



MOUNT VERNON COMPOSITE SQUADRON



Monthly Safety Meeting

14 July 2016

Please sign roster

Before we begin...

- Please sign the safety meeting roster
 - Used to log safety training in eServices
- Safety Officer logs training
 - Only other means (not through safety officer) is through on-line safety education course
- Safety training is a monthly requirement
 - Can view most current briefing on squadron website.
 - Status updated only after email sent to safety officer and logged.

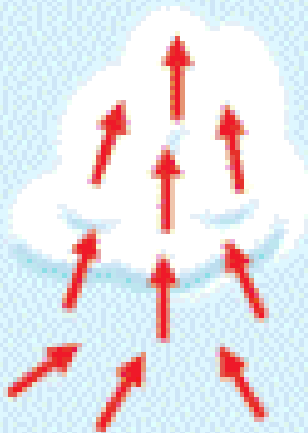
Agenda

- Thunderstorms
- Lightning
- Tornadoes

THUNDERSTORMS



(a) Cumulus stage



- Air motion consists entirely of updrafts
- Precipitation at upper levels, does not reach ground yet

(b) Mature stage



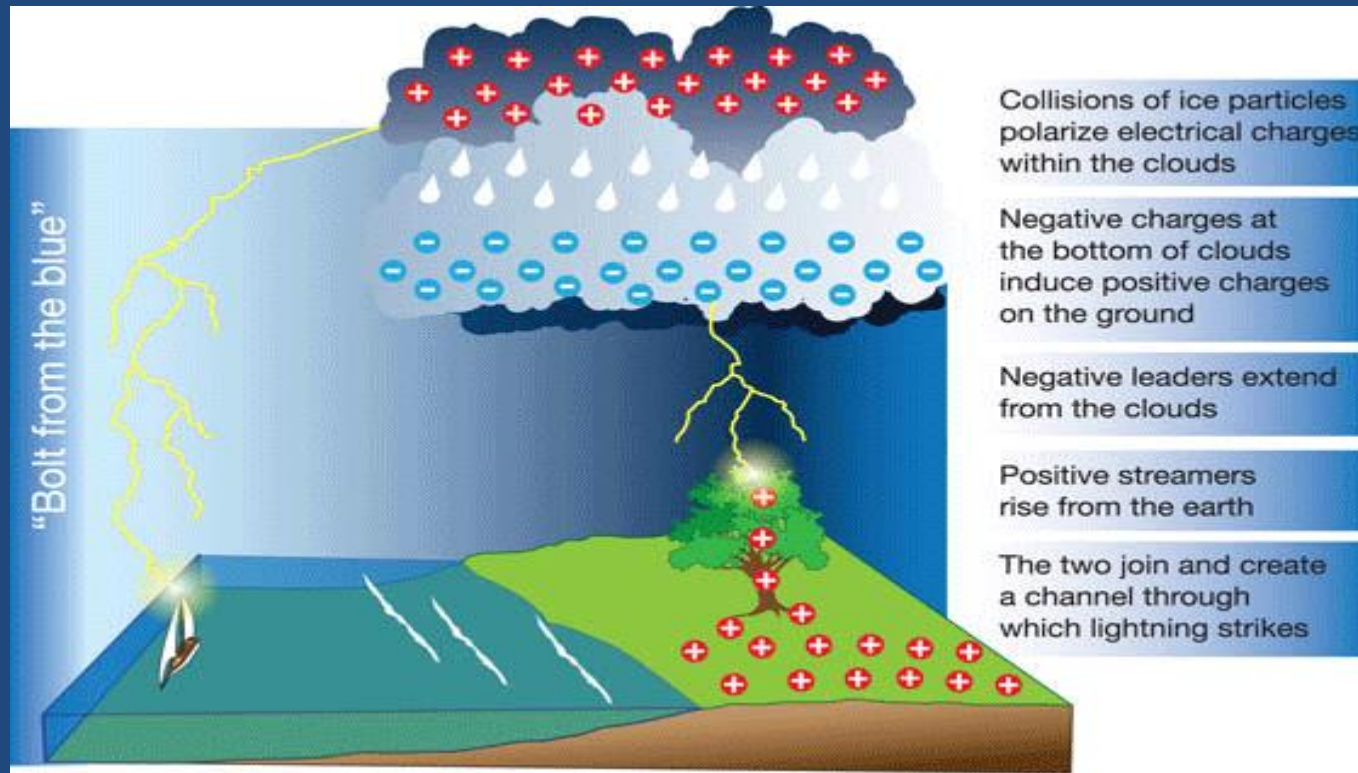
- Both updrafts and downdrafts present
- Precipitation starts to reach ground
- Showers are heavy

