

The Flypaper

Promoting Sport Aviation in Central Illinois for More Than 60 Years



Our November Chapter Gathering

At the November chapter gathering, Carl Olson - Executive Director, Derek Snyder - Deputy Executive Director, and Bryn O'Neil - Operations Supervisor, joined us to share an update on the project to construct new GA hangars on the south side of runway 11/29.

We've all seen roads and buildings go through the construction process and while large in scale, the roads and buildings seem to go up without much of a challenge. What we learned was how complicated and fragile plans can be and the Airport Authority, Airport Operations, and the teams involved with



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managing this project have done an excellent job while keeping the surrounding residents and the needs of the airport tenants at the center of their decision making process.

Carl provided some background for this project which was conceived back in 2009 as part of a Master Plan submitted to the FAA. Carl

shared the historical journey of evaluating needs and opportunities for the airport property and the continuous planning and reviews required to get to the point where projects are underway. He described long and tedious planning, engineering, local regulatory reviews, FAA reviews, environmental studies, and financial reviews where any one little change could cause the whole process to start over again.

The new hangars are needed because many of the current hangars which were built in the early 70's are no longer safe to maintain or occupy. Additionally, returning the ground that the current hangars occupy to grass will significantly reduce fees that the airport must pay to the City of Bloomington for drainage fees. The new hangars will hold up to 54 aircraft which are expected to be ready for occupancy in the second half of 2025.

~ See Carl Page 2

Our November Chapter Gathering

~ From Page 2

The entrance to the new hangars will be via Oakland Avenue on the south side of the airport property. A new and well-landscaped entrance is under construction. There were some concerns about non-tenant access for events that may be held within the new hangar complex as well as for flight instructors who may benefit or need access to the site.

In addition to the new hangars there will be a washroom facility (possibly the most expensive bathroom ever built in McLean county) and three gathering areas for tenants. A priority for the project was to have an area where tenants can gather and hang out. Additionally, a self-service pump will be made available on the South side for tenants of the airport.

Current tenants will be given the opportunity to relocate to the new hangars and they are still working out the approach that will be offered. Tenants who are content to stay in their current hangar will be allowed to do so. However, the tenant may be asked to move to a different location on the north side if that will enable a hangar to be torn down. We will be able to continue to use the EAA Chapter 129 hangar. The lease is up in 2035 and there may be some decisions to make at that time.

With the first phase of the project to work with the surrounding residents and get the ground ready for the hangars complete, they are now focused on GA. You can follow the project on the CIRA website - <https://cira.com/about-the-airport/general-aviation-construction/>

We look forward to ongoing dialogue and updates with Carl and his team.

~ Kirk Sampson



Construction overview of the new KBMI General Aviation Campus



Phase one construction completion of the General Aviation Campus site



December Holiday Open House 12/09

Join us Saturday morning at our EAA Chapter 129 hangar for some coffee, juice, breakfast pastries and hangar flying.

December 9, 7 to 11 am



Letters to the Editor

Charlie, November's FlyPaper, another outstanding newsletter! It is so good to see so much member contribution. You made that happen. You do an excellent job of bringing in timely and relevant content that makes it both interesting and informative. I truly look forward each month our 129 FlyPaper. Thank you so much for what you do. - Bill T

Thanks Charlie for sending me the newsletter. I love reading what people and members share with others. Bill A

Love it! Cheers buddy. - Shannon

Thank you so much for sharing!! - Billie



Podcasts - Traveling for the holidays? Check out EAA's The Green Dot podcasts. Hours of great aviation stories. Outstanding interviews with aviation experts and pilots from all reaches of aviation. Find them [here](#).

Chapter 129 VMC Club

The intent of EAA VMC Clubs is to create a community of pilots willing to share information, provide recognition, foster communications, promote safety, and build proficiency. Real world scenarios will be presented and discussed to determine the best solution from the conditions presented.



