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News!

April 2023

On the Web: <u>www.EAA80.org</u> Facebook: <u>www.facebook.com/eaa80</u> Twitter: <u>https://twitter.com/eaa_80</u>

President's Corner



Bruce Mundie

Leadership Boot Camp

Please plan on assisting the chapter on 14-15 April. We have three main jobs where volunteers are needed:

1. Clean-up, Set-up on

Friday AM; Teardown on Saturday PM 2.

3. Food Team: Coffee, Rolls and Doughnuts AM; Sandwiches, chips and drinks Lunch; afternoon snack

4.3. Transportation for fly-in participants: From Millard to hotel, to dinner, to event, and back to hotel and Millard4.

Please let me know if you want to lead one of the teams or even if you can just lend a hand. Ray Scholarship application process is underway. Deadline is 16 April.

Looking for a project lead for the Glastar build. Let me know if you are interested.

Spring has sprung! Let's get out and fly!

Thanks, and Fly Safe

Bruce

Miscellaneous Notes

Vice President Bob Dyer

The April 10 meeting is Owen Grimm from the FSDO FAASTeam presenting on maintenance and airworthiness.

May TBD

The June 12 we will have the NOAA weather center from Valley. Get your weather questions ready.

If you have any future presenter ideas, drop Bob Dyer a note.

Social Coordinator Ed Kirker

April 14 EAA National Leadership Conference @ Brazenhead

September 10 Plattsmouth Picnic at 12pm

TBD Christmas Party 6pm Social Hour, 7pm Dinner



Membership Rich Kolkman

New member to welcome:

• Robert Roehrborn, Gretna

Calendar of Events

- Apr 10, Chapter meeting, 7pm, Oak View Mall Able Ace, Owen Grimm from the FSDO FAASTeam will be presenting on maintenance and airworthiness
- Apr 14, National Leadership Conference dinner at Brazenhead
- Apr 14-15, National Leadership Conference at Able Ace
- April 22, Young Eagles, 8:30 am
- May 8, Chapter meeting, 7pm, Oak View Mall Able Ace
- May 13, Young Eagles, 8:30 am
- Chapter meetings at KMLE resume in June
- June 12, Chapter meeting, 7pm, Oracle Aviation
- June 17, Young Eagles
- July 10, Chapter meeting, 7pm, Oracle Aviation
- July 15, young Eagles
- Jul 24-30, Air Venture 2023, Oshkosh
- Aug 19, Young Eagles
- Sept 2, Young Eagles
- Sept 10, Young Eagles
- Sept 10, Plattsmouth Picnic, 12pm
- Oct 14, Young Eagles
- Nov 18, Young Eagles

EAA Announces Inaugural Learn to Fly Week – May 15 to 20

Aspiring aviators will have the opportunity to discover multiple pathways to becoming a pilot as EAA presents its inaugural Learn to Fly Week on May 15-20.

Beginning May 15th, expert flight instructors and representatives from various aviation organizations will present free, interactive webinars. These webinars will cover topics from starting flight training, saving time and money in flight training, preparing for the FAA written exam, to passing the checkride, and so much more. While the live showing of these presentations will be open to the public, the recordings will be archived for EAA members to view at their convenience.

Learn to Fly Week will conclude on Saturday, May 20, with Flying Start events hosted at chapters across the country. EAA's Flying Start program allows EAA chapters to welcome, encourage, and educate new aviation enthusiasts about the fun, freedom, and accessibility of personal aviation in their ongoing effort to help aspiring pilots achieve their dream of flight.

Sporty's Pilot Shop is the presenting sponsor of Learn to Fly Week. Sporty's will be participating in multiple webinars and offering product discounts during the week.

Full webinar schedule and more details on Learn to Fly Week can be found



local area. Following a short presentation about learning to fly, attendees will be offered a free introductory Eagle Flight to experience the spirit of aviation firsthand.

"Becoming a pilot is a dream for many, but few know where to start their journey. Learn to Fly Week was created to help encourage aspiring pilots to take action and begin the pilot training process," said David Leiting, EAA Eagles Program Manager. "Our goal is to show attendees how accessible achieving their dream actually is." Leiting also added that inspiration from this event stemmed from packed forums at the Learn to Fly Center at EAA AirVenture Oshkosh 2022, as well as the success of other EAA virtual events like Homebuilders Week and Virtual Ultralight Days.

