

April 2024

Chapter 25's Website - <https://chapters.eaa.org/ea25>

EAA Chapter 25 ON FINAL

“Waypoint”

John Schmidt, 2023 Ch. 25 President
EAA Lifetime 250021



Growing forward

If our chapter is to continue to grow and prosper, I need you to do one or more of the following:

1) Greet a newbie or guest at this April's chapter meeting, and engage in conversation, before and/or after the meeting. The recently-emailed Chapter Blast may garner a number of unchaptered EAA members in attendance on Wed. April 17 - If YOU vote with your dollars to be a member of chapter 25, let them know of the value you get in return. Maybe our visitors will see how Chapter 25 can benefit them, and come back again.

2) We are hosting our first (hopefully, annual) pancake breakfast on Sunday, June 16, 730am-1130am. I have been in contact with the Mn

Dept of Health, talked with other chapter presidents to see how they do their pancakes, gone to Restaurant Depot next to the State Fairgrounds to buy supplies, and your Board has met to discuss and plan. We need volunteers to step up and be a part of the crew that's going to put this on. We need Publicity, Car Parking, Aircraft Parking (possibly with the local CAP), Ticket Seller, Set Up (the night before), Clean Up, Server/Cook, and possibly a few more. One person gets to select every 10th person in line to 'catch a pancake and win a third sausage!'

(Please send an email to our chapter newsletter editor, if you haven't yet, and add your name to the list of Pancake Breakfast Volunteers, published elsewhere in this newsletter - I'm going to look at that roster and make some decisions). I'd rather, by far, have too many hands than too few. Take the opportunity to work with someone in the chapter that you don't yet know, and make a new friend in aviation.

This is our first attempt. There are going to be glitches. We won't be as profitable our first year because of up-front, one-time costs. But we are going in the right direction, and moving forward.

Newsy bits:

I went to the Mankato State Scholarship banquet on Tuesday, April 2, and met our scholarship recipient, Olivia Hudoba, from Ogilvie, MN. I couldn't be more impressed. She is a junior, and will be a fine addition to the pilot population. Your chapter scholarship dollars are being spent wisely.



John Schmidt, President of EAA ch. 25, and Univ. of MN-Mankato scholarship winner Olivia Hudoba, April 2, 2024.

New(er) chapter 25 member Mike Schoen, a CFI and owner of one of the nicest Piper Arrows in the metro, has issued his own challenge: He'll donate \$1,500 if the rest of the chapter will match it on or before 700pm, Wednesday, May 15, 2024 (our next chapter meeting). My check, with the words "Schoen Match" in the memo line, is already in the mail to Kim Johnson, 1834 Karis Way, Eagan, 55122; I hope you choose to join me (I'll remind you at the meeting). Thank you, Mike!

Ch. 25 member Alan Knutson will show up for our next (April) meeting with the pancake maker that he's built. He has done research on this to the point that he bought different spatulas to see how they'd perform. I'll be there with a sample of our sausages to serve up. Fingers crossed, this might work!

You might notice that this newsletter comes to you in a different type font, hopefully more readable - let me (or our newsletter editor, Bill Norton) know what you think.

I think that close to 50 people decided to do the 'bundle' option when renewing their chapter members (money for 1-renewing membership, 2-scholarship contribution, and 3-money for the new hangar fund). I am grateful for that level of support for our chapter.

George Braly, of GAMI in Oklahoma, has worked VERY hard to develop G100UL, a lead-free drop-in 100-octane fuel. I first listened to his ideas at Oshkosh in 2009; he was brilliant then, and he hasn't lost an intellectual step. He now claims to know why there were valve recession problems with Swift Fuel use in the fleet at Univ. of N. Dakota, but isn't saying yet, because he wants to give Swift Fuel and UND time to respond (Incidentally, Swift Fuel is sold at South St. Paul KSGS). I'll be interested in finding out what happened.

Our chapter has sold the donated RV9 wing and tail kit, money going to the chapter's coffers. The Board decided that the proceeds will go to the hangar fund. Mike York, past chapter president and in the process of finishing an RV6, is to be thanked for making this sale happen.

See that aircraft-quality wood on the back table? It's been there for 4 months now, at least. It won't be there for a 5th month. It's going to be auctioned off by Schmidt Auction and Bail-Bond Service during the next chapter meeting. Bring your bids and checkbook.

Our speaker(s) this month hail from our fellow EAA chapter in Wausau. They will talk to us about their Learn, Build, Fly program for teaching kids about aviation.