EAA VMC Club

Question of the Month

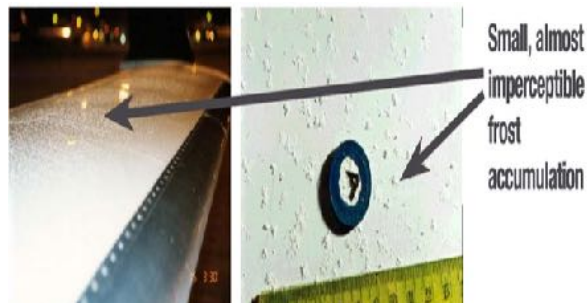
November Discussions

Question: Before an early morning flight, when the overnight air temperature has been below freezing, no water is found in the fuel during the preflight inspection. After landing some hours later after a flight in clear, sunny, VFR conditions, with air temperature now in the 50s, a check of the fuel finds it is contaminated with water. Where did the water likely come from? Why did the pilot miss the contamination on the early morning preflight?

Answer: The likely scenario is that the water was frozen solid during the early morning contamination check, and so it was not detected. During the flight, the temperatures rose and the ice thawed, thus presenting as water contamination in the fuel after landing.

6 Reasons Why Taking Off With Frost On Your Wings Is A Bad Idea

- 1) Frost the size of a grain of salt, distributed as sparsely as one per square centimeter over a wing's surface, can destroy enough lift to prevent your plane from taking off.
- 2) Small patches of ice or frost on your wings can result in asymmetrical stalls, resulting in roll control problems during takeoff.
- 3) Frost can reduce your wing's max lift by 30 percent
- 4) It can also reduce your wing's critical angle-of-attack by several degrees.
- 5) Because frost disrupts airflow over your entire aircraft, it can increase drag by up to 40%.
- 6) In the past 10 years, there have been over 30 general aviation accidents related to aircraft taking off with frost. The FAA says it's likely that each accident could have been prevented by removing frost from the airplane



Since 1960, operational experience and accident history have shown that contamination of any kind can adversely affect the aerodynamic properties of an airfoil, and that the safest course of action is to completely remove all contaminants from wing and flight control surfaces.

Therefore, the FAA cannot support the practice of merely polishing frost on a wing or control surface unless an aircraft manufacturer has developed explicit, approved procedures for doing so, and these procedures are strictly adhered to in operations and supported in training.



Veterans Day Ceremony in Clinton

As a special recognition of veterans, Jeff Morlock of Clinton, contacted us to see if we could help give veterans plane rides on Veterans Day at an event, he had scheduled at Nelson Thorp's airport hangar near Clinton. Jeff created an organization called **Battle Cross Crusaders** that honors veterans returning from Honor Flights with police and fire escorts back to Clinton, organizing a police and fire drive-by to honor WW2 vet's birthdays, providing flags along the funeral route to honor fallen veterans and providing memorial shadow boxes for families following a veteran's military funeral ceremony.

Jeff is not a veteran but feels recognizing veterans has become his passion in honor of his grandfather, WW2 Army medic S/Sgt Wavern H. Hill. On Saturday, November 11, 2023, members of EAA Chapter 129, Paul Krueger, Jim Visel, Bill Thacker, Jackson Zimmerman, and Doug Reeves flew three airplanes to Thorp Field LL34. Tad Foster, Air Force veteran from Terre Haute, brought his plane to the event too. Greg Struve brought two of his drones to video and photo the event. There was an audience of 60 to 70 guests and veterans in attendance.

The event began with USMC veteran Bob Potter WW2 and Korea aircraft mechanic serving on Guadalcanal opened the event with a welcome to all veterans. Special recognition was given to Dave Henard, Army Vietnam Helicopter Gunship pilot, Paul Petry, WW2 Army veteran, Gary Reigel, Army Vietnam veteran who served in place of his brother and Ron Jett, Army Vietnam veteran who also served in place of his brother. Army First Sargent John Long presented the Quilt of Valor to Gary Reigel and a patriotic blanket to Ron Jett from the Battle Cross Crusaders. Nelson Thorp, Army Vietnam veteran related stories about his father, Ernest Thorp a WW2 bomber pilot who was

shot down and held as a POW until the end of the war.

