



SEVERE STORM SPOTTERS TRAINING COURSE



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COURSE OUTLINE

PART ONE:

- I. Introduction and Welcome**
- II. Logistics**
- III. Sign-in Sheets**
- IV. On-the-Spot Severe Weather Quiz**
- V. The National Weather Service and the SKYWARN Program**

PART TWO:

- I. Did You Know? -- Facts and Figures Concerning Severe Weather in Arkansas**
- II. Tornadoes and other types of Severe Weather**
- III. Verifying Severe Weather**

BREAK

PART THREE:

- I. What does the National Weather Service look for?**
- II. The Thunderstorm Spectrum -- Single Cells to Supercells**
- III. What you need to look for - Storm Clues and Sequence of Events**
- IV. Photo Gallery and Critical Clouds**
- V. Quiz Answers**
- VI. Question and Answer Session**

Review material from this spotter class is available on the Internet at:

<http://www.nws.noaa.gov/om/brochures.shtml>

Look for "Basic Spotter's Field Guide" and "Advanced Spotter's Field Guide"

Tornado Safety Rules:

http://www.uaex.edu/Other_Areas/publications/PDF/FSA-1024.pdf



SEVERE STORM SPOTTERS INFORMATION SHEET

→(PLEASE PRINT LEGIBLY)←



NAME _____
(Print your name exactly as you want it to appear on your certificate)

MAILING ADDRESS _____

CITY _____ STATE _____ ZIP _____

HOME PHONE _____ BUSINESS PHONE _____

COUNTY _____

LOCATION _____

For location: Indicate “in town” if you live in the city you listed above. If you live outside of a town, give distance and direction from the town or a well-known landmark. For example: 3 miles northwest of Fordyce, 6 miles north of the Buffalo River on Highway 65, etc.

Please check any of the below that apply to you:

- | | | |
|--|--|---|
| <input type="checkbox"/> Arkansas State Police | <input type="checkbox"/> OES/OEM/DEM | <input type="checkbox"/> American Red Cross |
| <input type="checkbox"/> Sheriff’s Office | <input type="checkbox"/> Paramedic or EMT | <input type="checkbox"/> HAM Radio Operator |
| <input type="checkbox"/> City Police Dept. | <input type="checkbox"/> Firefighter | <input type="checkbox"/> AR Hwy. and Trans. Dept. |
| <input type="checkbox"/> Game and Fish | <input type="checkbox"/> Dept. of Correction | <input type="checkbox"/> Concerned Citizen |
| <input type="checkbox"/> Other _____ | | |

Please check any weather equipment that you have at your home or business:

- | | | |
|---|--------------------------------------|--|
| <input type="checkbox"/> Anemometer (wind speed) | <input type="checkbox"/> Thermometer | <input type="checkbox"/> Rain Gauge |
| <input type="checkbox"/> Wind Vane (wind direction) | <input type="checkbox"/> Barometer | <input type="checkbox"/> Internet Access |

Note: Weather reports are encouraged at any time during severe weather – but follow instructions from local officials first. A NWS meteorologist may call you during or after an event for information on the storm. Spotter sign-in sheets remain on file for five years. The information you provide is very important for sending reports to the news media, local severe weather studies, publication in Storm Data, and warning verification.



Severe Weather Exercise

See if you can identify the parts of a supercell (i.e. a thunderstorm with rotating updrafts). Fill in the blanks below (right) with the letters provided (left).

Side View of a Tornadoic Thunderstorm
Looking West

A
 B
 C
 D
 E
 F
 G
 H
 I
 J
 K
 L
 M
 N
 O
 P

- _____ Tornado
- _____ Roll Cloud
- _____ Mammatus Cloud
- _____ Cirrus Anvil Cloud
- _____ Storm Movement
- _____ Flanking Line Cloud
- _____ Rain Free Base
- _____ Cumulonimbus Cloud
- _____ Hail
- _____ Tail Cloud
- _____ Rain
- _____ Wall Cloud
- _____ Southwest
- _____ Northeast
- _____ Shelf Cloud
- _____ Overshooting Top



Spotter Reporting Procedures



What to Report:

- 1) Tornado, Funnel Cloud, Waterspout, or Wall Cloud
- 2) Hail, ½ inch or larger
- 3) Damaging Winds
- 4) Wind Damage, such as trees or power lines down, or damage to structures
- 5) Flash Flooding
- 6) Very Heavy Rain, falling at the rate of 1 inch or more per hour

In your report, include:

- What you saw
- Where you saw it (direction and distance from some town)
- When you saw it
- Your name and location, and be sure to mention that you are a trained storm spotter

Always remember to do your storm spotting safely!

Do not put yourself or your property in danger just to obtain a report.

Spotter Aids for Estimating Wind Speeds

- 25 to 31 mph...Large branches are in motion; whistling noises are heard from power lines
- 32 to 38 mph...Whole trees are in motion; inconvenience is felt when walking against the wind
- 39 to 54 mph...Twigs break off trees; the wind generally impedes progress when walking
- 55 to 72 mph...Damage to chimneys and TV antennas; shallow-rooted trees are pushed over
- 73 to 112 mph...Surfaces are torn off roofs; windows are broken; lightweight mobile homes are pushed out of place or overturned; automobiles are pushed off roads
- 113 to 157 mph...Roofs are torn off houses; weak buildings and mobile homes are destroyed; large trees are snapped off or uprooted
- 158 mph and up...Severe damage; cars are lifted off the ground