



Hanscom Aero Club Safety Meeting

15 June 2022



Outline

- **Summer Flying**
- **Thunderstorm Basics**
- **ASI Videos**



Summer Flying Considerations

- Higher temperatures
- Keep hydrated
- Sunglasses (non-polarized)
- Sunset occurs later
- Density altitude (performance)
- Increased air traffic (more private pilots in the sky)
- Increased humidity (carb-ice)
- Footwear (don't fly with flip-flops on)
- Life Jackets (esp when flying to the islands)



Temperature / Dew Point Spread

- **Dew point:**

- The temperature (in degrees) to which air must be cooled in order to be saturated with water vapor already in the air.
- The higher the dewpoint, the more moisture is in the air

- **Base cloud layer estimation:**

- $Alt(ft) = \frac{OAT(^{\circ}F) - DP(^{\circ}F)}{4.4} \times 1000$

- $Alt(ft) = \frac{OAT(^{\circ}C) - DP(^{\circ}C)}{2.5} \times 1000$

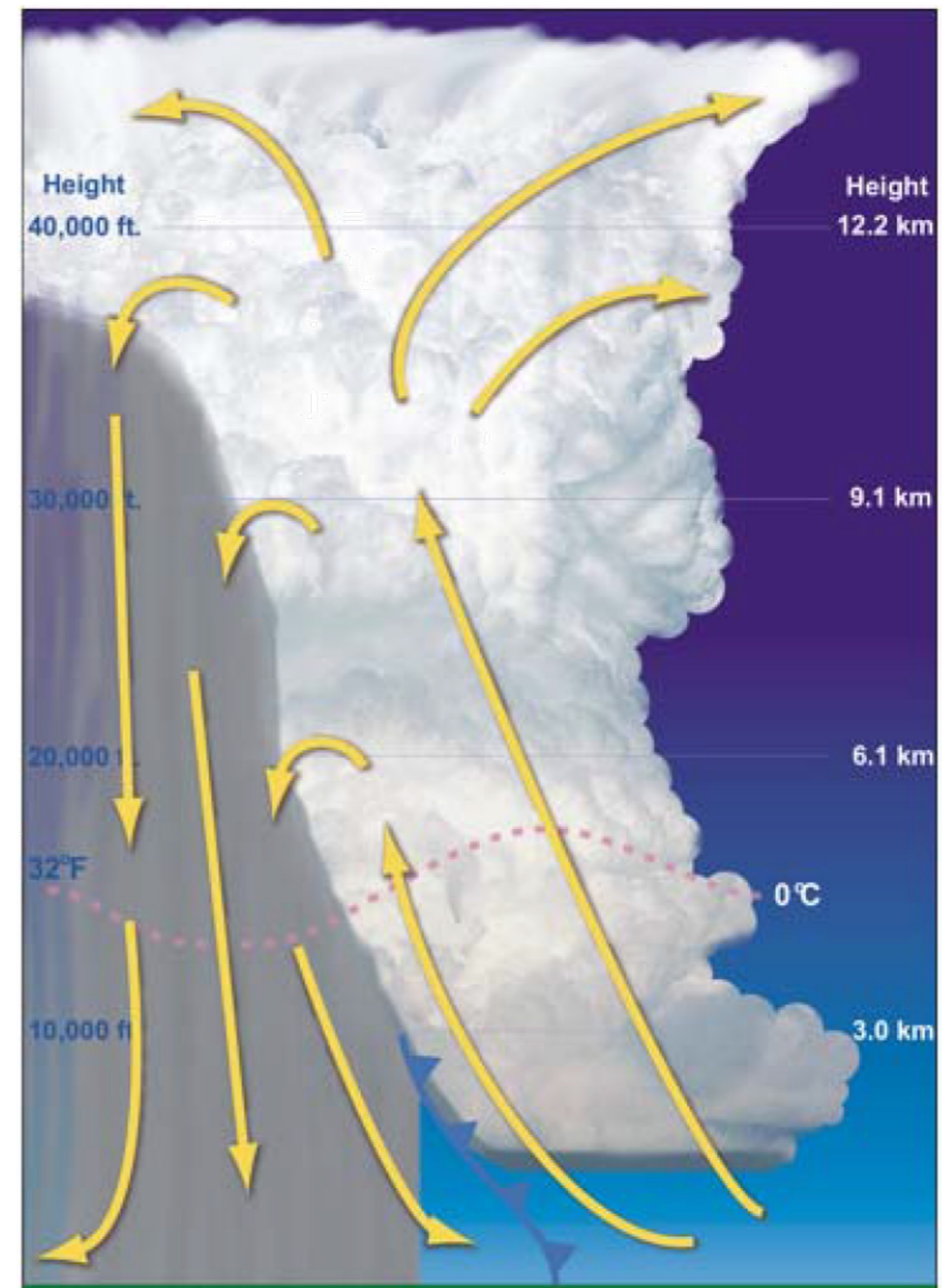
- **Spring/Summer = humid air = T-storms**



Thunderstorm Do's / Don'ts

- **Don't fly near the thunderstorms**
 - Severe turbulence rips wings off our tiny planes
 - Don't land or takeoff in face of one approaching
 - Don't try to fly under (even if can see to other side)
 - Don't fly under anvil
 - Don't fly into clouds with scattered T-storms embedded
 - Don't assume ATC will give you deviations/guidance without you asking first
 - Don't rely solely on NEXRAD from ADS-B – it's 15-20 min old when you see it
 - Do give PIREPS
 - Do listen for PIREPS from others
 - Do stay 20 nm or more away from storms

FIGURE 1. MATURE STAGE OF THUNDERSTORM





ASI Thunderstorm Videos

- **Ask ATC: Thunderstorms**
 - <https://youtu.be/n4cH4O3Qxbw>
- **Ask ATC: Precipitation Intensity & How to Deviate Around Weather**
 - <https://youtu.be/JGeFjwH-7kA>
- **Ask ATC: Weather Deviating**
 - <https://youtu.be/cyirzSfr0no>
- **ASI Accident Case Study: Time Lapse – misunderstanding in-cockpit weather displays can lead to tragedy**
 - <https://youtu.be/83uvKWJS2os>



Rudder Trim

