



EAA Chapter 100 December 2023 Newsletter

<http://eaa100.org>

2023 Chapter Leaders

President
Dwayne Hora
President@eaa100.org

Vice President
Ken Chase
VP@eaa100.org

Secretary
Jeff Hanson
Secretary@eaa100.org

Treasurer
Chris Budahn
Treasure@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 Chairperson
Dan Crandell
Brad Anderson
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

December 8th EAA Chapter 100 meeting agenda:

- Pledge of Allegiance
- Welcome Visitors
- Reports | As available
- Secretary's Report
- Treasurer's Report
- Committee Reports
Hangar
- Flight Advisor/Tech Counselor
- Old Business
- New Business
- Adjourn

Thank you,
Dwayne Hora
EAA Chapter 100
President

The next Chapter 100 meeting is at 7:00 pm on Friday evening, December 8, 2023.

The meeting location is at Chris Budahn, 6525 County 30 Blvd, Kenyon, MN 55946

Surviving the Season

-- Nikole Hartman

Best Practices for Winter Weather Readiness

Like many, my family and I enjoy watching wilderness survival shows, like the History Channel's *Alone*. We find it entertaining and comforting, in a strange way, to witness thrilling survival experiences in brutal environments from the luxury of our cozy couch. We can't help but envision how we would act if put in that same situation. Would we be prepared? Could we survive? Our guilty pleasure has us considering these hypothetical questions, but any pilot who

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A Note from the Treasurer

-- Chris Budahn

Hello EAA 100,
Nothing to report this month.
Happy Flying,
Chris

Meeting at Home

-- Chris Budahn

Hello EAA 100,
I will be hosting the next meeting at my home shop:
Chris Budahn
6525 County 30 Blvd
Kenyon, MN 55946
christopher@budahn.com
507-438-1130

There will be food available for everyone (pulled pork sandwiches). Please let me know if you plan to attend the meeting. I'd like to get an idea of how many will be eating. You can call, text, or email me.

I will be giving a short presentation on Air Traffic Control and then there will be an opportunity to talk about/look at my RV8 build.

Please bring a chair with you. I only have a limited amount of camp chairs.

I hope to see you all there.

Chris

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flies in extreme winter weather should consider them seriously.

With fewer planes in the sky and the potential for better visibility and boosted aircraft performance, the winter season presents supreme conditions for flying – if you're properly prepared. Here are some vital areas to plan for if you're thinking of flying this winter.

Frigid Fitness

Any survival expert will agree that physical and mental well-being are imperative for a successful expedition. As a pilot flying in the winter, it's important to understand the effects that colder weather can have on your body and mind. Cold stress, caused by exposure to extreme cold and windchill, can impair basic motor functions and have serious consequences.

Pilots are susceptible to cold stress before, during, and after flight. This occurs whenever skin temperature starts to drop, followed by internal body temperature. When your temperature drops below 98.6 degrees F, blood flow to your extremities is restricted to preserve heat in your core. We're all accustomed to chattering teeth and shivering, but as your body is unable to warm itself, fatigue and confusion or disorientation can also set in. Prolonged exposure can lead to serious cold-related conditions including hypothermia, which affects

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Secretary Comments

-- Jeff Hanson

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November Meeting Notes:

Sorry, I wasn't at the November meeting but here is the list of chapter officers that were re-elected:

- President: Dwayne Hora
- Vice President: Ken Chase
- Secretary: Jeff Hanson
- Treasurer: Chris Budahn

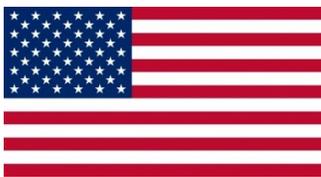
Newsletter Editor: Art Howard

Thank you Dwayne for hosting the meeting at your shop and putting together the speaker on Rochester Airport history. Any others who would like to host somewhere other than TOB please contact Dwayne to get on the schedule.

Respectfully submitted,

Jeff Hanson

Chapter Secretary



the ability to think clearly and move easily, and frost-bite, which damages deeper tissue and can lead to tissue death.



None of these symptoms are conducive for a safe and pleasant flying experience, so what can you do to keep Jack Frost from nipping at your nose?

Layer: There is no single magic garment able to adapt to the environmental variables of winter. Wear a breathable, wind/water-resistant outer layer, an insulating middle layer, and a breathable, moisture-wicking base layer to provide the protective barriers needed to combat cold. Protect extremities with thermal head-wear and gloves. Supplement with warming packs for feet, hands, and liners.

Footwear: Tennis shoes are fine for pre-flight in a warm hangar, but make sure your footwear is appropriate for the weather before pulling the aircraft outside and taking off. Consider wearing boots with a moisture-wicking lining to help stay dry and a slip-resistant sole for added safety.

Hydrate: Dehydration in cold environments is a major risk especially since lower temperatures suppress thirst (the body is focused on regulating core temperature more than fluid balance).

