



EAA Chapter 100 January 2023 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.

January Meeting

– Dwayne Hora

Reminders:

Next Chapter meeting is on Friday, January 13, at 7 pm at the Dodge Center Airport Admin Building.

Dwayne Hora
EAA Chapter 100
President



Next Steps After Your Airplane is Built

– EAA

You've finally achieved your dream of building your own airplane. Here are some resources that will help you fly safely or sell your airplane.

[Operating Your Homebuilt Airplane Safely](#)

Flying an airplane you've built is fun and gratifying. It also carries great responsibility and you need to be operating your homebuilt airplane safely.

[Amateur-Built Aircraft Safety Pledge](#)

The EAA Amateur-Built Aircraft Safety Pledge involves a few simple commitments that you can make to ensure the safety of yourself, your passengers, and the reputation of the homebuilt community for safety and ingenuity.

[Amateur-Built Aircraft Inspection](#)

Find an E-AB Designated Airworthiness Representative to inspect and certify your amateur-built aircraft.

[Testing Your Homebuilt Airplane](#)

When your aircraft is finally done, you'll see it sitting there, all ready to go ... But what about you? Time to start testing your homebuilt airplane.

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A Note from the Treasurer

-- Chris Budahn

Just one final reminder that the chapter dues are \$10 per year. I'm looking forward to an active year with a strong chapter. It will be exciting to watch the progress of those who have started build projects recently.

Happy Flying,

Chris Budahn
6525 County 30 BLVD
Kenyon, MN 55946



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[Repairing and Maintaining Your Airplane](#)

There are multiple types of FAA Repairman Certificates, and more than one way to obtain them. Our guide will help you determine which certificate may be right for you.

[Selling and Buying a Homebuilt Airplane](#)

There are a number of factors to consider when selling and buying a homebuilt airplane. View key articles from EAA's archives to offer some guidance.

[LODA Holders List](#)

These instructors hold Letters of Deviation Authority (LODA) from the FAA, authorizing them to operate their experimental aircraft for hire for the purposes of type-specific training.

[Tony Bingelis Award](#)

Recognizing EAA technical counselors for dedicated service and/or significant contributions.

Editor: The above was taken from the EAA website: <https://www.eaa.org/aaa/aircraft-building/builderresources/next-steps-after-your-airplane-is-built> When you click on the links, you will be prompted to sign into your EAA account first before you can look at the details. You will see the following:

Exclusive content for EAA members!

This page is a premium content area exclusively for EAA members. Premium content areas include more than 60 years of *EAA Sport Aviation* archives, access to Flight Advisors and Technical Counselors, homebuilding hints and tips, and much more.

Editor: Another one of our EAA membership benefits!

Secretary Comments

-- Jeff Hanson

EAA Chapter 100

Chapter 100 meetings

Here are the minutes from the December meeting:

- 11 members present
- Chapter officer awards were handed out to all officers present.
- Further chapter t-shirt discussion.
- Chapter library discussion. The new cabinet has been completed and looks great. Gordy Westphal made a motion for a new step stool. Art Howard provided the 2nd and the motion passed.
- TOB FBO TV discussion. It was brought up that the current TV in the FBO is very small and virtually useless. Stan Blankenship made a motion to allow up to \$600.00 to purchase a larger TV and associated wall mount to provide entertainment for transient pilots at the FBO. Brad Anderson provided the 2nd. After lengthy discussion, the motion passed with one objection.
- Motion to adjourn - Art Howard, 2nd - Dwayne Hora.
- Thank you to Kathy Lessard and Glen Jackson for hosting the meeting and providing refreshments. Also, thanks to Brad for the fresh cheese curds. All were very tasty!

Respectfully submitted,

Jeff Hanson

Chapter Secretary



<http://www.pilotspost.co.za/articles/161009TheRoseParrakeet-AerobaticShowPlaneoftheThirties/07.jpg>

FAA Winter Flying Tips

-- FAA

Editor: This is taken from FAA Winter Flying Tips P-8740-24.pdf. For the complete article please use url: <https://www.faasafety.gov/files/gslac/library/documents/2020/Oct/262416/FAA%20Winter%20Flying%20Tips%20P-8740-24.pdf>

