

President

Bruce Mundie
703-405-7817

president@eaa80.org

Vice-President

Bob Dyer
402-740-9309

vicepres@eaa80.org

Secretary

Craig Tylski

secretary@eaa80.org

Treasurer

Steve Farner
402-690-8751

treasurer@eaa80.org

Membership Coordinator

Rich Kolkman
402-616-9891

membership@eaa80.org

**Tech Counselors/
Flight Advisors**

Mike Howard
402-991-0403

&

Jerry Ronk
402-980-8973

&

Bob Condrey
402-651-0402

tech-counselors@eaa80.org

**Young Eagle
Chair**

Scott Pridie

youngeagles@eaa80.org

Newsletter Editor

Chris Halfman
402-618-3148

newsletter@eaa80.org

Web Editor

Dale Botkin
402-983-2661

webmaster@eaa80.org

News!

August 2022

On the Web: www.EAA80.org

Facebook: www.facebook.com/eaa80

Twitter: https://twitter.com/eaa_80



President's Corner

Bruce Mundie



August 6th is the one-year anniversary of

our ABLE ACE facility at the Oak View Mall. I firmly believe that we have upheld our pledge to open doors to all walks of life in the Omaha area to many diverse aspects of aviation.

Along with our partners: Omahawks, THOR Rocketry, and others, we have created a special place for aviation enthusiasts. If you have not been to the mall yet, plan your visit with the Zenith 750 build times, usually Tuesdays and Thursdays.

Our Ray Scholar is post solo and tearing up the private pilot syllabus! Delaney is pushing through training, and she is doing great. She is on schedule and with a little luck, she will be EAA 80's second completed Ray Scholar in 2023.

August and September are full of great EAA 80 activities. Young Eagles, Harvest Fest, ABLE ACE education and aircraft building, and weekly fly outs. There are plenty of opportunities to participate!

Looking to hold our monthly meeting at the Millard Airport in Oracle's main hangar, BUT, if it is forecast to be too hot, we will flex to the

Oak View Mall. I will send out any changes via e-mail and on Facebook.

Thanks and fly safe!
Bruce

Calendar of Events

Aug 7 CAF Fly-in at Council Bluff airport
Aug 8, Chapter Meeting, 7pm, Oracle Aviation, Millard (weather pending)
Aug 13, Young Eagles, 8 am, Oracle Aviation, Millard
Sept 11, Chapter BBQ, Plattsmouth Airport
Sep 12, Chapter Meeting, 7pm, Oracle Aviation, Millard
Sep 24, STEM Day, location TBD



Shirts!!!!

Bruce has ordered chapter shirts. Bring your \$25 cash or check to the next meeting.

Miscellaneous Notes

Vice President

Bob Dyer

August 8 - David Greer, AWACS

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

Young Eagles

Scott Pridie

The July 16 rally was canceled as a result of unfavorable weather for the first time in 3 years.

The next rally will be held August 13, 8 am, Oracle Aviation, Millard.

Membership

Rich Kolkman

The Chapter welcomed two new members last month:

Jacob Pietro, Omaha

Collin Adams, Bellevue

AirVenture Camping Notes

For the first time, our chapter took advantage of the "Chapter Camp Site" program and purchased the maximum number of sites (6). The interest by chapter members exceeded the available space early in the show, but after some juggling everything worked. Location was terrific, far better than individuals would have gotten if arriving at the show the weekend before it started. This was a record setting year for AirVenture attendance, so the location being close to everything was a huge bonus.

EAA Chapter 80 Meeting Minutes

July 2022

The chapter meeting was held on July 11th at the Millard Airport, Oracle Aviation, and called to order at 7 PM by Bruce Mundie.

Guests and New Members: Guests included Merlin and Brook Barr from Clarinda IA (Iowa EAA Chapter) flying a Comanche, and Jerry Ferry and his grandson Jacob (who is getting started in aviation).

Meeting Minutes: The June 2022 minutes were approved as written.