Jeff coordinated with several Nashville TN recording artists to record songs that tell the story of the veterans and attached the songs to videos that feature photos of the veteran. Jeff played several videos/songs recognizing the honored veterans in attendance.

Following the ceremony, flights around the Clinton area and over Clinton Lake were given to twenty-six veterans. Jeff's team provided a great buffet meal for all in attendance.

It was an honor for members of our EAA Chapter 129 to participate in a great

program recognizing these honored veterans.

To learn more about "Battle Cross Crusaders" check their Facebook page and an article from the Clinton Journal dated November 8, 2023.

~ Doug Reeves



View drone videos at: [Veteran Flights Video](#)

Freezing Rain, Freezing Drizzle, And Freezing Fog

~ from **Boldmethod**

You might know the METAR abbreviations for freezing rain (FZRA), freezing drizzle (FZDZ), and even freezing fog (FZFG), but how are they different?

Freezing Drizzle & Freezing Rain: The Difference

At the surface, freezing drizzle might seem like just a smaller version of freezing rain. While this may be true in some ways, the process that forms each is different.

The simplest difference between freezing drizzle and rain is shown in the difference in their temperatures as you gain altitude

Notice how freezing rain starts as snow aloft, then falls through an inversion layer which melts it, and then re-freezes as it passes through the cold layer of air near the surface.

But, looking closely at the temperature profiles you'll notice that the freezing layer on the drizzle stays below 0 degrees C the entire time.

Freezing drizzle relies on moist stratus clouds with weak updrafts to release small droplets as they become too heavy. Unlike freezing rain, freezing drizzle starts as SLD (supercooled large droplets) that coalesce and grow to a size large enough to fall from the clouds as drizzle.

Freezing Rain

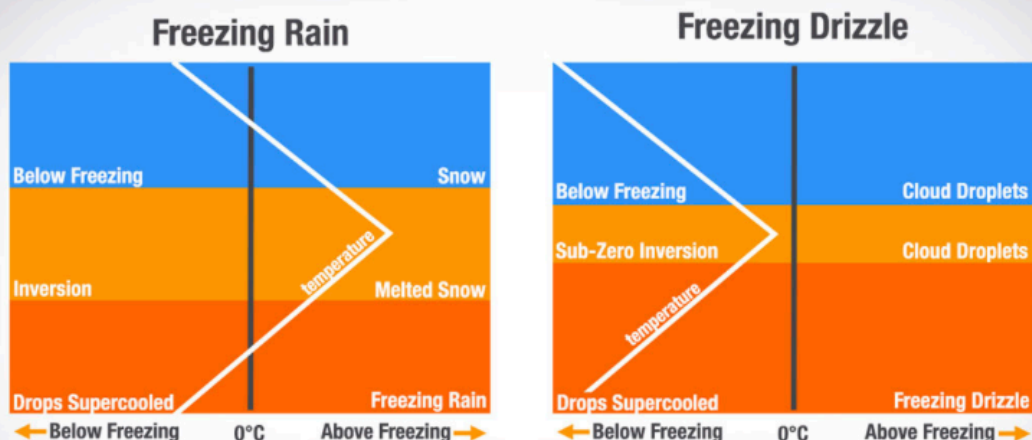
According to the FAA, freezing rain is created when snow falls through a warm layer, then through a sub-zero layer of air - also known as a temperature inversion. These drops fall through the freezing layer so quickly that they don't have time to completely freeze before they get to the ground.

As the melted snowflakes fall through the below-freezing surface layer of air they become supercooled, creating a significant icing risk to aircraft. What is supercooling though?

~ see **Freezing Page 7**



Temperature Profiles



Freezing Rain, Freezing Drizzle, And Freezing Fog

Supercooling is a state where a liquid is below freezing but isn't a solid (in this case, ice), meaning that as the droplets fall through the atmosphere they can't crystalize. But when supercooled droplets impact a surface of *your aircraft*, they stick and freeze.

Why Are Supercooled Large Droplets So Dangerous?

Large drops, like you'd expect with freezing rain, can form a heavy glaze on your airframe (clear ice) that can be difficult to remove, especially if ice forms aft of de-icing equipment. Clear ice can also be hard to see because of its smooth, transparent appearance.