Introduction

Winter flying in most parts of the United States can adversely affect flight operations. Poor weather conditions with fast moving fronts, strong and gusty winds, blowing and drifting snow, and icing conditions are just part of the conditions that require careful planning in order to minimize their effects. Operation in this environment requires special winter operating procedures. These pages are designed to refresh the pilot's memory in cold weather operations. Pilots should assure themselves that they have obtained adequate cold weather knowledge appropriate to the aircraft used and the geographical and weather environment. Winter flying is not particularly hazardous if the pilot will use a little extra caution and exercise good judgment in analyzing weather situations. The material presented here has been taken from many discussions of winter flying techniques with highly qualified pilots in various parts of the United States. The experience gained in accident investigations has also been included in this guide. This guide contains ideas and possible courses of action for the pilots to keep in mind while operating aircraft during winter months. It is produced in connection with the Federal Aviation Administration, General Aviation Accident Prevention Program, as a reference for pilots desiring information on winter flying.

About Winter Flying

Most pilots are familiar with winter conditions in their particular area; however, often a distance of a few miles may change the environment enough to present new problems to an inexperienced pilot. There are certain precautions that are significant to winter flying. Flight planning during winter months will require special

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knowledge in order to protect the aircraft as well as the pilot. Extra precautions should be used. Often roads that are well traveled during the summer months will be abandoned in the winter. To be forced down far from civilization may create a serious problem of survival. With today's extensive highway system, following a highway would not extend most flights in small aircraft by more than a few minutes. Even the vehicles on the road can give valuable information. You may see cars and trucks coming toward you with fresh snow adhering to the front of the vehicles. In most cases, you may as well start making a 180-degree turn due to reduced visibility ahead. File a flight plan. A flight plan, in conjunction with an ELT, and a little knowledge on winter survival may save your life. Experience has shown that the advice of operators who are located in the area where the operation is contemplated is invaluable, since they are in a position to judge requirements and limitations for operation in their particular area. When flying to a business appointment, always give yourself an out by informing your contact that you intend to fly and will arrive at a certain time, unless the weather conditions are unfavorable. You, the pilot, have complete responsibility for the GO or NO GO decision based on the best information available. Do not let compulsion take the place of good judgment.

Aircraft Preparation

If your home base is located in a warm climate area, you may not have familiarized yourself with the aircraft manufacturer's recommendations for winterizing your aircraft. Most mechanical equipment, including aircraft and their components, are designed by manufacturers to operate within certain temperature extremes. Manufacturers generally can predict their product's performance in temperature extremes and outline precautions to be taken to prevent premature failures.

Baffling and Winter Covers

Baffles are recommended by some manufacturers to be used in augmented tubes. Winter fronts and oil cooler covers are also added to some engine installations. FAA approval is required for installation of these unless the aircraft manufacturer has provided the approval.

When baffles are installed on aircraft, a cylinder head temperature gauge is recommended, particularly if wide temperature differences are to be encountered.

Engine Oil

The oil is extremely important in low temperatures. Check your aircraft manual for proper weight oil to be used in low temperature ranges.

Oil Breather

The crankcase breather deserves special consideration in cold weather preparation. A number of engine failures have resulted from a frozen crankcase breather line which caused pressure to build up, sometimes blowing the oil filler cap off or rupturing a case seal, which caused the loss of the oil supply. The water, which causes the breather line freezing, is a natural byproduct of heating and cooling of engine parts. When the crankcase vapor cools, it condenses in the breather line subsequently freezing it closed. Special care is recommended during the preflight to assure that the breather system is free of ice. If a modification of the system is necessary, be certain that it is an approved change so as to eliminate a possible fire hazard.

Hoses

An important phase of cold weather preparation is inspection of all hose lines, flexible tubing, and seals for deterioration. After replacing all doubtful components, be certain that all clamps and fittings are properly torqued to the manufacturer's specifications for cold weather.

Cabin Heat

Many aircraft are equipped with cabin heater shrouds, which enclose the muffler or portions of the exhaust system. It is imperative that a thorough inspection of the heater system be made to eliminate the possibility of carbon monoxide entering the cockpit or cabin area. Each year accident investigations have revealed that carbon monoxide has been a probable cause in accidents that have occurred in cold weather operations.

Control Cables

Because of contraction and expansion caused by tem-

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Newsletter Editor

-- Art Howard

Hope you had a good Christmas with your friends and family.

My lap top was out for service and is back now. What a challenge when things are fixed under warranty and your data is not all backed up! Fortunately, I did not lose much.

Happy New Year!

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

See you around the patch.

Please send articles and pictures to me at:

alhowar@attglobal.net.

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perature changes, control cables should be properly adjusted to compensate for the temperature changes encountered.

