



EAA Chapter 100 April 2021 Newsletter

<http://eaa100.org>

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EAA Chapter 100 is a nonprofit association involved in the promotion of aviation through adult and youth education, hands-on training, building and maintenance of experimental aircraft, and through community awareness programs.

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Reader submissions and comments are strongly encouraged.



Thunderstorms

-- FAA Advisory Circular 00-24C

Editor: The following is just part of FAA Advisory Circular 00-24C. To read the complete Advisory Circular on Thunderstorms, please go to https://www.faa.gov/documentlibrary/media/advisory_circular/ac%2000-24c.pdf

Knowledge of thunderstorms and the associated hazards with thunderstorms is critical to the safety of flight. For a thunderstorm to form, the air must have sufficient water vapor, an unstable lapse rate, and an initial upward boost (lifting). A thunderstorm lifecycle progresses through three stages: the cumulus, the mature, and the dissipating. Figure 1, Mature Stage of Thunderstorm, is an example of a mature thunderstorm and the updrafts and downdrafts contained within them. Weather recognizable as a thunderstorm should be considered hazardous, as penetration of any thunderstorm can lead to an aircraft accident and fatalities to those on board. The current edition of AC 00-6 provides more details regarding the atmospheric conditions leading to the formation of thunderstorms.

THUNDERSTORM TYPES. Thunderstorms pack just about every weather hazard known to aviation. Pilots may encounter thunderstorms of different size and types. Thunderstorm types may be classified as:

a. Single Cell. A single cell (or common) thunderstorm cell often develops on warm and humid summer days. These cells may be severe and produce hail and microburst winds.

b. Thunderstorm Cluster (Multi Cell). Thunderstorms often develop in clus-

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Secretary Comments

-- Jeff Hanson

EAA Chapter 100

Chapter 100 meeting 03-12-21

Here are my notes from the March meeting:

- 20 chapter members and guests were present. It was great to see such a large turnout as well as some faces that we haven't seen in awhile.
- It was noted that the April meeting will be the last Friday night meeting until November. May through October meetings are held on the second Saturday of the month at 9:00AM.
- Father's Day Flight breakfast discussion. Jim will be attending a food service webinar put on by EAA corporate and will report back to the chapter on their recommendations and guidelines. A decision on whether or not to try to hold the event can be made at the next meeting.
- Member round table discussion followed until meeting adjournment.

Secretary's note: I was able to get the Hatz out for my first flight of the season the day after the meeting. It was a beautiful Saturday afternoon and it felt great to be in the cockpit again (my last time out was in October). It was also nice to see numerous other aircraft in the pattern with me as others took advantage of the early spring weather. I was able to get in 10 takeoffs and landings while navigating a noticeable crosswind (250° @ 12 on runway 20). I know that's probably not much for most of you but, in the Hatz, it kept me on my toes. It was a good day...

Respectfully submitted,

Jeff Hanson

Chapter Secretary

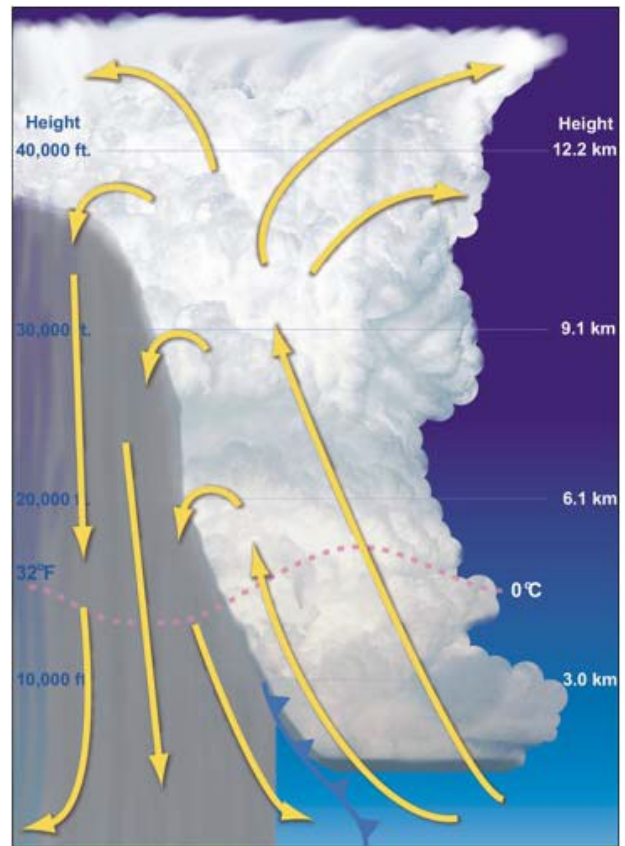
(Continued from page 1) - Thunderstorms

ters with numerous cells. These can cover large areas. Individual cells within the cluster may move in one direction while the whole system moves in another.

c. Squall Line. A squall line is a narrow band of active thunderstorms. Often it develops on or ahead of a cold front in moist, unstable air, but it may develop in unstable air far removed from any front. The line may be too long to detour easily around and too wide and severe to penetrate.

d. Supercell. A supercell is a single long-lived thunderstorm which is responsible for nearly all of the significant tornadoes produced in the United States and for most of the hailstones larger than golf ball-size.

