

The Flypaper

Promoting Sport Aviation in Central Illinois for More Than 58 Years



HAPPY NEW YEAR!

President's Corner

Charlie Bates

The new year rings in a host of chapter activities to kick

start our programs for 2023. First step was to put our chapter board in place so we can start the planning process for the year. Our Chapter 129 board for 2023 is:

- Charlie Bates-President, Treas
- Jason Jording-VP
- Doug Reeves -Secretary
- Dustin Davis - YE Coordinator
- Wayne Aldrich - STEM Coordinator

Chapter contributors:

- George Wilts-Tech. Counselor
- Mike Todd-Web Editor

Our board will meet in January to begin the process of planning our events for the year. High on the list are STEM projects and YE flights to get more youth involved in aviation; more organized fly-out

events for the chapter, a better social media presence and support for our homebuilders. Several board members will be attending the EAA Leadership Academy January 27 to 29 at HQ. The Academy is always a good time to share ideas with other chapter leaders across the US.

We have renewed our chapter with corporate for 2023 which in part, provides us with insurance coverage for our chapter and our events, and gives us access to all the resources EAA has to offer. See the Renewal Agreement on Page 10 which outlines the do's and don'ts for chapters.

Please welcome our new Young Eagles Coordinator, Dustin Davis. Dustin brings a lot of experience to our YE program as he and his daughter Lacie have worked at our

many YE events processing all the paperwork required for each flight. Thanks to Rachel Henderson for her efforts in managing the YE events for Chapters 29 and 129 and streamlining the processes involved with YE rallies for the past few years. Rachel has taken the President position at Chapter 29, but I am sure we will see her at 2023 YE events.

I'm looking forward to a fun year of aviation activities in 2023 as we put together our activity plans.

~
Charlie



You Have Information January!

January Membership Meeting

Please bring your favorite SOUP recipe or a complimentary side dish.

Thursday, January 19 at 6:00 PM

Speaker to be announced.



Bring a dish to share!

Inside George's Workshop

This month, we take a look inside George Wilts' workshop near Streator, IL.

I bought the cub project from the Retticks in Bloomington. It was built in 1940 in Lockhaven Pennsylvania. In 1948 the aircraft was flown to Coffyville Oklahoma where it was converted into a crop duster. The back seat was removed and a 50 gallon tank was installed in it's place. The 65 horsepower Franklin engine was replaced by an O-235 Lycoming which almost doubled the power. According to the logs the N32753 has been rebuilt 7 times prior to me owning it.



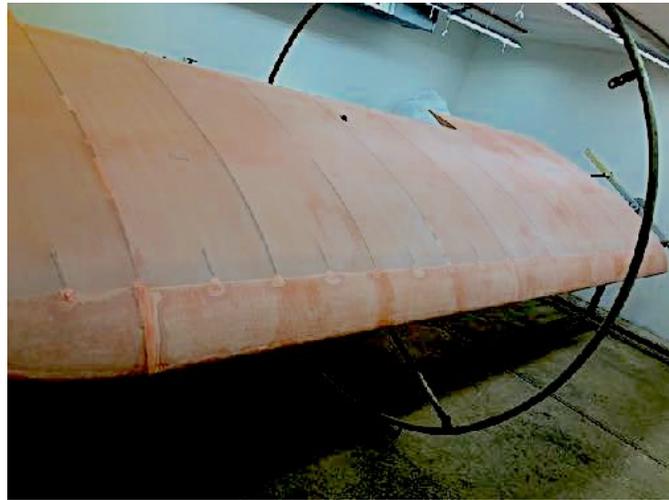
The fuselage on the left is the one that I used, the other was one that I got in Arkansas from a crop sprayer company. I had to replace all of the formers on the back of the fuselage as they were missing. The sprayer conversion that was done was called a cut back cub as all there was behind the cabin was the upper and lower longerons. I also had to replace all of the metal above the cabin as it was also gone, it's called the bird cage. The landing gear lift strut fitting were also replaced as part of the gross weight increase as per piper service bulletin. the gross is now 1220 compared to the original gross of 1100.



