# Stormspotter Reporting









# This presentation is sponsored by the Anderson County ARES

Your friendly neighborhood radio team



# **DISCLAIMER!**

This information is **NOT** endorsed by the National Weather Service and is not intended to be a substitute of the official Basic Spotter Training Program provided by the NWS.

This is simply designed & provided to aid trained spotters on what to report to base radio operators who are in direct contact with the NWS.







### **Our Mission**

To locate possible threats to life and property and provide information from which warnings can be issued!

# **SAFETY FIRST!**

Just like firefighters must be safe with helmet, coat, pants, boots, gloves, and air pack.

Storm spotting is no different. Be prepared and know what to look for.





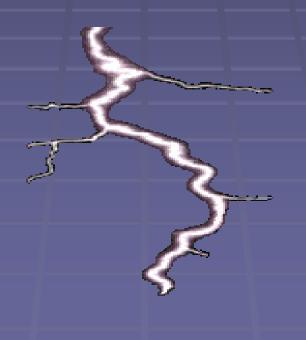
Spotters <u>SHOULD</u> attend a Basic and/or Advanced Storm Spotters Class before spotting. The schedule is online at <u>http://www.srh.noaa.gov/fwd/sptrsch.html</u>

Travel in pairs if at all possible. One to drive, one to watch.

Keep aware of your surroundings at all times.



# Remember, lightning is a major killer among weather phenomena....



# ...but drowning in a Flash Flood is the number one killer in severe weather!



If water is flowing across the road, and you cannot see the road, <u>do not</u> <u>attempt to cross!</u>

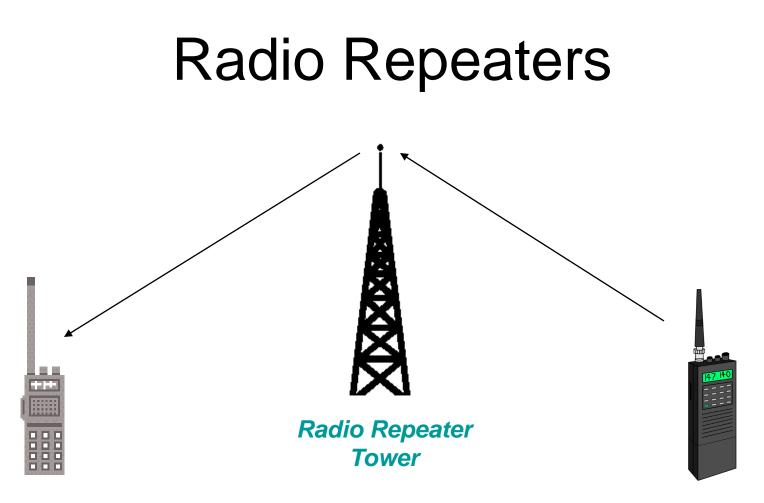
## Before going out, <u>be PREPARED!</u>

- ✓ Take approved training courses
- ✓ Have good <u>operational</u> equipment
- ✓ Have plenty of fuel in your vehicle
- ✓ Have a raincoat or light jacket available
- Have backup plan to call for help such as a charged cell phone or alternate radio frequency
- ✓ Have an ESCAPE ROUTE! ! !
- ✓ Have a plan for your family (they come first)

#### ...and being prepared also means:

**KNOW** your equipment! If you are not familiar with your radio equipment and end up transmitting on a wrong frequency or have some other malfunction, then you are NO GOOD as a spotter! You could be delaying valuable information from other spotters.

# Now....on to Radio Use & Etiquette



A radio repeater allows a mobile, portable, or base radio to talk to another radio many miles away.



Know how to operate the particular radio you are using and what channel or frequency is being used...BEFORE you go out!

Use a decent mobile radio capable of transmitting at least 10 watts minimum with a tuned antenna. (Primarily for VHF radios)

P-T-T means "push-to-talk" **NOT** "push-then-think".

## Radio Etiquette

Listen before you key up the microphone, be patient and take your turn.

Be brief but precise, other spotters may also have important information to report.

Allow the Net Control Operator to set the pace of on-air information.

**Radio Etiquette** (Amateur Radio Operators)

 Spotters usually activated on the 147.08 (Elmwood) repeater using "Long Tone Zero"

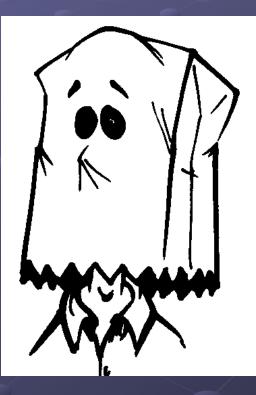
Listen to Net Control Operator for instructions

Weather Net is typically a Directed Net

 To converse with other amateurs, move to the 147.14 (Palestine) repeater or a simplex frequency such as 147.520 (TAC 1) or 147.530 (TAC 2)



# And <u>ALWAYS</u>, <u>ALWAYS</u> identify yourself and your exact location.



Spotters should be OUTSIDE spotting with eyes to the skies...

... not inside on the computer watching radar. The NCS and NWS are doing that function. SPOTTERS are needed to give actual reports of physical activity on the ground.

