

### EAA Chapter 478 Monthly Gathering November 19, 2024 Chapter Leadership Position Nominations and Elections 2W6 Terminal Building Conference Room 6-6:30 PM Social 6:30 PM Program Starts

### In this edition of Cockpit Chatter

From The Top – Volunteers needed and Elections Board of Directors Meeting Minutes – Treasurer Report – Current Status Young Eagles Corner – New YE Website The Homebuilder's Corner – RV14A almost ready to fly, RV7 VPX Programming The Flying/Maintenance Corner – Aeronca Chief Work, Removing MD50 Trees, Zero Restoration, For Sale – Various aviation items

## FROM THE TOP

Darryl Crawford, President EAA Chapter 478

At this month's Chapter Gathering we will be focusing on nominating and electing board positions for the coming calendar year. Elected terms are 2 years.

We also have several executive positions open: Vice President Secretary Treasurer Young Eagles Coordinator VMC Coordinator If you would like to nominate yourself or anyone else please respond with the name of your nominee. Once we have accepted nominations we will vote. Nominees, if the nomination is accepted, do not have to be present for the election so don't worry if you can't make it to the Gathering.

Board membership is not limited to the executive positions above. Also there is no limit to the number of board members we can have. As our chapter grows to its largest size as well as our efforts within the community expand it is imperative that our board participation also grow. Our success hinges completely on folks to assist in fielding ideas in discussion or helping in coordination no matter how minor the input. Do not be shy or fearful you'll be thrust into a burdensome position, we all support each other and a defined title is not required. Training and transition time is afforded to those that may want to dive directly into an executive board position so don't let unknowns deter volunteering. The rolls are pretty benign, even more so with more members involved which is our goal for 2025 and beyond.

Board meetings are the second Tuesday of the month at the 2W6 terminal building. Dialing in is possible if you are not available every meeting.

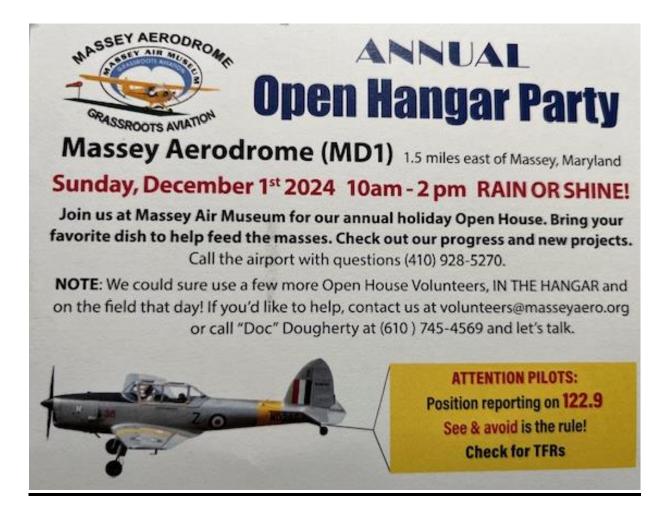
Thank you and send over those nominations please.



Donation QR Code for EAA Chapter 478

# **UPCOMING EVENTS**

Nov VMC – 16 November 2024 Mini YE Rally 2W6 – 16 November 2024 (after VMC) November Gathering – 19 November 2024 (Elections) Dec Board Meeting – 3 December 2024 Christmas Party – 17 December 2024 (121<sup>st</sup> Anniversary of the Wright Brothers first flight)



# EAA CHAPTER 478 MEETING MINUTES

1. The used AIRCRAFT tire bin/box is now positioned in front of the old "T Hangars" on the runway side. Please place your worn out tires in the box. These tires will be taken to a tire retreading company and the Chapter receives money for each tire, the amount varies with the size of the tire. 6.00x6 are especially sought after. The chapter may be able to get a tour of the retreading factory in Virginia in the future.

Ground Rules – Do not leave anything outside of the box or in the grass. If the box if full contact Chapter leadership and it will be emptied. If you have a large quantify of tires, contract Chapter leadership for a special pickup.

