

INTRODUCTION

The Skywarn networks take many different forms in different parts of the country. Typically, trained volunteer spotters report into a local operations center and these reports are then relayed to the National Weather Service. Reports are delivered to this local center by ham radio, telephone, CB and business band radios and from police and fire departments.

The NW Ohio Skywarn network was formed in May of 1965 as a response to the Palm Sunday tornado that hit NW Ohio.

The NW Ohio regional center is located in the Emergency Services Building in downtown Toledo. NW Ohio Skywarn is primarily made up of trained volunteer ham radio operators and local police and fire departments. Some counties have local countywide networks that collect information from the spotters in that county and then send reports into the regional net. Operators from other areas radio in reports directly to the regional center. This data is quickly relayed by the regional center to the National Weather Service in Cleveland, Ohio.

The NOAA weather radios are a very good way to get watch and warning information. The NOAA weather transmitters are located throughout the area, with the newest one being in Holland, OH on 162.500 MHz.

Training is available for both new *and* old spotters to define and identify severe weather, wall clouds and tornadoes. Training classes, which take about 2 to 3 hours to complete, are held throughout NW Ohio and are taught by the NWS.

IF THERE ARE ANY QUESTIONS, PLEASE CONTACT:

Steve Ashenfelter, N8XSF, District 1 Skywarn Coordinator
419-270-5358 n8xsf@arrl.net

Brent Stover, WD8PNZ, AEC District 1
419-297-8490 wd8pnz@arrl.net

NWOhio Skywarn web page:
<http://www.nwoskywarn.org/>

NET ACTIVATION

The Northwest Ohio Skywarn Net is activated whenever the National Weather Service issues a Severe Thunderstorm or Tornado Watch or Warning.

The net might be brought up in standby if thunderstorms anywhere in NW Ohio start to approach severe limits or if Severe Thunderstorm or Tornado Warnings are in effect for counties surrounding NW Ohio where these storms might move into our area. ***In these two cases, the net might be activated into standby status even if no watches or warnings are in effect in NW Ohio.***

The NWS will hopefully be in touch with the net before any thunderstorms reach severe limits. However, due to the fast-building nature of some thunderstorms, this will not always be possible.

Skywarn is NOT to be used for obtaining general weather information. ***It is ONLY to be used TO REPORT strong or severe weather.*** The net control operators will keep the net informed as to what is happening. Listen for a few minutes to hear what condition the net is in, and that will tell you what's happening. If you need quicker information or a general weather forecast, please tune to NOAA weather radio for continuous broadcasts.

**147.375+ repeater
linked with 442.950+**

**1st Alternate: 146.610-
2nd Alternate: 147.345+**
442.950+ will be linked to these if possible.

OTHER FREQUENCIES FOR NW OHIO SKYWARN REGIONAL NET COUNTY NETS and REPEATERS:

Seneca: 145.450-	Sandusky: 145.250- pl 186.2
Ottawa: 443.850+	Wyandot: 147.210+ pl 107.2
Hancock: 147.150+	Wood: 146.790+
Lucas: 147.270+	Fulton: 147.195+
Henry: 147.315+	Williams: 146.820-
Putnam: 146.715-	Defiance: 147.090+ pl 85.4
Lenawee: 145.370-	Monroe: 146.720-

SPOTTING TIPS & CLUES

HERE'S WHAT TO EXPECT OF A THUNDERSTORM

- All thunderstorms contain lightning. That is what differentiates a thunderstorm from a rain shower.

- A storm is considered severe if it produces sustained winds > 58 Mph or 3/4" hail. Sustained winds are winds sustained for more than 15 seconds.

- The wind at the front of the storm may be very strong. These are usually straight-line winds, not tornadic.

- Intense rain and possibly hail are the next effects you will see.

- Large hail often falls just ahead of tornadoes.

- A rain-free base, which is found in the rear quadrant of a super-cell, denotes the updraft area - a place to watch very closely.

- Wall clouds form from the rain-free base often 15 - 20 minutes before a tornado occurs.

- Tornadoes will generally form from either the wall cloud itself, or very close to it.

- The **best place** for a spotter **to be located to watch** for wall cloud or tornado development south of the storm.

- Storms and tornadoes generally move towards the NE (from the SW) at 25-35 mph, however, they can move as fast as 70 mph.

- When mobile spotting, it is best to find a high spot such as a top of an overpass. Park there and then observe.

SPOTTER SAFETY: Please remember this when spotting... ***your family and loved ones*** (as well as Skywarn) ***want you to be alive and well to spot another day. DON'T TAKE CHANCES!*** Have a safe place to protect yourself from wind or hail. Cars are safe places in case of lightning. Drive at right angles to the tornado in open country. Don't try to outrun a tornado in a city. Seek shelter in a strong building. **THINK SAFETY.**

WHAT TO REPORT

TORNADO WARNING

- 1) TORNADO
- 2) FUNNEL CLOUD
- 3) WALL CLOUD
- 4) DAMAGING WINDS
(over 50 mph, sustained)
- 5) Hail larger than 3/4".

