

THE SLIPSTREAM

THE NEWSLETTER OF GREEN RIVER EAA CHAPTER 441 KENT, WA



Next Meeting

Christmas Party December 7th

This Month's Program

If you no longer want to receive the newsletter, email me at ron@wanttaja.com

No Meeting This Month! Happy Thanksgiving.



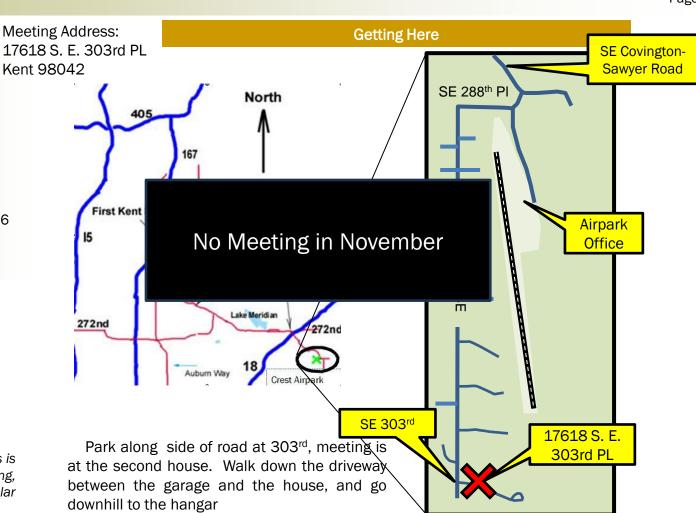
About Chapter 441



What did we talk about Last Month?

Flying the B-2

Note: Deadline for Newsletter articles is 11 PM the Sunday before the meeting, or until I receive the regular contributor's inputs.



Joint Party with EAA Chapter 26

When: Saturday, 7 December,

2:00p.m.

Where: 21307 SE 232nd St.

Maple Valley, WA 98038

Eat at ~3:00, party all afternoon,

home before dark

Chapters will provide meat,

beverages, and dinnerware

Bring a side, salad, or dessert to

share

Bring a (wrapped) aviation gift for the gift exchange (see next page)



White Elephant Gift Exchange

Chapters 26 and 441 have a traditional 'White Elephant' gift exchange as part of the Christmas party

Everyone who wants to participate brings a wrapped gift. This should be an aviation-themed article. In the past we've seen tools, books, ornaments, doo-dads, even aviation-oriented junk (er...treasures). If you feel you must purchase something, keep it inexpensive: we've used \$10 as a target in the past. But it need not be "new". Don't feel a need to go out and buy something.

When the time comes, in random order, each person will have the option of either selecting a new gift, or "stealing" a gift previously taken by someone else. The person who lost their gift then has the option of selecting a new one, or stealing from someone else.

For some, the ultimate satisfaction is to provide the most coveted of the gifts, something unique that others might find they can't live without. It's fun when the gift you provided gets stolen over and over again (although there is a limit to the number of steals, which will be announced at the party).



Christmas Party 7 December



Questions on MOSAIC? Find the Latest!

While the general aviation community awaits the release of the final MOSAIC rule in 2025, EAA is keeping everyone up to date on what it could mean on many levels of recreational aviation.

Tom Charpentier, EAA's government relations director, hosted an October 23 webinar that outlines the latest on the rule, which creates in effect Sport Pilot/Light-Sport Aircraft 2.0. That webinar is archived and available for all EAA members.

More information regarding possibilities within MOSAIC is also available online at <u>EAA.org/MOSAIC</u>. This site outlines opportunities for new and existing pilots, flight instructors, and flight schools.

While federal law prohibits the FAA from providing its internal discussions on any rule with outside organizations, <u>EAA's recommendations to the MOSAIC NPRM</u> earlier this year — supported by a variety of GA organizations — are positive additions to the rule package that we believe should be included.

Good News for Experimental Accident Totals

September 30 marked the end of the FAA's fiscal year and with it, the annual conclusion of the annual 12-month tracking of fatal accidents among experimental category aircraft. The preliminary numbers from the agency received late last week appear to present an excellent snapshot of safety over the past year.