This is a fund raising effort for the Chapter, please pass the word to your aircraft owning friends to drop off their Aircraft tires to help the Chapter.

2. The Chapter has decided to stop paying for a Post Office Box. This is expensive for the few pieces of mail the Chapter receives each year. One of the Chapter Officers will use their home address for the mailing address to satisfy the EAA requirement for the Chapter to have a mailing address.

# **TREASURER'S REPORT**

#### Submitted by Don Byrne

EAA Chapter 478 Financial Report Through 3 October 2024			
Fund	Amount		
Petty Cash	\$304.00		
Savings	\$439.00		
Checking	\$23,726.73		
Total	\$24,469.73		

Note; The Chapter received a checking account deposit of \$ 1565.00 for 2023 Young Eagles credits. This was one of our better years! Thank you to all Young Eagle Volunteers in 2023.

# YOUNG EAGLES CORNER Young Eagle Coordinators – Keith King, Paul Gambacorta, Greg Stevens

Editor's Note: I am posting an email that many of us should have received on changes to the Young Eagle website, please note the information about passwords and the section I highlighted.

I am thrilled to announce that the new version of Young Eagles online registration is now live! The new tool, EAA Chapter Events, can be found at EAAChapters.org.

As a current user of YEDay.org, your profile has been migrated to the new tool. The new online software is directly integrated with your EAA.org account. Therefore, your credentials are as follows:

- Email: (Email)
- Password: EAA.org Password.

If you have forgotten your password, you can reset it by clicking "Forgot Password." This will reset your password for EAAChapters.org and EAA.org as your profiles are now one and the same.

Once you have logged into the new tool, please click your name in the upper right-hand corner to review your profile for accuracy. You will notice that you can now list multiple EAA chapters that you are affiliated with.

Although the new tool is now live, EAA is already working on Phase 2 development. This next phase includes the following:

- Additional event types (Flying Start, Young Eagles Build and Fly, Young Eagles Workshop)
- Non-EAA member access to the tool
- Optional function to reserve seats for first-time fliers
- Cleaning up reporting functions
- Many more enhancements for the user experience suggested to EAA during beta testing

With the go-live of the new tool, I'd also like to update you on the shutdown timeline for YEDay.org.

- October 1 Chapters cannot add new events to YEDay.org
- December 31 YEDay.org will be decommissioned
  - YEDay.org will redirect to the new site
    - EAA will work with chapters with any existing events scheduled for January 1 or later

If your chapter has any events scheduled in YEDay between now and the end of 2024, you may finish those events out on <u>YEDay.org</u>.

I appreciate all your patience during this transition period. Make no mistake, there will be hiccups, but the Young Eagles team is committed to developing a high-quality tool that will make your life easier as a Young Eagles volunteer.

#### EAA Digital Signature App - Important Note

During this transition period, your login credentials for the digital signature app will not change. They will remain the same as your <u>YEDay.org</u> login. When <u>YEDay.org</u> is shuttered, the login credentials will transition to match the EAA Chapter Events tool.

## Young Eagles Flown by Pilot in 2024

Pilots	6/8	6/20	6/21	7/19	8/10	9/7				Other	Total
Joe Arvai					2						2
John Attebury			4		5						9
Robert Bray	5	2			4					1	12
Don Byrne	4	1		4	5	4					18
Dan Byrnes											0
Richard Byrnes	3				4						7
Ken Cahill						4					4
Darryl Crawford					1	6					7
Michael D'Errico	3				2					1	6
Egon Frech	5	2				5					12
Paul Gambacorta	5			6	2	7				3	23
Don Gates											0
Grant Miller											0
Chris Moody		2				5					7
John Nelson					2						2
Robert Jake Piercy											0
Charles Quandt					4						4
David Rivera											0
Marc Slavin					4						4
James Spencer	6										6
Richard Van Natta	3										3
Brian White					5						5
Benard Wunder	6	2	8		3						19
Total	40	9	12	10	43	31	0	0	0	5	148

