

J A N U A R Y 2 0 2 0

EAA Chapter 25

ON FINAL

MINNEAPOLIS/ ST PAUL, MN

“Flight Lines”

- from Mike York
EAA Chapter 25 President

Happy New Year! I believe our chapter had a great year. The Pietenpol build group that meets on Wednesday nights completed their 10 year build at Dale Johnson's workshop with painting to start in 2020. What will fill the Wednesday night void and what's next for Dale's workshop? The Zenith 701 group now has nine owners and progress has been steady with recent painting of the wings and miscellaneous parts. The fuselage is coming along very well. The group was “evicted” from Reggie Roorda's garage and has moved into Jerry Shiroo's shop. The group hopes to have the 701 flying in the summer months. Come out to one of the Thursday night build sessions to see the progress and lend a helping hand if you wish. Looking forward to the new year!



There has been some interest in forming an EAA IMC club within the chapter. There is not an IMC Club nearby. Did you fill out the chapter survey? This is one of the items that some members expressed interest in adding to our chapter repertoire. <https://eaa.org/eaa/pilots/EAA-pilot-proficiency/proficiency-and-education-programs/imc-club>

Don't forget to RSVP for the chapter Christmas party to be held on Saturday, January 18th. Check your e-mail for the link to RSVP, also seen here https://docs.google.com/forms/d/144SqKcWzfuTOi_Ywssy_hXgDNu4pww7MljR8NOminoE/edit

The January meeting will be January 15th and is a tour of Steinair in Faribault. For those who would like to carpool, meet at the chapter hanger for a 6:30pm departure for a meeting start at 7pm. The chapter will provide pizza and refreshments. Steinair does amazing avionics work and has a brand new facility to serve our needs. I hope to see everyone there!

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Young Eagles Update by Kris Olson

We cancelled our November 16th Young Eagles rides event due to forecast winds. We had some kids signed up. We also cancelled our December 14th Young Eagles rides event, due to forecast cold temperatures around 10-15 degrees. We had some kids signed up from the November date. One of our Young Eagles pilots, Boyd Francisco was able to give 3 kids Young Eagles rides on Sunday, December 22nd. The temperature was in the 30s and light winds.

EAA has the dates out for the EAA Air Academy 2020 summer camps. The 12 and 13 year old camp has openings for Session 1 and Session 2. The 14 and 15 year old camp has openings for Session 1 and Session 2. The 16, 17, and 18 year old camp Session 1 and Session 2 are at capacity and have waitlists.

See <https://www.eaa.org/eaayouth/eaaviation-and-flight-summer-camps/eaair-academy> for more information on the camps.

Email airacademy@eaa.org to be added to the waitlist, if wanting to sign up for a camp that has a waitlist.

Contact Kris Olson if you want to apply for an Air Academy camp scholarship from Chapter 25.

EAA Chapter 25 Banquet By Pat Halligan

On November 17th, our EAA chapter held its annual banquet at the Royal Cliff Event Center in Eagan. Approximately ninety folks enjoyed a wonderful evening, visiting, eating delicious food and listening to a great presentation by Gary Black. Gary works for the Cirrus Aircraft Company and he and a few other Cirrus owners flew a group of military veterans to the Green River area for a four day rafting trip. The veterans had served in Kosovo, Iraq and Afghanistan. This was a chance for them to forget the horrors of war and enjoy some of the most beautiful wilderness in North America. I want to thank all our members who bought a ticket, donated a silent auction item, or brought their spouse to the banquet. Plans are underway for the 2020 banquet.



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From EAA Sport Aviation

Winter Flying for Airplanes and Pilots

NOVEMBER 15, 2018



BY HAL BRYAN

IN FLYING TIPS.



As the first snows fall here in Wisconsin and the temperature drops well into the low double-digits, it's time to think seriously about winter flying. In this part of the country, storms tend to move through the area, so, between blizzards, you get a lot of beautiful days of blue sky and unlimited visibility. And this is not to mention the improved performance that all of that nice, dense, dry air brings with it.

I've lived in Oshkosh for several years, but I've done most of my 30 years of flying in places with much milder winters; so, when I wanted some tips about cold-air aviating, I sat down with EAA's Flight Training Manager Joe Norris, a longtime pilot and CFI who regularly flies year-round. It was a good discussion, and we came up with a few tips to make sure both airplane and pilot are well-prepared.

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Trivia by
John Schmidt

How many hours does an airliner accumulate before it reaches its service limit?

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(continued from pg. 3) Hal Bryan

The Pilot

Any time we fly, we have to consider the possibility, no matter how remote, of an off-airport landing. On a nice and sunny summer day, landing in a field somewhere could often be simply inconvenient, with the biggest problems behind you once you safely get out of the airplane. In the short and bitter cold days of winter, that inconvenience could quickly turn in to a legitimate survival situation, so keep that in mind as you plan your route.

So, what do you bring with you? Well, there are the obvious common sense things like a jacket, hat and gloves, a survival blanket, some food and water, a fire starter of some kind, and a multi-tool like a Leatherman or a Swiss army knife. A dedicated tool for cutting seatbelts and shoulder harnesses is a good idea, as is another one for breaking your way through a cracked or jammed canopy.

You should think about a backup battery and/or a solar or hand-cranked charger for your cellphone, or, if you're flying in a really remote area think about investing in a satellite phone or messenger device. Signaling devices are smart, too, like a mirror, chemical light sticks and maybe a flare gun. There's a company that makes a giant reflective streamer, billed as a passive signaling device that looks promising as well.