While the final totals are still being tabulated, the initial total of 37 accidents is well below the FAA's not-to-exceed figure of 46 for the period. That includes 29 fatal accidents in homebuilt aircraft. More details will be available in the coming weeks as the FAA's annual total of GA activity is compiled. These figures also mirror what appears to be an improved year for overall general aviation safety, even as total flight hours have increased.

"FAA officials have taken notice of these improved safety figures," said Sean Elliott, EAA's vice president of advocacy and safety. "Agency officials have remarked to us how EAA's programs have helped build the safety culture that leads to these positive numbers."

I took a look at the aircraft in the US Registry, as far as trying to estimate how many planes will be eligible to be flown by Sport Pilots after implementation.

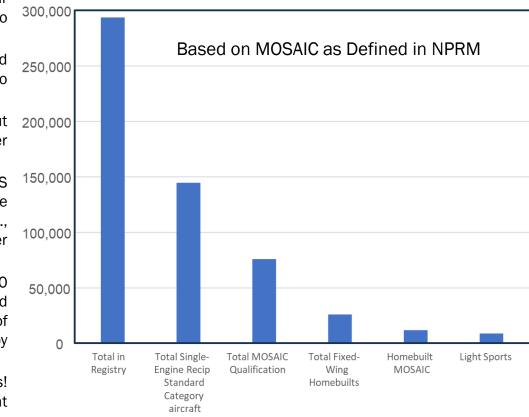
Note that this is based on the MOSAIC rules as listed in the NPRM...EAA, and other organizations, are trying to get a relaxation of the limits.

Based on the January 2024 FAA registry, about 200,000 75,700 Standard Category aircraft will qualify under MOSAIC.

There are about 293,000 total aircraft in the US registry. But of that amount, only about 144,000 are the typical GA aircraft that the program is aimed at (e.g., Standard Category, single-reciprocating engines). Over 50% of our typical GA aircraft will qualify under MOSAIC.

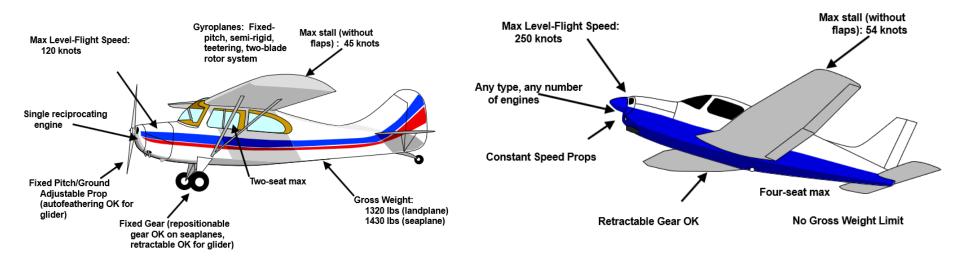
However, that 77,100 aircraft include about 14,000 Standard category aircraft that had previously qualified under Light Sport. So, one could claim that 43% of typical GA aircraft will be newly-capable of being flown by Sport Pilots.

Note that this tally does not include homebuilts! While the FAA issued a list of production-type aircraft that met Light Sport, no such list was every produced for homebuilts...and I figure the same thing will happen with MOSAIC



This illustrates how the eligibility rules will change for Sport Pilots, if MOSAIC is implemented.

Again, this is based on the MOSAIC NPRM. EAA and other organizations are trying to get the limitations relaxed further.



Current Light Sport

Under MOSAIC

		Model			
		Registry			
Make	Model	Count	Notes		
Aero Commander/Rockwell	100	163			
Aeronca	All	3805			
American/Grumman American	AA-5 Traveler	380	AA-1 models cannot meet the requirement at forward CG		
Aviat	A-1, Pitts S-1, Pitts S-2B	1028	Pitts S-2C not included		
Bellanca	14-13, 14-19, 14-9, 7*, 8*	2026			
Boeing/Stearman	Model 75/PT-17, etc.	451			
Cessna/Textron	120-175	35964			
	182 A-D	2161	Higher Gross Weight starting with the 182E; raises stall speed	ed to 56 knots	
Champion/American Champion	All	2417			
Diamond	DA-20, HK-36	362	_		
Ercoupe	All	842		Again this based	
Interstate	All	88		Again, this based	
Luscombe	8*, T-8F	2602		on MOSAIC as	
Maule	M-4, M-5, M-6, M-7, MT-7 (If not five seats)	732	Most MX/MXT-7 models have five seats		
Mooney	M-10, M-18	137	M-10 is the Cadet (Ercoupe), M-18 is the single-seat Mite	Defined in NPRM	
Piper	E-2 through PA-22	12945	L		
	PA-28-140, PA-28-161	5748	All other PA-28s have stall speed above limit		
Porterfield	All	44			
Stinson	10, L-5	210	Stinson 108 lists 67 MPH clean stall		
Taylorcraft	All	3153			
Waco	Non-Cabin Waco Biplanes	533	Many cabin Wacos are licensed as five-seat airplanes		