Eat: Eating a healthy meal before flight is important for your physical and mental wellbeing. Eating also keeps your metabolism up which helps you retain heat.

Rest: Make sure you're well-rested before flying. Your body needs energy to maintain its core temperature. Additionally, exhaustion and fatigue can exacerbate an

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already stressful situation.

Limit Direct Exposure: The less time you're exposed to the elements, the less likely you are to be severely impacted by them.



Make a List. Check it Twice.

Now that you're properly bundled, you need to make sure your aircraft is ready to face the elements. In the winter, your preflight checklist is especially crucial and should be scrutinized with even more care than Santa double-checking his naughty list. Inspect your aircraft as though an examiner is observing you: check tire pressure (which tends to drop in cold weather), perform any needed snow/ice removal, and inspect the engine cowling for any debris or small animals looking for a place to stay warm.

Pay special attention to the aircraft openings where snow can enter, freeze solid, and obstruct operation, especially if an aircraft is parked in an area of blowing snow. These openings should be free of snow and ice before flight. Inspect pitot tubes, heater intakes, carburetor intakes, anti-torque and elevator controls, and main wheel and tail wheel wells where snow can freeze around elevator and rudder controls.

Be sure to inspect your fuel vent before takeoff. A vent plugged by ice or snow can cause the engine to stop, the tank to collapse, and potentially other serious damages. Additionally, always double-check your anti- and de-icing equipment.

It's crucial to warm up your aircraft cabin and engine in cold weather, especially if it's not being stored in a hangar. Watch for potential fire hazards due to faulty heaters and/or cords and do not leave your airplane

unattended during the preheating process. Be careful that the heat ducting is not blowing on flammable parts of the airplane such as upholstery, canvas engine covers, and flexible fuel, oil, and hydraulic lines. Ensure you always have a fire extinguisher at the ready during the preheating process. Be aware that if your aircraft is stored in a hangar, frost may develop on it once it is brought out into the cold. Keep an eye out for this and be prepared to remove as necessary.

Precipitation Preparation

Proper flight planning is always important; however, it is particularly crucial when flying in winter weather. With the possibility of sudden weather changes, pilots must have a detailed understanding of weather conditions and forecasts along their flight route. Simply put — winter preflight planning should take longer than prepping to fly in warmer weather. Keep this in mind as the tendency to rush to avoid becoming cold could result in missing a critical item.



The cold air of winter often provides increased visibility, letting you see everything more clearly from further away. However, snow and ice can create hazardous conditions, so knowing the fastest or safest escape route is a critical part of the flight planning process. Be sure to utilize the numerous weather tools available to inform go/no-go decisions. Pay attention to the weather patterns most common in your local area and assess the trends for your destination several days ahead of time if you're flying cross-country.

Flight planning should include your destination as well

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Newsletter Editor

-- Art Howard

Brr! The balmy November days are over. Preheat is now important for your aircraft if you plan to fly and enjoy cold weather flying.

On the back page of this newsletter you will see a Certificate that was mailed to me by Guinness World Records. When I was at Venture North Aviation, LLC last winter, I achieved a record I was not looking for. I just wanted to get my Flight Instructor Ratings. I did a Google search last summer and saw that I was older than the last person to get that recognition. So there you have it, a freshly minted flight instructor who is an older person. Most Flight Instructor candidates are young people looking to get into a flying career with the airlines or corporate. A few of the Flight Instructor candidates actually want to make a career of being a flight instructor.

From my perspective, it is nice to work with pilot candidates that want to learn to fly or improve their flying. I am really enjoying my new part time work.

On another note, I just completed two flights for Life-Line Pilots. I was flying for Angel Flight, but they have an age restriction of 80 years old. LifeLine Pilots does not have an age restriction. I picked up the young boy, 10 years old, and his mom as the companion, on Sunday and flew them back home on Wednesday, just before Thanksgiving. The young lad had doctors appointments at the Mayo Clinic in Rochester.

I had strong headwinds on the way back with a slowest ground speed of 68 knots briefly! For awhile I saw the milage get shorter and the time in flight increasing to KRGK. At 0231 Zulu I saw winds from 267 at 42 knots!