John Schmidt
EAA lifetime 250021

Pancake Breakfast

We are accepting names of those Ch. 25 members who wish to volunteer for our first annual Pancake Breakfast, Father's Day, Sunday, June 16, 2024, 7am-1130am, Lakeville Airport Main hangar.

Names of those who volunteer will be published in the April, and May newsletters. Come and join us!

If you are interested, and want your name added to the list, send an email with "I wanna pancake!" in the subject line to:
jeschmidt@hotmail.com

List of Pancake Breakfast Volunteers, so far:

Mark Elliot
Jerry Farrell
Sean Hageman
Pat Halligan
David Machaj
Bill Norton
Reggie Rhorda
Tom Richards
John Schmidt
Thaddeus Tessier

Next Page, the Father's Day Pancake Breakfast Flyer -

EAA chapter 25 members:

Sorry again for the shameless plug, but I'm teaching my "Intro to Aviation" course, this summer (twice!) this time through Forest Lake (June) and White Bear Lake (August) Community Education programs. If you know any kids in the metro that might be interested, would you please cut-and-paste and share this information with them? I think, due to kids/families having to find their own transportation, kids in the north metro might be a target audience. I have, in the past, taught this class effectively to a class size of 28 kids, so please feel free to spread the word.

Thank you.

John Schmidt
651 373 3779 c

Forest Lake Community Education:

Intro to Aviation - Intro Ages 10-15

FLY! The possibility of flight has fascinated people for thousands of years, but only in the last 120 years have we enjoyed powered flight. Learn the history, science, math, personalities and traditions of aviation. We will look at aviation maps, navigation, design, art and the people behind the progress of flight. We will look back at the history and learn the future direction of powered flight. Students will track their own progress through daily journaling and will come home with materials at least every other day.

John Schmidt

4033-SU24 Jun 17-Jul 2nd Mon-Fri

11 sessions 12:30-3:30pm \$245

FLAHS 372 (door 4)

No class Jun 19

Forest Lake Community Spring/Summer Programs Catalog:

<https://indd.adobe.com/view/f41e8683-bd6f-4847-9e55-4bf94e3e1849>

Fly! Is on page 38.

White Bear Lake Community Education:

John Schmidt: Intro to Aviation-Lets Fly!: Gr 5-9 This class will educate you on the history, science, math, personalities, and traditions of aviation. We will look at aviation maps and navigation, design, art, and the people behind the progress of flight. Students will track their own progress through daily journaling, and will come home with

materials at least every other day. 0829-041 | 12 Sessions | Mon-Thu,
Jul 29-Aug 15 1:00-4:00 PM | \$199 | Lincoln Elementary School |
Schmidt

White Bear Community Education Summer Catalog:

<https://resources.finalsite.net/images/v1709049962/whitebeark12mnus/gany4zkfgpe9p9yx86l3/CSSummerFINALCATALOG.pdf>

FLY! Is on page 33.

EAA Ch. 25 Meeting Minutes

- 7 PM Sharp meeting was called to order
- Kris Olson reported that Young Eagles was canceled this month due to winds. We had 7 pilots and 25 kids signed up. Next Young Eagles is planned for April 20th.
- Ch 25 was not selected for the next round of Ray Scholars
- President Schmidt talked briefly about his summer aviation class he teaches in the north metro and encouraged any chapter member to contact him if interested in starting a similar class in the southern metro area. He is willing to share his lesson plans
- CH 25 is in need of a social media guru
- Jim Fischer talked briefly about the CH 25 scholarship program.
- REMINDER June 16th is our Fly In Fathers Day Pancake Breakfast. Sign up with an email to President Schmidt titled I WANT PANCAKES to volunteer
- First Guest Speaker was Trent Taylor. Mr Taylor spoke in depth and with great humility about a landing he had in his Carbon Cub. Mr. Taylor is a pilot with approx 650 hours tailwheel time, 1507 great landings and 1 good one. His landing was after a complete engine power loss at 50' AGL resulting in a gear collapse. His story was entertaining but couldn't compare to watching it on video he had recorded from inside the cockpit with his GoPro camera. Wings credit applied for his talk.
- Second Speaker was Scott Schaffer - an aviation teacher in the Minnetonka High School. Mr. Schaffer had an in-depth slideshow

illustrating the amazing work he has done within a public school system that strongly supports aviation. He teaches multiple aviation related classes including Drone (UAS) operations, intro to aviation, and a private pilot written test / ground school prep course.