Ron Wanttaja

I was testing the engine after making repairs to fix my #3 ignition issue (as reported last month - RJW). On initial inspection, I found the top of the #3 spark plug charred (the top plug in this picture), unlike the other plugs that showed no such wear. So, I changed out all 4 spark plugs and replaced all 4 ignition coils. But I found the cause of all this excitement was a short in the wire bundle to the #3 ignition coil. It had rubbed against the bottom of the support rail (that holds the wire harness and fuel rail) on the top of the engine. You can see the horizontal cuts in the wire insulation (I pulled back the wire loom to make the cuts more visible). I fixed that damage and the wire routing issue. I also switched from 10W-40 to 5W-50 oil (Oil analysis showed that my 10W-40 oil had broken down too much). After all this pampering, the engine seems much happier. So am I.





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Spinner crater filing process.... currently back in build primer waiting for the next round of glaze and sand.

I don't know if this is generally the case or not, but the as-received spinner surface finish was the worst of all the fiberglass parts.

Steve Cameron Responded:

The first spinner I got last year from a Canadian source looked like a 5th grade shop project. The carbon fiber one I got from Whirlwind was much nicer, but it cost almost as much as my prop.





Still working through the CNC learning curve, the alignment and label marks centered as intended but the outer diameter cut shifted and ended up both off center and partially off the material.... In any case I was still able to mount the faceplate and use a rasp to get the final size and angle and now have a much better way to get the spinner ready for paint

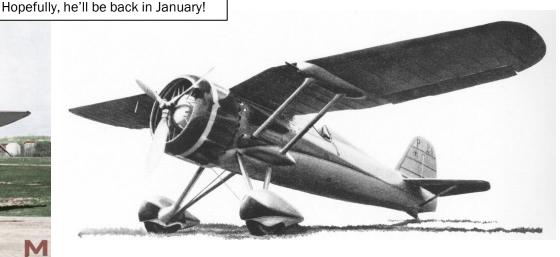


PZL P.24

Ikarus IK2



The Ikarus IK-2 was a 1930s high-wing, single-seat, monoplane fighter aircraft of Yugoslav design built for the Royal Yugoslav Army Air Force. A gull-wing design, it was armed with a hub-firing autocannon and fuselage-mounted synchronised machine guns. Just 12 production models were built, as the aircraft was obsolescent at the time it was brought into service in 1935, and only eight were serviceable at the time of the German-led Axis invasion of Yugoslavia in April 1941. After the defeat of Yugoslavia, the remaining four aircraft were taken onto the strength of the air force of the Axis puppet state, the Independent State of Croatia, but none survived the war.

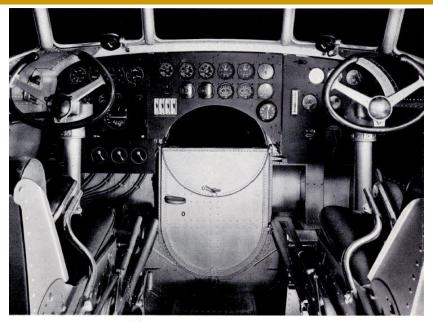


The PZL P.24 is a Polish fighter aircraft, built in the late 1930s by Państwowe Zakłady Lotnicze. It was a much more advanced development of the PZL P.11, a Polish wing all-metal fighter designed by Zygmunt Puławski.

The second P.24/II prototype [shown above], often referred to as the "Super P.24", established a new world speed record for a radial engine-powered fighter of 414 km/h. The initial production aircraft closely resembled the P.24/II configuration, albeit with some changes such as the adoption of an enclosed cockpit.