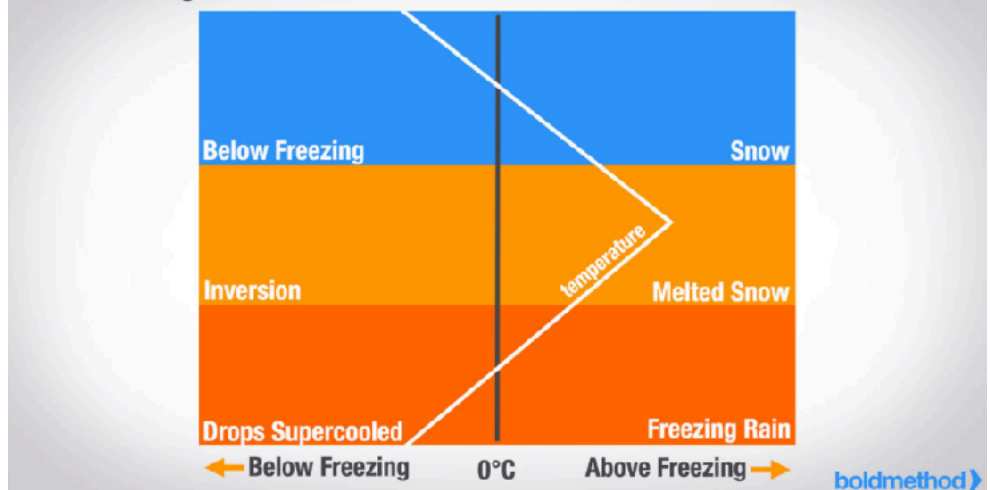
Inadvertent icing encounters with freezing rain can be deadly, the NTSB is still investigating a recent Cessna 210 crash in Lubbock, Texas where freezing rain is suspected to be a significant contributing factor.

Freezing Drizzle: Real-World Example

On January 19th, 2023, northeast upslope winds kept a shallow moisture plume aloft in the Denver area. Paired with the cold surface temperatures, freezing drizzle coated almost everything on the ground. Later in the day as the moist layer of air got thicker, ice crystals began forming aloft. Those ice crystals served as a condensation nuclei, and the freezing drizzle started sticking to the ice crystals aloft. As soon as that happened, the freezing drizzle was replaced by light snow.

~ see *Freezing Page 8*

When Freezing Rain Forms



Freezing Drizzle Accumulation
(Wind Blowing From Left To Right On The Ramp)



Freezing Rain, Freezing Drizzle, And Freezing Fog

Freezing Fog

The process to create freezing fog is essentially the same as freezing drizzle. What's the difference? Once the visibility drops below 1/2 mile, METARs report freezing fog (FZFG) instead of freezing drizzle (FZDZ).

Just like radiation fog, freezing fog forms on clear, calm nights. Subzero temperatures supercool water droplets in the air. But without any cloud condensation nuclei to adhere to, these super-small droplets freeze to whatever they come into contact with. In most cases trees, the ground, roads, and ***your aircraft***. Everything becomes covered in a glass-like glaze.

When freezing fog conditions exist, ice accumulation will increase as the wind increases.

Weather Products

The first indication that freezing precipitation might be a factor will be found on your airport's TAF or METAR. Here are the codes you'll see:

- Freezing Rain: FZRA
- Freezing Drizzle: FZDZ
- Freezing Fog: FZFG

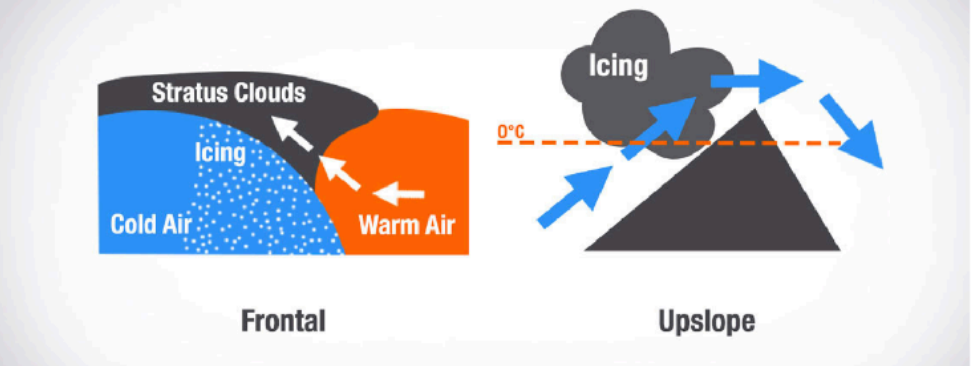
Without the proper de-icing tools the airlines have, it's best to stay on the ground when freezing rain, drizzle, or fog is headed your way.

Special Thanks: Dr. Andrea Orton, Purdue University and National Weather Service Forecasting Office, Boulder, CO.

~Nicolas Shelton Nicolas is a flight instructor from Southern California. He is currently studying aviation at Purdue University. He's worked on projects surrounding aviation safety and marketing. You can reach him at nicolas@boldmethod.com.

Be sure to check out boldmethod at: <https://www.boldmethod.com/> and see their many training opportunities.

Where Freezing Precip Forms



An Aviation Enthusiast

If you hangar a plane in the E-Row area at BMI, you will likely have seen a young man standing at the fence line with a portable aviation radio in hand and showing much interest in your aircraft. And he will likely be able to tell you much about your plane including specific details of the avionics you have installed in your panel. Nearby, you will see Alex's mother Virginia who routinely drives him to the airport so he can explore his passionate hobby.

Meet Alex Moody. On any given day, Alex can tell you the make and model of any plane on the ramp. Airplanes are his passion.

His mother, Virginia noted: 'Alex has always shown a fascination with airplanes. We lived near McGuire Air Force Base when he was an infant and by 8 months of age, he had separate hand signals for jet, airplane and helicopter and would give us the signal before we could even hear them. His hearing and vision were pretty amazing as a child. He loves talking about airplanes with anyone who will listen and preferably respond!'

Alex's passion for airplanes extends into collecting models. He has generously offered to donate a portion of his model collection to the Prairie Aviation Museum to be put on display for others to enjoy. He is a special young man. Brilliant about airplanes and autistic. He has a vast store of knowledge for things he is interested in. He can tell you the day of the week for any date you choose, knows all the prime numbers into the 300,000s and loves airplanes.

The autism spectrum refers to a variety of related conditions that have previously gone by names



Hi! I'm Alex Moody. Like you, I have a family, I went to school, and I volunteer at Carle/Lifelong Access and McLean County U of I Extension Office. I enjoy hanging out with my best friend, airplanes, hiking and traveling. I also happen to have autism.

such as autism, pervasive developmental disorder, and Asperger's syndrome.

"High functioning" or "more able" people with autism spectrum disorders (ASD) meet criteria for one of these conditions, but have average-to-above-average intellectual abilities.

At least 1 in 59 people are on the autism spectrum.

The Autism Spectrum Disorders (ASD) are neurobiological conditions that are life-long for most people who get diagnosed.

~ see Alex Page 10



An Aviation Enthusiast

~ From Page 9

To work effectively with someone on the spectrum, you do *not* need an in-depth understanding of the different diagnostic labels or the biological causes of ASD. It does help to have: (1) a general understanding of ASD differences and (2) a unique understanding of the individual with whom you are working.

People with ASD and Neurotypical people may have difficulty communicating with one another. People with ASD, for example, may have difficulty understanding what others say, especially abstract or teasing language. Other people with ASD express themselves in atypical ways. Some talk very little and others talk “too much.” Many people with ASD have difficulty “reading” people and using nonverbal communication, such as tone of voice, facial expressions, or gestures.

Alex enjoys talking with pilots on the field about their planes. Some observations from Alex:

- When you talk to me, I am mostly interpreting each word.
- I may act like I understand you when I don't.
- I have a hard time understanding sarcasm, slang, and words with more than one meaning.
- I am interested in airplanes, numbers, and calendars.

