated by the hams. The highlight of the day will be a weather balloon launch at 3:30 pm.

Admission is free, though you do need to bring a photo ID if you are over the age of 16. For more information, go to our website at <http://www.erh.noaa.gov/okx/>.

To get to BNL, take the Long Island Expressway (I-495) to exit 68 North (William Floyd Parkway). From the Sunrise highway (NY Route 27), take exit 58 North (William Floyd Parkway). The entrance to BNL is the second traffic light north of the LIE.

New SKYWARN Coordinators

There are several new area SKYWARN Coordinators in the area to welcome aboard.

Ed Iacono WA2EQH, has been appointed as new coordinator for the 5 boroughs of New York City.

In Passaic County NJ, we have "shuffled the deck" a bit, with Paul Beshlian KC2CJW taking over as Coordinator. Thanks to former Upper and Lower Passaic Coordinators Ted Wolf KB2BLX and Bill Reyna N2QBR, respectively, for their help, and for agreeing to stay on and assist Paul.

In Rockland County NY, Joe LaFiandra N2LF and Alan Goodman N2CYC have swapped positions, with Alan assuming the reigns as Coordinator. Thanks to Joe for several years' work as Coordinator.

Essex County NJ has two new Coordinators. Stan Rogacki WA2EXX has taken over as County Coordinator, with Jon Burchfield KJ2N is the new Deputy Coordinator.

In addition, two new Deputy Coordinators have also been appointed. Our new Deputy Coordinator for Western Suffolk County NY is Kevin Strickland KC2CPF, while Bob Schneider KC2CWT is our new Putnam County NY Deputy.

Congratulations to all!

There are still several openings for Coordinators and Deputies available as of press time. Positions are available in Union, Fairfield, New London and Middlesex Counties, as well as in New York City. Any ham with an interest in any of these, please contact Scott KC2JCB.

A listing of current SKYWARN Coordinators in our area is located at this web address: <http://www.erh.noaa.gov/okx/Skywarn/coordinators.html>

Spring Training 2004



Spotter Training for Spring 2004 is now complete, with over 600 spotters trained, including over 100 Advanced Spotters. Of those spotters trained, 350 were "first-timers."

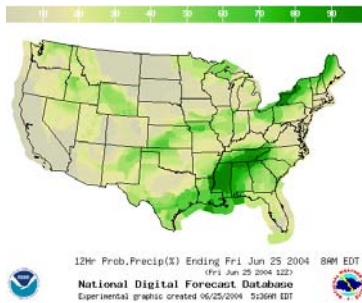
The bragging rights for the largest class go to the crew in Southold in eastern Suffolk County NY, with over 90 attendees and 70 registered spotters. A great job was turned in by Don Fisher N2QHV, Peconic Amateur Radio Club, Southold Town ARES and Southold High School for putting on that class. The Bergen County Team took top honors for this year's Advanced Classes with 47 attendees at the class held in Mahwah.

We also introduced a new trainer this spring. Paul Beeman W2PB (Suffolk County Coordinator) became the first non-NWS "instructor" for a Basic SKYWARN class in our area, and from all reports, the class, while small, was a smashing success. Paul has already stated that he would like to teach more classes in the future (and we WILL take him up on the offer). Several other Coordinators have also expressed an interest in this endeavor.

We may hold a few classes in the fall, based on requests and needs. Thanks to all of the people who made all of the classes a success this past spring.

The National Digital Forecast Database

(Courtesy: NOAA/NWS NDFD Web Page)



Beginning in late 2003, the National Weather Service (NWS) began making available a limited number of forecast grids of weather elements (e.g., cloud cover, maximum temperature) in what is being called the NWS National Digital Forecast Database (NDFD). In addition, national graphics produced from these grids are now available, such as the precipitation probability graphic shown here.