Treasurer's Report: The May-June treasurer's report was provided in the chapter newsletter and approved. The opening balance was \$15,712.65. The ending balance is \$10,992.52.

Membership: Rich Kolkman reported that 91% of the 112 active members have paid their 2022 dues. Five new members: Robert Graham, Walker Pickering, David Cook, Jared Cook, Tyler Swanson.

Scholarship:

- Bruce is still looking for a scholarship chairman volunteer.
- Delaney has now logged 18.3 hrs and is flying about 3 times / week. National has reimbursed us \$4000 for her training thus far.

Tech Counselors: Mike Howard had no inputs.

Young Eagles (YE): The next YE flight event is this Saturday, July 16th, at Millard Airport. Last month 21 were flown, this Saturday has 21 pre-registered (max allowed) and 3 on the wait list. Pilots and ground volunteers are needed.

Tools: no change.

Friends of EAA80: No report

Builder Reports:

- Bill Haas has been taxiing the Berkut.
- Tom Wieduwilt says the Bearhawk is at the hangar and the wings will be installed soon.

Builder Meeting: None scheduled.

Chapter Build: Bob Condrey reported that the Zenith 750 has had power applied to the panel; however, the battery has died. The wings and tail surfaces are back off (no more work to do now), system checks are done, prop installed, and the windshield and doors are next to install. It may be moving to a hangar later this fall.

Fly-outs: Mike Howard didn't have any fly-outs, but a few members went to Tarkio Mo for the World's Smallest Airshow July 9th.

Social Coordinator: The next event is the Plattsmouth chapter BBQ on September 11th. Advise Ed Kirker if you plan to attend so he can estimate the hamburger requirements. This is a fly-in event as well, and there may be Young Eagles flown.

IMC/VMC: On pause during the summer.

VP: Bob Dyer reported that the next speaker is Jim Greer on AWACS.

PRESIDENT: Bruce provided the following:

- Jim Beyer is setting up a chapter base camp at Oshkosh this year.
- Bruce would like someone to start gathering a record of Chapter 80's history: first flights, presidents, locations, etc...
- Help is requested to update our outdated website.
- New subdued grey Chapter 80 T-shirts were available for \$25 purchase. Contact Bruce if you'd like one.
- The proposed chapter hangar has been estimated at \$267k for the building, another \$22k for the door, and another \$100k for ancillaries. This \$400k estimate did not include a paved floor.

Calendar: July 25-31 2022 AirVenture, Oshkosh
 Aug 7 CAF Fly-in at Council Bluff airport
 Aug 8 Chapter Meeting, 7pm, Oracle Aviation, Millard
 Aug 13 YE, Millard Airport
 Sept 11 Chapter BBQ, Plattsmouth Airport, possible YE flights
 Sep 12 Chapter Meeting, 7pm, Oracle Aviation, Millard
 Sep 24 STEM Day, location TBD

Old Business:

- Tom Baarsch in Omaha has a Thorp T18 project he is parting out. He has about \$800 in tools and parts available. He can be reached at 402-547-0762. tbaarsch@gmail.com
- Bruce reports that the Glastar is in storage in Glenwood and our chapter will likely take possession after the Zenith is moved to a hangar.
- The one-of-a-kind Corvair (engine) pusher aircraft (N15CF) is still available for free. Last chance or Bruce is going to refuse the offer.

New Business: None

Announcements:

- Jim Beyer still has RV4 raw metal available for sale, Millard hangar C1. The proceeds are going to the chapter.
- Hague Howey has room for two more campers at Oshkosh 2022.

- Hague also announced that Aviation STEM / Youth Build at the Oak View mall is on Saturdays from 1-4pm.
- The RV-12 squad (Woodstock) is at three members and looking for a fourth to buy in to the aircraft.
- Pat Stolinski blew a tire on the Piper Archer during a recent flight and was looking for a Goodyear tire.
- There was a prize drawing. A set of chocks went to Rich Kolkman, who then offered them back and subsequently won by Cole Dostal. A new chapter t-shirt was won by Steve Farmer.