#### EAA Chapter 478 Young Eagles Total

Year	Flights	Year	Flights	
1992	6	2012	242	
1993	54	2013	79	
1994	44	2014	127	
1995	79	2015	248	
1996	89	2016	206	
1997	90	2017	205	
1998	47	2018	209	
1999	23	2019	112	
2000	113	2020	2	
2001	94	2021	65	
2002	90	2022	269	
2003	101	2023	164	
2004	66	2024	148	
2005	138	2025		
2006	97	2026		
2007	122	2027		
2008	51	2028		
2009	113	2029		
2010	156	2030		
2011	187	2031		
Total	1760	Total	2076	
<b>Grand</b> Tota	al	3836		

# **THE HOMEBUILDER'S CORNER**

#### RV-14A Almost Ready for First Flight Submitted by John Schultz

The RV-14A project that I briefed to the Chapter last February is on the cusp of first flight. If all goes well, the DAR, Darrel Watson, will inspect Monday 11/18, and it will be time to ready it for flight.

First engine start was almost perfect. The airplane has dual P-Mags which directly feed the Dynon Engine Monitoring System (EMS). I was reading twice the RPM due to the wasted spark nature of the P-Mags. One quick fix in the software, after a phone call for help to Dynon, and theoretically I'm now reading the proper tach. Second start, pictured here, worked 100%.



Weight and balance went well thanks to the club's scales. The aircraft sits 3deg nose up so I built platforms to sit under the scales under the mains for proper weight. I re-weighed the aircraft after filling the tanks and calculated a fuel moment arm about 1/2" different than Van's RV-14A.

I'll be beating up the pattern in Piedmont's Cessnas for proficiency this next week and if all goes well, you may hear "RV 9314A departing Runway 29 (or 11)" in the near future.

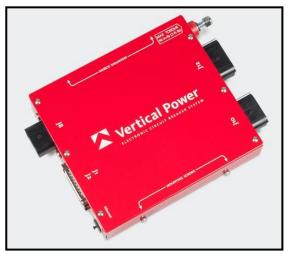
#### RV-7 Builders Report The Vertical Power System (VPX) Setup

Submitted by Tom Weiss

The Vans RV-7 "Kit" is really just an airframe kit, although it is very good, it doesn't cover the Firewall Forward, Electrical and Avionics systems. Later Vans kits, RV10, 12, 14 are more complete in varying amounts in these areas.

One of the first electrical system decisions I made was to use the Vertical Power System VPX Sport system. There are two VPX model, the Sport and the Pro. The difference is number of channels and of course the cost. I determined the Sport was adequate for the number of electrical devices I would have in the airplane.

The VPX is a computer that provides programmable circuit breakers for the electrical system. The Sport has the ability



to power 22 circuits plus 2 axis electric trim (I am only using pitch trim). My electrical system is pretty simple in that I am building a VFR aircraft but will have glass displays. The advantages of the VPX over a conventional electrical system that I liked were:

- 1. No circuit breakers required on the panel (frees up panel space)
- 2. Switches are not carrying power, each switch only provides a Ground connection to the VPX (allows any type of switch to be used)
- 3. Ability to set circuit breaker sizes anywhere between 1 Amp and 15 Amps.
- 4. Individual circuit load can be seen on the glass display
- 5. Total system current use can be seen at anytime on the glass display
- 6. A couple of system enhancements that are more of a cool feature but not super necessary
  - a. Starter circuit is disabled above 600 rpm
  - b. Flap extension circuit is disabled above a user defined airspeed (100 knots for me)
  - c. Trim motor speed is cut in half above a user defined airspeed (110 knots for me)
  - d. Flaps can be deployed to predefined stops with one momentary push button. Example one button push gives 10 degrees, another button push give another 10 degrees etc, but one up button push runs the flaps full up.