The NDFD contains a seamless mosaic of digital forecasts from NWS field offices working in collaboration with the National Centers for Environmental Prediction (NCEP). The database is available to all customers and partners, public and private, and will allow those customers and partners to create a wide range of text, graphic, and image products of their own. With time, a wider array of forecast elements will be available in the database as will a larger set of graphical presentations.

To see the NDFD in action, check out this web page...
<http://weather.gov/forecasts/graphical/>.

Advanced Hydrologic Prediction Service (AHPS) (Nancy Figueroa, NWS Upton Service Hydrologist)

Each year, flooding kills more people than any other form of severe weather, and causes damage in excess of \$3.5 billion. Three-quarters of all Presidential Disaster Declarations are the result of flooding. Clearly, hydrologic forecasting is critical to public safety and the economy.

The Advanced Hydrologic Prediction Services (AHPS) is the NWS' frontline solution to provide improved river and flood forecasting and water information across America. AHPS builds upon the NWS' long history of around the clock forecasting, bridging past successes with new sciences and technologies. Forecast tools in AHPS include those for short-fused flash floods on small streams, and those for long-range forecasts for floods on larger rivers.

AHPS provide forecasts of river levels and river flow, including river forecast information such as:

- How high the river will rise?
- When the river will reach its peak?
- Where will the flooding occur?
- How long will flood (or drought) last?
- How certain is the forecast?

AHPS provides more hydrologic information in a timely and user-friendly manner, including visual internet products. AHPS will expand product accessibility and provide easy to read graphical products and information. If you can click a mouse, you'll have instant access to a wealth of hydrologic information for your community.

More information on Advanced Hydrologic Prediction Services is available at: <http://www.nws.noaa.gov/water>.

FEATURE SECTION ...

HURRICANES!

Tropical Outlook 2004

Yes, it's hurricane season once again. From June 1st through November 30th of each year, people living up and down the Atlantic seaboard keep a nervous eye to the east and south, hoping that the next tropical cyclone to form heads out to sea and doesn't affect any land areas.

In the Tri-State Region, we have been extremely fortunate in the past several years...no direct hits, and for that matter, few near misses. The last tropical system to directly impact the region was Hurricane Floyd, which didn't produce much in the way of wind, but certainly dropped a lot of rain and caused widespread flooding in northern New Jersey and in the Hudson Valley. The last hurricane to directly impact Long Island was Gloria in 1985. (Hurricane Bob in 1991 just brushed the East End.)

The outlook for Hurricane Season 2004 calls for a continuation of the recent above normal activity in the Atlantic basin. The official NOAA Hurricane forecast released in May calls for a total 12 to 15 tropical storms, with six to eight systems becoming hurricanes, and two to four of those major hurricanes.

In 2003, three hurricanes and three tropical storms affected the United States. Hurricane Isabel amounted in over \$3 billion in damage, and 17 deaths alone.

Does this mean that the Atlantic coast, and more specifically, the coastal areas of the Tri-State Region, should be worried? Based on long term averages, we should get hit by a hurricane or tropical storm on Long Island every 10 years or so. Add to that the point that we have tended to "let our guard down" because of the lack of tropical activity in these parts recently, we're setting ourselves up for a potential disaster. Now is the time to begin thinking about your preparedness plan. Don't wait until a storm is lurking just offshore.

Here is the 2004 Atlantic Basin Name List...

Alex, Bonnie, Charley, Danielle, Earl, Frances, Gaston, Hermine, Ivan, Jeanne, Karl, Lisa, Matthew, Nicole, Otto, Paula, Richard, Shary, Tomas, Virginie, Walter.

For more information on Tropical Weather, check out these web sites or contact the National Weather Service in Upton (address at the end of the newsletter)...