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BLOOMINGTON-NORMAL, ILLINOIS



Inside George's Workshop



The covering system is a multi-step Poly Fiber as that is what I am familiar with. The pictures of the wing is the complete covering process. The fabric is glued on then shrank with a regular electric clothes iron in 3 stages, increasing the heat



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Inside George's Workshop



Added Vortex generators on the wings and horizontal stabilizer to reduce the stall speed



I also installed a 12-gallon wing tank in the left wing that feeds into the 12-gallon fuselage tank by opening a valve



I used tri-pacer horizontal stabilizers and balanced elevators



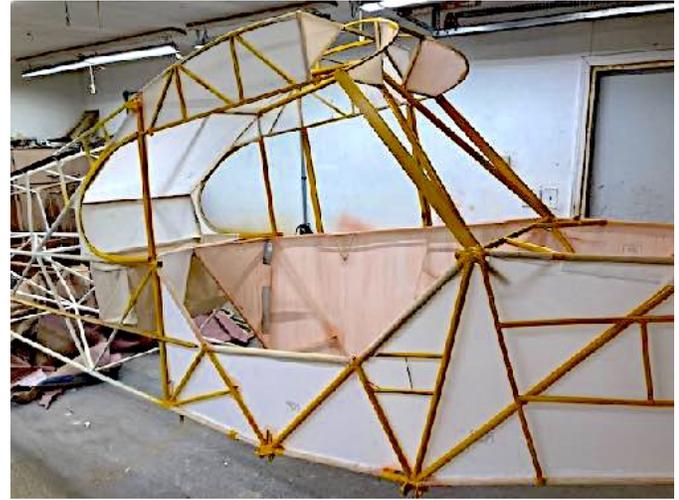
This jack assembly is used to stretch the bungy cords to install them on the landing gear.



EAA CHAPTER 129
BLOOMINGTON-NORMAL, ILLINOIS



Inside George's Workshop



All of the controls are covered and painted except the rudder which should be done this week. I am also getting ready to cover the fuselage but first, everything has to be installed in the interior which I am in the process of doing right now.



I added Grove disc brakes, a C-85 continental engine in place of the original Franklin that was long gone. Also installed a B&C light weight starter along with a Lithium-ion light weight battery.

In keeping with being able to fly in and out of a tower-controlled airport I installed a small Becker radio with push to talk switches in the control yoke like what is used in a sail plane and also an intercom system.

I am hoping to finish the rebuild this winter, this spring I am putting my runway back in and am in the process of converting one of my buildings into a hanger.



EAA Online Homebuilders Week

Homebuilders Week – Online Event Starts January 23

An online opportunity to learn about all aspects of building your own aircraft

By Charlie Becker, EAA Homebuilt Community Manager

EAA will be hosting our third annual Homebuilders Week online learning event for aircraft builders: (www.EAA.org/HomebuildersWeek). It will be five straight days of educational forums covering a broad spectrum of aircraft building topics. It will start on Monday, January 23, 2023, and run until Friday, January 27, 2023. The live online presentations will be open to everyone interested in building their own aircraft. Sessions will start at 11:30 a.m. CST and run until 8:30 p.m. CST daily.

This event is an opportunity for a new person to jump in with both feet and learn a lot about the wonderful world of homebuilding. We will cover areas like getting started successfully and techniques when building with sheet metal, composites, steel, and wood. But it won't be just for the newbie; we are offering in-depth talks on panel planning, engine selection, FAA certification, flight testing, and selling a homebuilt aircraft. There will be something for every builder, whether you are just starting out, knee deep in a project, or just received your airworthiness certificate — it is going to be a great learning opportunity.

EAA is working with industry experts, kit manufacturers, and other subject matter experts to provide top-notch material for builders. The sessions will be live and allow time for attendee questions. Recordings will be archived and available to EAA members for review.

EAA Homebuilders Week coincides with the 70th anniversary of the founding of the Experimental Aircraft Association in 1953. Those founding members of EAA lit the fuse on the homebuilt movement that provides affordable access to aircraft ownership and today has spread worldwide.

EAA Homebuilders Week is possible through the generous sponsorships of Aircraft Spruce & Specialty Co., Dynon, Scheme Designers, Inc., and Van's Aircraft, Inc.

Visit EAA.org/HomebuildersWeek to review the schedule and sign up for a session.