Combining the educational forums from the Learn to Fly Center and the connections and inspiration found at Flying Start events, EAA Learn to Fly Week is the latest effort in the at EAA.org/LTFWeek.

EAA Chapter 80 Meeting Minutes

March 2023

The chapter meeting was held on March 13th at ABLE ACE, Oak View Mall, and called to order at 7 PM by Bruce Mundie.

Guests and New Members: Three guests attended: Bob Rayborn, Jerome Dixon, and Cole.

New Members Lisa McWilliams and Doug Spurlock became dues paid members tonight.

Meeting Minutes: Meeting Minutes from February 13 were approved with no changes or modifications.

Treasurer's Report: It was reported the current balance as of the chapter meeting

was \$13,341.95. Chapter dues can now be paid using a credit card with a \$1 surcharge.

Membership: Rich Kolkman reported that the membership is at 128. 57% are Paid with 55 still left to pay. Also Rich needs pictures of some members for the membership roster.

Scholarship:

- Delaney, 2022 Ray scholarship recipient, reported she has about .5 hours left until she can take her check ride.
- The chapter has been approved to offer the 2023 Ray Scholarship. Deadline for applications are April 16, 2023. Interviews for finalists will be held the first week of May. Final selection will be May 5.
- Scholarship amount has been increased to \$11,000

conjunction with Harvest Days. October 14, November 18.

Tools: Contact Nathan Beyer your tools manager.

Friends of EAA80:

No Report

Builder Reports:

Ben & Bob Gilbert are still waiting for their inspection with first flight soon to follow.

Mike Stahl is making progress on his RV8.

TW shared a table leg leveler he found on Amazon. Nefish 4 Pack Leveling Casters Heavy Duty for Workbench 2200 LBS Capacity, Upgraded Handle Design Retractable Caster Wheels Set of 4, 360 Degree Swivel Castors for Machine,



- **Tech Counselors:** Bob Condrey talked about a change in the approval process for airworthiness certificates of experimental aircraft. This includes task based options using the 17 EAA test cards and creating a POH equivalent for the aircraft.
- Jim Beyer shared what he learned about loss of water cooling in Rotax engines and how long one could fly such an engine to land safely.

Young Eagles (YE):

- Next Young Eage event will be March 13 starting at 8:30m.
- Upcoming events April 22, May 13, June 17, July 15, August 19, September 2. September 10 will be at Plattsmouth in

Equipment, Shelves

Builder Meeting: None scheduled.

Chapter Build:

- Zenith is waiting for warmer weather to start working on again.
- Club RV 12 is making progress in Council Bluffs Airport.
- The chapter picked up the Glasair kit March 4. Seems fairly complete. Any volunteers to lead on this project and complete an inventory?
- Regarding the Metrotech RV's no decision has been made by the school on what to do with the kits. Stay tuned

Fly-outs: Junction City, KS

Lucas, KS with 3 planes and 4 people.

Social Coordinator: Ed Kirker reported Leadership Conference is April 14, 2023. Dinner at Brazen Head. 5:30 Social Hour. 6:30 Dinner. Meeting at Oakview April 15.

5

Chapter Picnic and Flyin September 10 at Plattsmouth.

Christmas Party 2023 December 2023

IMC/VMC:

IMC meeting is every 2nd Thursday at Able Ace.

VMC meeting is every Second Tuesday at

Lookout for the AirVenture email list.

The chapter purchased a new 16 foot fabric projector screen for \$120.00.

Internet WiFi at Oakview Mall, no decision has been made. It may be free to tenants. No update so far.

Old Business:

Chapter Coffe Mugs and Koozies are in the works.

Need someone to lead the campsites for AirVenture 2023.



Revv Aviation (Council Bluffs airport).

VP: Bob Dyer, next meeting guest speaker will be Owen Grimm from FSDO

President: Bruce Mundie is planning to speak with OAA about a chapter hangar at Millard. The purpose is to see if there is an open door if this is even possible.

