



EAA Chapter 478

COCKPIT CHATTER

Lexington Park, MD

July 2023

A Bronze EAA Chapter



EAA Chapter 478 Monthly Gathering July 18, 2023, 6:30 PM, 2W6 Terminal Building Conference Room

Program: Flight testing experimental aircraft for Wisk, a company developing all-electric VTOL aircraft, presented by Aaron Rouland

In this edition of Cockpit Chatter

From The Top –Cambridge YE Rally - finally

Board of Directors Meeting Minutes – 11 July 23

Treasurer Report – Current Status

Young Eagles Corner - 30 Young Eagles Flown – John Attebury, Ryken Flights

The Homebuilder's Corner - Challenger II and RV7 Builders Reports

The Flying/Maintenance Corner -

For Sale – Free wire

FROM THE TOP

Tom Weiss, President EAA Chapter 478

The Young Eagles Rally at Cambridge was finally conducted after two cancellations earlier in the year due to weather. The Rally was held on July 1st, but even this day started off with uncertain weather. A total of 34 Young Eagles were flown by a group of pilots from our chapter and additional EAA members from the Eastern Shore. Thanks to everyone who worked to make this event successful. NOTE: Pictures from all of the recent Young Eagle events are now available via links on the Chapter's website home page.

The Chapter is moving forward with planning a Chapter Build and Fly program. If you are not familiar with the Build and Fly program go to the EAA.org site and check it out. The Museum will host this event, we have Chapter volunteers and we have some interest from the local AMA chapter. We have received the aircraft kit from EAA, waiting for the electronics and other components. We have also ordered an additional airframe kit that has not arrived. This will be a great program, but the planning is critical to

ensure it is educational and enjoyable for the Young Eagles.

We need a volunteer to provide a container for worn out aircraft tires that can be re-treaded. The container would be placed outside of Sid Wood's hangar as agreed to by 2W6 management. Not anything too elaborate, simply something with Signage and a lid to protect from the elements. It should hold about 20 tires. These tires can be recycled for \$5.00. This tire recycling effort is a fund raising opportunity for the Chapter. If you are willing to build a box or if a group of Chapter Members are willing to build a box, let me know.

There have been two significant updates to the Chapter Website (<https://chapters.eaa.org/ea478>) thanks to the hard work by Chris Moody. The first I mentioned above is the posting of the pictures from our Young Eagle Rallys. The second is we now have a "Donate" button on the page for general donations to the Chapter, this is different from the Chapter membership button. Membership through the website is \$21 per year, the donate button allow any amount to be entered. We have had several people ask how they can donate in the past and haven't had a good method, this should enable donations.



Donation QR Code for EAA Chapter 478

If you are going to AirVenture, have a safe trip and enjoy the event. I look forward to hearing about it when you get back.

Enjoy the weather, I look forward to seeing you at an upcoming Chapter event.

UPCOMING EVENTS

July Gathering – 18 July
August Gathering – 15 August
August VMC Meeting – 19 August
Young Eagles Rally 2W6 – 1 September
Picnic – 16 September

EAA CHAPTER 478 MEETING MINUTES

EAA Chapter 478 Board Meeting Minutes
July 11, 2023

Attendees: John Attebury, Don Byrne, Darryl Crawford, Paul Gambacorta, Chris Moody, Tom Weiss, Sid Wood

