

# Storm Spotting Basics

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Before we go any further, we want to say this. Storm spotting is really dangerous. You can get seriously injured or killed, or your vehicles destroyed by severe storms. Do not attempt storm spotting unless you have been properly trained and know what you're doing.

So, you might ask... just what is storm spotting? Is it like we saw in the movie, Twister? Well sometimes it can be like that, but not usually. Real storm spotting is about 90% boredom and 10% sheer terror!

The folks in the movie were actually storm chasers, not storm spotters. Storm chasers are usually funded and work for television stations or large universities. Storm spotters on the other hand are almost always volunteers that give their own time, gas, vehicles and equipment to help make sure that you, the public at large knows what is happening. Storm spotters also usually don't drive as far as storm chasers and are usually within radio contact distance with their local National Weather Service.

Storm spotters usually are ham radio operators, but not always. Ham radio, usually 2-meter or 70-cm band, is the quickest way to relay important information from the field to the National Weather Service. Sometimes, that information is relayed back to us in the field, telling us that the storm we are watching has changed on the radar image and we need to change positions or watch for certain things that might develop in that storm.

Not everything about a storm is considered reportable. We do not report that it is raining hard or if there is lots of lightning in the area. We do however, report things like winds over 57 mph, dime sized or larger hail, wall clouds, rotating wall clouds, funnels and of course, tornadoes on the ground.

We go through training that is usually given each spring by the National Weather Service and/or one of our local Ham Radio clubs. We also highly encourage new spotters go with veteran spotters for several times out, to really see what we are talking about. There is nothing worse than a wrong report, or one that is given, but the reporting party does not know where they are.

Storm spotters usually keep a good eye on the weather forecasts. We know, sometimes days before, when a weather system will be in our area that may cause severe weather. We look for things like a strong low pressure system heading our way that also has lots of moisture heading north in front of this low. If there is a cold front associated with this low and a dry line with it, it could all add up to a severe weather outbreak.

We will be checking in with our local NWS for updated outlooks as well as checking the latest radar images. We start prepping our vehicles, making sure that they are full of gas and that our radio equipment is hooked up and working properly. We also make sure that this system is close enough that we can get to the severe storms within the time needed, so we can report back to the

NWS. It doesn't do any good to head out towards a severe storm, only to find out that it fell apart just as soon as you started towards it. That happens more often than we like and that wastes our time and gas.

If possible, we like to know that a system is expected to go severe in our area. That way, we can go to that area in advance and stage so that we can move in whatever direction needed to intercept that storm. We want to position ourselves in the best area to view exactly what that storm is doing, but only in the safe zone.

During daylight hours, we usually use two teams of spotters. Team #1 is positioned usually south and slightly east of severe storms. That is because most severe storms travel east and have rotation that causes the view from other areas around the storm to be blocked by rain. Team #1's job is to report what the storm is doing and when it is doing it. **Example:** This storm is building. We've got strong inflow winds of 45 mph and a lowering rotating wall cloud. We can see a funnel forming, but it has not touched down at this time.

Team #2 travels along behind the storm and reports what damage the storm has done. **Example:** We have strong outflow winds of 62 mph and quarter sized hail on the ground. We also have 6" tree limbs broken off and roof damage in the area.

During nighttime spotting, everyone stays behind the storm in the Team #2 position because you can not safely see what the storm is doing and where it is going next. You rely on lightning flashes to light up the storm to see what it is doing.

During the next storm spotting article, we will discuss the anatomy of severe storms, also known as supercells...