Presentation: Roy Tyson, representing the THOR Rockets L3 Project, provided information on amateur rocketry. They have 30 members in their local group and generally have monthly rocket launches at various sites depending upon the types of rockets available to launch.

He described the three types of rockets (low power, mid-power, and high power), the types of motors (one-time and reusable), and general details on chute recovery systems and flight computers.

Due to rocket sizes only certain launch sites are acceptable depending upon the rocket size and power. They sometimes need the land owners permission (which is hard to get for larger launches) and need an FAA COA (Certificate of Authorization) for large high power launches. An FAA NOTAM needs to be filed a week in advance. Altitude waivers are typically in the 4k' to 16k' range, but can be as high as 50k'.

He showed a video of his "M" Class motor rocket which was 8" in diameter and 14' tall. It weighed 75# and had a 4" diameter (reusable) motor with redundant flight guidance computers (used mainly to deploy the drogue and main recovery chutes). His launch peaked at 5,410' and reached Mach 0.5 with a max of 7.74G (average 2.49G). Roy noted that more advanced rockets can exceed Mach 2 and 50,000'.

For more information contact: Nebraskarocketry.com and look for information and the calendar of events. THOR (The Heartland Of Rocketry)

Next Meeting: The next meeting is August 8th at Oracle Aviation, Millard Airport, at 7pm.

Technical Advisor

→ Koehler's Korner →



I noticed during my enduro flight mentioned in last month's S&R that my navigation lights were not working. They popped the breaker after only a few seconds. Had some interesting

troubleshooting that I will share with you this month.

First off, to effectively troubleshoot, one must understand the system being investigated.

WE ARE A FULL SERVICE FBO

- Maintenance & Parts
- Avionics Part 145 Repair Station
- AvGas, Jet A
- Aircraft Rental

- Flight Training
- VA Approved Flight Training
- Commercial Drone Training
- MCX Redbird Flight Simulator

- FAA Testing
- Pilot Supplies/Merchandise
- Aircraft Brokerage
- Aircraft Acquisition

KMLE
12916 Millard Airport Plaza
Omaha, NE
402.934.5300
www.oracleaviation.com

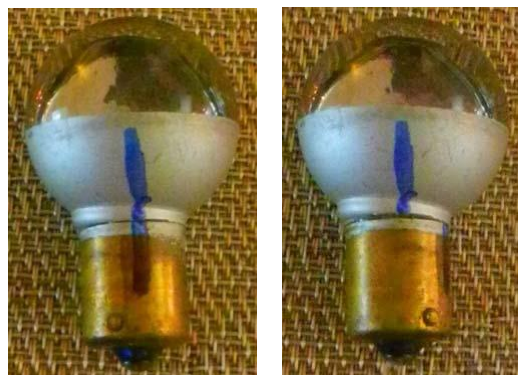
The best way to do that on an electrical system is to have a wiring diagram or schematic diagram. A review of my Mooney's navigation light system shows that it is powered from a combination switch and circuit breaker, rather than the usual separate circuit breaker and switch. On the output side of the combination switch/circuit breaker there are three ring connectors with three wires going to each of the lights, a white on the tail, red on left or port side, and green on right or starboard side. The lights are each grounded near their respective light sockets.

In my case, the white would come on during the brief time before the circuit breaker popped, but neither of the wing lights illuminated. That made me suspect that the problem was in one of the wings. I removed the wing tip lenses and the light assemblies, including the colored glass lens over each light bulb. One wants to be super careful with the colored glass lenses, because they are super expensive, like north of \$75 for PMA/TSO'd units and about half that for experimental. Be careful, the green lens looks blue, but the yellow component in the light filament produces the specified green when it passes through the blue glass. Also, be careful of the small paper gasket that is supposed to be on the base of the lens. They are about \$12 from Spruce. Their intrinsic value appears to be less than a dollar, so I would be sorely tempted to make my own with a razor knife and some gasket material.