CST	Monday 1/23/2023	Tuesday 1/24/2023	Wednesday 1/25/2023	Thursday 1/26/2023	Friday 1/27/2023
11:30-12:45	Building an Aircraft: What You Need to Know- Charlie Becker	Composite Construction Basics- Mark Forss	Top Five Project Killers- Lisa Turner	EAA's Homebuilt Movement: Past Accomplishments and Future Opportunities -Jack Pelton & Charlie Becker	Amatuer Built Aircraft Certification Process-Joe Norris
1:00-2:15	Wiring Basics - Dick Koehler	Buying a Used Homebuilt- Vic Syracuse	Flight Testing Basics-Gary Baker	Lycoming Engine Installation - Dave Prizio	Working with Wood 101- John Egan
2:30-3:45	TIG Welding-Charlie Becker & Earl Luce	The REAL Culprit in HB Accidents- Ron Wanttaja	Zenith Aircraft Kits & Plans- Sebastien Heintz	Panel Planning-Stein Bruch	Advocacy Update: MOSAIC, Fuels & More - Tom Charpentier & Rob Hackman
4:00-5:15	Sonex Aircraft & AeroConversions Products- Mark Schaible	Fabric Covering Basics - Mark Forss	Advanced Flight Systems- Rob Hickman	Garmin Experimental Avionics Solutions- Brad Brensing	Plans Built Aircraft: The Affordable Option-Tim Hoversten
5:30-6:45	Sheet Metal Basics - Mark Forss	Dynon Avionics-Michael Schofield	Gas Welding -Budd Davisson	Choosing Wheels & Brakes- George Happ	Van's New High-Wing RV-15-Greg Hughes
7:00-8:15	Kit Selection - Paul Dye	Van's RV Aircraft Kits-Greg Hughes	Finding an Engine for Your Homebuilt-Mike Busch	Painting Your Plane: DIY or Use an Expert?-Craig Barnett & Ken Reese	Maintenance Horror Stories - Vic Syracuse



Winter Flying - Runway Conditions

Student And Instructor Slide Off The Runway - *reprinted with permission from Boldmethod*

We pulled the following report from the [NASA ASRS](#) database. It's a good example of how, even with proper planning, you may find yourself in a situation where loss of control can sneak up on you...

Student and instructor were coming back from an instrument practice lesson. Approaching the airport and entering the downwind, the crew briefed the landing and made a special note for landing on the contaminated surface and what exactly could happen. It was made clear that the student would have control and the instructor would shadow along for safety. The approach, flare, and touchdown were all controlled and stable. A straight roll-out path remained for about 2-3 seconds after touchdown before the airplane veered left of centerline. The instructor took control to correct, and the roll-out path straightened back up. Airplane again started veering left no matter how much rudder and braking action was applied to the right. The aircraft left the runway surface into the snow at a very slow speed. No injuries were noted.

A thorough weather briefing, indicating runway MU values in the mid-high 20s was obtained prior to launching. ATIS was obtained prior to entering BTL airspace. At the time,



runway conditions were thin dry snow over ice with MU values in the mid-20s. The MU values below 40 indicated less than ideal braking, but not impossible landing conditions. The crew believed the contaminated runway to be an acceptable risk. A better understanding of braking action reports, aircraft landing performance on, and different landing procedures for contaminated runways could be gathered and applied to conditions such as these to help determine the likelihood of conducting a safe flight.

How To Get Runway Condition Information

So how can you figure out what the runway conditions are like before you arrive at your destination?

When airports conduct a braking action test, they issue a NOTAM for the braking action. You can find the NOTAMs in ForeFlight, like this example:

KLVN Apt Obs TFR ARTCC Jep

LAST 7 DAYS

RWY RUNWAY 12 FICON 3/3/3 100 PCT FROST OBS AT 1811230500. COND NOT MONITOR, MONITORING, OR MONITORED 1811230530-1811231400. 23 NOV 05:28 2018 UNTIL 24 NOV 05:28 2018. CREATED: 23 NOV 05:28 2018

Effective Nov 22 10:28 PM MST
Expires Nov 23 10:28 PM MST

T TAXIWAY ALL FICON FROST BA MEDIUM OBS AT 1811230500. COND NOT MONITOR, MONITORING, OR MONITORED 1811230530-1811231400. 23 NOV 05:29 2018 UNTIL 24 NOV 05:29 2018. CREATED: 23 NOV 05:30 2018



Winter Flying - Runway Conditions

What Do The Numbers Mean?