- Meeting Adjourned at 8:30pm

Sincerely Submitted
Mark Elliott
EAA Ch 25 Secretary

34th Annual Minnesota Aviation Hall of Fame Inductee Banquet

It's too late to buy tickets but as a reminder -

Saturday, April 20, 2024
Mystic Lake Center (west side of the casino)
2400 Mystic Lake Blvd., Prior Lake, MN 55372

Upcoming Fly-Ins

Breezy Point Aviation Day 9th Annual

May 4, 2024
10 am - 2pm
8MN3 - Breezy Point Airport, 30360 Airport Rd Breezy Point MN 56472

Pilots & Friend Social
Aircraft Static Display (no airshow), EMS Vehicles, Firetrucks, Helicopter

Classic Car Show

Free Lunch - Brats and Hotdogs

Free Ice Cream Treats

For more information contact: Cliff Muller, 218-838-3434, www.breezy-pointairport.com



Great Minnesota Aviation Gathering

May 17 - May 18

The 2024 **Great Minnesota Aviation Gathering** is at the **Buffalo Municipal Airport (KCFE)** Buffalo, MN. Friday the 17th 8:30am - 5:00pm and Saturday the 18th 8:30am - 3:00pm.

This year's event, we will have heated hangars for the event! KCFE is located just a few miles outside of the MSP Class B airspace, a fact that has increased the number of pilots who choose to fly in! We encourage you to consider **overnight camping** under the wing of your aircraft Friday evening, so you can take in both days of the GMAG!

We bring together a variety of aviation-related speakers, vendors, exhibitors and sponsors who provide up-to-date information and services to those who attend:

- Hangar Flying Sessions - A variety of dynamic speakers provide a series of in-depth, provocative presentations on topics important to pilots and aviation enthusiasts, alike.
- Exhibitors - Exhibitor booths enable attendees to spend plenty of time visiting with vendors and organizations in an aviation environment that is second to none.
- Experimental Aircraft Association (EAA) - Chapter leaders from across the state gather to exchange ideas on how to get more children and adults involved in aviation.
- Recognition of FAA Master Pilots and Scholarship Awardees -The FFAST will bestow the Master Pilot Awards and the Minnesota Pilots Association and other Aviation entities recognize Scholarship Awardees.

A schedule of events will be posted at www.mnpilots.org as the event approaches.

Cost \$10 entrance fee per day or free entrance with membership.

Build Updates

Glastar Project by Dan Strehlow

The wings are complete. Flaps and aileron cables are set up now with X-overs corrected. With the wings on, the aircraft just fits and wings can be folded .



Next up - firewall pass-throughs are being opened and we're learning how to install windows in fiberglass.

Hatz Classic Project by Kevin Knutson

March 15th update - Center section drain fairings-- Revisited

So this has been another "educational" moment for me. As a review, the first four pictures below outline the fabrication process for the fiberglass fairings to fit the fuel drains under the center section.





The last two pictures are oops, they all warped.



For updates and more pictures on Kevin Knutson's Hatz Project - <https://eaabuilderslog.org/?blproject&proj=7dAZ6sqil>

Do you really need a compass?

By Jeff Simon in AOPA news

After all, putting a mechanical compass in a modern aircraft seems akin to putting a wind-up clock in a Tesla. Searching for guidance, I spoke with fellow builders, flight instructors, and avionics experts. The simple answer I received every time was "Yes." Then I made one last call to my good friend and consummate federal aviation regulations expert, Ric Peri at the Aircraft Electronics Association. Peri's answer: "Well, let's go through the FARs and figure it out." And down the rabbit hole we went...

It started simply enough. FAR 91.205 specifies various instruments required for flight under VFR, starting with these three:

1. Airspeed indicator.
2. Altimeter.
3. Magnetic direction indicator.

Most people interpret "magnetic direction indicator" to mean a compass. But does it? And we also need to consider that Part 91 covers general operating and flight rules, not the certification of the aircraft. So, we need to dive into Part 23, which covers airworthiness standards for the airplanes most of us fly.

Part 23.1303 stipulates the minimum required flight and navigational instruments, and it matches up exactly with FAR 91.205. Part 23.1327 covers the accuracy and installation of the magnetic direction indicator, but it doesn't define what exactly that is. Can it be an electronic instrument, driven by a magnetometer, or does it have to be a mechanical compass? If we look at the amendments to Part 23 and the associated commentary, we can see that the FAA has gone back and forth on the topic over the years.

In 1993, Amendment 43 to Part 23 addressed the issue directly, and the commentary on the revision explained that a magnetic direction indicator has to be a non-stabilized magnetic compass based on the following explanation: "The non-stabilized magnetic direction indicator, which does not require power from the airplane's electrical systems, provides directional information to the pilot when all other directional navigation systems have failed due to loss of power." The FAR language was changed to read, "A direction indicator non-stabilized magnetic compass." No powered instruments need apply. End of story.