Before beginning the wiring of the systems in the airplane, the Vertical Power website has a "Planner" section that is free to use. This allows you to identify each piece of electrical equipment, the amps that will be required and if a switch will control it. Then using the Planner tool you can assign each load to a channel in the VPX and based on load and wire size determine circuit breaker rating to setup. The Planner takes some time to get through as you need to know the requirements for each device and wire length to get to each device. After the Planner is fully populated the tool will provide a layout of the VPX system, but of course after that there is a lot of wiring for both power, ground and switches. Once all of the wiring is complete and the devices are hooked up it is time to start checking circuits before putting power on any wire. I checked each circuit from the VPX pin to the device for continuity. I also confirmed each ground was run to the right place along with each switch input. I even check some circuits from the output connector on the VPX, for example, the light circuits I operated to ensure I had them wired properly. After I was confident I had each circuit wired properly I was ready to program the VPX.

The first step was to provide 12 volt power to the VPX. I removed the power wire that connects the VPX to the main buss bar. I then connected a battery to it and connected the battery to the aircraft ground lug on the firewall. So far no smoke. The VPX has a blinking light that shows it has power.

Next back to the VPX Website. There is a "Configurator tool" on the website that is downloaded to a Windows computer. The computer is connected to connected to the VPX with an Ethernet cable, once this connection is made a second light on the VPX starts to blink, we now have power and communications. The next step on the website is to download the configuration file that is specific to my electrical system design that comes from the Planner. This went well and loaded all of the channels to the VPX with all of my predefined information such as circuit name and switch needs.

After everything was loaded, I went through each circuit to define the circuit breaker value, define if it uses a switch and if yes which switch input to assign. I also set the airspeed for the flaps and trim. After this, I checked each systems from the switches on the panel and the sticks. I have now completed all of the programming and have checked each circuit. The Configurator has a simulation section where I set airspeeds and rpm to ensure each of the limit features worked properly. After some adjustments they worked as expected. I still have several devices that I haven't purchased to install and wire, but everything I have has worked.

In general this process was a challenge and required a lot of study of the VPX manuals, but after some time I got comfortable doing what was required. I am confident that what I have done so far is correct.

#### RV-8, N899CF moved to TN Submitted by Charles Fox



On 13 October a 26 ft box truck was rented and the RV 8 loaded, which took most of the day. A long 7 'X 3 ' wide X 14 " high wooden crate was loaded in first, which was used to hold numerous parts and block the fuselage from moving forward. Chocks were constructed around tires and then the fuselage was strapped to the truck. Wing cradle was reinforced and with wings slid on left side of truck and strapped to truck. Heavy duty styrofoam boxes were constructed around control surfaces and they were place under and around fuselage.

Truck loaded and on 14 October the 14 hr journey to Gallatin, TN commenced. Approximately \$5,500 was saved compared to using a commercial aircraft shipping company. RV 8 In its new home. The plan is to have it flying early 2025 and soon thereafter it may return to So MD if my reverse shoulder operation is as successful as hoped.



# THE FLYING/MAINTENANCE CORNER



Russ Tokarsi and Don Byrne working on the Aeronca Chief Project

<u>Editor's Note:</u> This article is detailed and too long to print in the Newsletter, but has a lot of good detail on a very challenging restoration project of a rare aircraft. The Zero will eventually be housed in Virginia. Note also the leader of this team is Dan Hammer a former EAA Chapter 478 Member and MD50 resident. Take some time to read this, the scope of the project makes building an Experimental Amateur Built look insignificant!

#### Mitsubishi Zero A6M3 Restoration Project Engine runs in preparation for first flight

Submitted by Don Byrne

Here's an interesting article I stumbled across about Legend Flyers at Paine Field, Everett, Washington that is restoring the world's only Mitsubishi Zero A6M3 for the VA Military Aviation Museum. The project manager for Legend Flyers is our past CRE resident Dan Hammer who can be seen in many of the pictures in the article.

Tom, this might make a good newsletter addition about one of our previous Chapter 478 members.

https://www.militaryaviationmuseum.org/zero-the-almost-first-flight/



David Rivera working to improve the approaches to the MD50 Runway

#### FOR SALE

EAA Chapter 478 has received a donation of aviation supplies from Mr Steve Abbot. His wish was to sell these items and use the proceeds for youth programs in our chapter (workshops, build and fly program, etc.).