We need volunteers for the Leadership conference April 14 & 15. Drivers are needed to pickup and dropoff from Millard. Need to source breakfast, lunch and Dinner April 15. Arrange for table and chairs from the Mall.

Calendar:

Young Eagles March 18 8:30am at Millard Apr 10 Chapter meeting, 7pm, Oak View Mall Able Ace Apr 15 National Leadership Conference at Able Ace April 22 Young Eagles at Millard

Announcements:

The drawings for an EAA80 T-shirt were won by Dave and Chock Blocks by Steve Moffitt

Presentation: Marty and Micheal Jones presented on their passion in balloons. They are members in the Nebraska Balloon Club. They talked about the materials balloons are made out of. The limits and challenges of flying a balloon as well as some history. Did you know the first modern day balloon was flown right here in Nebraska? Ed Yost flew in 1960 in Bruning Nebraska.

Next Meeting: The next chapter meeting is April 10 at the Oak View Mall Able Ace facility, 7pm.

New Business:

→Koehler's Korner



I have been doing avionics installations this past month. For instance, the past two weeks I have been working on a Piper Cherokee, PA-28-180 upgrading the

autopilot, primary instrument display, and horizontal situation indicator (HSI).

The project started with frustration in getting accurate displayed info on the engine instruments. The oil pressure gauge had failed and no one seems to be able or willing to repair the gauge, which is part of a sixgauge cluster gauge package. The fuel gauges were long ago unreliable and inaccurate. (The best way to die in an aircraft is to believe the 50+ year old fuel gauges.) The decision was made to upgrade to a JPI EDM-900 primary instrument display. This required removing all the current engine instruments, RPM, MAP, etc., and redoing the right side of the instrument panel to remove the hole for the cluster gauge and several other instrument holes. I had to make an overlay panel with the new cutout for the EDM-900.

Next came the autopilot. The plane had the Brittian pneumatic system that worked off the turn coordinator with an option for electronic tracking off the course deviation indicator (CDI) to track down an airway. The support for the Brittian system had dried up several vears ago, with the final straw being the manufacturer of the rubber boots needed for the actuators stopping production. My friend chose to install the TruTrak system now sold by King as the AeroCruz 100. At about \$5600 for the complete system, I am not sure why anyone would put in any other system, as most are at least five times more expensive and do not do anything significantly better than the TruTrak does, including altitude hold, heading hold. GPS course tracking and coupled GPS or ILS approaches. It even has an emergency button that if pushed, will return the plane to straight and level! However, it took us four days to remove all the wiring and nylon pneumatic tubing. The Installation

Instructions are spectacularly well done, with color photographs of each step. All brackets and hardware are provided, so it is just a matter of following the book. Both the servos go under the back seat, and the control unit mounts on the instrument panel. Had to make another specialized overlay panel, but it was straight forward. For wiring, besides power and grounds, most of the interfaces are via data links, which we will talk about later.

Finally, a few weeks prior to the Cherokee flying in for the preceding work, the HSI failed and was determined to be so obsolete that repair parts are not available. The unit was the NSD-360, by Century. It has a vacuum gyro, with an electronic CDI and course arrow overlaid. Somewhat less expensive than allelectric HSIs like the King KCS- 55, it nonetheless also has a poorer reliability history. I well remember it being in new Mooneys in the 1980s. So, the owner was faced with buying an overhauled display for \$3300 or a Garmin G5 for about the same price (we buy from Lafayette Avionics; Josh is the owner; see their website).



Garmin G5

Again, we spent a couple of days removing the old system, including three extra boxes besides the display, plus the remote magnetometer. One of the wire bundles from the GPS to the HSI display has eighteen wires in it to send all the discreet signals to the display such as to tell the GPS where the needle is set on the HSI, and what the deviation is between where the needle points and where the plane actually is located. All of this is replaced in the new G5 with four data link wire pairs. Actually, one data link, a RS-232 goes from the GPS directly to the G5, and three RS-429 links go from the GPS to a buffer box, called the GAD29B, and it talks to the G5 through a single data link called a CAN bus. The CAN bus is simply a shielded twisted pair of wires (MS27500) and the units talk back and forth on it. So, as amazing as it sounds, the G5 only has six wires in its connector, power, ground, the two wires of the RS-232 link from the GPS, and the two wires of the CAN bus link from the GAD29B!

