



## COSHOCTON COUNTY OHIO

(The following is from NWS Pittsburgh, which in part is tailored for Coshocton Co Skywarn)

### What is **SKYWARN**?

Welcome to the Pittsburgh, Pennsylvania National Weather Service SKYWARN program. SKYWARN is a group of trained severe weather spotters that report directly to the National Weather Service.

Year after year, reports from SKYWARN observers have assisted the NWS in issuing timely warnings based on REAL-TIME reports throughout our 36 County Warning Area covering parts of PA, WV, OH, and MD. The NWS's primary mission is to issue warnings to protect life and property.

The ground truth reports from SKYWARN spotters are a vital link in using advanced radar data and meteorological skills to carry out our mission. Their observations also provide us with information in compiling documentation of severe weather events and verification of warnings. These reports become part of the United States Storm Data publication, which is used by researchers and also provides climatological data on a wide variety of unusual weather phenomenon, including statistics on death, injuries, and property and crop damage.

Over half of our 1600 + spotters are also licensed amateur radio operators (a.k.a. hams). The hams throughout many of our counties meet and organize their spotter efforts on one radio frequency (network or nets), when severe weather threatens. Amateur Radio Emergency Services® (ARES®) provides communication support for the SKYWARN program.

SKYWARN also publishes a [newsletter](#) to its spotters.

An effective **SKYWARN** net usually follows some form of guide or outline. This is especially helpful in making it through the rougher times that occasionally occur. Usually it is in these tough times that your communications to the **NWS** have the utmost value.

Remember, **SKYWARN** is **NOT** a club. By putting aside any differences that do not support the goals of **SKYWARN**, you'll find your **SKYWARN** net to be at its most effective level. A great amount of the work is done by the amateur radio community in fulfilling the goals of **SKYWARN**. The **NWS** appreciates your assistance. The Pittsburgh National Weather Service office has over 2000 trained spotters in our 36 county warning area that covers four states. We rely on you in assisting in goals number 2, 3 and 4.

# THE GOALS OF AMATEUR RADIO SKYWARN

- 1) TO HAVE A NETWORK OF SPOTTERS IN PLACE TO REPORT SEVERE WEATHER
- 2) TO ACTIVATE THIS NETWORK AS NEEDED
- 3) TO COORDINATE REPORTS FROM THE SPOTTERS IN A PROFESSIONAL MANNER
- 4) TO RELAY THESE REPORTS TO THE NWS IN A TIMELY MANNER

## ACTIVATING THE NETWORK

Methods of initial awareness of severe weather and the need to activate the network:

- 1 Receive a call from the **NWS** requesting reports.
  - 2 NOAA Weather Radio, local TV or radio, if your county is under a Severe Thunderstorm/Flash Flood/or Tornado Warning, there is no doubt that the **NWS** needs your reports.
  - 3 **NWS** Pagers.
  - 4 Tune to your local repeater, where **SKYWARN** nets are held. Others may have begun to activate the net.
  - 5 If you are hearing reports on the repeater that meet the criteria set by the **NWS**.
  - 6 Request by **EMA** or other county official.
- Please note: The need for activation occurs when only one of these criteria is met.

## CRITERIA FOR REPORTING

*Severe Weather Criteria is defined as:*

- **Tornado** Violently rotating column of air descending from a cumulonimbus cloud, and touching the ground. If possible report any injuries or fatalities.
- **Funnel Cloud** A “rotating” appendage descending from the base of a cumulonimbus cloud, but not touching the ground. If possible, always look at the area beneath the funnel cloud for flying debris. If flying debris is observed, it is a tornado.
- **Wind Speeds** Report wind speeds greater than 40mph
- **Damage** Report all storm-related damage (large branches, fallen trees, structural damage, flood damage, etc.) Even if it is several days after the event.
- **Hail** Report 3/4in. (penny) size HAIL or larger. Specify the diameter based on the hail scale.
- **Flooding** Report any flooding you observe, including basement, road, stream, creek, and ice jam flooding. Report the name of the stream/creek, road number/name (if applicable) and depth.
- **Rainfall** Report when you receive one inch (and then at least every inch thereafter)
- **Snowfall** After 2 inches of new snow, and then at 4”,6” & every 3” thereafter.
- **Freezing Rain** As soon as you observe freezing rain/drizzle, especially if it starts to collect on objects. Call again if the glaze/ice accumulation exceeds ¼ inch.
- **Thunder Snow** Location and Time of occurrence