The FAA previously used the "MU" scale to relay braking conditions. It was based on a 0 to 100 scale, with 0 being no braking, and 100 being perfect braking.

Today the FAA uses a more simple 0 to 6 scale. **0 is bad. 6 is good.**

The numbers are issued for each third of the runway: touchdown, midpoint, and rollout. So when you're picking up ATIS, you're going to hear something like this: braking action 5/4/2.

Now for the terminology. When you used to talk to ATC, they referred to braking action as good, fair, poor, or nil. But "fair" has been tossed out the window, and you'll now hear "good, medium, poor, and nil", or a couple combinations of those words.

The FAA's New Braking Action Reports

Assessment Criteria		Control/Braking Assessment Criteria	
Runway Condition Description	RwyCC	Deceleration or Directional Control Observation	Pilot Reported Braking Action
<ul style="list-style-type: none"> Dry 	6	—	—
<ul style="list-style-type: none"> Frost Wet (Includes damp and 1/8 inch depth or less of water) <p>1/8 Inch (3mm) depth or less of:</p> <ul style="list-style-type: none"> Slush Dry Snow Wet Snow 	5	Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	Good
<p>-15°C and Colder outside air temperature:</p> <ul style="list-style-type: none"> Compacted Snow 	4	Braking deceleration OR directional control is between Good and Medium.	Good to Medium
<ul style="list-style-type: none"> Slippery When Wet (wet runway) Dry Snow or Wet Snow (any depth) over Compacted Snow <p>Greater than 1/8 inch (3 mm) depth of:</p> <ul style="list-style-type: none"> Dry Snow Wet Snow <p>Warmer than -15°C outside air temperature:</p> <ul style="list-style-type: none"> Compacted Snow 	3	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Medium
<p>Greater than 1/8 inch (3 mm) depth of:</p> <ul style="list-style-type: none"> Water Slush 	2	Braking deceleration OR directional control is between Medium and Poor.	Medium to Poor
<ul style="list-style-type: none"> Ice 	1	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor
<ul style="list-style-type: none"> Wet Ice Slush over Ice Water over Compacted Snow Dry Snow or Wet Snow over Ice 	0	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	Nil

boldmethod ▶

If You're Flying Into A Towered Airport...

When a braking action NOTAM is issued at a towered airport, they'll include it in ATIS. **But keep in mind, even if a runway condition report is NOTAM'd for the airport, the tower is not required to give you a conditions report over the radio.**

It's not because they don't want to be helpful, it's because they're often times very busy. If conditions are rapidly changing and the ATIS isn't representative of the true runway conditions, tower may give you updated runway information directly. But if you have a question about the runway condition after listening to ATIS, it's always best to ask.



Winter Flying - Runway Conditions

If You're Flying Into A Non-Towered Airport...

We spoke to Kreg Anderson, who runs the non-towered Alexandria Municipal Airport in Minnesota (KAXN) to find out more. As a side note, Kreg started as the youngest airport director in the country at just 23 years old last year.

When you're flying into a non-towered airport, there may or may not be a NOTAM issued for runway conditions. And even if there is a NOTAM, it might not have the same FAA braking action codes due to a lack of airport operations personnel, equipment, or a general lack of aviation knowledge by city-appointed airport managers. **This is why you'll sometimes find public-use, non-towered airports with snow or ice covered runways and no winter weather NOTAMs.** On the other hand, some airport managers use a software program called the "Runway Condition Matrix" to determine braking reports, which is a great tool for smaller airports. When we're talking smaller general aviation airports, it all

comes down to each airport's individual funding, staffing, and plowing equipment.

Preparing For Touchdown

When you touch down on a contaminated runway too fast, you can significantly increase your landing distance. Trying to compensate by over-braking only makes things worse.

On slick surfaces, your brakes are much less effective, and they can quickly get you in trouble. Initially after touchdown, use little to no brakes. Then, gently press them to feel their effectiveness. It's easy to get anxious and jam on the brakes, but that can lock up your wheels. And when that happens, your braking effectiveness decreases, and you can start sliding. The more gentle you are on the brakes, the easier it is to maintain directional control on the runway.

When All Else Fails: Go-Around

If you have enough runway, and braking/directional control is clearly a problem, going around even after touchdown may be an option.