MATURE STAGE OF THUNDERSTORM



DOS AND DON'TS OF THUNDERSTORM AVOIDANCE.

Thunderstorm Avoidance. Never regard any thunderstorm lightly, even when radar observers report the echoes are of light intensity. Avoiding thunderstorms is

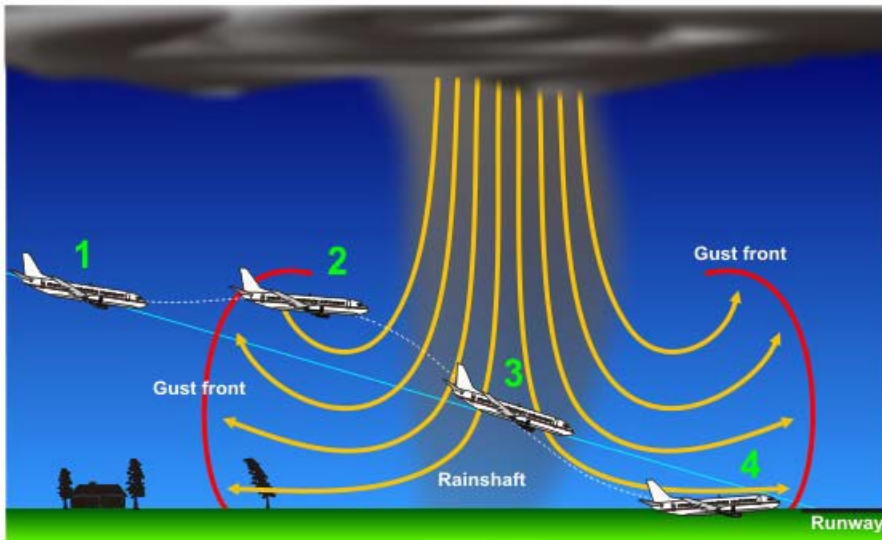
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the best policy. Following are some dos and don'ts of thunderstorm avoidance:

- (1) Don't land or takeoff in the face of an approaching thunderstorm. A sudden gust front of low-level turbulence could cause loss of control.
- (2) Don't attempt to fly under a thunderstorm even if you can see through to the other side. Turbulence and wind shear under the storm could be hazardous.
- (3) Don't attempt to fly under the anvil of a thunderstorm. There is a potential for severe and extreme clear air turbulence.

MICROBURSTS FROM THUNDERSTORMS CAN PRODUCE DESTRUCTIVE WINDS GREATER THAN 100 KNOTS



- (4) Don't fly without airborne radar into a cloud mass containing scattered embedded thunderstorms. Scattered thunderstorms not embedded usually can be visually circumnavigated.
- (5) Don't trust the visual appearance to be a reliable indicator of the turbulence inside a thunderstorm.
- (6) Don't assume that ATC will offer radar navigation guidance or deviations around thunderstorms.
- (7) Don't use data-linked weather next generation weather radar (NEXRAD) mosaic imagery as the sole means for negotiating a path through a thunderstorm area (tactical maneuvering).

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When to activate the ELT after the engine goes silent

-- Dick Fetcher

Most pilots probably got the letter from the FAA I have posted below. I agree with there ideas but I also feel they should have included one more small paragraph. *Just remember, the ELT broadcasts a loud and annoying beep on 121.5 when you turn it on. If you are going to or already are communicating with someone about your problem on 121.5 and the ELT is on, all you are going to hear is that damn beep. So remember, beep early and beep often, but be ready to turn the ELT off if you want to communicate on 121.5.*

From: FAASafety.gov

<info_fps=44RF.com@faasafety.gov>

Sent: Wednesday, March 24, 2021 17:09

To: fps@44RF.com

Subject: "When to activate the ELT after the engine goes silent" - FAASafety.gov

FAA Safety Team | Safer Skies Through Education

When to activate the ELT after the engine goes silent

Notice Number: NOTC1747

All pilots should be thoroughly familiar with the operation of their aircraft's ELT, whether it's the analog 121.5 and 243 MHz models, or the newer 406 MHz digital ELTs. This familiarization should include knowing how and when to manually activate an ELT during an inflight emergency. We asked Larry Bothe, Master & Gold Seal FAA Certified Flight Instructor and seminar presenter at EAA's Air Venture, to share some insight on this important subject:

I think of early ELT activation the same way I think of (and teach) the early declaration of an emergency. If the engine quits, or some other emergency occurs requiring an immediate off-field landing, declare an emer-

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gency and activate your ELT right away. As soon as the immediate flying tasks (pitch for best glide, set the trim, pick a place to land, and turn the airplane to go there) are done, you need to squawk 7700, declare an emergency, and activate your ELT. Don't wait until you have gone through your other checklist items and then call at the end. By that time, you may well be too low to call (line-of-sight), and down in the ground clutter, out of sight of radar. The idea is, that since in reality you probably won't make a perfect textbook emergency landing, you need to get help on the way to take you to the hospital and tend to your injuries. If you don't summon help while you can, you may survive the crash, only to die of exposure in the wreckage because nobody knows you are there.

That's why I recommend manually activating an ELT while still in flight. If you rely on the crash to set it off, and you are injured, how will you know if it activated or not? You want to be found, RIGHT AWAY! If you have remote activation capability, turn the darn thing on when you are squawking 7700 and declaring the emergency. Let people know you are in trouble. Make yourself easy to find and be rescued, for sure. All the modern 406 ELTs have panel mounted remote switches.

Just push the button.

What if you manage to "fix" the emergency (belatedly figured out that the fuel selector was in the wrong position, and the engine really will run), or end up landing without damage or injury? You have already summoned all these people via radio and ELT. Simple. If still in the air, use that same radio you used to declare the emergency to call it off. I did that once with Memphis Center, and they were happy it worked out OK. I didn't hear a word from the FAA later. If you are on the ground, cancel the false alert by calling the U.S. Air Force Rescue Coordination Center at 1-800-851-3051.

The whole idea here is to get help coming so you and your passengers can be rescued, really fast. One of the ways to do that is to manually activate your ELT early. It's also important to register your 406 MHz ELT with

Newsletter Editor

-- Art Howard

NOAA so they know who the device belongs to and who to call if it's activated. Here is the website for more information and to register: <https://www.sarsat.noaa.gov/beacon.html>

For more information on ELTs see:

The Airman's Information Manual (AIM)

https://www.faa.gov/air_traffic/publications/atpubs/aim_html/chap6_section_2.html

Why should I buy a 406 MHz ELT? (FAA Safety Briefing magazine November/December 2010 p. 23)

https://www.faa.gov/news/safety_briefing/2010/media/novdec2010.pdf

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Items for Sale

Editor: Please send me a description and photo, if you have one, and I will place your for sale item here.

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(8) Do remember that the data-linked NEXRAD mosaic imagery shows where the weather was, not where the weather *is*. The weather conditions may be 15 to 20 minutes older than the age indicated on the display.

(9) Do listen to chatter on the ATC frequency for Pilot Weather Reports (PIREP) and other aircraft requesting to deviate or divert.

(10) Do ask ATC for radar navigation guidance or to approve deviations around thunderstorms, if needed.

Editor: The above information is just an excerpt from [FAA AC 00-24C](#). Please read the entire AC 00-24C for a more complete understanding of thunderstorms.

Editor: The airspace depicted below shows where you need ADS-B out. There is a lot of airspace where you **do not need** ADS-B out, including **KRST** and **KTOB**. ([FAA](#))

Editor: This is from the EAA Young Eagles **Pilot Guidelines** brochure: **Pilot Requirements**

The Young Eagles pilot requirements are basic, but **MUST** be followed.

- ◆ Be a current EAA® member and hold an appropriate airman's certificate (sport pilot or greater)
- ◆ Possess a current medical certificate (if applicable)
- ◆ Be current to carry passengers in the aircraft you plan to use
- ◆ Have a current flight review
- ◆ Complete the Young Eagles registration form before the flight, including parent or legal guardian signature, and pilot signature
- ◆ Conduct flights in an aircraft that is in airworthy condition
- ◆ Have aircraft passenger liability insurance for the aircraft used (owned, rented, or borrowed)
- ◆ Adhere to all applicable Federal Air Rules (FARs)
- ◆ Complete both the online training and basic background check as a part of EAA's Youth Protection Policy. For more information, visit EAA.org/YouthProtection.

Editor: Make sure you are current to fly Young Eagles at the EAA Chapter 100 Young Eagles events this fall in 2021. Hopefully, this event will occur this year.

