

EAA Chapter 478 COCKPIT CHATTER

Lexington Park, MD December 2024

A Silver EAA Chapter



EAA Chapter 478 Monthly Gathering

May 20, 2025

Program: Pax ATC Briefing
2W6 Terminal Building Conference Room
6:00-6:30 PM Social
6:30 PM Program Begins

In this edition of Cockpit Chatter

From The Top – Weather challenges and Young Eagles
Board of Directors Meeting Minutes – 6 May 2025
Treasurer Report – Current Status
Young Eagles Corner – International Young Eagles Day in June
The Homebuilder's Corner – RV-14A First Flight – Part 2
The Flying/Maintenance Corner – CFI Musings, VMC topics
For Sale – Items donated to the Chapter and Items from Jim Davis

FROM THE TOP

Darryl Crawford, President EAA Chapter 478

We cancelled the mini YE events for April and May due to weather. Getting Young Eagle Flights started this year has proven to be a challenge. Our first large Young Eagle Rally will be in 3 weeks and hopefully the weather will cooperate. We will need participation from many Chapter Members to ensure this event is run safe and we give the opportunity for a meaningful flight experience to as many young folks as possible.

The program this month will be a discussion with the Pax ATC concerning flying around and in their airspace. This is a great opportunity to get your questions answered about the local airspace and the rules that pertain to it. If you have other questions about airspace use, this would be an opportunity to ask those questions.

Our annual Open Hangar Night is coming up in June. For all members who have their airplanes based at 2W6 and would like to show off your pride and joy contact Paul Gambacorta.



QR Code to donate to the Chapter

UPCOMING EVENTS

May Gathering – 20 May June Board Meeting – 3 June 2025 June Young Eagle Rally – 7 June 2025 Open Hangar Night – 17 June 2025 June VMC – 21 June 2025

EAA CHAPTER 478 MEETING MINUTES

EAA Chapter 478 Board of Directors Meeting May 6, 2025 – 6:30 PM

Attendees: John Attebury, Darryl Crawford, Tom Weiss, Don Byrne, BJ Hall, Greg Stevens, Rich Byrnes, Sid Wood, Paul Gambacorta, Keith King, Chris Moody

Discussion:

- 1. Build and Fly will be scheduled for next year. The plan will be to provide one airplane for each student. The students will be responsible for purchasing the radio equipment. Plan is for 10 students.
- 2. EAA Memorial Wall nomination for Donna Stewart, cost \$500, will be cost shared, Chapter will donate \$250.
- 3. YE Credits for 2024 is \$910, must be spent for supplies that support the YE Program.
- 4. Chapter has 50 paid members.
- 5. New YE website is up and running, accessed through EAA.ORG/Chapter website. This is working better now after more use.
- 6. Possible future programs on Wilkerson Tire Recycler and an update on the airport future.
- 7. YE after May VMC on 17 May. Still looking for pilots.
- 8. 2025 major events:
 - a. YE Rally on June 7th @ 2W6
 - b. YE Rally on the Saturday of Labor Day Weekend @ 2W6
 - c. Open Hangar June 17th
 - d. Also Ryken and BJ Hall's group for smaller YE events
 - e. Cambridge Wags, Wings and Wheels, 9 August.

- f. September Picnic
- g. Chapter Fly-Out to Gettysburg for Pancake Breakfast first weekend of June.
- 9. Need to merge Newsletter Email Distro list, membership roster and treasurers list.
- 10. Membership Dues are due for 2025
- 11. IRS Tax return has been done and the State Tax Return has been done.
- 12. We have been notified that we are a "Bronze" Chapter this year. But this may be wrong. EAA is working to adjust this to "Gold", we have not been officially notified of the change. Adjourned: 7:12 PM

TREASURER'S REPORT

Submitted by Don Byrne

EAA Chapter 478 Financial Report Through 30 April 2025		
Fund	Amount	
Petty Cash	\$39.40	
Savings	\$439.00	
Checking	\$25,211.28	
Total	\$25,689.68	