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Dornier DO-24





The Dornier Do 24 was designed to meet a Royal Netherlands Navy requirement for a replacement of the Dornier Wals being used by its Naval Aviation Service in the Dutch East Indies, with the Netherlands government signing a contract for six Dornier Do 24s on 3 August 1936. Two more prototypes were built for the German navy to be evaluated against the Blohm & Voss BV 138.

The Do 24 was an all-metal parasol monoplane with a broad-beamed hull and stabilising sponsons. Twin tails were mounted on the upswept rear of the hull, while three wing-mounted tractor configuration engines powered the aircraft. Fuel was carried in tanks in the sponsons and the wing center section. Up to 1,200 kg (2,600 lb) of bombs could be carried under the aircraft's wings, while defensive armament consisted of three gun turrets, one each in nose, dorsal and tail positions. In early aircraft the turrets were each fitted with a machine gun but later aircraft carried a 20 mm cannon in the dorsal turret.[2][4] The Do 24 was one of the few German Luftwaffe aircraft that featured a tail turret.

On the Wreckord Page 14

Lancair Evolution – California: While in cruise flight at 25,000 ft, the airplane's windshield shattered, immediately followed by a rapid decompression of the cabin. The pilot shut down the engine, entered an emergency descent, and navigated to a nearby airport. During the approach for landing, the pilot received an anomalous landing gear indication and chose to perform a gear-up landing. The airplane touched down with an 8-knot tailwind and slid along the runway until it impacted a fence, continued across a road, and

came to rest in dirt. Both wings were substantially damaged.

Postaccident testing showed that the relay modules responsible for opening and closing circuits to the left main landing gear were dislodged when the windshield shattered, resulting in the anomalous gear indication. A portion of the windshield that remained attached to the frame exhibited a fracture consistent with pure tension loading, likely from internal pressurization. Due to the curvature at that location, the fracture area was likely one of high stress on the windshield. Examination of the windshield fragments and frame did not show any evidence of impact from a foreign object, but showed significant structural flexing of the fuselage due to delaminated wet-layup plies during construction, as evidenced by extensive cracking at the aft engine cowling.



Zenith CH-601XL – **North Carolina**: The builder reported that the airplane was in cruise flight when the engine experienced a total loss of power. He noted that the right fuel tank was empty and that the fuel selector handle was on the left tank. He attempted a restart; however, this was unsuccessful, and he performed a forced landing in a field. The nose landing gear collapsed during the landing roll, resulting in structural damage to the lower fuselage and engine firewall.

Examination of the wreckage revealed that the fuel tank selector handle was on the left tank but the fuel valve remained on the empty right tank. Further examination of the hardware revealed that a threaded metal rod that the pilot installed to connect the tank selector handle to the fuel valve "twisted like bubble gum" when rotated and would not turn the fuel valve. The pilot, who was the airplane builder, used a thinner rod than specified due to an interference problem. The pilot reported that the handle/valve assembly had operated normally during initial testing.

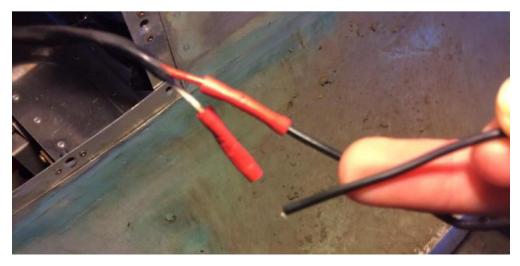


On the Wreckord Page 16

BD-5B – Indiana: The purpose of the test flight was to obtain rate of climb data on the airplane, which had recently been completed. Following the sixth climb of the flight, the engine began to run rough. The pilot turned back toward the airport and entered the traffic pattern, and the engine experienced a total loss of power. The pilot determined that the airplane would not reach the runway and performed an off-airport landing in a field. The field was soft and contained high vegetation, which resulted in a ground loop during landing.

The pilot noted that, during the flight, the No. 1 cylinder exhaust gas temperature and cylinder head temperature had dropped, indicating that the No. 1 cylinder was not firing properly. It was after the No.1 cylinder quit firing that the No. 2 cylinder also quit firing. A postaccident examination of the engine revealed that the wire in the No. 1 cylinder connector between the engine control unit and the fuel injector was not properly crimped at the connector, which allowed the wire to be pulled back. In addition, a wire to the No. 2 connector was found broken where the wire had been spliced. This wire most likely separated at the spliced area due to engine

vibrations after the No. 1 cylinder ceased operating.



