



AUGUST 2023

In This Issue

- ✓ From the Left Seat Ray Ballantyne
- ✓ Trivia Question Elisa Petersen
- ✓ 3D Print Workshop Tracy Halsted
- ✓ NPRM Modernization of Special Airworthiness Certificates [MOSAIC] Released for Comment – Erik Petersen
- ✓ Update on Daniel Weaver Dave Miller
- ✓ Osh Kosh Photos Ray Ballantyne
- ✓ Understanding ADS-B traffic: when does it work? – Reprinted (via Dave Miller)
- ✓ Minutes Richard Howell
- ✓ Board Member Contact Info

Upcoming Events

August

18- BOD

18-20 Arlington Skyfest

26- Gathering W28 (Sequim Valley Airport) Hangar #15

September

9-10 Hood River WAAAM

13- IMC/VMC

22- BOD

30- Gathering W28 (Sequim Valley

Airport) Hangar #15



Super Guppie (Photo credit Ray Ballantyne – Air Venture 2023)

FROM THE LEFT SEAT — RAY BALLANTYNE

Summer is in full bloom, and it's flying time! Lisa and I returned from Oshkosh Airventure early in August and had an amazing experience at the "Big Show". We survived the Fisk Arrival, landed on the green dot (actually put some rubber on it) and camped under the wing for a week. We sat in the chapter's lavender chair at the Blue Barn, saw our directional sign, and got a chance to talk directly to national leaders. We also saw Madeline Patterson there but didn't see Bud.



We closed out our Young Eagle events in July with the rally in Pt Townsend. All together we flew 139 youth with 25 pilots donating their aircraft and expenses. Thank you, pilots, ground crew, and especially Tracy and Bud for working so hard to put on three rallies. You make a difference in young people's lives.

Our first Build and Fly session is coming to a close, which means it will be time to learn to fly the LT-40 RC aircraft that the young people built. Rick Vaux, Richard Howell, Mike Niewiarowicz, and the Tracy's have done a great job of organizing, assisting, and managing our first build.

The annual Poker Run is taking place now, with the winners to be announced at the August Gathering on August 26. If you have any questions, contact Barry Halsted.

It's time for the biannual nominations for the chapter board of directors. I'm pleased to report that all the board members have agreed to serve another term. As a result, there will be no need for a nominating committee. If you would like to serve on the board, please let me know and we can include you as a candidate for the November election. However, Harry Cook said he would like to get someone else to host the VMC/IMC club, so contact him or me if you're interested.

I would like to personally thank Rick Vaux for presiding over the last two gatherings and getting Judy Stipe to present the history of local airstrips. This month we will have a Gathering on August 26 instead of Air Affair. It will be at 0930 at Hanger 15 at Sequim Valley Airport. I hope to see you there.

- Ray

TRIVIA QUESTION - ELISA PETERSEN

17 airlines across the globe are no longer in operation

Two of them each left over 100,000 passengers stranded when they exited the industry Which two airlines were responsible?

3-D PRINT WORKSHOP — TRACY HALLSTED



On August 5th, Erik Petersen held a 3-D print workshop in his home. Attendees were Richard Howell, Sid Vandover, Barry and Tracy Halsted. The first thing was to design the object, using software provided. This seemed easy for the engineers in the group to grasp. For me, not so much.



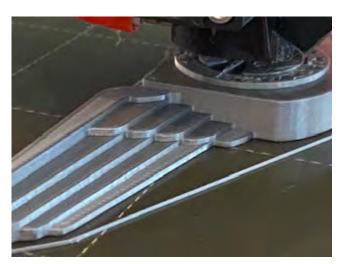
The program was copied to an SD card, which was inserted into the 3-D printer. Note the big spool of plastic coil on top of the printer. That is the material that is used to create the object. Erik explained the large variety of material that can be used, including different colors.



Here, Barry, Richard, and Erik are watching the printer. The printer works like a regular printer, except instead of ink it lays down a thin layer of material. The object is build one layer at a time, Even for our simple wings, there were many layers.