NWS Upton's Tropical Weather Page:

<http://www.erh.noaa.gov/okx/hurricane.html>

Tropical Prediction Center / National Hurricane Center:

<http://www.nhc.noaa.gov/>

Hurricane Preparedness

(Information Courtesy NOAA/NWS Publication "[Hurricanes...Unleashing Nature's Fury](#)")

Before the hurricane season

- Know the hurricane risks in your area, e.g., determine whether you live in a potential flood zone.
- Learn safe routes inland.
- Find out where official shelters are located.
- Develop a family hurricane action plan.
- Review working condition of emergency equipment, such as flashlights and battery-powered radios.
- Ensure you have enough nonperishable food and water supplies on hand.
- If you live in a hurricane prone area:
 - Trim trees and shrubbery.
 - Buy plywood or shutters to protect doors and windows.
 - Clear loose and clogged rain gutters and downspouts.
 - Determine where to move your boat in an emergency.
 - Check policies to see if you have flood and wind insurance.
 - Know your community safety plan.

Before the Storm

When in a Watch Area...

- Listen to radio, TV, or NOAA All-Hazards Radio frequently for official bulletins of the storm's progress.
- Fuel and service family vehicles.
- Inspect and secure mobile home tie downs.
- Prepare to cover all window and door openings with shutters or other shielding materials.
- Check batteries and stock up on canned food, first aid supplies, drinking water, and medications.
- Prepare to bring inside lawn furniture and other loose, light-weight objects, such as garbage cans, garden tools.
- Have extra cash on hand.

Plan to leave if you...

- ☔ Live in a mobile home. They are unsafe in high winds, no matter how well fastened to the ground.
- ☔ Live on the coastline, an offshore island, or near a river or a flood plain.
- ☔ Live in a high-rise building. Hurricane winds are stronger at higher elevations.

During the Storm...

When in a Warning Area...

- Closely monitor radio, TV, or NOAA Weather Radio for official bulletins.
- Complete all preparations, such as putting up storm shutters, storing loose objects, etc.
- Follow instructions issued by local officials. Leave immediately if told to do so!
- If evacuating, leave early (if possible, in daylight). Stay with friends or relatives, at a low-rise inland hotel/motel, or go to a predetermined public shelter outside a flood zone.
- Leave mobile homes!
- Notify neighbors and a family member outside of the warned area of your evacuation plans.
- Take pets with you. Leaving them behind is likely to result in their being injured, lost or killed.
- Move to a safe area before you are cut off by flood waters.

What to bring to a shelter:

- ☔ First-aid kit; medicine; baby food and diapers; cards, games, books; toiletries; battery-powered radio; flashlight (one per person); extra batteries; blankets or sleeping bags; identification, valuable papers (insurance), and cash.

Reminder! If you ARE told to leave your home, do so immediately!

If Staying in a Home...

Only stay in a home if you have NOT been ordered to leave. Stay inside a well constructed building. Examine the building and decide what you do if winds become strong enough to produce deadly missiles and structural failure.

- Turn refrigerator to maximum cold and open only when necessary.
- Turn off utilities if told to do so by authorities.
- Turn off propane tanks.
- Unplug small appliances.
- Fill bathtub and large containers with water for sanitary purposes.

In strong winds...

- Stay away from windows and doors even if they are covered. Take refuge in a small interior room, closet, or hallway.
- Close all interior doors. Secure and brace external doors.
- In a two-story house, go to an interior first-floor room, such as a bathroom or closet.
- In a multiple-story building and away from the water, go to the first or second floors and stay in interior rooms away from windows.
- Lie on the floor under a table or another sturdy object.

After the Storm...

- Keep listening to radio, TV, or NOAA All-Hazards Radio.
- Keep abreast of road conditions through the media. Wait until an area is declared safe before entering.
- Do NOT attempt to drive across flowing water. As little as 6 inches of water may cause you to lose control of your vehicle...2 feet of water will carry most cars away.
- If you see flowing water across a roadway, **TURN AROUND AND GO ANOTHER WAY!** Many people have been killed or injured driving through flooded roadways or around barricades. Roads may be closed for your protection.
- Stay away from moving water. Moving water even 6 inches deep can sweep you away.
- Do not allow children, especially those under age 13, to play in flooded areas. They often drown or are injured in areas appearing safe.
- If someone needs to be rescued, call professionals with the right equipment to help. Many people have been killed or injured trying to rescue others in flooded areas.
- Stay away from standing water. It may be electrically charged from underground or downed power lines.