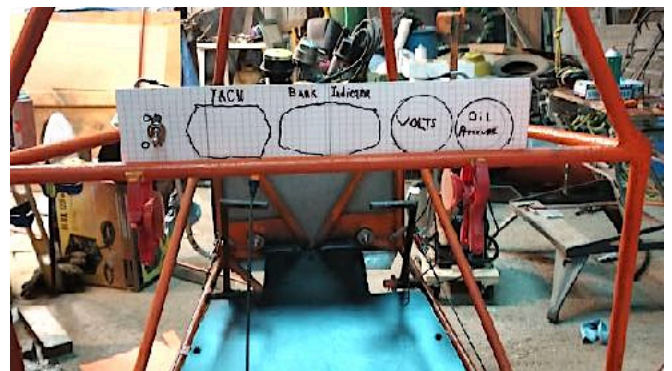
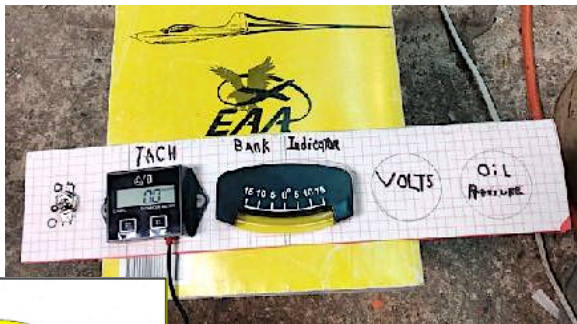


- If I am talking too much about my own interests, it is okay to tell me that you want to change the subject.
- Sometimes I want to talk about the same things over and over. Tell me how long I can talk to you about a favorite subject.
- I don't like to be touched, but fist bumps are okay.

Say hello to Alex when you see him at the airport and enjoy his shared enthusiasm for aviation.

Jim Hazen's Legal Eagle XL

With the engine mounted last month, Jim has moved to a warmer indoor workspace to do his panel layout. The panel will expand to attach to the vertical tubes for support.



Jumpseating in the Airline World

As you have recently seen in the media, the jumpseat has been a hot seat! We had one individual under the influence of mushrooms and another story about a flight deck officer using his weapon against the captain. Now, I was in neither of these cockpits but have been in both situations numerous times and want to shed some light on what actually happens.

Jumpseating in the airline world is extremely common. It is used when the aircraft is full and a pilot wants to ride along for business or pleasure. If you remember the movie 'Catch Me If You Can',

the main character checks in and is granted access to the jumpseat but has no idea how to work it. Nowadays it is a lot more secure, no glass of milk is offered, and you have to show ID a few times to even get to the cockpit. On top of that there is the whole factor of seniority and who is the rightful one to even sit up front. And then there is the possibility the captain may not let you sit in the jumpseat! The captain of the flight is the one who has the ultimate authority. I have never seen it denied but heard of stories of people getting denied based on sloppy dress, bad attitudes and even past union/picket line disputes. Normally

however, if you are in business casual with a smile on your face being a normal polite individual,

there is no problem. If finally granted to jumpseat, you are part of the crew. Even though you are not manipulating any controls, you are in the flight deck and expected to not be a distraction and help if needed. The most common task is traffic avoidance and looking for other aircraft. Another set of eyes goes a long way. Also, if you are flying into an

unfamiliar airport to you but familiar to the jumpseater, they can give a 'tribal knowledge' brief that is worth its weight in gold as weird airports like O'hare and M i a m i . Jumpseating is a privilege and I have never had any experiences like the individual last month.

Unfortunately, one individual can tarnish a good thing instantly.

In regards to the Federal Flight Deck Officer using his weapon, I think there is a lot more to that story than we know. That's essentially like an individual with a concealed carry permit pulling over a police officer to show them their fancy weapon. My point exactly, it doesn't make sense and in my experience with FFDO's they are all very calm, steady individuals professionally and personally. I think we will hear more in the coming months but like I said above, it just takes one person to ruin something overnight.

~ Spencer Plattner is FO for Delta Airlines



EAA CHAPTER 129
BLOOMINGTON-NORMAL, ILLINOIS



The FAA Safety Team offers a number of activities, courses, seminars and webinars at <https://www.faasafety.gov>. Following are a few current webinars.



