



# EAA Chapter 100 December 2024 Newsletter

<http://eaa100.org>

## 2024 Chapter Leaders

President  
Dwayne Hora  
President@eaa100.org

Vice President  
Ken Chase  
VP@eaa100.org

Secretary  
Jeff Hanson  
Secretary@eaa100.org

Treasurer  
Chris Budahn  
Treasurer@eaa100.org

Web Editor / Newsletter  
Art Howard  
Webmaster@eaa100.org

IMC Club Director  
Art Howard  
IMCclub@eaa100.org

Program Director  
Art Howard  
ProgramDirector@eaa100.org

Technical Counselor  
Wayne Trom  
TechCounselor@eaa100.org  
507-374-6245

Flight Advisor  
Dave Nelson  
FlightAdvisor@eaa100.org

Young Eagles Coordinators  
Ashleigh Wempe  
Richard Fugate  
YoungEagles@eaa100.org

Tool Coordinator / Hangar  
Gordy Westphal  
ToolCoordinator@eaa100.org  
Hangar@eaa100.org

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.

## December Meeting

– Dwayne Hora

The December Chapter 100 meeting will be held December 13 at 7pm in the Dodge Center Airport terminal building.

The next EAA Chapter 100 meeting is at 7:00 pm, Friday, December 13, 2024 at the Dodge Center Airport, KTOB.

### Meeting agenda as follows:

- Pledge of Allegiance
- Welcome Visitors
- Reports | As available
  - \*Secretary's Report
  - \*Treasurer's Report
- Committee Reports
  - \*Hangar
  - \*Young Eagles
- Old Business - **We need a Chapter Secretary to complete the chapter renewal.**
- New Business - 2025 BoD meetings, 2025 Chapter meeting schedule & calendar approval.
- Flight Advisor/Tech Counselor
- Builder Reports - Time permitting
- Adjourn

Thank you,  
Dwayne Hora  
EAA Chapter 100  
President

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## A Note from the Treasurer

-- Chris Budahn

Hello EAA 100,

It's that time of year again where I have to ask for your membership dues. The dues are only \$10. Please be sure to keep your EAA national membership account current as well. This can be done at [www.eaa.org](http://www.eaa.org). If you haven't already given me your national membership number, please submit that with your dues payment. We use a roster management tool that links to your national membership. This allows us to keep track of things you have done on the national level such as Youth Protect training or background checks that are necessary for participation in the Young Eagles program.

You can mail the payment to me, or bring it to the next chapter meeting.

Thanks,

Chris Budahn  
6525 County 30 BLVD  
Kenyon, MN 55946  
507-438-1130

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## Reeling in Rough Air

-- Redbird Flight

**Editor:** The following is from Redbird Flight URL: <https://www.redbirdflight.com/friday-morning-flight-plan/reeling-in-rough-air>

As a student pilot, I recall flying on my own to the familiar rural airport where I had first soloed to hone my soft- and short-field skills. After proving to myself that I had those maneuvers down pat, I realized I still had about 30 minutes left until I needed to head back to my home airport.

It was a hot summer day in Central Texas and an absolute sauna in the cockpit of my Skyhawk. As such, I decided to climb to more comfortable temperatures for a steep turn rehearsal.

At TL027 (my cheeky notation for Temperature Level 27C), I performed clearing turns and a steep turn to the left, flying through my prop wash upon completion. I patted myself on the back for nailing the turn in bumpy conditions and began rolling into a right steep turn.

### WHAM!

Apparently, sledgehammers were falling from the sky, and one had hit my airplane, sending me sharply downward. In response, I pulled hard on the yoke and simultaneously experienced a vertical gust from below—or so I thought.

Flying back home, I experienced more of the same aggressive turbulence, fighting to maintain at or below 2,000 feet per ATC's instructions. After explaining this scenario to my CFI, he grinned and told me how I had worsened it. While the air caused half the sudden, jarring changes in altitude, the PIC caused the other half. Oops.

In theory, we all know how to fly in turbulence: Slow to Va and focus on maintaining attitude instead of altitude.

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## Secretary Comments

-- Jeff Hanson

Here are the minutes from the November meeting:

- Meeting was hosted by Dwayne Hora at his shop.
- 8 members present.
- Election of chapter officers:
  - o President: Dwayne Hora
  - o Vice President: Ken Chase
  - o Secretary: Open
  - o Treasurer: Chris Budahn
  - o Newsletter Editor: Art Howard
- o Motion made to accept the complete ballot by Art Howard, 2nd by Tim Argo. Motion passed.
- o Ray aviation scholarship discussion.
- o Builders reports.