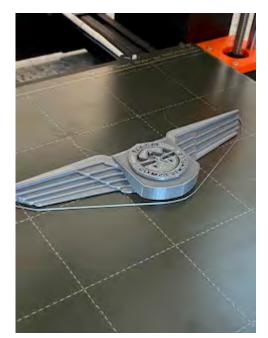
Here, the printer is working away on the object. Sorry I can't include a video. It was amazing to watch!



Our object, a pilot wing pin with EAA 430 insignia on it, is being built here, one layer at a time.



Here, the wings are almost complete!



Even closer to being done!



Here is the completed wing.

Erik also talked about the vast number of objects that can be made with 3-D, and how there are many templates available that can be used as a starting point. Harry Cook from our chapter made a part for his new Sonix, with Erik's help. That's how easy it is!

The Sequim Museum of Arts has a 3-D printer onsite that was donated by Erik. Anyone who wants to build an object at home can take their program on an SD card to the museum and do the printing there.

Any questions, please ask Erik. Thank you, Erik, for a wonderful demonstration!

Tracy Halsted EAA 430 member

NPRM MODERNIZATION OF SPECIAL AIRWORTHINESS CERTIFICATES [MOSAIC] RELEASED FOR COMMENT — ERIK PETERSEN

New Light Sport Rules are Coming!

FAA released a preview of Modernization of Special Airworthiness Certificates (MOSIAC), changes to light-sport and other proposed changes Wednesday, July 19th. You can see the entire 318 page proposal that is released for public comments, clock is ticking as there are only about 60 days left as this came in after the deadline for the newsletter. https://public-inspection.federalregister.gov/2023-14425.pdf

Comment here by 10/23/2023:

Federal Register:: Modernization of Special Airworthiness Certification

I went through the 318 pages and for our membership, these are the changes being proposed that could have the most impact:

- Remove the definition of Light sport aircraft from 14 CFR 1.1 which limits to aircraft weight, seating, stalling speed, maximum speed, engine type, propeller type, etc.
- Part 61 will define the parameters of a sport pilot may operate to decouple the certification requirements for light sport category aircraft certification and sport pilot certification.
- Persons exercising the privileges of a sport pilot certificate or a flight instructor certificate with a sport pilot rating would no longer be restricted to operating light-sport aircraft as defined in § 1.1
 - o Remove gross weight limit.
 - VH not to exceed 250 knots.
 - VS1 does not exceed 54 knots.
 - o Parameters above put max gross around 3000 pounds and depending on the aircraft, some lighter planes are outside that envelope.
 - Max seating capacity increased to 4 yet only 1 passenger is allowed.
 - Allowed to use CS/controllable pitch prop.
 - Allowed retractable gear.
 - Allow aerial work for light-sport category.
 - Allowed night flight (current medical/Basic Med required)
 - Allowed rotorcraft.
 - o Allowed a certain number of hours in simulator for Sport pilot cert.
- * Removal of the word "reciprocating" from § 22.100 to allow for alternate propulsion...
 bring on the light-sport turbines!
- Remove the requirement for manufacturers to mark category aircraft as "light-sport."
- Creates light-sport repairman training courses.
- May allow experimental operations to operate over dense population for special airworthiness phase I certs (some kit, no plans built)
- Implement language for space support vehicles.

- Create a new category: light-sport kit-built aircraft.
- Noise certification requirements for new or acoustic altered aircraft

The list above is not exhaustive, focused on what our membership may be interested in. Here are a few articles on the announcement and expect more as AirVenture is now in the rearview mirror:

https://www.eaa.org/eaa/news-and-publications/eaa-news-and-aviation-news/news/mosic-takes-significant-step-forward

https://www.flyingmag.com/faa-releases-mosaic-rule-proposal-for-light-sport-aircraft/

https://www.aopa.org/news-and-media/all-news/2023/july/19/light-sport-envelope-expansion-proposed-at-last

MOSAIC proposed rule published - AOPA

What is FAA Mosaic? (A Simple Explanation) (pilotpassion.com)

UPDATE ON DANIEL WEAVER — EMAILED TO DAVE MILLER

Hi Dave,

How have you been? I saw the cub flying around recently and wanted to stop by to say hi but I was on my way to a dentist appointment so I didn't have the time.