During your go-around, adding power increases airflow over your tail, and you'll most likely have

better directional control on the ground with the rudder (even considering left-turning tendencies). If you do go-around, lift off, and take time to think through your Plan-B. That might be making another attempt at the airport, but it might also mean flying to another airport with better runway conditions.

Preparing To Land In Less-Than-Ideal Conditions

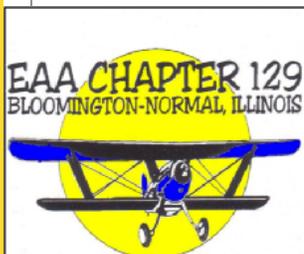
Next time you fly, pay attention to the runway conditions. We're deep into the season for slick runways, and if you're not prepared, you can find yourself in a lot of trouble in almost no time at all.

Know the runway condition codes, give yourself enough plenty of runway to stop, be gentle on the brakes, and fly your airplane all the way to the taxi turnoff.



Chapter 129 Renewal Agreement

- Support the mission, vision, goals and objectives of EAA and EAA Divisions as appropriate to the Chapter or Squadron.
- Maintain a non-profit incorporation status with our state or other government authority as applicable by the Chapter/Squadron's state.
- Maintain Chapter/Squadron Bylaws in accordance with the bylaw guidelines provided by the EAA Chapter Office.
- Obtain and maintain a Federal Employer Identification Number (US Chapters only) from the IRS and provide this number to the EAA Chapter Office. (You may obtain this number by filling out a SS4 Form and sending it in to the IRS. Please contact the Chapter Office if your Chapter/Squadron requires a form.)
- Ensure that all Members of our EAA Chapter/Squadron who vote, hold office or pay dues to the Chapter are current EAA Members. Warbird, IAC, and Vintage Chapter Members must be Members of their respective division. All officers and leaders must be 18 years of age or older.
- Participate in the EAA Chapter/Squadron Aviation General Liability Insurance Program (US and Canada Only). (No substitute insurance will be allowed.) Further, at no time, conduct any prohibited activities.
- Report our Chapter/Squadron Sponsored Events to the EAA Risk Management Office, using the proper insurance applications or notice forms at least 30 days prior to the event, and to adhere to the insurance requirements for EAA Chapter/Squadron Events. (The Aviation General Liability Insurance is an exclusive benefit to Chapters/Squadrons and may not be extended to cover activities or events that are not Chapter/Squadron sponsored activities. Full disclosure of all activities and responsibilities is required.)
- Use EAA Trademarks in accordance with the EAA Chapter Trademark Agreement, which is included in the EAA Chapter Handbook Appendix. The EAA Chapter Office will provide copies (by request) of the current EAA Chapter Trademark Agreement, in writing or via the EAA Web Site.
- The Chapter or Squadron agrees not to operate (fly) an airworthy aircraft within the Chapter/Squadron structure.
- Ownership, lease, management, control, maintenance or up-keep of an airport, airpark or restricted landing area will not be conducted by the Chapter or Squadron (with the exception of aircraft parking and/or storage, tie-downs, volunteer airport clean-up or improvement projects).
- Aviation maintenance or aviation services operations including flight training, fueling, etc. for hire or donation will not be conducted by the Chapter or Squadron (with the exception of ground schools, classroom training presentations, including related materials).
- Operate exclusively as an EAA or EAA Division Chapter/Squadron and separate from any and all co-affiliations as a club, chapter, or sub-group of other organizations, associations or special interest groups on a local, regional, national or international level.
- The Chapter or Squadron agrees not to use the name Experimental Aircraft Association, Inc. in signing any lease agreements, airport use agreements, permit use documents or other legal contracts but rather shall only sign such legal documents using the official corporate name of the Chapter or Squadron.
- The Chapter accepts and acknowledges that the Chapter has been granted a conditional Charter under the authority of EAA. Further, the Chapter accepts and acknowledges that the privileges granted to the Chapter under the conditional Charter may be withdrawn if the Chapter fails to meet the requirements of EAA, including reasonable requirements that are not listed here. EAA may in its sole discretion grant the Chapter a limited time period in which to cure any such failure. If EAA withdraws the Chapter's conditional Charter, the Chapter agrees to cease using any reference whatsoever to itself, publicly or privately, as a Chapter of EAA.
- Email is the primary form of communication between EAA HQ and Chapter officers, as such all EAA Chapter officers must have a valid email address.
- The Chapter agrees not to have any paid employees.