"ForeFlight Workshop 8 - Flight Planning with EFB"

Topic: ForeFlight Workshop & X-Plane - Advanced Flight Planning and Weather! Free Prizes!

On Monday, December 4, 2023 at 19:00 Central Standard Time

Select Number: SW19125457

Description: This workshop will offer comprehensive training on the use of ForeFlight, with a focus on essential regulations and techniques for flight planning, Federal Aviation Regulations (FARs), Aeronautical Information Manual (AIM) content, and aeronautical decision-making (ADM).

Information and updates can be found on www.ForeFlightWorkshops.com.

To view further details and registration information for this webinar, [click here](#).

The sponsor for this seminar is: **NTX FSDO FAAS Team - SW19**

The following credit(s) are available for the WINGS/AMT Programs:

Basic Knowledge 3 - 1 Credit

Are You Fit for Flight?

You inspect your aircraft before and after each flight. Are you inspecting yourself as well? Our latest FlySafe GA Safety Enhancement topic, "Are You Fit for Flight?" discusses the importance of checking in with yourself before each flight to make sure you are fed, hydrated, rested, and emotionally fit to fly. Similar to a preflight checklist used to inspect critical parts of your aircraft, the I'MSAFE checklist helps you assess your own personal fitness for flight. Review this checklist and other important information here medium.com/faa/are-you-fit-for-flight-2195ad664ad7.

Surviving the Season: Best Practices for Winter Weather Readiness

Winter weather presents some supreme conditions for flying, but there are some vital things to consider and areas to plan for if you do. As the seasons change, so should your approach to flight. Make sure both you and your aircraft are equipped for colder temps and winter precipitation. For tips on how to best prepare for winter flying, see the article "Surviving the Season: Best Practices for Winter Weather Readiness" at faasteam.medium.com/best-practices-for-winter-weather-readiness-f359c2920b7a in the Nov/Dec 2023 issue of *FAA Safety Briefing*. See the entire winter-themed issue at www.faa.gov/safety_briefing.

Also, be sure to check out the panel on winter survival techniques from last week's *From the Flight Deck GA Pilot Winter Prep Workshop* at youtube.com/watch?v=hnrMHzeMqxY.



Webinars, Podcasts, Videos!

Keep in touch with what is happening each month with the **Chapter Video Magazine**. **Charlie Becker and Jack Pelton** discuss current events and activities at HQ.

December Video!



Find EAA's Chapter Videos at:
<http://eaa.brightcovegallery.com/chapters/detail/videos>

Wanted

Do you have an aviation story to share? Send your pictures, stories, events, travel adventures, builder updates for our next issue of **The Flypaper**.

Email them to: cmbates50@gmail.com

EAA CHAPTER 129
BLOOMINGTON-NORMAL, ILLINOIS



Our **November and December webinars** are free of charge and cover topics that include aviation history, piloting tips, fascinating stories, and more. We're sure you'll find a presentation to enjoy!



EAA
Webinars
INTERACTIVE | EDUCATIONAL | MOBILE



Be sure to check out the October/November edition of **Midwest Flyer Magazine**.

[Click here for link to website!](#)

EAA Chapter 129 2023 Calendar of Events

November 15 - Fallen Heroes Tree of Honor
Tree Lighting Ceremony- 5:00 pm

November 16 - Chapter 129 Monthly Gathering

November 18 - Chapter 129 VMC Meeting 0900

December 9 - Chapter 129 Holiday Party
7:00 am to 11:00 am

January 18, 2024 - Chapter 129 Monthly Gathering

Every Saturday 7 to 9 AM - Gathering of Eagles at
EAA Chapter 129 hangar F-15



Join us at the EAA Chapter 129 hangar for
our Gathering of Eagles breakfasts
Saturday mornings 7:00 am to 9:00 am
for some great food
and some hangar
flying at its best.



Chapter 129

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Wayne Aldrich - STEM Coordinator

George Wilts-Tech. Counselor

Kirk Sampson - Media & Web Editor

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