Back to the light bulbs, the one from the right wing was highly fogged, and I could see a broken filament, so it was a sure replace. The other bulb, which was from the left wing, looked okay and the filament seemed intact. I tested it with a multi-meter set on ohms and found continuity in the bulb, so I assumed the bulb was good. However, when inserted in the left wing socket, it blew the circuit breaker, so I assumed something was wrong with the wiring to the left wing.

To troubleshoot the left wing wiring, I first disconnected the ring connectors at the circuit



breaker, and tested to ensure that with the bulbs removed, there was no continuity (short) to ground (which would explain the blowing of the circuit breaker). All the wires tested good, so I reattached them to the circuit breaker, powered-up the circuit and carefully measured the voltage at the base of all the sockets. All socket bases had good clean battery voltage (12.3v), so it appeared that the wiring was all good!

At this point I was a bit confused. All parts of the nav light system seemed to be okay, except for one burned out bulb, but that would not explain what was blowing the circuit breaker. I put the good bulb back in, and "pow" the breaker blew when turned on. I noticed that the bulb was a bit loose in the socket, so I wiggled it, and all of a sudden, the bulb lit and the breaker did not blow. I wiggled it again, and the breaker blew! Obviously, the bulb was defective. Upon closer inspection, it noticed that the base would swivel about 60 degrees to the right when viewed from the socket end. I drew a line on the base when swiveled to the left as seen in this picture. When I tested it in this position, there was no continuity. However, if I rotated it to the right, and tested it with the multi-meter, it was a dead short!

So, two new light bulbs at about \$22 each from Spruce and I was able to fix my navigation light system. The blown bulb was an easy find, but the bulb with the loose base was sneakier to troubleshoot. It was intermittent, depending on how it was rotated. When twisted to the right, it internally shorted and would blow the circuit breaker. When twisted to the left it was open. The normal internal resistance of a good bulb is on the

order of about 2 ohms, and at a glance, it appeared that the shorted condition of zero ohms was so close on my old analog meter that I did not notice the difference.

Moral of the story is to understand the system (have a schematic) and then be as orderly and systematic as possible in checking the various parts. Intermittent and multiple failures (two bad bulbs) can be real confusing.

There will be EAA SportAir Workshops in Oshkosh during AV22. I will be teaching the Electricity course, but Sheet Metal, and Welding will also be offered. Sign up early as the spots seem to go very quickly. Hope to see some of you there. Otherwise, I will be in the Builder Education Center area helping out

with the Composites 101 and Sheet Metal 101 courses.

Keep building, flying, maintaining, learning and having fun.

Dick 07/2022

Legal Stuff (2nd notice)

June 16, 2022 the Chapter registered a corporation name change with the Nebraska Secretary of State. The Eastern Nebraska Chapter 80 of the Experimental Aircraft Association has been changed to EAA Chapter 80.

EAA 80 MONTHLY TREASURER REPORT

Jul-22

Opening Balance	\$10,992.52
DEPOSITS	
Ray Scholarship	\$4,000.00
Zenith Deposit	\$1,000.00
Shirt Sales	\$460.00
Dues	\$200.00
EXPENSES	
Shirt Inventory	\$1,105.70
Rent ABLE/ACE	\$150.00
Food/Drink	\$63.48
Ending Balance	<u>\$15,333.34</u>



<https://www.centralcylinder.com/>

©2020 Central Cylinder All Rights Reserved 6315 Lindbergh Dr. Omaha, NE 68110 | (402) 451-6468 | ccs@centralcylinder.com

Photos!

July presenter Roy Tyson from THOR talking about rocketry. The black rocket on the table with the fins to the right reached speeds over Mach 2 and has been to FL200.



Chapter 80 VP Bob Dyer and Roy Tyson from THOR (The Heartland Organization of Rocketry).

Right: A very expensive game of rocket lawn darts.



Upcoming Webinars

[Homebuilt Highlights from AirVenture](#)

Homebuilders Webinar Series.

8/2/22, 7 p.m. CDT

Marc Cook

[Disastrous Annual](#)

Qualifies for FAA WINGS and AMT credit.