Meeting adjourned at 7:50 pm.

Respectfully submitted,

Jeff Hanson

Chapter Secretary

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But keep in mind that mitigation and avoidance are important elements of dealing with turbulence, especially if you're carrying nervous passengers in your GA airplane. The turbulence experienced in an SR-22 may be frightening to non-pilot passengers compared to the Airbus A320 turbulence they're used to.

Here are some insights and mitigation and avoidance tips when considering turbulence.

### **Turbulence ≠ shear**

Turbulence is annoying but rarely dangerous. Shear can bring you out of the sky. Brief wind conditions and forecasts along your route before taking flight, and continue monitoring them during flight. We mostly avoid turbulence for comfort but must avoid shear for safety.

### **Know what $V_a$ actually is**

As a refresher,  $V_a$  is the speed at and below which the airplane will stall before its limit load factor can be exceeded. It's listed in the POH for your aircraft in the Limitations section and is the speed at or below which you should maintain in turbulent conditions.

### **Know what $V_a$ is at different weights**

Depending on the make and model, the POH may list several  $V_a$  speeds based on weight. For example, in the Cessna 172R POH, calibrated and indicated  $V_a$  speeds are listed based on three different gross weights.

If you're loaded to the gills at 2,450 pounds gross,  $V_a$  is 99 knots indicated. But, if you're just a couple of passengers lighter at 2,000 pounds gross, the indicated airspeed for  $V_a$  is lower at 92 knots.

However, some POHs only list  $V_a$  at gross weight. If that's the case and you're not flying at gross, you can still figure it out. Per Barry Schiff, " $V_a$  for lighter weights can be approximated by reducing the published  $V_a$  by two knots for each 100-pound reduction in gross weight." As with all performance calculations, err toward conservative (slower) numbers, and remember that you're losing the weight of burned fuel as you fly.

### **Weight is great**

The heavier you are, the harder it is for turbulence to push you around (refer to the aforementioned SR-22 vs A320 comparison). The greater mass of a planeload full of bodybuilders and 100LL won't be pushed as far as the solo marathon runner flying with  $\frac{1}{3}$  tanks.

Imagine kicking a beachball that weighs only a few ounces, then imagine kicking a 14-pound bowling ball with the same force. The ball is your airplane, and your foot is the wind. The bowling ball won't move nearly as far. Also, don't kick a bowling ball. It hurts.

### **Turbulence is born of contrast**

Lighter ground or water next to darker ground can create a sharp temperature gradient by radiating heat at different rates, disturbing the air above it. Hills and

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mountains direct air such that it changes direction and speed and can cause rotary air movement.

Temperature and pressure differences between large air masses breed turbulence at and around their intersections. When planning and performing a flight, stay mindful of permanent turbulence makers, like geographic features, and more transient causes, such as frontal boundaries.

### Do as I say, not as I did

As a solo student pilot flying through rough air on that sultry summer day, I had not fully absorbed the best practice of flying with fingertips on the yoke and focusing on maintaining attitude as opposed to altitude. My neophytic reactions made my ride twice as wild as it had to be.

So, the final pointer is to remember to employ the classic rules we all know: use a light touch on the controls to maintain attitude as opposed to altitude, and slow to the Va speed you calculated before your flight.

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## Winter Safety Tips

-- FAA

### Make Your Winter Safety List, Check It Twice. Don't be Naughty, Watch Out for Snow and Ice.

Pilots face new challenges as temperatures drop and precipitation falls. Here are the FAA's top tips for pilots operating in winter weather:

**1. Understand runway and weather conditions** for your arrival airport during your [pre-flight briefing](#). Before you take off, make sure you have reviewed weather reports at your destination and en route, and that your aircraft is equipped to handle icing conditions and has adequate fuel.

If you are headed to destinations in Alaska, Colorado, or Hawaii, you can also look ahead with [weather cameras](#).

### [Look Before You Fly with FAA Weather Cameras](#)

[The manager of the FAA's weather camera program shares his experiences with aviation in Alaska and the forthcoming...  
medium.com](#)

**2. Communicate with Air Traffic Control.** If a weather-related concern or runway contamination leaves you unable to accept instructions, remember that the Tower is there to help.