Next month we will dive into data buses and how they work and how to wire them. Actually, the wiring is rather simple, using a shielded twisted pair which is MS27500 wire, and it is wired just like you would wire a modern audio panel to a headphone jack. We actually do this during the EAA SportAir Electricity Workshop. Come take a Workshop with us some time if you want some hands-on experience.

This kind of an avionics upgrade is not trivial. I know Danny spent way more time than originally planned a few years ago when he was modernizing his panel. One of the problems we ran into was that almost everything was done in the cockpit, and for most of the time only one person could work there. A "gopher" was handy to bring special tools and work the other side of the belly and firewall, but it was the old story that although one woman takes nine months to have a baby, nine women together cannot do it in one month! Even though there were three of us, most of the time an eight-hour day produced only about ten-man hours of effort. If we had had ten workers, the project would not have moved any faster. It just takes time.

I hope this little discussion on modern avionics helps you better build and maintain your plane.

{Ed.: Dick is right about this. I learned a lot and now have all the necessary special tools to do this repeatedly (and have a few times). If you need help with a mockup, updating a few panel items, or installing a completely new panel and would like help, I'm happy to provide that. However long you think this might take, triple it because NOTHING with aircraft is ever as simple as it looks. Danny}

Keep building, flying, and maintaining. Dick 3/2023

EAA Chapter 80 is classified as a Non-Profit Charitable Organization per section 501(c)3 of the Internal Revenue Code. As a result, we are eligible to receive tax-deductible contributions in accordance with Code section 170.

Your contributions will go towards such things as:

- ✓ Aviation scholarships
- ✓ Scholarships to send kids to EAA's Air Academy in Oshkosh, Wisconsin
- Helping promote Young Eagles events and rallies for the community
- ✓ Many other events that promote aviation in the Eastern Nebraska and Western Iowa region.

EAA 80 is a 100% volunteer organization, there are no paid members to the staff. Our only funding comes from chapter dues and occasional fund raising.

Please visit our website eaa80.org or contact an officer to inquire about making a tax free donation.

	EAA 80 MONTHLY TREASURER REPORT Mar-23	
Opening Balance		\$13,141.93
DEPOSITS	Dues	\$325.00
EXPENSES	Oak View Rent	\$150.00
Ending Balance		\$13,316.93

Photos! This and That



March presenters Marty (left) and Michael (right) Jones gave a talk on behalf of the Nebraska Balloon Club. Michael also owns Emerald City Express Hot Air Balloon Rides in Omaha.



Ben and Bob Gilbert after a successful air worthiness inspection. Congrats!

Upcoming Webinars

Task-Based Phase I Flight Testing

Qualifies for FAA WINGS credit. 4/4/23, 7 p.m. CDT Tom Charpentier

Ethics of Misdiagnosis

Qualifies for FAA WINGS and AMT credit. 4/5/23, 7 p.m. CDT Mike Busch

The History of Steve Wittman

Museum Webinar Series 4/11/23, 7 p.m. CDT Chris Henry

The Nine Principles of Light Airplane Flying

Qualifies for FAA WINGS credit. 4/12/23, 7 p.m. CDT Rich Stowell

Planning for International Young Eagles Day

Young Eagles Webinars Series 4/18/23, 7 p.m. CDT David Leiting

VNAV and Visual Approaches: Helpful or

<u>Hidden Dangers?</u> Qualifies for FAA WINGS credit. 4/19/23, 7 p.m. CDT Gary Reeves

All About Flying to the Bahamas, Caribbean,

and Cuba Qualifies for FAA WINGS credit. 4/26/23, 7 p.m. CDT Jim Parker

Booted Out of Annual!