Propellers

Propeller control difficulties can be encountered due to congealed oil. The installation of a recirculating oil system for the propeller and feathering system has proved helpful in the extremely cold climates. Caution should be taken when intentionally feathering propellers for training purposes to assure that the propeller is unfeathered before the oil in the system becomes congealed.

Batteries

Wet cell batteries require some special consideration during cold weather. It is recommended that they be kept fully charged or removed from the aircraft when parked outside to prevent loss of power caused by cold temperatures and the possibility of freezing.

Wheel Wells and Wheel Pants

During thawing conditions, mud and slush can be

thrown into wheel wells during taxiing and takeoff. If frozen during flight, this mud and slush could create landing gear problems. The practice of recycling the gear after a takeoff in this condition should be used as an emergency procedure only. The safest method is to avoid these conditions with retractable gear aircraft. It is recommended that wheel pants installed on fixed gear aircraft be removed to prevent the possibility of frozen substances locking the wheels or brakes.

Operation of Aircraft

A thorough preflight inspection is important in temperature extremes. It is natural to hurry over the preflight of the aircraft and equipment, particularly when the aircraft is outside in the cold. However, this is the time you should do your best preflight inspection.

Fuel Contamination

Fuel contamination is always a possibility in cold climates. Modern fuel pumping facilities are generally equipped with good filtration equipment, and the oil companies attempt to deliver pure fuel to your aircraft. However, even with the best of fuel and precautions, if your aircraft has been warm and then is parked with half empty tanks in the cold, the possibility of condensation of water in the tanks exists.

Fueling Facilities

Another hazard in cold climates is the danger of fueling from makeshift fueling facilities. Fuel drums or "case gas," even if refinery sealed, can contain rust and somehow contaminants can find their way into the fuel. Cases are on record of fuel being delivered from unidentified containers which was not aviation fuel. As a precaution, we suggest:

- Where possible, fuel from modern fueling facilities; fill your tanks as soon as possible after landing, and drain fuel sumps to remove any water which may have been introduced.
- Be sure the fuel being delivered is, in fact, aviation fuel and is the correct grade (octane) for your engine.
- If you are not using modern fueling facilities, be

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sure to filter the fuel as it goes into your tanks.

NOTE: A funnel with a dirty worn out chamois skin is not a filter, nor will a new, clean chamois filter out water after the chamois is saturated with water. Many filters are available which are more effective than the old chamois. Most imitation chamois will not filter water.

- Special precautions and filtering are necessary with kerosene and other turbine fuels. Manufacturers can supply full details on handling these fuels.

Fuel Filters and Sumps

Fuel filters and sumps (including each tank sump) should be equipped with quick drains. Sufficient fuel should be drawn off into a transparent container to see if the fuel is free of contaminants. Experienced operators place the aircraft in level flight position, and the fuel is allowed to settle before sumps and filters are drained. All fuel sumps on the aircraft are drained including individual tank sumps. Extra care should be taken during changes in temperature, particularly when it nears the freezing level. Ice may be in the tanks which may turn to water when the temperature rises, and may filter down into the carburetor causing engine failure. During freeze-up in the fall, water can freeze in lines and filters causing stoppage. If fuel does not drain freely from sumps, this would indicate a line or sump is obstructed by sediment or ice. There are approved anti-ice additives that may be used. Where aircraft fuel tanks do not have quick drains installed, it is advisable to drain a substantial amount (1 quart or more) of fuel from the gascolator; then change the selector valve and allow the fuel to drain from the other tank. [Advisory Circular \(AC\) 20-43C, Aircraft Fuel Control](#) contains excellent information on fuel contamination. Paragraphs 10 and 11 are especially pertinent to many light aircraft and include a recommendation for periodic flushing of the carburetor bowl.

Aircraft Preheat

Low temperatures can change the viscosity of engine oil, batteries can lose a high percentage of their effectiveness, instruments can stick, and warning lights,

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.

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

when "pushed to test," can stick in the pushed position. Because of the above, preheat of engines as well as cockpit before starting is considered advisable in low temperatures. Use extreme caution in the preheat process to avoid fire. The following precautions are recommended:

- Preheat the aircraft by storing in a heated hangar, if possible.
- Use only heaters that are in good condition and do not fuel the heater while it is running.
- During the heating process, do not leave the aircraft unattended. Keep a fire extinguisher handy for the attendant.

Editor: To be continued in the February Newsletter. If you cannot wait, please use url at the beginning of this article to read the rest of this Winter Flying Tips article.
