

The FlyPaper

March 2022

The Official Newsletter for EAA Chapter 477, Charleston, South Carolina



Words From the President

Hi everyone,

Hoping all is well and you are enjoying this warm spring weather.

We are planning for Glen to be our speaker at the March meeting, the topic will be 100 LL and its replacement. I find it amazing it's taken this long and yes still no new fuel is in the pipeline. I hope to have Nick speak to our group also at a future meeting.

Our February 19th YE rally went great. Thank all of you who showed up to help. Thank you Todd over to Ace Basin for the use of his gate. We had 33 cars parked on the field during the event. Moms and Dads came with their kids and had a fun time. Mr Glen was a great Gate keeper.

Not that giving a kid a ride isn't important, in fact it's very important. It's also important to make it a quality moment. It's more than giving an airplane ride, following up and seeing at least one kid get to the finish line is a task, that 477 has to offer.

Dow has an update for our scholarship essay and we are now in the hunt for our first ever 477 award for learn to fly scholarship recipients. 477 also hopes to be sponsoring at least one child to an EAA Science Camp beginning in 2023.

In the near future, we will be putting some changes on the floor for a members vote. This will update the 477 By laws. Housekeeping in the spirit of keeping the chapter solvent, to be filed with the state of SC, with safeguards in place of financial and assets, and for the enjoyment of future members and leadership teams.

Liz has some info on our next rally. She's also redoing our web site design. It's been long overdue. I thank you Liz for your hard work.

We are still adding new members to 477. Might have a lot to do with its a "something for everyone chapter"? It's great to see new faces mixed in with the regular's, welcome to old and new.

I will attend Sun N Fun for the first time this coming April, just not sure if I'm flying to my other home base KPGD and then drive daily to Lakeland or drive to FL. I hear the airspace is crazy busy at the event.

We, your staff, look forward to seeing you soon and thank you for your support.

That's it for me for this one,
Be safe out there.
Doug



Doug St Pierre
President EAA 477



Upcoming Events

EAA477 Chapter meeting

We will have an in-person meeting on March 12th at KRBW starting at 10:00 AM in the terminal conference room. BBQ to follow meeting. Glen Phelps will give a presentation regarding the 100LL aviation fuel replacement efforts. A BBQ lunch will follow at hanger #20.

South Carolina Breakfast Club:

Please use the following link to access the latest in scheduling:

<http://southcarolinabreakfastclub.com/2021-schedule>

Young Eagles Report

Liz Birch

Young Eagles Coordinator

We had another successful rally in February, flying 20 Sea Cadets. Huge shout-out to all of the volunteers we had come out to help. At this rally we were able to use the gate entrance by Ace Basin Aviation and have people park next to the hanger. This ended up working really well, and we hope to be able to do this at future rallies. Another new feature we had at this rally was that we have moved to an all electrical system for registration. What this means is that we can have an estimated head count ahead of each rally to know how many kids are coming. Online registration and signatures means no more mailing in forms after each rally, and it also reduces the chance of us missing a signature somewhere.

Moving forward, we will continue to plan more rallies. Our next one as of now is for the Boy Scouts on May 28th at the Waltherboro airport. If you are available and willing to volunteer, please let me know. We are currently in the works of trying to plan a public rally as well, so we will need lots of volunteers.

As always, if you are someone you know has a kid interested in young eagle flights, send them my way and I'll add them to my list to get them connected to a pilot.

Thanks,

Liz Birch

YE Coordinator

217-706-0148

lizbirch2331@gmail.com

EAA Ray Scholarship Update

Dow Sanderson

Last night I received an e-mail from EAA Field Representative Chris Gauger informing us that our Chapter will not receive the Ray Scholarship that we applied for last November. There were only 128 Scholarships available, and 168 applications were received. However, he was very encouraging, and urged us to apply again next year (which, of course, we shall do).

While, as Scholarship Chair, I am disappointed. But, we have learned some things from this process. Before we can hope to be successful in receiving one of these large \$10,000 Scholarships, we need to have specific, identified, and well-qualified candidates.

The criteria require:

- The recipient must be between the ages of 16-19.
- The recipient must have a Third Class Medical, and will have already soloed.
- The candidate may only use the scholarship for Private Pilot training (not to be used for Instrument, or subsequent ratings).

The purpose of this, of course, is to ensure Chapter investment in an individual student-pilot on the front end, which makes perfect sense. I look forward to being very intentional at all future YE Rallies in recruiting candidates who would be a good fit. I am grateful to Liz and Aimee, and all our members who are taking our Young Eagle program to a new level. I have submitted the Chapter Scholarship application to our officers, and hope that it is a clickable download on our webpage very soon.

We all remember those who were our mentors and encouragers in our own aviation quests. How good it is to be able to provide the same for future aviators.

Best wishes,

Dow Sanderson

February Meeting Summary

Glen Phelps

Last month we had a trip report from John Stoll telling us about the workshop he and his son attended in Iceland, oops, I mean Oshkosh, WI. As John said then, his blood has become a little thinner having lived “south” for a few years.