## Remember to always give the three most important parts of a report

1. **TIME** - TIME OF OCCURRENCE
2. **EVENT** - HAIL, TORNADO, FUNNEL CLOUD, ETC.
3. **LOCATION** - COUNTY AND DIRECTION/DISTANCE FROM NEAREST TOWN

Often severe storms strike quickly and are isolated in our area. There will be times when there is no radio operator at the **NWS** to make direct contacts to you. This is when your main link to the **NWS** is via the 800 Severe Weather Hotline. **One person, often the Net Control Station, should be delegated to using the HOTLINE to relay severe weather reports.** This will avoid duplication and keep the 800 lines free. Whenever calling the Severe Weather Hotline, identify yourself as a **SKYWARN** member in Coshocton County Ohio.

The radio operator at the NWS can provide information on the current watch/warning status for your county and a brief radar synopsis. It is up to the Net Control Operator to determine what level of Net Activation is required given certain circumstances. The degree needed varies, but could be effectively arranged in a four-tier system.

## Net Activation to STANDBY MODE

**When used:** When a Severe Thunderstorm Watch has been issued, but no weather activity is occurring in the area. Note the expiration time of the watch.

A Net Control Station and backup NC will then be established. Bring up link repeater. Enable ECHOLINK if possible. Assign a liaison to monitor adjacent counties in direction of weather. If any severe WX damages are known, report the to Coshocton Co EMA and net. The Calling Tree appropriate to Coshocton Skywarn should also begin. Take and log check-ins asking for full call sign and location. Now is the best time to establish where potential observers are located for the upcoming event, not when the severe weather is hitting. The Net Control Station will also relay Watch information frequently. Normal use of the repeater will continue, however, please leave a pause between transmissions should Net Control need to break in to take the Net to a higher level. As the storms approach your area, the Net may need to be fully activated.

**When used:** Used during ALL Tornado Watches and during Severe Thunderstorm Watches when active weather is occurring.

Nets for Flood/Flash Flood Watches are normally not required. There may be exceptions when the **NWS** would request additional spotter reports, ex. remnants of a tropical storm moving through the area, etc. The **first priority**, during this condition, would be **taking and relaying weather reports** to the **NWS and Coshocton Co EMA**. **Second priority would be check-ins** asking for full call sign and location. The Net Control Station takes control of the frequency and gives frequent updates on Net Status and Weather Watches. Prepare for further upgrade as storms approach or if Severe Weather Reports begin coming in.

## Net Activation to **SEVERE WEATHER MODE**

**When used: If a SEVERE THUNDERSTORM WARNING has been issued for Coshocton County.**

**Priority must be given to collecting and relaying weather reports, No check-ins at this time.** Check-ins taken (if at all) at the discretion of NCS as time permits. Net Control will announce warning information frequently. **Only reports meeting the criteria mentioned earlier should be requested.** "It's not raining here" reports are not needed, unless requested.

**When used: If a TORNADO WARNING has been issued for Coshocton County.**

**Net Control Station takes total control of frequency. Net Control requests tornado, funnel cloud and wall cloud reports. If there are no tornadic reports, Net Control requests reports meeting the above criteria. Stations without one of the above reports should maintain radio silence.** No Check-ins taken. Net control will relay Tornado Warning information frequently. **Priority will be given to stations reporting and tracking the funnel cloud or tornado.**

Often, if one waits until a warning is issued, it is too late to organize spotters, collect reports and relay them to the **NWS and Coshocton Co. EMA** in a timely manner. Spotters are also requested to checkin/ check-out in Stand-by. This will help Net Control know where available spotters are before the storm moves through the County.