As for non-towered, remember that you can always call the airport beforehand to get an update on runway conditions, or review the airport's weather report.

**3. Ensure a thorough weather briefing** for your planned destination airport prior to departing. The FAA provides pilots with weather planning tools to check the [National Airspace System status](#), [airport status and delays](#) and [Surface Weather Observation Stations](#).



**4. Check and understand Notices to Air Missions (NOTAMS)** for your departure and arrival airport, especially if they pertain to snow and ice.

**5. For air carrier pilots, verify your understanding of arrival and departure windows.** Winter weather may require [Prior Permission Required \(PPR\)](#) or [Slot Times](#).

**6. Go sloooooowwwwww.** Plan extra time to enter and exit runways due to winter weather.

**7. Learn the jargon** air traffic controllers and airports use to assess runway conditions for pilots.

The FAA's [Takeoff and Landing Performance Assessment \(TALPA\)](#) is a method for airports and air traffic controllers to communicate actual runway conditions to the pilots in terms that directly relate to the way a par-

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ticular aircraft is expected to perform. The TALPA initiative improves the way the aviation community assesses runway conditions, which provides an aircraft operator with effective information to anticipate airplane [braking action](#).

TALPA is mostly used at major airports, but all pilots could benefit from understanding more efficient ways to communicate and understand braking conditions with each other and airport personnel.

Hear more about TALPA and how it works in our [From the Flight Deck](#) video on Winter Weather Challenges.

**8. During snow removal on the airport, use caution for additional vehicles on movement areas.** [Learn more](#) about how to stay safe when snow removal vehicles are in the mix.

**9. No matter the weather, file a [flight plan](#).**

**10. Help out your fellow pilots.** Ask for and provide [pilot weather reports \(PIREPs\)](#) in flight so that other pilots can have information on the weather you are experiencing.

**11. Lookout for the signs.** [Snow](#) drifts can obscure airport signage and markings both on the surface and alongside the runway or taxiway, making it difficult for a pilot to know where to hold short or turn.

One way to prepare for this possibility is to get familiar with destination airports before you fly by reviewing airport diagrams. You can also browse our [From the Flight Deck video series](#) for first-person footage of safe landings at airports throughout the country.



## Newsletter Editor

-- Art Howard

If you plan on winter flying, be safe, and dress for the cold weather.

Also, someone please come forward and volunteer for the Chapter Secretary position. This is an important function but does not take a lot of time.

See you around the patch.

I need more articles from the membership. Please send your articles and pictures to [alhowar@attglobal.net](mailto:alhowar@attglobal.net).

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**12. Understand [icing conditions](#) and when they occur in flight.** Check out this [Advisory Circular on Flight in Icing Conditions](#).

The [National Weather Service](#) also has predictive models for aircraft icing, including icing PIREPs. Learn more about how the FAA contributes to [current and forecast icing products \(CIP/FIP\)](#).

**13. Check your tire pressure before departing.** Cold weather will affect tire pressure.

**14. Stay Warm.** This may seem trivial, but long-term exposure to the cold can have a physiological effect on both your body and your mind, affecting response time and basic motor functions. Not only should you dress warmly enough, but you might also consider packing some high energy food, a Mylar blanket, some warming packets, or a change of clothing in case yours gets wet.

Learn more about how the cold can affect your ability to fly in [this issue of the FAA Safety Briefing Magazine](#) (PDF).

**Bonus.** Not planning on flying this winter? [Learn how to safely store your aircraft](#), so that you don't experience issues in the spring.

**Editor:** The above article can be found at URL: <https://medium.com/faa/make-your-winter-safety-list-check-it-twice-dont-be-naughty-watch-out-for-snow-and-ice-184dbf22fa22>

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## Fly-in Event Websites

The following are websites to use to look for fly-in activities:

<https://www.dot.state.mn.us/aero/events/flyins-and-events.html>

<https://wisconsindot.gov/Pages/doing-bus/aeronautics/trng-evnts/flyins.aspx>

<http://www.moonlightflight.com/>

<https://www.socialflight.com/search.php>

If you know of any others, please send the link to me at:

[alhowar@attglobal.net](mailto:alhowar@attglobal.net)

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## EAA Young Eagles Pilot Requirements

-- EAA

**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](http://EAA.org/YouthProtection).

**Editor:** Make sure you are current to fly Young Eagles at the EAA Chapter 100 Young Eagles events.

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