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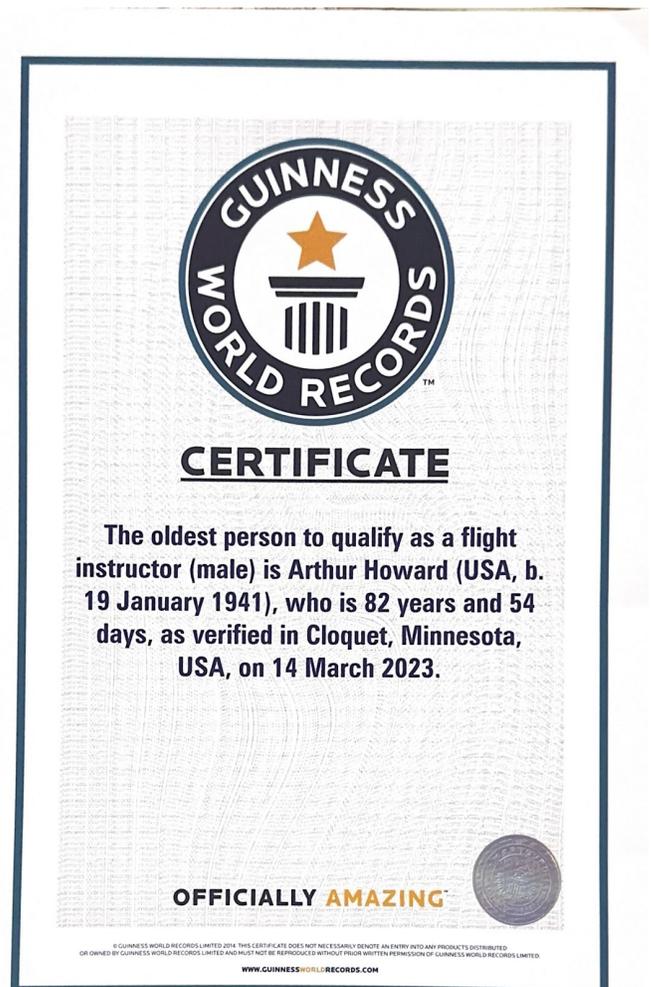
as some contingency routes in case you encounter unexpected weather and need to change course. Mid-air, mid-ice storm is not the time to come up with a "plan B." The more you understand how the weather acts within your common flying zones, the better prepared you'll be for any issues that arise during flight.

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Fortunately, the winds closer to KRGK subsided. The important lesson here is to recheck your fuel consumption to insure you have enough to reach your destination with a reserve. Doing the calculations with the slowest ground speed indicated I would hav12 gallons left when touching down at the Red Wing Regional Airport. Since the wind let up some, I touched down with 22 gallons remaining. A nice reserve for a night flight that was 4:15 hours!

I have not done a long night cross country in many years. Some short ones but nothing this long. There are sure a lot of lights on the ground in the modern world! It was a smooth night flight at 4,000 feet. The outbound flight to KMCI, Champaign/Urbana Illinois was 2:45 hours at 7,000 feet. Strong winds can be helpful or really a problem when messing with a slower ground-speed. It was nice to help someone with medical problems.

I need more articles from the membership. Please send your articles and pictures to alhowar@attglobal.net.



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Equip for Elements

Winter flying is not like competing on a reality survival show, with an entire production team waiting in the wings in case something goes wrong. When you're waiting for aid in an unheated airplane on a cold, snowy night, you'll be wishing you had the option to "tap out" and be rushed off to safety and warmth.

Even the most cautious pilots experience emergencies, so always pack necessary survival equipment, including extra winter clothing, a fully charged phone, a flashlight with new batteries, high-energy food (like protein bars and nuts), and water. Additionally, consider equipping your plane with some survival gear for the worst-case scenario. Some states (like Alaska) require specific equipment to be carried on board, by law, applicable to the time of year. Be sure to check your local area before flying.

Your basic survival kit should consist of the 6 C's of survival.

Cutting Tool: A knife is a versatile, indispensable addition to any survival kit. A small and useful tool, a knife can be used for processing wood and as a flint and steel striker for fire.

Fire Starting (Combustion) Device: This can include stormproof matches, a simple lighter, or a ferro rod.

Cover: A lightweight, compact, and multi-purpose tarp, drop cloth, emergency blanket, or even a heavy-duty plastic trash bag. This cover can be used as a wind-breaker, sleeping bag, or ground covering. It can also be used to catch rain/snow for drinking water or to signal for rescue if it's reflective or brightly colored.

Container: An uncoated metal container can be used directly over a flame to purify water or to create a hot water bottle to aid in keeping you warm.

Cordage: A 7-strand paracord is very helpful for many things and very difficult to replicate in the wilderness.

Communication: A satellite phone, InReach, or Spot device. Having the ability to communicate your exact location via satellite when not in cell coverage significantly reduces the time necessary to facilitate a rescue.

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](https://www.eaa.org/youthprotection).

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

Cold, Hard Facts

With so many variables to consider, from abrupt changes in weather to equipment maintenance, many general aviation pilots may decide to skip the wintertime adventure for something more mild (and warm), like binge-watching the latest season of *Survivor*. However, with the right preparation and precautions, wintertime can truly be a wonderland, offering some of the best air for flying.

Nicole Hartman is an FAA Safety Briefing associate editor. She is a technical writer-editor in the FAA's Flight Standards Service.

Editor: This article is from the November/December 2023 FAA Safety Briefing url: <https://www.faa.gov/sites/faa.gov/files/NovDec2023.pdf>