1. July Program will be Aaron Rouland talking about flight testing EVTOL aircraft at Wisk Corporation.
2. August program will be John Shultz talking about his RV-14A Project.
3. The picnic will be 16 Sep at MD50, 4:00 PM start
4. Build Fly Program – Half of the kit from EAA has arrived, it is mostly the airframe kit. The rest which is the electronics is on the way. The second airframe kit we ordered is backordered but paid for.
5. VMC for July is the 15th. Young Eagle Flights will be done using only paper forms.
6. August VMC and Young Eagle Flights will be the 10 Aug
7. The Chapter is looking for volunteers that can be a flight advisor and additional Tech Counselors.
8. Young Eagle Rally at Lawrenceville VA is 23 Sep.
9. Fly Out to Dynamic Aviation in Bridgewater VA, working a plan for this in the Fall. Dynamic is restoring the first Air Force One aircraft.
10. The Chapter has cancelled the Zoom subscription, this will save us \$150 per year.
11. Discussion on how to make Young Eagle Events better
 - a. Everyone agreed the flying part of Young Eagle events is great
 - b. How to make them better and keep people in the building longer?
 - c. Flight Simulator that is available is a possibility
 - d. Other possible activities, open for suggestions
12. Question came up of how people could donate to the Chapter, they can't pay for the Young Eagle ride. Work to add a donation tab to the website. This is now available.
13. Coordination of the Ryken Young Eagle Flights is taking a huge amount of time, maybe Ryken should donate to the Chapter since they are charging tuition for the flight academy program?
14. The Bird Dog restaurant at the airport enjoys the YE events and asks that we keep them informed of our schedule and they will adjust their schedule to be open when needed.
15. Later this year we will have a review of the YE.org site and how pilots and volunteers need to access it, this will be done at one of our Gatherings.

TREASURER'S REPORT

Submitted by Don Byrne

<u>EAA Chapter 478 Financial Report</u> Through 30 June 2023	
Fund	Amount
Petty Cash	\$11.40
Savings	\$439.00
Checking	\$21,369.19
Total	\$21,819.59

YOUNG EAGLES CORNER

Young Eagle Coordinators – Darryl Crawford/Keith King

**John Attebury is the first Chapter Member to fly 30 Young Eagles this year.
Congratulations John.**





PIREP: Ryken High School Young Eagle Flight

Submitted by Bernie Wunder

Ryken HS is sponsoring three aviation camps this summer and the first one was completed on June 30th. There were eight happy campers that came over to MD50 for a Young Eagle ride. The weather (smoke and haze) almost cancelled the event, but our YE coordinator and pilots pressed on. Since these kids had flown aircraft simulators during the week, they were familiar with flying. For the two kids I flew, I was able to demonstrate stalls, somewhat steep turns, etc. and one of them wanted to try himself. This was a first for me since most YE flights are fairly straight and level. We flew over the high school, got a picture, and then on to St Clements Island for a history lesson. Overall, my flights were enjoyable and educational, I think, for these young pilots!



Young Eagles Flown in 2023

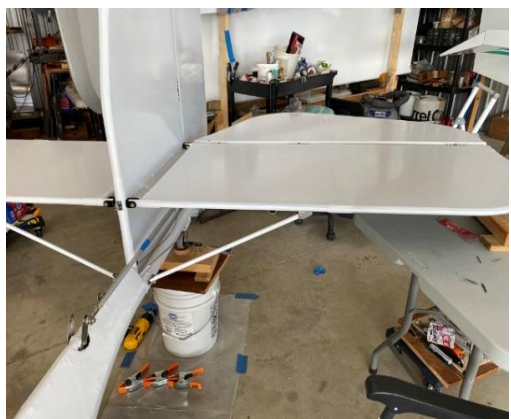
Pilots	3/18	6/10	7/1							Other	Total
John Attebury	3										3
Scott Boas											0
Robert Bray											0
Don Byrne											0
Dan Byrnes											0
Richard Byrnes											0
Matt Carruthers											0
Michael D'Errico	2										2
Egon Frech	3										3
Paul Gambacorta											0
Don Gates											0
Robert Lightstone											0
Grant Miller	2										2
Chris Moody											0
John Nelson										1	1
Robert Jake Piercy											0
William Posnett											0
David Rivera											0
Ron Shippee											0
Ronald Surfield											0
Benard Wunder	2										2
Total	12	67	34	0	0	0	0	0	0	1	13

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	13
2004	66	2024	
2005	138	2025	
2006	97	2026	
2007	122	2027	
2008	51	2028	
2009	113	2029	
2010	156	2030	
2011	187	2031	
Total	1760	Total	1777
Grand Total		3537	

THE HOMEBUILDER'S CORNER

Challenger II Builder Report – July 2023

Submitted by Sid Wood



I am Building a Quad City Aircraft Challenger II E-LSA 2007 Kit:

I installed the left and right Horizontal Stabilizer Panels along with the Horz. Stab. Struts and SB2 Brackets. Installed the left and right Elevator Panels; secured the Elevator hinges with AN3-4 bolts and AN310-3 Castle nuts. Cotter Keys will follow when other alignments are done.