## **Equipment**







#### **Binoculars**

Mobile radio (preferred)

**Portable radio** 





Compass



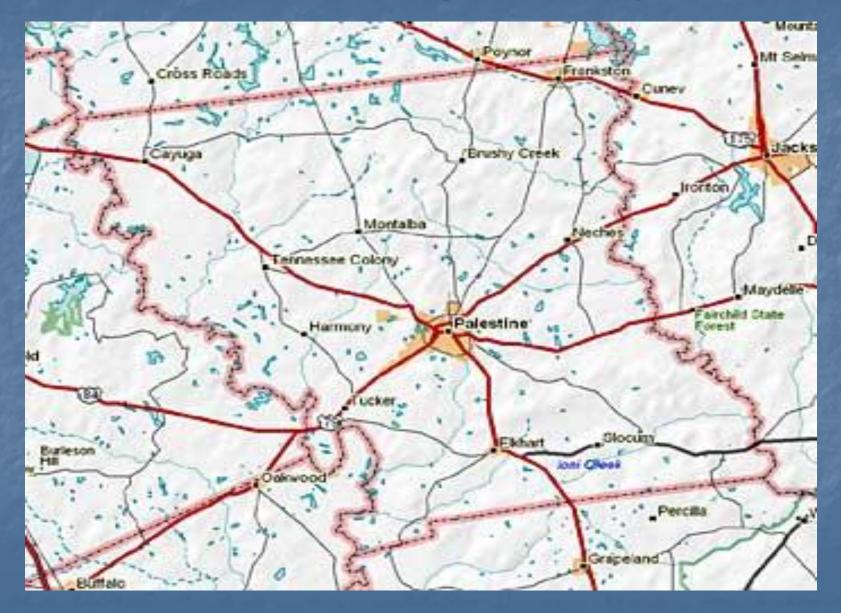
Flashlight

# A GPS is good to have with you as well!



### Maybe even use APRS.

## ...and lastly, a map!



## Watch vs. Warning

Watch – issued by the NWS indicating that a particular hazard is possible.

Warning – issued by the NWS local offices indicating that a particular weather hazard is either imminent or has been reported.

#### **Contacting the National Weather Service in Ft. Worth**

- by phone @ 1-800-792-2257
- online @

<u>http://www.srh.noaa.gov/StormReport/SubmitReport</u> <u>.php?site=fwd</u> (or simply Google "NWS Ft. Worth submit report")

On radio via the UHF repeater linked to Corsicana the frequency is 444.600 + 103.5

Be sure to tell the NWS only what the TRAINED SPOTTERS in the field are telling you. DO NOT tell them what YOU are seeing on a RADAR screen.

## What to Report Minimum Reporting Criteria Funnel Spotted

## 1. Is surface damage occurring?

- 2. Is funnel visible half-way to the ground?
- 3. What is your current location?
- 4. Direction & distance from you to the funnel?
- 5. Direction & rate of travel of funnel?
- 6. Do you have an escape route?

### Wall Cloud Spotted



- 1. Is there visible rotation in the cloud?
- 2. Is any surface damage occurring?
- 3. Where is the updraft located on the wall cloud?
- 4. What is your exact location?
- 5. Direction & distance from you to the wall cloud?
- 6. Direction & rate of travel of the wall cloud?
- 7. Do you have an escape route?

Observe the cloud for at least five minutes to see if it develops into a funnel.

# Remember that <u>ALL</u> other reports cease when a funnel or wall cloud is reported!





New Criteria Now

1. Report hail 1 inch or larger (the size of a quarter)

2. What is your exact location where the hail is falling?

3. What is the estimated size of the hail (in inches or coin size)?

4. How much is falling (occasional or heavy)?

5. Is there a shelter nearby for you to seek cover?

TIP: If possible, <u>DO NOT</u> drive a vehicle during <u>heavy</u> hail. The speed of the vehicle plus the speed of the falling hail will cause tremendous damage to the vehicle.

### **Damaging Winds (over 50 mph)**

**1. What is your exact location?** 

- 2. Is the wind speed greater than 50 m.p.h. (can't walk against the wind)?
- 3. What is the direction of the wind?
- 4. Briefly describe the damage that is occurring.

### How Do I Estimate Wind Speed?

(from the NWS Advanced Spotter Guide)

| Mile Per Hour | Specifications   |
|---------------|--|
| 25 -31        | Large branches move; whistling in<br>high lines  |
| 32-38         | Whole trees in motion  |
| 39-54         | Twigs break off trees; walking impeded   |
| 55-72         | Damage to chimneys, TV antennas;<br>pushes over shallow rooted trees                           |
| 73-112        | Peels surface off roofs; windows broken;<br>trailer houses overturned                          |
| 113+          | Roofs torn off houses; weak buildings<br>and trailer houses destroyed; large trees<br>uprooted |

## **Observe any fallen limbs or trees**

What size are they?

Is it green wood, seasoned, or rotted?

Is the tree uprooted? Do you see the roots?

Is the tree broken on the trunk somewhere?

**Rainfall** (over 1 inch per hour)

• What is your exact location?

 What is the estimated rainfall in inches per hour?

Is there any flash flooding occurring at your location?

### How do I *estimate* rainfall?

• 0.5 to 1.0 inch per hour = Heavy

• 1.0 to 2.0 inch per hour = Very Heavy

• 2.0 to 5.0 inch per hour = Intense

• > than 5.0 inch per hour = Extreme







Light rainfall has almost no impact on visibility.

1.0 inch per hour/heavy rainfall makes it difficult to see beyond 75-100 feet with any definition.

Extreme rainfall rates restrict clear visibility to 20 feet or less. (Typically less, which is about the length of a standard size automobile).

**TIP:** <u>**DO NOT**</u> attempt to estimate rainfall if your car is in motion. Rain beating on the windshield can be misleading.



Storm information can also be reported to the National Weather Service at

http://www.srh.noaa.gov/fwd/sptreport.html

## SKYWARN TRAINING Is very important!



## For Further Info:

# Go to the PACARC website at www.pacarc.org On the front page, in the yellow there is a link to download a PDF of SKYWARN Net Control Info

## WRAP UP

## Questions and/or Comments For further info contact

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