Hi fellow EAA members,

I am currently selling my unfinished S-18 project. No engine. Considerable amount of aluminum sheet and tubing included. \$12,000. If you or someone you know who is interested, please contact me at:

Norm Pauk: Tel: 253-561-4801

Email: Npauk@msn.com







For Sale - RV-12 Project

I have an extensive RV12 project for sale. Thank you for sharing this information with your members. Here's what's included:

Wings are completed, including landing light and strobes

Tail group and fuselage cone are completed

Fuselage is 80% complete, including controls, wiring, canopy

Panel completed, including Avidyne/Garmin/ELT package with 2 axis autopilot

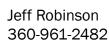
Finishing kit includes landing gear, brakes, tires, fairings, wheel pants, control cables, seat belts, plexi, etc. (This the most expensive kit on the airplane).

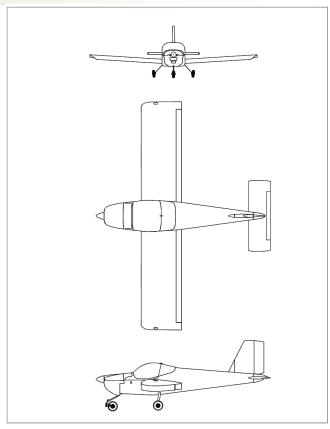
Factory built fuel tank.

Interior kitupholstery, side panels, sound proofing.

This is RV12 #616. It is designed for the carbureted 100 HP Rotax, and cannot be converted to the injected version. The kits were purchased 2011/2013. My cost was over \$50K. Duplicating today would be over \$75K. Price for all is \$45K.

Project is safely stored and available for thorough viewing in Anacortes.

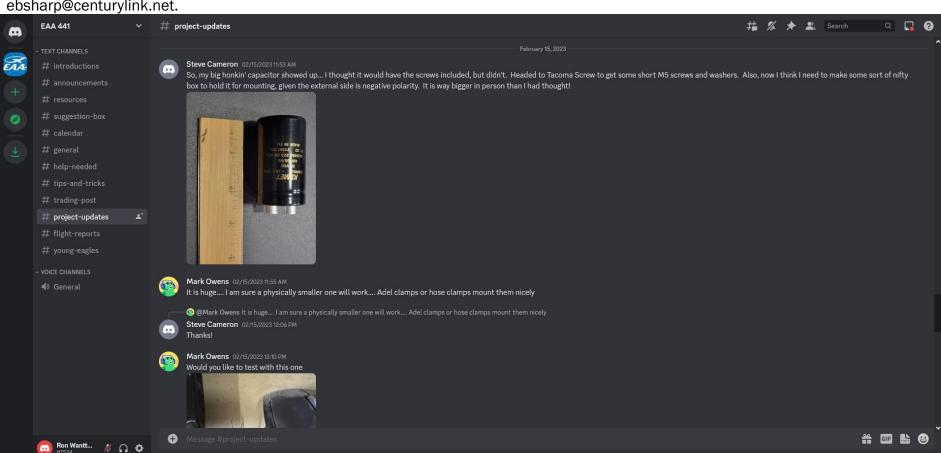




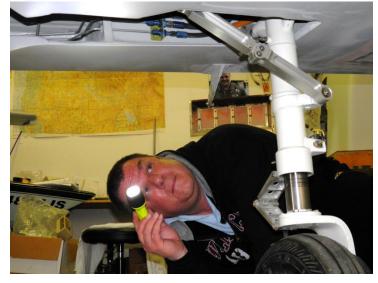
Chapter 441 Online Forum

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EAA 441 has a dedicated online forum using the Discord server. It's a free service without ads or spam content, and can be accessed via mobile apps or on your PC via a web browser. To sign up, email Edwina Sharp: ebsharp@centurylink.net.













Chapter 441 is fortunate to have two tech counselors. Feel free to call Brian (253)-369-0489, or Dave Nason any time. You don't need to wait for some significant milestone in your project.

Remember, this is not an "inspection". The shop doesn't need to be cleaned for a visit. All are quite used to looking at pieces, parts, and assorted bits, and will be happy to answer questions, offer advice, and generally talk about projects, building, flying, or whatever.