Note from Treasurer:

It's that time of year to pay Chapter dues! The amount hasn't changed, still the low low price of \$20.00. There's three ways to pay;

- 1) See the Chapter Treasurer at a meeting (VMC, Board meeting or Chapter meeting) and slip him cash or a check
- 2) Send a check to; Don Byrne 12108 Double Tree lane Lusby, MD 20657
- 3) use the PayPal link on our Chapter Website (https://chapters.eaa.org/eaa478)

I will repeat this request in the March newsletter then start sending emails reminding people of dues delinquencies.

Help support our Chapter, Don Byrne EAA 478 Treasurer

YOUNG EAGLES CORNER

Young Eagle Coordinators – Greg Stevens, BJ Hall, Paul Gambacorta

The large June Young Eagle Rally is scheduled for June 7, 2025. This event will be our opportunity to show the wonders of flight to a large number of young folks. The number of our members and friends that participate, the more young folks we can fly. You will see notices coming from the Young Eagle system for volunteer opportunities and please volunteer to help by flying or as a ground volunteer. This event is normally an event that has great weather and the number of Young Eagles is only limited by the Chapter's ability to fly them. Please talk to Greg Stevens or BJ Hall at the Gathering and let them know how you can help on June 7th.

Young Eagles Flown by Pilot in 2024

Pilots	6/8	6/8	6/20	6/21	7/19	8/10	9/7	Oct-Nov	Other	12/7	Total
Joe Arvai						2					2
John Attebury				4		5		4		1	14
Robert Bray	5		2			4			1		12
Don Byrne	3	1	1		4	5	4				18
Dan Byrnes											0
Richard Byrnes	3					4					7
Ken Cahill							4				4
Darryl Crawford						1					1
Michael D'Errico	2	1		3		2	6	3	1	2	20
Egon Frech	5		2				5				12
Paul Gambacorta	4	1			6	2	7		3		23
Don Gates											0
Grant Miller								1			1
Chris Moody			2				5	4			11
John Nelson						2					2
Robert Jake Piercy											0
Charles Quandt						4					4
David Rivera										1	1
Guy Sappah				2	4			1			7
Marc Slavin						4					4
James Spencer	4	2								2	8
Richard Van Natta	2	1		8							11
Brian White						5					5
Benard Wunder	6		2			3		4		2	17
Total	34	6	9	17	14	43	31	17	5	8	184

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	184	
2005	138	2025		
2006	97	2026		
2007	122	2027		
2008	51	2028		
2009	113	2029		
2010	156	2030		
2011	187	2031		
Total	1760	Total	2112	
Grand Total 3872				

THE HOMEBUILDER'S CORNER

RV-14A Phase 1 Flight Test Part 2

Submitted by John Schultz



Last month I described my first flight in my new RV-14A. Following the first flight and replacement of my Dynon Skyview system (see last month's update), I structured my flight tests in the following order:

Flight 2: Lycoming called for a 2.5 hour break-in process of which I was able to complete the first hour and some during the maiden flight. I continued the engine break-in process, checked out the new displays, performed non-turning stalls with flaps up and down and calibrated the AoA system for the rest of flight test. My only non-aerodynamic stall warning indicator was AoA, therefore AoA calibration was a priority.

Flight 3: Worked on the trim and autopilot system in preparation for performance testing. Pitch trim sensitivity was too high and it took several attempts to dial it down to an acceptable.

Flight 4: Level flight and climb performance with wheel fairings off.

Flights 5-8: Installed wheel fairings. For those familiar with USNTPS, flights 5-9 were full on DT-II type tests in different configurations. I completed static and dynamic stability and control tests, level flight and climb performance tests and stall testing.

