SEVERE THUNDERSTORM REPORTING REFERENCES

CLOUD IDENTIFICATION REFERENCE

Shelf Cloud (A)
- A horizontal, shelf-like cloud on the leading edge of the thunderstorm
- Signals the approach of the downdraft, which includes heavy rain, gusty winds, and sometimes hail
- ID Tip: Slopes away from the rain
- Beware: Shelf clouds can appear to touch the ground, and can look different when viewing from the side
- Can rotate about a HORIZONTAL axis
- No need to report to the NWS

Wall Cloud (B)
- A ROTATING lowering from a T-storm updraft base. Often precedes a funnel cloud and tornado.
- Rotation must be about a VERTICAL axis
- ID Tip: Slopes down and towards the rain

Funnel Cloud (C)
- A VIOLENTLY ROTATING column of air that is NOT in contact with the ground
- Rotation must be about a VERTICAL axis
- ID Tip: Rapidly rotating cloud edges look smooth (versus ragged).

Tornado (D)
- A VIOLENTLY ROTATING column of air in contact with the ground
- Rotation must be about a VERTICAL axis
- ID Tip: Rapidly rotating cloud edges look smooth (versus ragged). To see if it is contact with the ground, look for debris or dust circulating at the surface.

SCUD (E)
- Harmless, ragged looking clouds that do NOT rotate
- Can move up and down, may look turbulent. May look like they are touching the ground
- Responsible for a majority of false funnel cloud and tornado reports
- ID Tip: Edges of the cloud look ragged (instead of smooth like rapidly rotating clouds).
**Wind Speed Estimation Chart**

<table>
<thead>
<tr>
<th>Wind Speed (mph)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-31 mph</td>
<td>Large tree branches moving. Wires whistle.</td>
</tr>
<tr>
<td>32-38 mph</td>
<td>Whole trees moving. Some difficulty when walking into the wind.</td>
</tr>
<tr>
<td>39-46 mph</td>
<td>Small branches or twigs break off. Cars veer when driving.</td>
</tr>
<tr>
<td>47-54 mph</td>
<td>Slight structural damage (shingles blown off). Large branches break off.</td>
</tr>
<tr>
<td>55-63 mph</td>
<td>Structural damage (parts of roofs blown off). Trees uprooted or snapped off.</td>
</tr>
<tr>
<td>64-73 mph</td>
<td>Widespread structural damage (whole roof removed, walls blown in, etc.)</td>
</tr>
</tbody>
</table>

**Please report the following immediately to the NWS**

*Remember: Time, Event, Location*

- **Wind damage** - Large healthy limbs, structural damage, or trees uprooted
- **Hail** - Compare to coins or sports balls; report the largest stone!
- **Flood** - Water rising rapidly, flowing over roads, flooded buildings
- **Rotation** - Wall clouds, funnel clouds, and tornadoes
- **Snow** - In an open area away from fences or drifts; amount of snow (inches to the nearest tenth, take an average if necessary), impacts from snow
- **Ice accretion** - Take an average of the thickest/thinnest ice, report amounts to nearest 0.1”

**How to Submit a Storm Report to NWS Jackson, Kentucky**

Toll Free: 606-666-8000

Online Website - [https://weather.gov/crh/stormreports?sid=jkl](https://weather.gov/crh/stormreports?sid=jkl)

Twitter - @NWSJacksonKY

Facebook - [www.facebook.com/NWSJacksonKY](http://www.facebook.com/NWSJacksonKY)

Amateur Radio - WX4JKL

E-mail - w-jkl.webmaster@noaa.gov

[spotter.network.org](http://spotter.network.org), ccorahs.org, mping.nssl.noaa.gov

**NWS JKL**
www.weather.gov/jkl

**Skywarn™ page**
https://www.weather.gov/jkl/spotter