More details concerning the Coshocton County Skywarn Network will be available during the weekly Training and Readiness Net, every Monday night at 9:00 PM on the 145.230 Repeater through the Spring and Summer. If the Repeater is off the air, we will move the Net to the 147.045 Repeater. If that Repeater is also off the air, we will move the Net to 146.490 Simplex. We will keep you up-to-date with the pluses and minuses of the new operations. We welcome your feedback. Granted, what works well for one County might not for another. Many Counties conduct two-meter radio Skywarn nets. If a County EC/AEC would like to share information in future newsletters on how they conduct their nets, let us know.

**HAIL SCALE: Pea .25 inch, Small Marble .50 in, Penny .75 in.,  
Nickel .88in., Quarter 1 in., Half Dollar 1.25 inch,  
Golfball 1.75 inch, Baseball 2.75 in., Softball 4 inch**

**DEWPOINT scale:**

Degrees "F"	50-55	55-60	60-65	65-70	>70
Thunderstorm chance	Poor	Fair	Moderate	Good	Excellent

# HAM Radio Skywarn Net Frequencies

<b>Ohio County</b>	<b>Primary Frequency</b>	<b>Alternate Frequency</b>
Belmont	145.21	146.76
Carroll	147.075 pl 141.3	443.20
Columbiana	146.805 pl 162.2	444.825
<b>Coshocton</b>	<b>145.230 (no PL)</b>	<b>147.045(no PL) , (146.49 -3<sup>rd</sup> alternate)</b>
<b>Franklin</b>	<b>146.760 pl 123.0 Skywarn</b>	
<i>Franklin</i>	<i>147.060 pl 94.8 ARES repeater</i>	
<b>Guernsey</b>	<b>146.85 pl 91.5</b>	<b>146.46</b>
<b>Harrison</b>	<b>146.655 pl 114.8</b>	<b>146.655 (Simplex)</b>
<b>Holmes</b>	<b>146.670 pl 71.9</b>	
Jefferson	146.94	147.06
<b>Knox</b>	<b>146.790 pl 71.9 Skywarn and ARES, Backup 146.520</b>	
<b>Licking</b>	<b>146.760 Skywarn Primary freq</b>	
<b>Licking</b>	<b>146.880 Skywarn Auxillary Net</b>	
<i>Licking</i>	<i>145.470 ARES repeater (no PL), ARES backup 146.460</i>	
Monroe	147.27	146.91
<b>Muskingum</b>	<b>146.61 pl 74.4</b>	
Noble		
<b>Tuscarawas</b>	<b>146.73 pl 71.9</b>	

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Acknowledgements: NWS Weather Forecast Office Pittsburgh for use of some of the above material.

**Visit the Pittsburgh NWS website :**

<http://www.weather.gov/pbz/>

**Receive CodeRED Weather Warnings for Coshocton County.** Please go to Coshocton Co. EMA site and click on CodeRed Weather Warning logo on page and register. All Coshocton County Amateur Radio Operators need to sign up for this valuable tool.

<http://www.coshoctoncounty.net/agency/ema/>

**Coshocton Co. Oh. ARES® is a NOAA Weather-Ready Nation Ambassador™ .** Check out the web site: <http://www.nws.noaa.gov/com/weatherreadynation/>

Storm Prediction Center [www.spc.noaa.gov](http://www.spc.noaa.gov)

Pittsburgh nws radar : <http://radar.weather.gov/radar.php?rid=pbz&product=N0R&overlay=11101111&loop=no>

Cleveland nws radar: <http://radar.weather.gov/radar.php?rid=cle&product=N0R&overlay=11101111&loop=no>

Wilmington nws radar: <http://radar.weather.gov/radar.php?rid=iln&product=N0R&overlay=11101111&loop=no>

Your personal **SKYWARN SPOTTER ID** \_\_\_\_\_

April 2008 ,March 12,2009 rev see rainfall report.. Now one inch,  
Jan 2015 revised.. Hail reportable starting at penny or 3/4inch or larger.