This wording was maintained through other amendments, until Amendment 62 in 2012, where the wording for minimum required flight and navigational instruments mysteriously changed back to "A magnetic direction indicator," language that remains to this day. So, what happened? Does an electronic instrument now count? Sorting through volumes of commentary that went into the rationale for many of the changes in Amendment 62, they all point to "Yes." Beginning in 2012, there was an industry push to accept that electronic instruments could deliver levels of accuracy and reliability that mechanical instruments simply could not. And so, the requirement for a "compass" has finally been relegated to the history books. A "magnetic direction indicator" is the current requirement for VFR flight, alongside the airspeed indicator and altimeter. (IFR flight requires additional instruments including artificial horizon, directional gyro, slip-skid, rate of turn, and others.)

Given the numerous electronic flight instruments available for the general aviation pilot, will this soon make the classic wet compass a thing of the past? The answer is, maybe. Some primary flight displays and electronic flight instrument systems on the market still list a "compass" as required equipment under their supplemental type certificates. It would certainly have been better if their STC language matched the FAA's "magnetic direction indicator." But the pieces are certainly in place to support a retrofit, all-electronic panel that meets the FAA requirements for certification, redundancy, and emergency power backup.

In 2015, the FAA released a policy statement (PS-ACE-23-08) acknowledging the superiority of electronically driven attitude indicators, making it possible for thousands of aircraft to easily upgrade to electronic attitude indicators and dump their old vacuum pumps. These days, many new flight instruments on the market utilize modern magnetometers, delivering reliable and highly accurate magnetic direction indication. I suspect it won't be long before the old wet compass and all of its issues are a thing of the past. The FAA removed the "compass" specific requirement from the private pilot certification standards back in 2013. Now it's time for the retrofit avionics industry to step up and complete the process, relegating those compass correction cards to the museums. Until next time, I hope you and your families remain safe and healthy, and I wish you blue skies.



Young Eagles Update

by Kris Olson, Ch. 25 YE Coordinator

Our Young Eagles group canceled our March 16th Young Eagles event, due to the forecast gusting winds.

Our next Young Eagles rides event is Saturday, April 20th at Airlake Airport. We are holding our May Young Eagles rides on Saturday, May 11th, since some of our pilots and ground crew will be busy attending the Minnesota Pilots Association's Great Minnesota Aviation Gathering on May 17th and 18th. We welcome more pilots and ground crew to help at our events.

Contact me if you are interested at ksimpson2@yahoo.com



IMC Club Update

IMC Club meetings are the first Tuesday of each month via Zoom. Our next meeting is scheduled for May 7th, 2024.

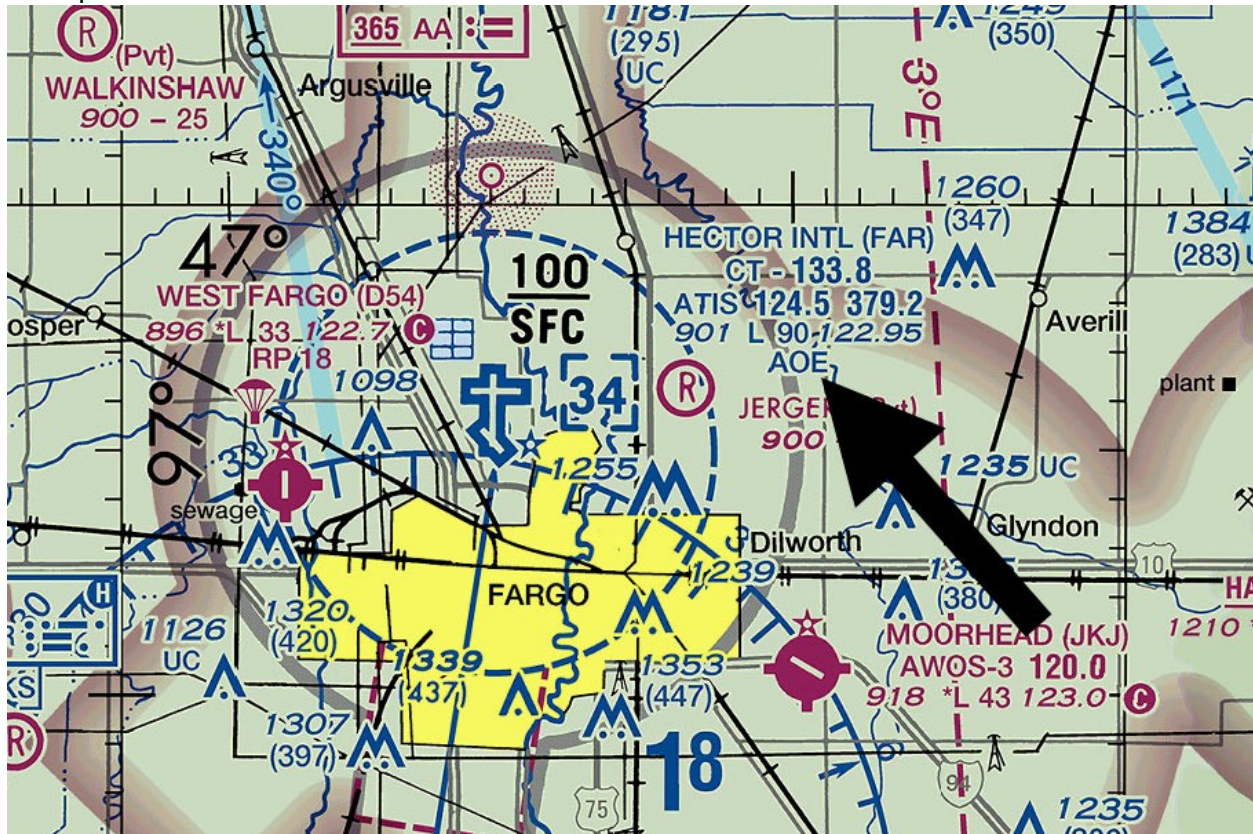
Contact Terry Carmine for more information at tlcarmine@gmail.com