Flight 9: Pitot-static test. In a perfect world, the pitot-static test would occur neat the very beginning of the program. However, since I was the 11,000th+ RV built, I made the assumption that "they" pretty much had the pitot-statics worked out. As it turned out, my assumption was correct thus my data from the previous flights was still valid!

The remaining flights consisted of take-off and landing performance, best glide testing, spins and high altitude (17,500 MSL) performance testing.

In the end, I signed off the task-based flight test program in 39 hours. However, several of those hours were spent flying the aircraft at high power settings to seat the piston rings and stabilize my oil consumption. If I did not have to break in a new engine, I think I could have completed the task-based flight test program in 25 hours. I need to qualify that statement with the notion that I was flying a proven design and I was VERY aggressive with time management. There was not a lot of need for fly-fix-fly.

I'm a fan of EAA's Flight Test Manual and would be more than willing to discuss your Phase 1 plan. Next month, I'll write about level flight performance and results.

THE FLYING/MAINTENANCE CORNER

Editor's Note: EAA Chapter 1041 has been kind enough to share their Newsletter with us, the below was in their May Newsletter and has been added here to encourage all of you to consider the message being sent by the CFI Musing. TAW

The Musings of a CFI

By Jason Pape – EAA Chapter 1041 Gettysburg

It's a Bird, It's a Plane, It's... THAT WAS A PLANE!

This month I'd like to dive into "see and avoid" and overreliance on ADS-B. Once again, my musings are driven by a recent accident where a Cessna 172 collided with a Lancair in the traffic pattern. Miraculously, the occupants of the Cessna walked away from the accident. Sadly, the occupants of the Lancair perished.

See and avoid is the basis for traffic separation during VFR flight. There is a litany of guidance on it. It is required knowledge for the Private Pilot written and practical exams. We are taught how to scan for traffic and the limitations of our own eyeballs. There are established right-of-way rules and standard traffic pattern entries all to help us with both the see and the avoid.

Those that know me well have probably heard me rant about learning to fly with a glass cockpit and the overreliance on the magenta line that can result. But traffic avoidance is another place where I think we can become over-reliant on technology. ADS-B is fantastic. It gives us a level of situational awareness that many of us in older aircraft never had before. This includes traffic, right on my GPS or iPad. The problem is, it's not foolproof. ADS-B traffic display is dependent on 3 things. One, your aircraft must be equipped with an ADS-B "in" receiver, whether it is permanently installed, or a handheld unit like a Stratus. Next, other traffic in the area must be equipped with an ADS-B "out" transmitter, or, at a minimum, a functioning Mode C transponder. Third, for those aircraft with only a Mode C transponder, or for traffic that is more than a couple of miles from you, ATC must be receiving and rebroadcasting the positions of those aircraft using TIS-B (Traffic Information Service – Broadcast).

I want to talk about a few incidents that I personally had, one before I had ADS-B, the others after. These highlight the limitations of both "see and avoid" and ADS-B.

In 2016 I learned the importance of keeping your head on a swivel when flying. I had just purchased my plane and was flying it home for the first time. Like most older aircraft in 2016, I had no ADS-B capability. I had chosen a route that would take me across the mountains and overfly Gettysburg before making a turn down to Westminster. As I crossed the ridges west of Gettysburg, I started a decent from 5500' to 3000'. As I cleared the last ridgeline, I caught a flash of yellow just in time to see a Piper Cub pass directly below me. We had about 500' of separation. Had I been lower or it been higher, there would have been no time to react. The reason I bring this incident up is that, even if I had ADS-B in capability, I likely would not have seen this plane on my display. This was an old Piper Cub in airspace that does not require ADS-B or a transponder. The chances are pretty good that this plane was not equipped in a manner where ADS-B or TIS-B would have shown it. And even in the old days of no traffic info, I didn't see the plane until it was too late.