I reworked the PVC Rudder Stops to obtain 30-degrees left and right rudder movement and clear the Elevator Panels by 1-inch per the construction plans. Rudder Stops installation is complete.



I fabricated the two Elevator push rods per the construction plans and adjusted to obtain 30-degrees up and 25-degrees down. Moving the Elevator using the Stick in the Cockpit was a milestone.



Left PVC Rudder Stop is engaged

Elevator Push Rods are connected to the Elevator Panels



I fit Check for the Cockpit Doors after fabric cover and paint was completed; no adjustments needed.

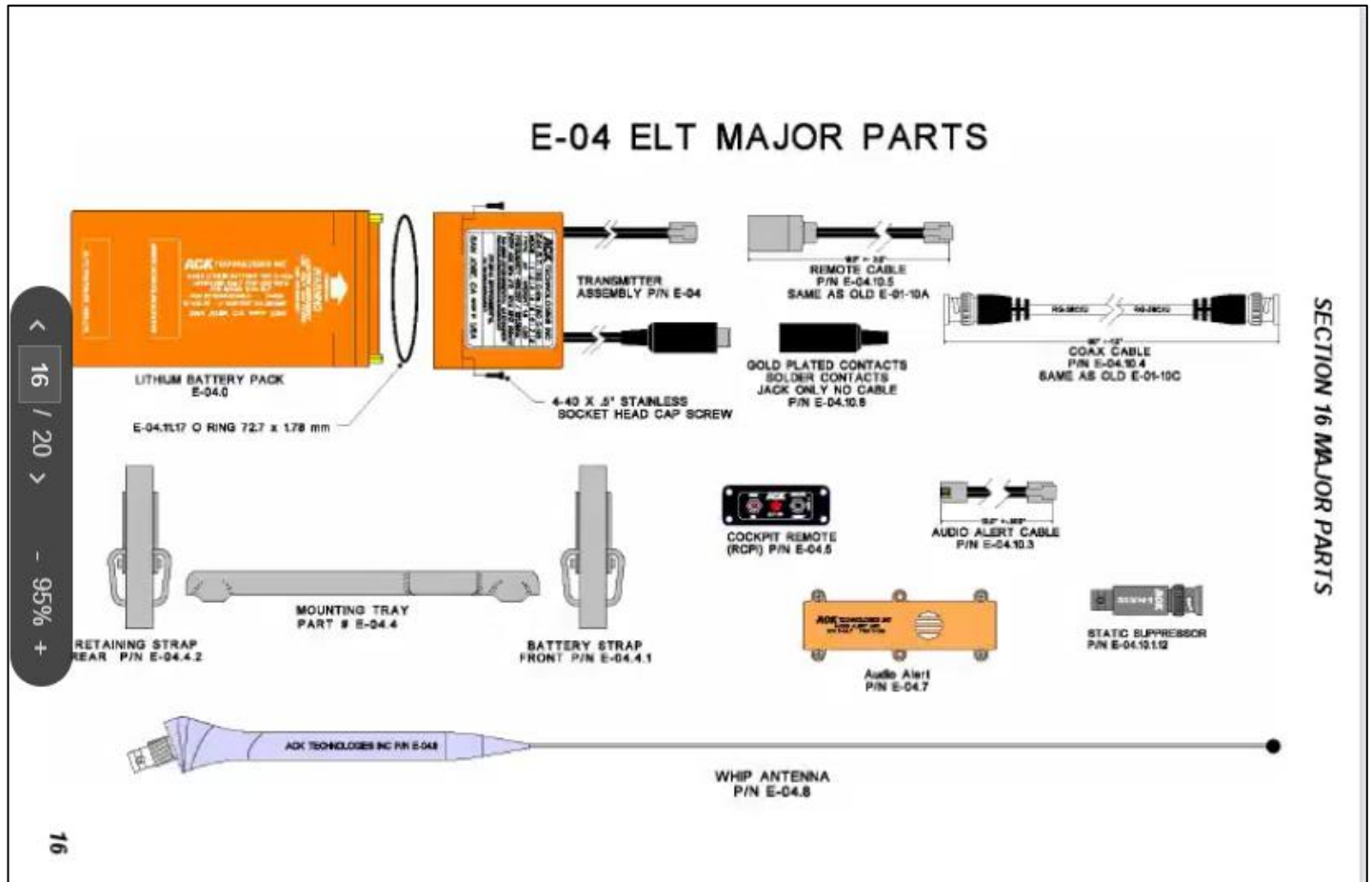
Mind numbing extra details are recorded in the [EAA Builders Log Site](#)