Here's a list if the items with a suggested selling price. If you think the price is too high, make me an offer. Details and purchases can be made by contacting Don Byrne at <u>byrnehangar@comcast.net</u>

David Clark H10-40 headset \$120

Stratus 2S ADS-B In \$300

Garmin GPS MAP 496 \$500

Life Raft, Survival Products Incorp 4 Person \$700

Champion Oil Filters CH48108-1 (QTY 4) (\$48.50 at AC Spruce) \$ 160

Aircraft Cover for Cirrus SR20, Bruce's Custom Covers \$200

Nose Tow Bar \$100

CHOC-IT Collapsible Wheel Chocks FREE

Twist In Tie Down Anchors (QTY 2) FREE

#### FOR SALE

I have a wing cradle available for free at St Mary's. I will post on Vans boards after this next week if no one here needs it (wings not included). Give me a call, John Schultz, (703) 389-1009



I also have a 20x10 carport frame that I covered in plastic to create paint booth. It's a cheap Amazon metal frame which I wouldn't trust in outside winds without very sturdy guide wires, but it worked great in the garage. Some of the poles are blue-ish, others have not been touched. Free to a good home. I'll be taking it to the metal bin in December if no one wants it.

Give me a call, John Schultz, (703) 389-1009



New In Box: I bought a Harbor Freight engine stand with the idea of making a fuselage rotisserie but never did. This one is free to any aircraft builder. Give me a call, John Schultz, (703) 389-1009

# **CHAPTER 478 CALENDAR OF EVENTS**

date	Event
19-Nov	EAA Chapter 478 Members Meeting @ 6-8 pm @ 2W6 Terminal
28-Nov	Thankskiving Holiday
3-Dec	EAA Chapter 478 Board Meeting 6-8 pm @ 2W6 Terminal
1-Dec	Massey Aerdrome Fly In 10 am - 2 pm
14-Dec	EAA Chapter 478 VMC Meeting 9-10 am @ 2W6 Terminal
17-Dec	EAA Chapter 478 Member's holiday Party 5-8 pm @ 2W6 Terminal
25-Dec	Christmas Holiday
1-Jan	New Years Day Holiday

### In the Chocks

Thanks for all of the inputs this month, looking forward to seeing all of you at a Chapter event soon.

Build, Repair and Fly Safe. Tom Weiss – Editor

*Cockpit Chatter* is published monthly by the Experimental Aircraft Association (EAA) Chapter 478 solely for the dissemination of information and ideas to the membership. Gatherings are held on the Third Tuesday of the month at ^:30 PM in the Patuxent River Test and Evaluation Museum. Membership is \$20.00 per year and requires an active membership in EAA. Any opinions expressed herein are strictly those of the author and do not necessarily reflect the opinions of the chapter or the Experimental Aircraft Association.

<u>Chapter Officers</u> President: *Darryl Crawford 2024-25* Vice President: Paul Gambacorta 2023-24 Secretary: Treasurer: *Don Byrne 2023-24* <u>Committee Chairs and Chapter Advisors</u> Social Chairman: John Reinert, Sid Wood, Membership Chairman: Program Coordinator: Paul Gambacorta Young Eagles: Keith King, Paul Gambacorta, Greg Stevens Flight Advisors: *Bill Posnett, Joe Arvai* Technical Counselors: Sid Wood Newsletter Editor: *Tom Weiss* Web Editor: Chris Moody Tool Crib Committee: Colin Cline Board Members Sid Wood 2024-25 Chris Moody 2023-24 Bill Englehart 2023-24 John Attebury 2023-24 John Reinert 2023-24 Greg Stevens 2023-24 Keith King 2023-24 Past President Tom Weiss 2024-25

<u>Chapter Web Address</u> <u>https://chapters.eaa.org/EAA478</u>