Qualifies for FAA WINGS and AMT credit. 5/3/23, 7 p.m. CDT Mike Busch

The P-6 Hawk

Museum Webinar Series 5/9/23, 7 p.m. CDT Chris Henry

Cloudy With A Chance of PIREPs

Qualifies for FAA WINGS credit 5/10/23, 7 p.m. CDT Prof. H. Paul Shuch

<u>Stop Dreaming and Start Flying – Flight</u> <u>Training First Steps</u>

Qualifies for FAA WINGS credit Learn to Fly Week Webinar 5/15/23, 12 p.m. CDT EAA Staff

Flight Simulators 101 - Leveraging a Home

Simulator for Flight Training Qualifies for FAA WINGS credit Learn to Fly Week Webinar 5/15/23, 7 p.m. CDT Chris McGonegle

How to Pass the Private Pilot FAA Written Test in Less Time

Qualifies for FAA WINGS credit Learn to Fly Week Webinar 5/16/23, 12 p.m. CDT Bret Koebbe

How to Save Time and Money in Flight

<u>Training</u> Learn to Fly Week Webinar 5/16/23, 2 p.m. CDT Larry Bothe

Become a Professional Pilot; Which Path is

<u>Best?</u> Learn to Fly Week Webinar 5/16/23, 7 p.m. CST Paul Maloy

Getting Back into the Left Seat - No Matter

How Long It's Been Qualifies for FAA WINGS credit Learn to Fly Week Webinar

5/17/23, 12 p.m. CDT Jamie Beckett

Getting Started in Ultralights

Qualifies for FAA WINGS credit Learn to Fly Week Webinar 5/17/23, 2 p.m. CDT Timm Bogenhagen

Pass Your Checkride (Part 1 of 2) – The Oral

Qualifies for FAA WINGS credit Learn to Fly Week Webinar 5/17/23, 7 p.m. CDT Larry Bothe

Preparing to Attend a Flying Start Event

Learn to Fly Week Webinar 5/18/23, 12 p.m. CDT David Leiting

Upcoming Webinars

(continued)

Pass Your Checkride (Part 2 of 2) - The

Practical Exam Qualifies for FAA WINGS credit Learn to Fly Week Webinar 5/18/23, 7 p.m. CDT Larry Bothe

FAA Medical Certification and You

Qualifies for FAA WINGS credit Learn to Fly Week Webinar 5/19/23, 12 p.m. CDT Tom Charpentier

Conquer the Checkride: Strategies for a

Successful Practical Test Qualifies for FAA WINGS credit Learn to Fly Week Webinar 5/19/23, 2 p.m. CDT Loren French

Ultralight/Homebuilt Rotorcraft Arrival Procedures - AirVenture 2023

Qualifies for FAA WINGS credit. 6/28/23, 7 p.m. CDT Mark Spang

These are the current webinars listed on <u>eaa.org</u>. Please check the site at:

www.eaa.org/en/eaa/news-and-publications/eaa-

webinars to see if there are other webinars available.

Guess Who???





EAA CHAPTER 80

New Member Application Form

CONTACT INFO	RMATION				
NAME:	EAA #:				
Home Address:	SPOUSE NAME:				
	HOME PHONE #:				
E-MAIL ADDRESS:	Cell Phone #:				
PROFESSION:	RETIRED? [] Yes] No] STUDENT? [] Yes] N				

Membership Profi	LE						
OWNED AIRCRAFT?	[🗖 Yes	D No]	Түре:			N-NUMBER	:
AIRCRAFT BUILDER?	[🗖 Yes	□ No]	TYPE:			% COMPLETE	:
AIRPORT BASE:				HANGER:			
PILOT LICENSE/RATINGS:							
JOIN E-MAIL GROUPS:	[🗖 Fly-O	ut 🗖	Builder	s 🗖 You	ng Eagles	AirVenture	Chapter Build]
YOUNG EAGLE				YOUTH PR			
VOLUNTEER?					URRENT? [L	Yes 🛛 No]	
OK TO PUBLISH INFO. IN			Do	YOU HAVE		YEAR	OINED
CHAPTER DIRECTORY?	[🗖 Yes	□ No]	A N	AME TAG?	[🗆 Yes 🛛	No] EA	A80?
ANNUAL DUES - \$2	5 (\$15 S	TUDENT) —				
PAYMENT FOR YEAR(S):	[🗖 202	23 🗖	2024	□ 2025	□ 2026	D 2027]	
PAYMENT DETAILS:	Түре:			AMOUNT		D	ATE:

— Mail Check то: —————	FOR MORE INFORMATION:
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