SEVERE THUNDERSTORM WARNING

All of the above, plus

- 1) DAMAGING WINDS
- 2) HAIL (with size reported)
- 3) FLOODING (Over curbs or roadways)

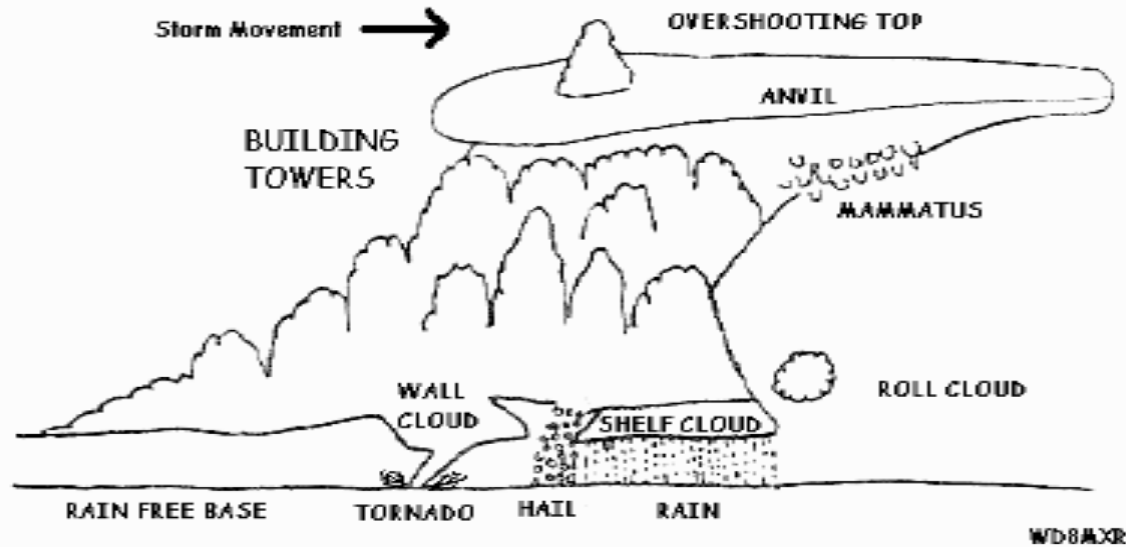
Tornado or Thunderstorm Watch

All of the above plus

- 1) GUST FRONT ARRIVAL
- 2) APPROACHING THUNDERSTORMS
- 3) TORRENTIAL RAIN (near 0 visibility)

Please note that nowhere in this list is there any mention that we want reports of "the sun is out here", or "it has quit (or is not) raining here". If the net control operators want these types of reports, they will specifically ask for them.

TORNADIC THUNDERSTORM:



HOW TO REPORT

"TELE" System of reporting

T - Time of observation and direction of movement.

E - Effects such as wall cloud or hail.

L - Location County and then miles from a known town/city.

E - Estimated or Measured

An example of a good report would be:

At 6:15 pm, we had golfball-sized hail, southwest winds of 40-50 miles an hour. I am in Wood County, 2 miles North of Bowling Green, and these observations are measured.

HAIL - Estimating Size

Pea Size1/4" - 1/2"

Penny Size3/4"

Quarter Size1"

Golfball Size1"-3/4"

WIND SPEED – Estimating

25 – 31 Large branches in motion.

32 – 38 Whole trees in motion.

39 – 54 Twigs break off trees.

55 – 72 Shallow trees uprooted and slight structural damage.

73 – 112 Major structural damage.

Large trees uprooted.

A big **THANK YOU** to the following people for all of your help with Skywarn:

The **T**oledo **R**adio **A**mateur **C**lub for the use of the 147.375 and the 146.940 repeaters.

The **T**oledo **M**obile **R**adio **A**ssociation for the use of the 147.270 repeater.

The **G**reater **T**oledo **A**mateur **R**adio **A**ssociation for the use of the 146.610 repeater.

Jerry, WJ8E, for the use of the 442.950 repeater.

All of the other clubs, people and organizations in NW Ohio who operate repeaters. Without you, communications would be much more difficult.

The Lucas County Commissioners, Dennis Cole, Lucas Co. EMS Director and Bill Halsey, Lucas Co. EMA Director, for their support with the main Skywarn station at the Lucas County Emergency Services Building.

The National Weather Service and especially Mr. Bill Comeaux, Area Manager/MIC, WSFO CLE.

All of the net control operators throughout NW Ohio, who give so much time to keep this system running.

AND THE MOST IMPORTANT THANK YOU OF ALL GOES TO THE SPOTTERS IN NW OHIO WHO REPORT SUCH VITAL DATA IN VERY DEMANDING SITUATIONS.



N8XSF Productions 2008

District 1 NW OHIO



SKYWARN™

FOR THE COUNTIES OF:

**SENECA
SANDUSKY
OTTAWA, LUCAS
WOOD,
HANCOCK
WYANDOT**

*and the adjoining waters of
Lake Erie.*

**147.375+ repeater
linked with 442.950+**