All are welcome to attend.



Trivia Challenge

What does AOE indicate in Hector International's (KFAR) airport description?



Answers on next page -

This Month's Quote

**"Choose your journey, change your journey, own your journey,
but above all else, enjoy your journey."**

Susan Kilrain,
Aerospace engineer, Astronaut, Test pilot

Trivia Answer

AOE means that this airport is an airport of entry. This indicates that there is an U.S. customs and immigration office located on field to process international arrivals.

For more VFR chart trivia questions -
<https://www.boldmethod.com/blog/quizzes/2024/02/7-sectional-chart-questions-to-see-what-you-know/>

Need parts from Aircraft Spruce?

Chapter 25 member Mark Elliot often (monthly, sometimes even weekly) orders from Aircraft Spruce. If you'd like to save the shipping costs (works well with small orders), and pay NO SALES TAX consider this strategy:

- 1) Find the Aircraft Spruce part number(s), and the amount of that item, you want.
- 2) Email your 'order' to Mark, and he will combine it with his next Aircraft Spruce order.
- 3) Wait for Mark to contact you, letting you know your material has arrived, and
- 4) Meet up with him to get your goods.

DreamLandAviation@gmail.com Phone 651-398-8637

Contact any of these folks if you have questions or suggestions on what we might do differently to improve our Chapter 25.

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Mark Elliot	Secretary
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Pat Halligan	Board Member
Jim Fischer	Board Member
Bruce Anthony	Board Member
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Mike York	Board Member
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Terry Carmine	IMC Coordinator
Bill Norton	On Final Newsletter Editor
Bryan Francis	Webmaster
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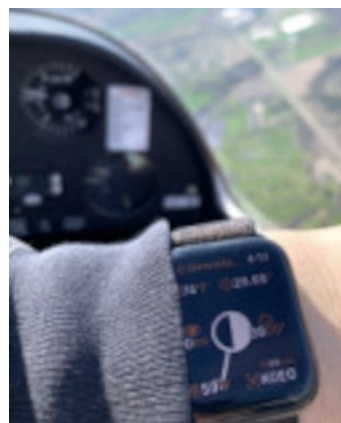
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Submissions for publication, questions or comments on articles, etc. are encouraged and should be addressed to: Bill Norton

e-mail: **loribill123@gmail.com** Submission deadline: 1st Wednesday of the month.

New or renewal Chapter membership (\$25/year) should be addressed to: **Mike C. York, 15860 Jocko Ct., Shakopee, MN 55379-7512.** Membership forms will soon be available at our new website <https://chapters.eaa.org/ea25> Permission for other EAA Chapters to use the non-copyrighted portions of this publication is hereby granted provided the source is acknowledged. Any copyrighted material that appears in this newsletter is with the permission of the acknowledged copyright holder. Any further copying must obtain the permission of the original copyright holder.

On Final

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