These next 2 happened in the vicinity of the Frederick airport. One happened in 2021 and one in 2023. Both happened after the ADS-B requirement went into effect. These were both Young Eagles flights. One flight northwest of Westminster, just outside of the Mode C ring for the Baltimore-Washington Class B (I later confirmed that this plane landed at Frederick). The other was to the west of Frederick, towards Harpers Ferry, inside the Mode C ring. On both flights, I had planes pass just below me. In both instances, there was

about 1000' or so of separation. Neither of these planes showed on the ADS-B in. I know my transponder was receiving because I had other traffic on the display, just not those planes that mattered. Both planes required ADS-B out capability.

This final incident was kind of wild. It is common for the Frederick tower to have pilots setup for a long straight in for runway 23. My son and I were on that long final. We were watching another Cessna inbound from Westminster on a converging course with us. We had it in sight and on ADS-B. That aircraft called the tower and was told to follow us. Shortly after, we heard radio calls for a third aircraft to extend downwind and look for the second plane and us. We heard pilots saying they had aircraft on ADS-B, but never heard "traffic in sight". While my son continued the approach to land, I kept an eye on the plane that I had in sight that was told to follow us and was scanning for the third. Then suddenly, I saw it. We watched in real time as those two planes converged. They were converging, rapidly. At the last second, they both took very aggressive evasive action and disaster was avoided. We broke off our approach and let ATC get things settled down. After landing, we were able to meet up with the instructor onboard the second plane, the Cessna inbound from Westminster, and we did a debrief. Turns out there was a fourth plane involved. Another plane was on downwind, much close to the airport. That is the plane that ATC had been talking to and the one the instructor had on ADS-B. The instructor on that second plane saw the third plane at the last second and took the evasive action.

ADS-B provides fantastic situational awareness, but I think it would be good for all pilots to reflect a bit...

- Do I rely too much on ADS-B for spotting traffic?
 - Has ADS-B ever lied to me?
 - Am I really looking outside enough for traffic?
- How can/do I get my passengers to help me spot other planes?
 - Have any good ideas you can share on spotting traffic?

I'd like to close by taking a crack at that last question. See and avoid can be hard. The FAA says we should incorporate "looking for traffic" into our safety briefing. I certainly do. I go one better though. I don't just ask passengers to look for other planes. I tell any passenger that, if they spot another plane before me, and point it out, I will buy them a beer (airlines at 35000' don't count). It gives them an incentive to look and me an incentive to look harder. Lucky for me, so far, I am only down one beer. Then again, my wife hates beer, so I get off cheap. I do dread the day a Young Eagles kid beats me though!

May 2025 EAA Chapter 478 VMC meeting

Editor's Note: Paul Gambacorta has done a great job of organizing the VMC topics for each month. If you are not attending you are missing a great opportunity to increase your piloting skills and knowledge. You should be able to review each of the video's below using the links provided.

Topic One - Lost and Unlucky (EAA 3:52)

- Cessna 170A minimally outfitted
- 330 nm flight between non-towered airports
- Digitized Sectional chart, cell-phone, Garmin GPS map
- Good weather clear and calm
- Two-hours later, lose map data

- Can't find airport and fuel getting low
- What would you do?

Topic Two – Collision Course (EAA 3:10) Scenario Slide

- Flying rented Piper warrior with ADS-b
- Uncontrolled airport, single runway 13/31
- Good Weather
- Announce departure on 31 for closed traffic touch & go practice
- On touch & go climb-out observe inbound aircraft on ADS-b at 2 o'clock descending quickly
- Make a radio call to inbound traffic asking if they have you insight.
- Reply NO. Appear to be on a collision coarse.
- What would you do?



Topic Three <u>- Rob Holland Crash Preliminary Report</u> (YouTube 4:10)

- Airshow practice at Langley AFB, VA
- On normal landing approach. Leveled off at 50 ft. Pitched up, rolled 90-deg left and impacted.
- Manufactured aircraft modified for counter-weight adjustment.
- March 2025 condition inspection
- Left elevator counter-weight access plug backed-out and jammed flight control.
- No safety wire provision.