Sorry for going MIA, the last few months have been pretty busy for me! Here is a recap of what I have been up to lately:

In April the Design Build Fly team that I was part of at UW drove down to Tucson with our plane and placed 5th out of 97 teams. We got beat by a German team, an Austrian team, Embry-Riddle and Virginia Tech (Virginia Tech beat us 494.79 points to 494.55 points so we almost scraped out a fourth place finish). I attached some photos of the team, the plane and the box the plane had to fit in below. There is also a 30 minute recap video of the competition if you are interested in seeing more.



Episode 7: Fly-off Showdown | Design Build Fly 22-23 Season | DBF UW | AIAA DBF 2023

youtube.com

My main focus in May and June was wrapping up my capstone project for my major which involved designing a new freighter concept aircraft for Boeing from the ground up and doing a lot of wind tunnel tests (more photos below).

Then on June 10th I graduated, so I now hold a BS in Aeronautical and Astronautical Engineering (thanks in part to the scholarship from the EAA chapter) which wrapped up my time as a UW student.

After graduation I took a month off to relax at home and then on July 10th I started an accelerated flight training program at ATP Flight School at Paine. Right now I am working towards my instrument rating and by the end of the program I will have an instrument rating, commercial single and multi and CFI, CFII and MEI (assuming all goes according to plan). I am really enjoying the instrument training. The planes I am flying are all G1000 equipped which at times can be overwhelming to someone who is used to a 6-pack, but it has a lot of cool features that are really useful for IFR (as long as you don't get too distracted by them and forget to fly the airplane).

I just took the instrument written today and passed with 100% which I was pleasantly surprised by.

I'd love to stop by another EAA meeting sometime and update people so they know their scholarship money has been put to good use!

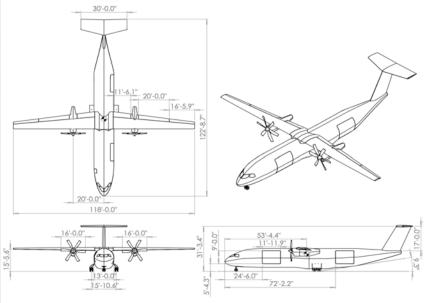
That's about it from me.

Thanks for all your support!

Daniel

P.S. Did you and Dave Woodcock end up taking delivery of the Legend Cub?







OSH KOSH — OH MY GOSH (LOOKS FUN!) PHOTOS — COURTESY OF RAY BALLANTYNE



CHECK OUT THE RECORDED 'LIVE CAM' FROM EAA VENTURES AT:

HTTPS://YOUTU.BE/U8J1H3E3540?LIST=PLVVZNW5UWVU-BOL4UPOESSQXWMSICUME7

UNDERSTANDING ADS-B TRAFFIC – WHEN DOES IT WORK? (REPRINT)

AUTHOR: JOHN ZIMMERMAN OF SPORTY'S PILOT IPAD PILOT

NEWS (SOURCE: <u>UNDERSTANDING ADS-B TRAFFIC: WHEN DOES IT WORK? - IPAD PILOT NEWS</u>), NOVEMBER 10, 2022

Portable ADS-B receivers for the iPad (like the <u>Sentry</u>, <u>Garmin GDL 50</u> and <u>Stratus 3</u>) can receive ADS-B traffic in addition to weather. But unlike weather, which is broadcast continuously, traffic is only transmitted in certain cases. This can make ADS-B traffic very confusing—when does it work and when does it not work?

