

Hendricks County Amateur Radio Skywarn

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Date: **01 March 2017**

To: **Hendricks County Amateur Radio Operators**

Subject: **2017 Hendricks County Skywarn Procedures**

How are we organized?

Operationally, we act on behalf of the National Weather Service. We report to the NWS Forecast Office in Indianapolis and they give us direction regarding where to look and what information to report. In Hendricks County, Skywarn brings together volunteers from Emergency Management, RACES, ARES, and local clubs. However, you do not need to be member of any of those groups in order to be a Skywarn weather spotter.

What frequencies do we use?

The frequencies for Hendricks County Skywarn nets are, in order of preference:

Primary	147.165 MHz repeater (+600 kHz)
Secondary	147.015 MHz repeater (+600 kHz)
Secondary	442.900 MHz repeater (+5.00 MHz)
Simplex	147.510 MHz simplex

Liaison	146.970 MHz (-600kHz, 77.0Hz PL) Liaison to Central Indiana Skywarn Net
Liaison	442.650 MHz (+5.00 MHz, 77.0Hz PL) Liaison to Central Indiana Skywarn Net

How is severe weather traffic passed?

A Hendricks County Skywarn net can be activated at the request of the NWS *or* our EMA Director *or* whenever a Severe Thunderstorm Warning or Tornado Warning has been issued for Hendricks County.

During a net operation, our Net Control Operator, or our Net Liaison, will report to the Central Indiana Skywarn Net. The Central Indiana Net passes information to us from the NWS and we pass reports to the NWS through the Central Indiana Net. By having one point of contact with the amateur radio spotters, through the Central Indiana Net, the number of inputs the forecasters have to deal with is considerably reduced. The Central Indiana Net prioritizes the information collected by the county nets and makes sure the NWS gets the information they need.

If the Central Indiana Net is not active, but we are active in Hendricks County, our Net Control or Net Liaison can call reports into NWS by telephone (317-856-0359).

In either case, our Net Control will dispatch spotters per NWS request or our best assessment of the situation.

What does the NWS want from us?

The weather service wants accurate and timely reports of:

- Wall clouds, funnel clouds, or tornados. Look for rotation. Know the difference between a wall cloud and a shelf cloud and scary-looking low-hanging clouds.
- Hail – any size. Actual measured size is preferred, but comparisons to coin sizes are acceptable.
- Wind – sustained winds of 55 mph or greater, measured or estimated, or signs of wind damage
- Water – rain at a rate of 1" per hour or greater, flash flooding, water over roads

If it's not on this list or the weather service doesn't specifically ask for it, reporting it only ties up the net and distracts everyone from the task at hand. When in doubt, though, ask your net control operator.

How to be an effective spotter

Observe the cloud formations and movements. Measure, or estimate, the wind speed and direction. NWS has access to weather data, including radar, which is much more detailed and timely than any TV station or Internet site. The NWS uses that data to predict the movement and strength of convective cells. However, the NWS needs to know what severe weather events you are personally observing. This gives them the "ground truth" to verify what their data tells them. With that information, they can make accurate forecasts and warnings for the public.

Hendricks County EMA Position on Mobile Skywarn Weather Spotters

1. Mobile Skywarn weather spotters are responsible for their own personal safety and for the safety of their vehicles. Be especially cautious at night. Always be aware of your surroundings and have an escape route planned. Obey all traffic laws.
2. Do not drive into flooded areas or areas where power lines, tree limbs, or other debris are in the roadway. Honor all public safety road blocks and traffic directions. Unless we are asked by the Hendricks EMA Director to go into a damaged area to help or to assess damage, stay out of the area.
3. Make sure your vehicle is mechanically sound and that you have a full tank of fuel.
4. Mobile spotters are advised to go to a fixed location where they can stop and observe the weather. Attempting to follow a moving storm system, also known as storm chasing, is not endorsed or recommended by Hendricks EMA or the National Weather Service. If possible, take a partner with you to help watch for storm features and road hazards. If you need to stop along the road, park well off the roadway. Turn on your hazard (four-way) flashers. Make sure you park in an area where you won't get stuck.
5. Maintain contact with Net Control. Advise Net Control of your location and advise them when you change location.

Here is a link to a 2-part YouTube video from the NWS Paducah office about mobile spotter safety:

<https://youtu.be/92TWuQTLd4> and <https://youtu.be/LAG7HMvf5qc>. Both videos are about 17 minutes long.

Estimating Wind Speeds

25-31 mph	Large branches in motion; whistling sound heard in overhead utility wires.
32-38 mph	Whole trees in motion; inconvenience felt walking against the wind.
39-46 mph	Twigs and small branches break off trees; wind generally impedes walking.
47-54 mph	Structural damage to chimneys, roofing, antennas.
55-63 mph	Considerable structural damage to roofs; small trees may be blown over or uprooted.
64-75 mph	Widespread damage; large trees blown over or uprooted.
75+ mph	Extensive damage; roofs peeled off; RVs and mobile homes overturned; automobiles blown off highway.

Internet Resources

Hendricks County Skywarn – <http://www.hendricksraces.org/skywarn>

Central Indiana Skywarn – <http://www.w9news.org>

Indianapolis National Weather Service Forecast Office – <http://www.crh.noaa.gov/ind>

Spotter Information Page – <http://www.weather.gov/ind/spotter>

Local Severe Weather Information – <http://www.weather.gov/ind/localsevereweather>

NWS Storm Prediction Center – <http://www.spc.noaa.gov/>

Convective Outlooks – <http://www.spc.noaa.gov/products/outlook/>

Midwest Mesoscale Analysis – <http://www.spc.noaa.gov/exper/mesoanalysis/new/viewsector.php?sector=20>

Visual Hail Size Chart – http://www.crh.noaa.gov/images/iwx/publications/Hail_Chart.pdf

NWS Weather Spotter's Field Guide – <http://www.nws.noaa.gov/os/brochures/SGJune6-11.pdf>

UCAR/COMET Online Spotter Training Course – https://www.meted.ucar.edu/training_course.php?id=23

NWS Jetstream Online Weather School – <http://www.srh.noaa.gov/srh/jetstream/>