Topic Four - Can You Take Off With Another Plane On The Runway? (Bold Method)

- Tower controlled airport. Aircraft cleared aircraft to takeoff without delay while landing aircraft had not cleared the runway.
- Aborted take-off, landing aircraft cleared runway and towered re-cleared for take-off

- According to FAA JO 7110.65 (3-9-5), "Anticipated Separation."
- However, if it doesn't feel right Ask ATC.
- Takeoff abort procedure: Power Idle Maintain Directional Control Maximum Necessary Braking

Topic Five – Pilot Short Story | The French Disconnection (AOPA / YouTube 4:04)

- TB Epislon aircraft
- Following fly-over at football field
- Left and nose gear extended. Right landing gear failed to extend.
- Accomplished emergency extension and g-maneuvers
- Loitered for 1.5 hours. Chose Raliehg Exec airport and pre-coordinated crash rescue
- Conducted gear up landing in grass adjacent to runway.
- Clamp failure resulted in electrical cable and hoses to catch on gear.
- Minor damage, prop and engine required inspection.

Topic Six - Caution Helicopter Wake Turbulence (YouTube) (0:31)

- Common to have interaction with helicopter operations at 2W6.
- Video shows Bell helicopter approach for landing aand following Cessna caught in wake rolls right and impacts ramp area.
- Exercise extreme caution for wake from rotary wing aircraft!

Topic Seven <u>— Density Altitude — The Triple H Effect (AOPA / YouTube</u> 4:22)

- Heat, Humidity and Altitude all lower air density and increase density altitude
- Displaces air particles
- Triple H effect
- Tips
 - o Fly light
 - O Determine proper fuel/air mixture. Apply fuel power and lean for peak rpm
 - o Fly indicated airspeeds. Ground speed is faster
 - Use long runways. If you haven't reached 70% rotation speed abort.
 - o Accelerate in ground effect.
 - o Anticipate quicker deceleration
 - o Fly early for cooler air

Quiz - Density Altitude

- 1. <u>A</u>
- 2. **B False**
- 3. <u>B</u>
- 4. <u>A</u>
- 5. <u>C</u>
- 6. <u>**E**</u>
- 7. **B False**
- 8. <u>**B**</u>

9. <u>B</u> 10. <u>F</u>

VMC Question of the Month

- ACS for Private/Commercial Pilots identify the following Before takeoff Checks
- Potential powerplanr failure or other malfunction
- Other detailed guidance:
 - Abort Point
 - Decision Altitudes: flaps & gear retraction; straight ahead emergency landing
 - o Return to airport
 - o Emergency landing locations
 - o Emergency procedures: engine power loss; fire

FOR SALE

Our EAA Chapter received a donation of aviation supplies from Adml Steve Abbot with a request that proceeds from selling these items would be used to support our Chapter's youth programs.

Here's a list of items that the Chapter still has for sale with suggested selling prices. If you think the price is too high, make an offer. Details and purchases can be made by contacting Don Byrne (Treasurer) at byrnehangar@comcast.net or 301-602-7403. Items can be delivered to the Chapter meeting or other arrangements can be made.

Stratus 2S ADS-B In receiver \$200

Stratus 1 ADS-B Receiver \$50

Garmin GPS MAO 496 (with manul, antenna and charge cable) \$400

Life Raft, Survival Products Inc, 4 person \$500

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

Don Byrne EAA Chapter 478 Treasurer

For Sale items submitted by Jim Davis. Contact information: 301 904 5065 or jidavispe@cs.com

Tom: Please add following to your next newsletter.