- Have professionals check gas, water, and electrical lines and appliances for damage.
- Use a flashlight or emergency lighting. Never use candles and other open flames indoors.
- Use tap water for drinking and cooking ONLY when local officials say it is safe to do so.
- Use the telephone to report emergencies only.

Family Disaster Plans

Families should be prepared for all hazards that could affect their area. Where will your family be when disaster strikes? They could be anywhere at work, at school, or in the car. How will you find each other? Will you know if your children are safe? Disaster may force you to evacuate your neighborhood or confine you to your home. What would you do if basic services - water, gas, electricity or telephones - were cut off?

Steps to take...

- I. Gather information about hazards. Contact your local National Weather Service office, emergency management office, and American Red Cross chapter. Find out what type of disasters could occur and how you should respond. Learn your community's warning signals and evacuation plans. Assess your risks and identify ways to make your home and property more secure.
- II. Meet with your family to create a disaster plan. Discuss your plan with your family. Pick two places to meet: a spot outside your home for an emergency, such as fire; and a place away from your neighborhood in case you can't return home. Choose an out-of-state friend as your "family check-in contact" for everyone to call if the family gets separated. Discuss what you would do if advised to evacuate.
- III. Implement your plan.
 - a. Post emergency telephone numbers by phones.
 - b. Install safety features in your house, such as smoke detectors and fire extinguishers.
 - c. Inspect your home for potential hazards (such as items that can move, fall, break, or catch fire) and correct them.
 - d. Have your family learn basic safety measures, such as CPR and first aid; how to use a fire extinguisher; and how and when to turn off water, gas, and electricity in your home.
 - e. Teach children how and when to call 911 or your local Emergency Medical Services number.
 - f. Keep enough supplies in your home to meet your needs for at least three days. Assemble a disaster supplies kit with items you

may need in case of an evacuation. Store these supplies in sturdy, easy-to-carry containers, such as backpacks or duffle bags. Keep important family documents in a waterproof container. Keep a smaller disaster supplies kit in the trunk of your car.

- IV. Practice and maintain your plan. Ensure your family knows meeting places, phone numbers and safety rules. Conduct drills. Test your smoke detectors monthly and change the batteries two times each year. Test and recharge your fire extinguisher(s) according to manufacturer's instructions. Replace stored water and food every 6 months. Contact your local National Weather Service office, American Red Cross chapter, or local office of emergency management for a copy of "Your Family Disaster Plan."

A Disaster Supplies Kit Should Include:

- ☛ A 3-day supply of water (one gallon per person per day) and food that won't spoil
- ☛ One change of clothing and footwear per person
- ☛ One blanket or sleeping bag per person
- ☛ A first-aid kit, including prescription medicines
- ☛ Emergency tools
- ☛ A battery-powered NOAA All-Hazards Radio and a portable radio
- ☛ Flashlight, and plenty of extra batteries
- ☛ An extra set of car keys and a credit card or cash
- ☛ Special items for infant, elderly, or disabled family members

Good vs. Bad Spotter Reports

"This is KC2GLG, Bergen County NJ Deputy Coordinator, calling from Fair Lawn. At 435 pm, I observed hail 1 inch in diameter at my house and recorded a wind gust to 65 mph. Several small trees were blown down on my street as well. No flooding has been observed as yet. Since 300 pm, I have recorded 1.22 inches of rainfall, and we currently have light rain falling."

This is an example of what a "very good" spotter report might sound like, and very typical of the type of reports we get from many of our spotters. It identifies the person as one of our Coordinators, and specifically identifies the town and county from which he is calling. It also gives several specific reports AND the times of the observations.

Unfortunately, there are times when we get reports that are lacking in detail, or simply missing vital information. Such an example might look or sound like this...