•The Chapter will in good faith perform all normal and customary activities of a chapter or other corporation, for the benefit of its members and furtherance of the Mission of EAA. This will include without limitation electing officers and holding regularly scheduled Chapter meetings and Annual Meeting, with Agendas and Minutes written and preserved as corporate records, avoiding conflicts of interest, and otherwise complying with State laws including corporation laws. The Chapter will not operate a sweepstakes.



Chapter Video Magazine

January 2023

What You Can Expect

In this month's Chapter Video Magazine, Jack Pelton shares his thoughts on what to look forward to in 2023.

- Learn to Fly Day – May 20th, 2023
- International Young Eagles Day – June 10, 2023
- AirVenture 2023 - July 24 to July 30, 2023
- **Young Eagles Build and Fly**
- Recent aircraft donations to the museum collection
- **SportAir Workshops** - In person and now online
- AirVenture grounds improvements
- **Young Eagles 30th anniversary**
- **Chapter Leadership Training** Options

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

2023 Dues

Yep, it's that time of year again. A reminder to get your 2023 dues paid!

Mail them to:

EAA Chapter 129
2825 E Empire St
Bloomington, IL 61704

EAA CHAPTER 129
BLOOMINGTON-NORMAL, ILLINOIS



1/18/23 7 p.m. CST

Engine Dehydration: Cheaper Than an Overhaul!
Qualifies for FAA WINGS credit and AMT credit.
Matthew Dock

2/1/23 7 p.m. CST

Obsessed With EGT
Qualifies for FAA WINGS and AMT credit.
Mike Busch

2/1/23 7 p.m. CST

Obsessed With EGT
Qualifies for FAA WINGS and AMT credit.
Mike Busch

2/9/23 7 p.m. CST

Donations and Contributions to Chapters
Patti Arthur

2/14/23 7 p.m. CST

Neil Loving and his WR-1 "Loving's Love"
Museum Webinar Series
Chris Henry & Ben Page

2/15/23 7 p.m. CST

Introduction to Backcountry Flying
Qualifies for FAA WINGS credit.
Stef and Randy Goza

1/23/23 to 1/27/23

Homebuilders Week Charlie Becker

Don't miss Charlie Becker's Homebuilders Week program. See Page 7 for details.



Wanted

Your pictures, stories, events, travel adventures, builder updates for our next issue of **The Flypaper**.

Email them to: cmbates50@gmail.com

2023 Calendar of Events

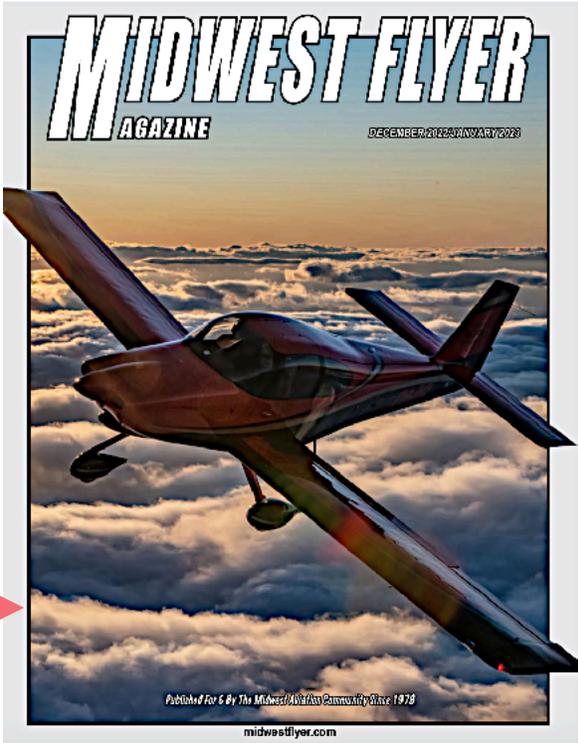
Jan 19 - EAA Chapter 129 Member Meeting

Feb 16 - EAA Chapter 129 Member Meeting

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

Be sure to check out the December/January edition of Midwest Flyer Magazine

<https://midwestflyer.com/wp-content/uploads/2022/11/MFM-Dec2022Jan2023-Interactive-Issue.pdf>



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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