Left Cockpit Door

RV-7 Builder Report – ELT Installation

Submitted by Tom Weiss

I bought an ACK E-04 ELT, there are other choices but this is one I chose primarily for price reasons. The number of components included in the box was a little surprising. The contents of the kit are show in the graphic below from the ACK manual.



The first decision was where to mount the ELT and the antenna. There is a lot of debate in the RV Community on this topic with some recommending mounting in the tail under the vertical stabilizer. ACK's only requirement is that it be mounted in the fuselage and mounted to primary structure not skin. The RV7 plans are completely silent on this requirement, it is completely left to the builder to decide where and how to mount the ELT. Another consideration is to put it somewhere that is accessible for maintenance and testing.

I decided to mount mine on the aft side of the baggage bulkhead at the bottom. My thinking was the mounting platform that I made would be riveted to the bulkhead and tied into the baggage area floor structure. Any longitudinal deceleration would be resisted by the bulkhead and the floor structure and would hold the ELT stationary and trigger the G switch in the ELT.

I made the platform from 0.040" aluminum, I bent all of the edges 90 degrees for stiffness, it is riveting to the bulkhead on the forward edge and the aft end is riveted to a stringer for stability. The ELT comes with a mounting tray that you can see in the graphic above. The mounting straps and the tray are different on each end, so it must be mounted properly or the ELT will be mounted backwards.



The next decision was where to mount the antenna. Again lots of debate in the RV Community over this and the RV7 plans are also silent on this. The first decision is inside or outside of the aircraft, lots of opinions on this. I decided to go inside because

RVs tend to flip upside down in an off airport emergency landing and having the antenna on the top could put it in peril, so mine is in the baggage compartment area, this area has glass on the top so the antenna will



be able to see satellites. Of course if it flips, it can't see anything, but at least it is not broken. Some people also believe there is a requirement that says you can't run the antenna cable through any structure because the structure could deform and cut the cable, I have not found that this is a requirement so you can see from the picture that mine goes through the baggage bulkhead and I installed a grommet to protect the COAX from chaffing.

I still have to complete the wiring to the cockpit remote box that gets mounted in the panel and a few other connections. I have all of the cables run to the instrument panel area for connection at a later date. One of the shortcomings in the RV7 design which was design in the late 1990s is that there is very limited space to get wires from the front to the aft of the fuselage through the wing spar carry through. And of course you don't want to drill holes through the spar, Vans has provided a Service Bulletin that designate places you can add holes, I have not done this and trying to avoid doing it. I think all that I have left to run through the spar are the other antenna cables, but I am sure I will be surprised by some

requirement I am not aware of at this point. Projects like this although small in the overall build are fun and provide the ability to make the airplane a little unique.

THE FLYING/MAINTENANCE CORNER

Nyce Airport is back! We were also issued our old identifier, MD84.

This scan is from the 15 Jun 2023 Baltimore-Washington TAC and it can now be found in the ForeFlight database.

