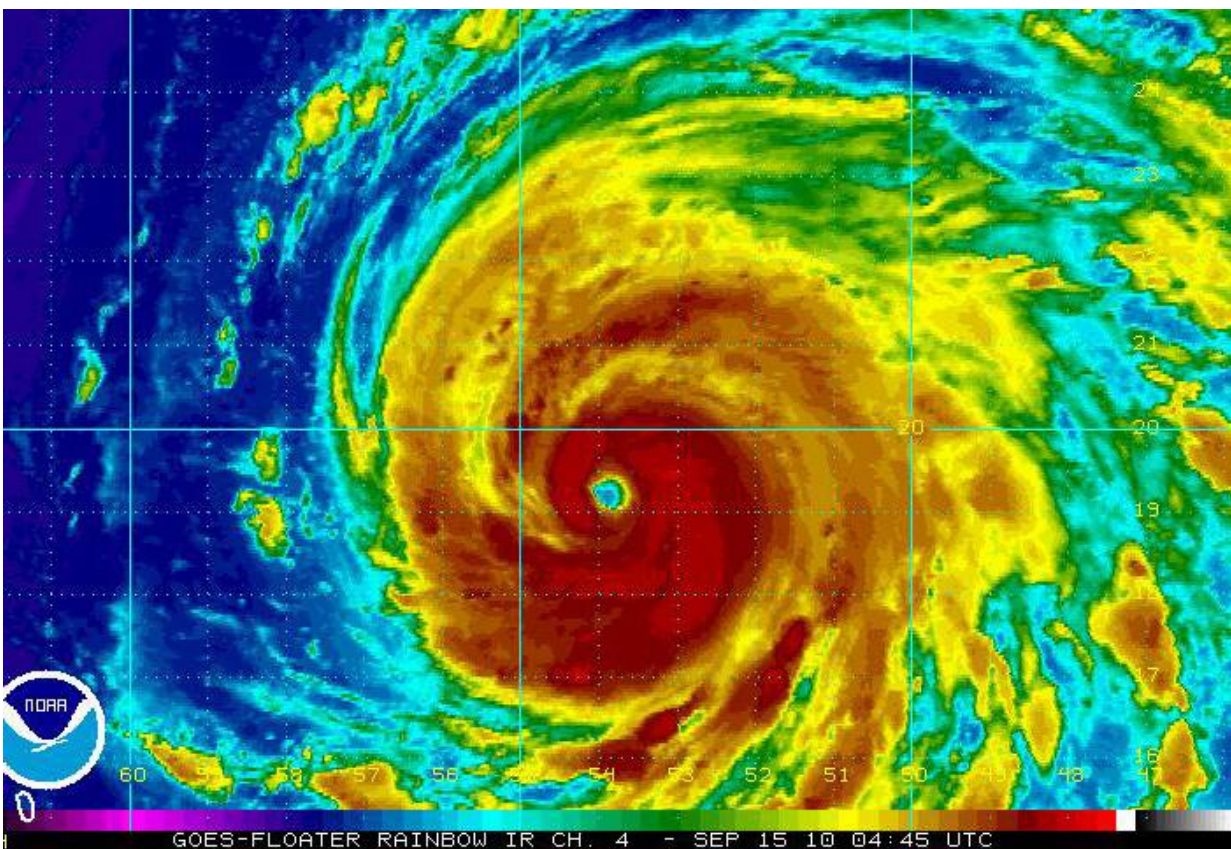


Did you know 'storm spotters' in your community keep you safe during severe weather?

June 29 2015, by Carolyn Graybeal



Hurricane shown on a weather radar. Credit: NOAA

Earlier this week, the Midwest and Northeast were [slammed with](#)

[tornadoes](#) and thunderstorms that grounded planes and held up trains. Thousands of people along the Northeast corridor lost power as a result.

During such hazardous weather, we rely on the knowledge, skill and expertise of meteorologists and designated emergency personnel to keep us safe and in the know. They in turn rely on data supplied by not just satellites and doppler radars but also – a network of citizen scientists.

But wait. With all our sophisticated technology, what could a few volunteers possibly contribute?

"Radars can tell us that there is heavy snowfall, but radars don't tell us how much, or if rain is mixing with the snow, or what damage is occurring. Our spotters do," explains Tanja Fransen Warning Coordination Meteorologist with the National Weather Service in Glasgow, Montana.

The 'spotters' she is referring to, also Skywarn's [storm](#) spotters' are a national network of over 350,000 volunteers who work with their local emergency and weather centers to monitor and report inclement weather. Skywarn was a response to the Palm Sunday Tornado Outbreak a particularly devastating series of tornadoes that ripped through Midwestern states in 1965. Overseen by NOAA's National Weather Service, the Skywarn program trains citizens to identify severe storms and provide accurate reports of storm developments and effects.

During a storm, volunteers send in reports to National Weather Service forecaster offices about what is happening locally. Meteorologists use this valuable 'ground truth' to validate data from their instruments and fill in information gaps, enabling them to make better predictions about what the storm might do next.



Manning the desks during a severe weather event, Skywarn volunteers help keep their communities safe. Credit: Skywarn/NOAA

"Reports from our spotters can be the basis for issuing severe weather warnings. For the recent floods in Houston we received flooding reports from a variety of sources including Skywarn spotters," says Dan Reilly, Warning Coordination Meteorologist with the National Weather Service in Houston-Galveston. The Fort Worth National Weather Service office estimated that those floods dropped about 35 trillion gallons of water.

Skywarn storm spotters are a diverse group of people varying in age, background and skill level. What they do have in common is an interest in weather and public service. To be a Skywarn storm spotter, volunteers must attend free training courses which cover the basics of storm

formations, accurate reporting techniques and of course, storm safety. Last year alone, NOAA trained over 70,000 storm spotters.

And with the ubiquity of social media, having a pool of trained volunteers is ever more important.

"These days it is so easy to send in a picture or phone in an event. Our offices can gather a lot of information. But it also increases the possibility of false reports," says Fransen. "Now more than ever, it is critical to have trained personal who can critically think and evaluate what they are seeing. They are reliable resources, giving us information we can trust."

In addition to on the ground storm spotters, the Skywarn network includes a subset of licensed amateur radio operators who provide additional assistance during storms. The National Weather Service forecast offices utilize amateur radio to maintain communication between on the ground storm spotter and forecasters. And during especially large storms which can knock out phone service, amateur radio volunteers help keep their communities informed of new warnings and other critical information.

But the contributions of Skywarn volunteers doesn't stop when the storm ends. The National Climate Data Center archives all severe weather reports and the data is used by insurance companies, researchers and other government agencies. You can check out recent reports on this map or access the archived data.

If you want to help your community the next time a storm hits, NOAA now provides online training modules. So with just a few clicks you can be on your way to becoming a Skywarn storm spotter.

And the folks at NOAA will certainly appreciate the help of their

volunteers.

"In the community I work with, we have a lot of repeat volunteers," says Fransen. "It is really good to see how civic minded and dedicated our volunteers are."

Talk to those in your community and find out if there is a storm spotter among you! Are you a storm spotter or training to be one? Tell us about your experience in the comments below!

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