To help, we've created this series of graphics, which shows three common scenarios:



Graphic 1: The worst case scenario, where you are flying with a portable ADS-B receiver, but you do not have an ADS-B Out transponder installed in your panel and there are no ADS-B ground stations in range. Here, you'll receive any airplane that is transmitting ADS-B Out via air-to-air transmission (no ground station required, so the lack of coverage does not matter). Not all airplanes have ADS-B Out, though, so you will see some traffic but definitely not all. In particular, you will not see Mode C targets.



<u>Graphic 2:</u> In this case, you are still flying with a portable ADS-B receiver and no ADS-B Out in your airplane, but you are close to another aircraft that is ADS-B Out equipped and there is a ground station in range. In this case, that ADS-B Out airplane is waking up the ground station and is receiving a custom traffic picture for a 30-mile diameter "hockey puck" around that airplane. If you are close enough to that airplane, your portable receiver can listen in on that traffic message and display targets.

While you won't get a complete traffic picture, you will get a better one, since the ground station transmits Mode C targets in addition to ADS-B targets. Just remember that you don't know what you don't know—there could be a target just outside the hockey puck that's not showing up (the red airplane in the graphic above) because the hockey puck is not centered on you.



<u>Graphic 3:</u> This is the best possible case. You have an ADS-B Out transponder in your airplane, so you are transmitting out to the ground stations and creating your own "hockey puck" of traffic information. You'll see all traffic within a 30 mile diameter and +/- 3500 ft. This includes all ADS-B Out traffic and Mode C traffic. You'll also see ADS-B Out traffic beyond the hockey puck, via a direct, air-to-air transmission. The only traffic not visible would be airplanes without any type of transponder. That means you still need to look outside, but it's highly likely that you'll see all the airplanes nearby.

If you have ADS-B Out and you feel like you're not seeing a full traffic picture, there are some options for troubleshooting. Read this article for detailed steps.

•

GATHERING MINUTES — RICHARD HOWELL

Date: July 29, 2023

- Meeting social and sign-in 0930.
- Chapter Vice President Rick Vaux called the Membership Gathering to order at 1000 at Sequim Valley Airport, Hangar 15
- Rick led The Pledge of Allegiance to the Flag with 29 members and 4 guests attending
- Guest(s): Sid Vandiver, Bob Stipe, Norm Nelson, Nathan Nelson.
- June Gathering minutes were approved as written.
- Correspondence: Two EAA AirVenture admission wristbands were awarded to the chapter for our Flying Start program. The chapter board members voted to gift them to a deserving chapter member - Ray Ballantyne. As it happens, Ray is attending AirVenture again this year to carry the banner for EAA Chapter 430! (Such a gift is specifically mentioned in the guidance provided by EAA HQ in the letter that accompanied the awarded wristbands.)

Old Business

- o The remaining \$300 Young Eagle credits are earmarked for our Build & Fly program.
- YE at Port Townsend (0S9) was a success 40 kids flown by 10 pilots and with the help of 12 staff.
- Our Young Eagles volunteers hosted 3 rallies and flew a total of 139 kids for 2023!
- Chapter financial condition reported Checking \$3,896, Scholarship \$10,420, Building Fund \$469.
- o Membership reported 94 paid members, with a running tally of "11" new members.
- Flyout (Barry Halsted) reported that Concrete (3W5) was especially fun. The airport itself is interesting and the flyout coincided with their own fly-in event that weekend. The August flyout will be to Chehalis (CLS) park near the fuel tanks. This is a special flyout destination for our Poker Run and can provide an extra card for participants. More participants means more proceeds for the Chapter and for the holder of the winning poker hand. The poker run concludes and the winners will be determined at our August membership gathering.
- o EAA Chapter 430 logo badges are available for \$5.
- Erik Petersen will host another 3D printer workshop next Saturday.