Don't Forget Your Feet

Some pilots are pretty particular about what kind of shoes they wear in the cockpit, but thin, light shoes that are great for rudder pedals are terrible for hiking back to civilization. Get a decent pair of boots, and do some practice taxiing and pattern work in them before you head off on a mid-January cross-country.

Don't Bring It - Wear It

The most important thing about what you bring isn't what you bring — it's where you put it. That multi-tool doesn't do you any good if it's in the baggage compartment and you need it to help extricate yourself from the cockpit after an off-airport landing. Get a jacket, or at least a vest, with lots of pockets, and keep the things you might need most on your person at all times.

Remember the bush pilot's maxim: "If you're not wearing it, it's just camping gear."

The Airplane

As much as airplanes love to fly in cold air, the oil in your engine isn't wild about it. As temperatures drop, the oil gets thicker and more viscous, and it becomes much harder to circulate it through the engine. The fact that metal components of the engine itself will contract, even slightly, in the cold can compound the problem, especially in areas of already close tolerances. Because of these things, we need to think about warming the engine and keeping it warm.

(continued on pg. 5)

(continued from pg. 4) Hal Bryan

A Heated Hangar is a Happy Home

The best thing you can do to prepare your airplane for winter flying is to keep it in a heated hangar. If you're planning a winter cross-country and need to overnight along your route, try to make arrangements for a hangar, even if it costs a few bucks. If the airplane does end up outside overnight, be sure to check for frost. The rule of thumb for frost is this: if you can see it or feel it, you need to remove it. Brush it off with a broom, or get the airplane into a heated hangar for even half an hour or so. And remember that there might be moisture in places you can't see, so be sure to carefully check for full control travel, inspect your wheels and brakes, etc. And while you're looking at the wheels, check your tires — cold temperatures bring low tire pressures.

The Engine Deserves a Blanket Too

If you're going to a fly-in or for a \$100 hamburger and the airplane is going to sit out in the cold for a few hours, bring an engine blanket and install it after you park. This will trap some residual heat and slow the engine cooling considerably. Not only that, if you do end up off-airport, an engine blanket actually makes a great mini-shelter if you just pop your head through the hole where the prop normally goes. You'll look silly — not to mention warm, happy, and alive.

Warm it Up Before You Start it Up

Preheating the engine is an option as well, and is generally advised when the temperature is less than about 45 degrees F (7 degrees C). While some airplanes that are regularly used in cold weather may have electric preheaters built in, it's more common to find a gas-fired or electric preheater. Some of the electric ones have thermostats and/or timers and can be safely plugged in the night before you fly, and some people have developed remote triggers where they can send their preheater a text message and turn it on or off remotely.

In a pinch, an engine blanket and trouble light with an incandescent bulb can help warm things up. Using carb heat while the engine is warming up can help incrementally, too, but bear in mind that carb heat air isn't usually filtered. This means that you don't want to do this if you're parked in the dirt or on a snow covered ramp, because you'll risk pulling debris or moisture into the engine.

Winterize It

There are factory winterization kits available for a lot of airplanes that cover the oil cooler, restrict airflow to the cylinders, and otherwise plug some of the holes. In the E-AB world, you may have to experiment a bit. Plenty of pilots find that some judiciously applied duct tape can make a big difference. One word of advice if you do use the duct tape method — remove it after every flight. If you leave it on all winter, then it might be stuck on for life, or, if you do get it off, then it'll take some paint with it.

(continued on pg. 6)

(continued from pg. 5) Hal Bryan



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Everybody's Got One

There are a lot of different ways to prepare your airplane for flying while frigid, and even more opinions about when and how they should be used. Just remember that safety always trumps convenience, and if you need some help or advice, talk to an A&P or an experienced CFI, just like I did. If you rent your airplane, then you should talk to whoever maintains it about their recommended winter procedures, what sort of oil they use, etc.

And, finally, revisit your personal minimums. You almost certainly have them already with respect to crosswinds, visibility, and ceilings, and density altitudes in the summer, so add minimum temperature to that list in the winter. For a lot of pilots in this part of the country, that minimum is somewhere between 15 and 20 degrees F (-9 to -7 degrees C). As with all personal minimums, set them and then respect them.

On Final

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Trivia (continued from pg. 3)

Items Available and For Sale

EAA Chapter 25 has a carbon monoxide detector in our tool crib for members to borrow. Please contact Doug Anderson our Tool crib manager.

Any members interested in aerobatic /tail wheel flying I am offering my club share in the 12KD club for sale. Super Decathlon based at Flying Cloud.

Email: mnwanner@visi.com

Answer: Airliners' lifespans aren't determined by hours of flight or years of service. Instead, they're determined by the number of pressurizations the plane undergoes (called 'cycles'). Every time a plane is pressurized during flight, it causes stress on the plane's fuselage. Over time, this stress causes irreparable metal fatigue and cracks. An approximate rule of thumb is 75,000 pressurizations per aircraft. In human terms, this works out to about 20-25 years for most planes.

A Boeing 747 has a design number of cycles of 35,000. The MD-80 has 110,000. Often, however, the cost to the airline to maintain a 20- to 30- year old airplane is such that it is taken off the line due to economies of maintenance vs. new airplane. An aircraft should be operable for about 30 years before reaching the cycle limit. The lifetime can be stretched by special inspection and maintenance programs. Some of these inspection processes can find cracks as small as 4/100 of an inch.

<http://www.travelpulse.com/news/impacting-travel/how-old-is-too-old-for-a-commercial-airplane.html>



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