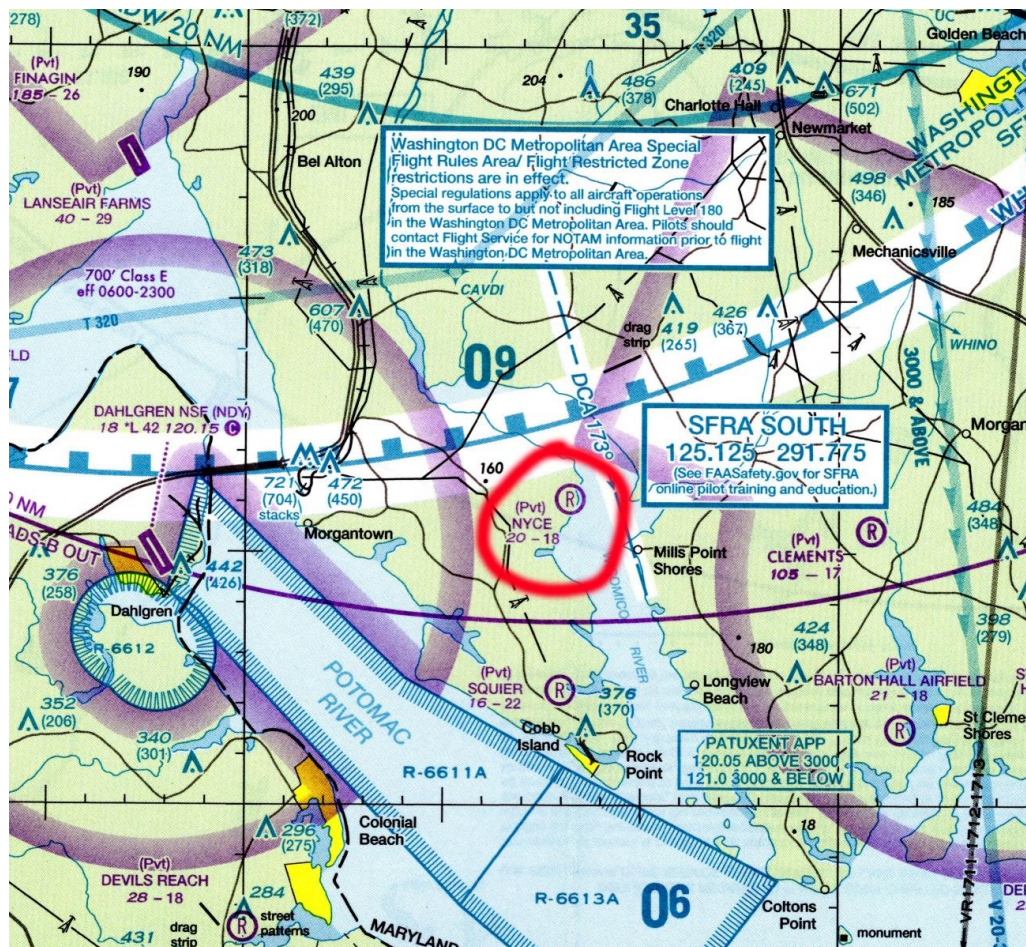
It has taken a lot of time and effort to get the field re-registered, but the Maryland Aviation Administration (MAA) and the FAA people were very helpful, and I want to thank them very much.

Many of *yall* also helped me get this done, and I'm grateful to you as well! We consider Nyce Airport part of our family legacy after 67 plus years of operation.

We make every effort to keep the strip moved and open for use, but if you want to drop in just give me a call to make sure!

Pete

301-873-4131



No Input this month

FOR SALE/FREE

Wire and Velco - Free

I have a large quantity of Hook & Pile (Velcro) fastener material in various widths up to 2", mostly with sticky backing, but there might be some sew on also, I have not looked at all of it.

I also multiple reels of multi-conductor aircraft wiring in various gauges and conductor counts. I have not extensively looked at all of it but I think it is mostly 18 AWG.

All of this is new and was saved from the trash when a contractor was cleaning house. It is available from me, free, in the quantity you need for your project. Contact me at (240) 298-6158 for further information.

CHAPTER 478 CALENDAR OF EVENTS

Date	Event	Location
MAY		
JUNE		

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/President

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 7:30 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.

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President: *Tom Weiss 2022-23*

Vice President: Paul Gambacorta 2023-24

Secretary: Gabriel Murray 2022-23

Treasurer: *Don Byrne 2023-24*

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Young Eagles: Darryl Crawford/Keith King

Flight Advisors: *Bill Posnett*

Technical Counselors: Sid Wood 2018

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Keith King 2023-24

Chapter Web Address

<https://chapters.eaa.org/EAA478>