(c) Dissipating stage



- Anvil fully formed
- Downdrafts increase, updrafts decrease
- Heavy showers give way to light rain

LIGHTNING



LIGHTNING



An Introduction to...

 #lightningsafety

LIGHTNING SAFETY!

www.lightningsafety.noaa.gov



**When
Thunder
Roars, Go
Indoors!**



Copyright 1999 - Samuel D. Barcklow - All Rights Reserved

What You Need To Know...

1. **NO PLACE** outside is safe when storms are in the area.
2. If you hear thunder, lightning is close enough to strike you.
3. When you hear thunder, *immediately* move to safe place.
4. Stay there until 30 minutes **AFTER** you hear the last sound of thunder.

Lightning is one of the top 3 storm-related killers in the United States!

U.S. Air Force/Chris A. Thurley

TORNADO

- What is a tornado?
- A tornado is a violent rotating column of air extending from a thunderstorm to the ground. The most violent tornadoes are capable of tremendous destruction with wind speeds of up to 300 mph. They can destroy large buildings, uproot trees and hurl vehicles hundreds of yards. They can also drive straw into trees. Damage paths can be in excess of one mile wide to 50 miles long. In an average year, 1000 tornadoes are reported nationwide.



TORNADO

- Required conditions for the development of tornadoes and the thunderstorm clouds with which most tornadoes are associated.
- Abundant low level moisture is necessary to contribute to the development of a thunderstorm, and a "trigger" (perhaps a cold front or other low level zone of converging winds) is needed to lift the moist air aloft. Once the air begins to rise and becomes saturated, it will continue rising to great heights to produce a thunderstorm cloud, if the atmosphere is unstable. An unstable atmosphere is one where the temperature decreases rapidly with height. Atmospheric instability can also occur when dry air overlays moist air near the earth's surface. Finally, tornadoes usually form in areas where winds at all levels of the atmosphere are not only strong, but also turn with height in a clockwise or veering direction.



FLOODS

What is a flood?

A flood results from days of heavy rain and/or melting snows, when rivers rise and go over their banks.

What is a flash flood?

A flash flood is sudden flooding that occurs when floodwaters rise rapidly with no warning within several hours of an intense rain. They often occur after intense rainfall from slow moving thunderstorms. In narrow canyons and valleys, floodwaters flow faster than on flatter ground and can be quite destructive.

Do flash floods hurt people?

Flash floods are the #1 weather-related killer in the U.S. Nearly 80% of flash flood deaths are auto related. Know beforehand if your area is a flood risk.

How much water is needed for your car to float away?

A mere 2 feet of water can float a large vehicle or even a bus. This is why you should never drive through flooded roads. Just 6 inches of rapidly moving flood water can knock a person down.

FLOOD ALERTS

FLOOD WATCH - means that an overflow of water from a river is possible for your area.

FLASH FLOOD WATCH - means that flash flooding is possible in or close to the watch area. Flash Flood Watches can be put into effect for as long as 12 hours, while heavy rains move into and across the area.

FLOOD WARNING - means flooding conditions are actually occurring in the warning area.

FLASH FLOOD WARNING - means that flash flooding is actually occurring in the warning area. A warning can also be issued as a result of torrential rains, a dam failure or snow thaw.

SAFETY TIDBITS

- HYDRATION
- SAFE BOATING
- BICYCLE SAFETY
- CAP SAFETY BEACON

Safety Training Credit...

- Please sign the safety meeting roster
 - Used to log safety training in eServices
- Safety Officer logs training
 - Only other means (not through safety officer) is through on-line safety education course
- Safety training is a monthly requirement
 - Can view most current briefing on squadron website.
 - Status updated only after email sent to safety officer and logged.