New Business:

- Chapter Tech Counselors have reviewed and identified surplus tool crib items and they are available today in hangar #17, two doors down. Please have a look and take whatever items you want. Remaining items will be discarded.
- Chapter member Gordon Tubesing has once again invited everyone to <u>Diamond Point</u>
 <u>Airport Appreciation Day</u> on Saturday, August 12, 1000-1500. Expect R44 helicopter rides,
 planes, cars, food and "The Village Perk".
 (visit https://2wa1.org/airport-day/)
- Dave Miller reported about runway repaving that is ongoing at Wm. R. Fairchild Intl. Airport.
 Pilots check NOTAMS.
- O Bob Hicks read a letter from and presented a generous donation by member Mark Schiely, who has moved away but continues to maintain his EAA Chapter 430 membership. Mark provided a complete AV Map moving map system. Mark suggested that whoever would like the system, please make a suitable financial contribution to the chapter. The chapter board will send a letter of thanks to Mark.
- Scott Fitzgerald presented his donation of a very nice towbar, suitable for a tailwheel aircraft. Scott suggested that a \$200 contribution to the chapter be made by its new owner.

 Sequim Valley Airport's Air Affaire will not be held this year, due to potential conflicts with airport projects. EAA Chapter 430 will therefore have a regular membership gathering on Saturday August 26th.

Project Reports

- Harry Cook Sonex Waiex B, wings done, starting fuselage.
- Richard Howell Sling 2, phase 1 flight testing.
- Dave Moffitt RV-12, airworthiness certificate application.
- o Erik Petersen Wheeler Express project sold, to be replaced with a flying Cozy Mk IV.
- The business portion of the meeting was adjourned.
- Judy Stipe and husband Bob, of Sequim Museum & Arts, teamed up to make a fine presentation about airport history, in and around Sequim.
- Once again, our Burger Bash was a smash. Kevin and Charlie Tracy, Joan Miller and others hosted coffee, treats, condiments and other wonderful preparations. Dave Miller and Todd Taylor teamed up at the grill. Thank you all!!

Addendum: Elections

- At the last chapter board meeting on July 21st, President Ray Ballantyne conducted a poll of elected Class I Directors - President, Vice President, Treasurer and Secretary - and asked about their intentions for the next 2 year term. All Class I Directors indicated willingness to continue in their same positions for a new term. President: Ray Ballantyne, Vice President: Rick Vaux, Treasurer: Tracy Halsted, Secretary: Richard Howell
- If there are any chapter members who are interested in, and are eligible for, one of these elected positions, please contact the board before the October 28th membership gathering.

Respectfully submitted,

Richard Howell, EAA 430 Secretary

BOARD AND DIRECTORS 2023

Chapter Phone Toll free 877-EAA-0430 (877-322-0430)

Position	Name	Phone Ext	Email Address
President	Ray Ballantyne	1	president@eaa430.org
Vice-President	Rick Vaux	2	vicepresident@eaa430.org
Secretary	Richard Howell	3	secretary@eaa430.org
Treasurer	Tracy Halsted	4	treasurer@eaa430.org
Class II Directors			
Programs	No Candidate	5	programs@eaa430.org
Membership	Erik Petersen	6	membership@eaa430.org
Newsletter	Elisa Petersen	7	newsletter@eaa430.org
Scholarship	David Miller	8 s	cholarship@eaa430.org
Young Eagles	Bud Davies	9	youngeagles@eaa430.org
VMC/IMC	Harry Cook		vmc@eaa430.org
Tool Crib	Rick Stoffel		toolcrib@eaa430.org
Web Editor	Andy Sallee		webeditor@eaa430.org
Build-n-Fly	Need Project		build-n-fly@eaa430.org
	leader		
Communications	Scott Fitzgerald		communications@eaa430.org
Fly-Out	Barry Halsted		
Tech Advisor	Harry Cook		techhc@eaa430.org
Tech Advisor	Barry Halstead		techbh@eaa430.org
Tech Advisor	Ernie Hansen		techeh@eaa430.org
Tech Advisor	Rick Vaux		techrv@eaa430.org