8/3/22, 7 p.m. CDT

Mike Busch

[The Culver PQ-14](#)

Museum Webinar Series.

8/9/22, 7 p.m. CDT

Chris Henry and Ben Page

[Handling In-Flight Emergencies in Small Airplanes](#)

Qualifies for FAA WINGS credit.

8/10/22, 7 p.m. CDT

Rod Machado

[Traffic Patterns at Non-Towered Airports](#)

Qualifies for FAA WINGS credit.

8/17/22, 7 p.m. CDT

Steve Krog

[IFR Routing Tricks for Efficiency and Workload Reduction](#)

Qualifies for FAA WINGS credit.

8/31/22, 7 p.m. CDT

Thomas P. Turner

[What Price Speed?](#)

Qualifies for FAA WINGS and AMT credit.

9/7/22, 7 p.m. CDT

Mike Busch

[The Treasures of Pioneer Airport, Part 1](#)

Museum Webinar Series

9/13/22, 7 p.m. CDT

Chris Henry and Ben Page+

[Crosswind Conundrum - When Winds and Runway Don't Align](#)

Qualifies for FAA WINGS credit.

9/14/22, 7 p.m. CDT

Prof. H. Paul Shuch

[FAA Enforcement Process](#)

Qualifies for FAA WINGS credit.

9/21/22, 7 p.m. CDT

James Cooling and Alan Farkas

[Flying With Datalink Weather—ADS-B and SiriusXM Tips](#)

Qualifies for FAA WINGS credit.

9/28/22, 7 p.m. CDT

John Zimmerman

[On a Short Leash – Maintenance Costs](#)

Qualifies for FAA WINGS credit and AMT credit. .

10/05/22, 7 p.m. CDT

Mike Busch

[The Treasures of Pioneer Airport, Part 2](#)

Museum Webinar Series

10/11/22, 7 p.m. CDT

Chris Henry and Ben Page

[Tax Exempt Basics](#)

10/13/22, 7 p.m. CDT

Patti Arthur

These are the current webinars listed on eaa.org.

Please check the site at:

www.eaa.org/en/eaanews-and-publications/eaawebinars to see if there are other webinars available.



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 CHAPTER 80

NEW MEMBER APPLICATION FORM

CONTACT INFORMATION

NAME:

EAA #:

HOME ADDRESS:

SPOUSE NAME:

HOME PHONE #:

E-MAIL ADDRESS:

CELL PHONE #:

PROFESSION:

RETIRED? ☐ Yes ☐ No

MEMBERSHIP PROFILE

OWNED AIRCRAFT? ☐ Yes ☐ No

TYPE:

N-NUMBER:

AIRCRAFT BUILDER? ☐ Yes ☐ No

TYPE:

% COMPLETE:

AIRPORT BASE:

HANGER:

PILOT LICENSE/RATINGS:

JOIN E-MAIL GROUPS: ☐ Fly-Out ☐ Builders ☐ Young Eagles ☐ AirVenture ☐ Chapter Build

YOUNG EAGLE

VOLUNTEER? ☐ Yes ☐ No

YOUTH PROTECTION

TRAINING CURRENT? ☐ Yes ☐ No

OK TO PUBLISH INFO. IN

CHAPTER DIRECTORY? ☐ Yes ☐ No

DO YOU HAVE

A NAME TAG? ☐ Yes ☐ No

YEAR JOINED

EAA80?

PAYMENT – DUES \$25/YEAR

PAYMENT FOR YEAR(S): ☐ 2022 ☐ 2023 ☐ 2024 ☐ 2025 ☐ 2026

PAYMENT DETAILS: TYPE:

AMOUNT:

DATE:

MAIL CHECK TO:

EAA80 MEMBERSHIP
C/O RICHARD KOLKMAN
18058 LEAVENWORTH ST.
ELKHORN, NE 68022

FOR MORE INFORMATION:

MEMBERSHIP@EAA80.ORG
WWW.EAA80.ORG
WWW.FACEBOOK.COM/EAA80
TWITTER: @EAA_80