Lost Medical and forced to liquidate aircraft and miscellaneous equipment and supplies. Included:

- 1. 1969 Piper Colt converted to taildragger with Lycoming O-320, 160 hp; 1600 SNEW
- 2. 1940 Stenson 10A. Project plane with new Ceconite covers and paint. Converted to Lycoming D290 125 hp
- 3. ICOM hand held com with new battery
- 4. Air Compressor 5.5 cf; 100' air hose included
- 5. Engine Force Air Heating System with Propane Tank
- 6. Refrigerator Stand up. Free to customers
- 7. New Overhauled AH and DG instruments (by Rudy Electronics)
- 8. New Sky Beacon ADSB out
- 9. Narco Com 11
- 10. Garmin 396 GPS with roadway software
- 11, King DME
- 12. Stratus ADSB in portable receiver
- 13. Gas Power Tug suitable for aircraft up to 6000 lbs
- 14. Ray Marine RL 70C Color Moving Map GPS Monitor with 4KW Open Array Antenna {4'-0"}

Interested parties call Jim Davis 301 904 5065 or <u>jidavispe@cs.com</u>

CHAPTER 478 CALENDAR OF EVENTS

Date	Day	Event
20-May	Tuesday	EAA Chapter 478 Members Meeting 6-8 pm @ 2W6 Terminal
21-May	Wednesday	US Naval Academy Graduation, Annapolis MD
22-May	Thursday	US Naval Academy Graduation, Annapolis MD
24-May	Saturday	Harrisurg Air Show, Harrisburg PA / Stafford Airshow, Stafford VA
25-May	Sunday	Harrisurg Air Show, Harrisburg PA / Stafford Airshow, Stafford VA
26-May	Monday	Memorial Day Holiday
31-May	Saturday	Gettysburg EAA Chapter 1041 Spring Fly-in/Drive-in Pancake Breakfast 8- am - 12 pm
1-Jun	Sunday	Gettysburg EAA Chapter 1041 Spring Fly-in/Drive-in Pancake Breakfast 8- am - 12 pm
3-Jun	Tuesday	EAA Chapter 478 Board Meeting 6-8 pm @ 2W6 Terminal
6-Jun	Friday	World War II Weekend, Reading PA
7-Jun	Saturday	Young Eagles Day 9 am - 1 pm @ 2W6 Terminal, World War II Weekend, Reading PA
8-Jun	Sunday	World War II Weekend, Reading PA
17-Jun	Tuesday	Open Hangar Night 5-7 pm @ 2W6
21-Jun	Saturday	EAA Chapter 478 VMC Meeting, Ocean City MD Air Show
22-Jun	Sunday	Ocean City MD Air Show
28-Jun	Saturday	Massey Antique Fly-in, Massey MD / Dayton Airahow, Dayton OH
29-Jun	Sunday	Dayton Airahow, Dayton OH
8-Jul	Tuesday	EAA Chapter 478 Board Meeting 6-8 pm @ 2W6 Terminal

In the Chocks

Thanks for the inputs this month, I could always use more. 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 6:30 PM in the St. Mary's County Airport Terminal Building Conference Room. 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.

Chapter Officers

President: *Darryl Crawford* 2024-25 Vice President: Rich Byrnes 2025-26

Secretary:

Treasurer: Don Byrne 2025-26

Committee Chairs and Chapter Advisors

Social Chairman:

VMC Coordinator: Paul Gambacorta Program Coordinator: Paul Gambacorta Young Eagles: Greg Stevens, BJ Hall Flight Advisors: *Bill Posnett, Joe Arvai* Technical Counselors: Sid Wood Newsletter Editor: *Tom Weiss* Web Editor: Chris Moody Tool Crib Committee: Colin Cline

Chapter Web Address

https://chapters.eaa.org/EAA478

Board Members

Sid Wood 2024-25 Chris Moody 2025-26 Jeff Panko 2025-2026 John Attebury 2023-24 BJ Hall 2025-2026 Greg Stevens 2025-26 Keith King 2025-26 John Pechon 202526

Past President Tom Weiss 2024-25