"I'm a spotter in Bergen County. It's raining cats and dogs at my house right now and I heard static on the radio a while ago. I also heard that there might

be a tree across some road on the scanner."

What's wrong with this report? Well, first of all, where is this spotter located? "Raining cats and dogs" really doesn't help us that much...we need to know how much rain has fallen, and since what time. Lightning does cause static to be heard on AM radio stations, but you cannot readily tell where the storm is, where it is moving to, or how severe the weather being produced is. There are no specifics...no really helpful information.

The keys to a useful (good) spotter report...whether it is reported via amateur radio, telephone, fax or email...

- 📍 Identify yourself as a spotter (you can give your call sign or spotter ID number). We may or may not ask for it. (Amateur radio net controls WILL ask for a call sign during check-ins, so they will have your ID.)
- 📍 Tell us the location of your observation, the time that the event actually occurred, and exactly what occurred. Be specific, but remember that the person on the other end of the line may be extremely busy and won't have time for a long, drawn-out explanation.
- 📍 Give specifics and first hand information. Generalities and second (or third) hand info needs to be verified with another report or phone call and can become very time consuming.

If the NWS forecaster or amateur radio Net Control feels that additional information is needed, we'll ask for it, or call you back.

These points are always discussed during spotter training classes, and are discussed in the local spotter guide that we hand out.

We hope to improve upon our on-line spotter reporting form, so that it will be easier for you to make your reports to us, and make it easier for us (the NWS) to get and use your reports.

Please remember that the spotter line (the 800 number) is for spotter reporting ONLY. Forecasts should not be requested on this line, ESPECIALLY during severe weather!

And finally, please don't take it personally if your report does not make it into a Public Information Statement or Local Storm Report. Most of the time, we will send out a representative sampling of reports. Other times, we just may simply be too busy to include all of the reports that we receive. Rest assured that your reports are needed and used, regardless of whether they get published or not.

Parting Shots

One of the topics that I often get questions about is in regard to amateur radio nets during severe weather...when are they run, where do I find them, what should I report, etc. Let's start with the basics.

In most cases, this is how things get started. The Storm Prediction Center in Norman OK will be monitoring conditions specific to development of severe weather over a large area, and will issue Severe Thunderstorm or Tornado Watches as needed.

Once a Watch has been issued for any part of the Upton service area, SKYWARN is automatically activated. SKYWARN can also be activated by the duty

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We're on the Web!
www.erh.noaa.gov/okx

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lead forecaster at any time prior to Watch/Warning issuance if he or she feels that the situation dictates. This would be done by way of an update to the Hazardous Weather Outlook product.

Once SKYWARN is activated, the Coordinator or his/her deputies in the counties are then responsible for activating local SKYWARN Nets when needed (preferably before warnings are issued).

Ideally, there should be a minimum of 2 people "running" a net...the Net Control Station (NCS), and Net Liaison. The Net Liaison's job is to relay any reports of severe weather to the NWS, either via phone or to WX2OKX, if we have staffing to run the radios during an event.

Where can you find the nets? An up-to-date listing is maintained on the Upton SKYWARN Page (see below for address). Nets are currently run in each county with relays to NWS via phone or via radio if we have the station staffed.

When WX2OKX is manned, we will monitor nets in the counties that are or will be affected by severe weather. We currently can hit most county nets in the eastern half of our area, and get reports relayed via other repeaters or phone from other areas. Hopefully the installation of a new (taller) radio tower behind the office in the coming months will change that soon. With that, we should be able to reach most of your warning area on VHF/UHF. If that still isn't enough, we may begin running wide area nets on HF. Stay tuned...

If you have questions regarding these nets or are interested in getting more involved, contact myself or one of your local coordinators (see the Skywarn homepage for a current listing).

Now, for the non-hams, activation of SKYWARN means that you should be alert for possible severe weather, especially when watches and warnings are issued. If you do observe severe weather, please call us as soon as it is safe.

Have a safe (and hopefully quiet) severe weather season.

73 de Scott KC2JCB