In his presentation, he showed us the fiberglass fairing they made, which gave them enough “hands on” experience to have confidence in working with other layups. They also did layups that would mirror the work needed to get a fit for the windscreen to fuselage fit. Of course, this was a little more complex.

In the fairing work, they made a “mold”, applied “release” material so that the subsequent layers of fiberglass and glass cloth could be worked loose after cure. They then applied layers of micro finish and sanded to a form that could be used. Here are a couple of photos of the finished piece he passed around the table:

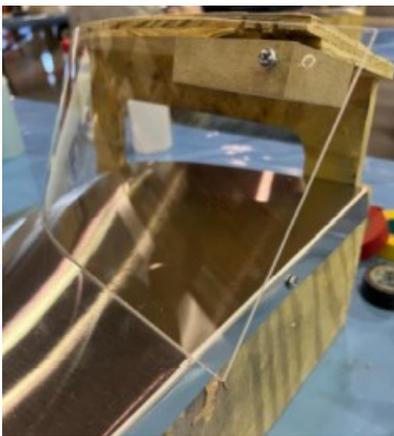


Bottom of fairing showing where the release material was on the form



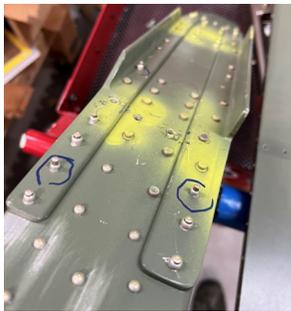
Top of fairing showing the rough finish over the layup.

They also did work to show how one would make a fairing to attach a windscreen to an aluminum cowl. This was discussed in the meeting and photos from last month's newsletter showed part of the process, and are added below:



After the presentation regarding the fiberglass class, he presented a solution to the problem with a “poorly” completed center spar of the horizontal stabilizer in his RV he is building.

It seems that in the “learning” process, he had some trouble getting rivets seated properly, and he knew it “could” be a problem. Some of the evidence of that is shown in the photos below:



Poorly seated rivets

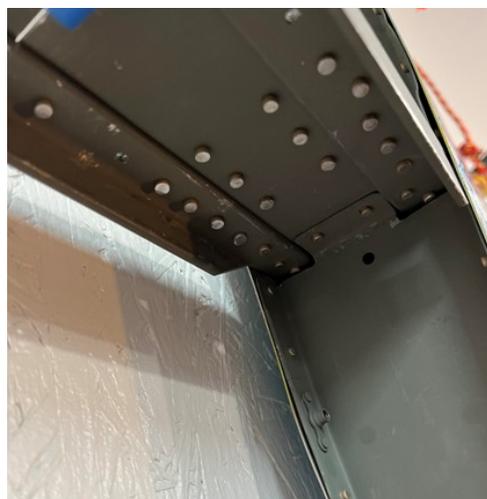


Difficulty in removing the poorly seated rivets



More poorly seated rivets

After working with this process for a while, John decided to “invest” in a couple of new parts to construct a new center spare. Cost for the three items was less than \$50, and now having “experience” with getting things seated properly, this is what his new installation looks like:



John now has a lot more confidence in the safety of the construction. Would the previous conditions have caused a failure? Maybe and maybe not. It also shows that sometimes it is a lot more effective to spend just a few bucks to replace material with good items so that the “repairs” are much better than attempting to make the previous items “work”.

Thank you John for a GREAT presentation and acknowledging the “learning” curve.

Following the meeting we adjourned to hanger #20 for pizza. And, speaking of learning curves, I was kinda “in charge” of getting the pizzas ordered, but was having real problems, (first time you know). I called our President who was in Florida, and he got the pizzas ordered correctly, paid for them from there and Ron Santos was on his way to pick them up. I know that all who were enjoying the pizzas never knew how much it took for them to get to the hanger. But, all enjoyed the lunch.

Aviation Safety and Upcoming Events

Ron Malec

FAAST Blast - FAA Safety Briefing News Updates

As a subscriber to the FAA Safety Team and the NASA Aviation Reporting System ‘CALLBACK’ Newsletters, I will share updates and information that I believe will be beneficial to all members.

General Information

- **The Notam Is Dead. Long Live The Notam** (from *Aviation Safety*, January 2022) The FAA redefines the acronym to make it gender-neutral: Notice to Air Missions.

This change is an extensive update to the order that includes multiple amendments and corrections. Per FAA memorandum on NOTAM name modification in coordination with the FAA Administrator, the acronym NOTAM is updated from Notice to Airmen to the more applicable term Notice to Air Missions, which is inclusive of all aviators and missions.”

- **Instructor Insight** (from the NASA Aviation Reporting System ‘CALLBACK’ December 2021 Newsletter)

Flight instruction poses some unusual challenges not typically found in commercial operations. Mistakes must often be allowed to unfold so that students can learn to recognize them and correct on their own. A delicate balance exists between allowing students to carry out actions far enough so learning occurs but not so far that safety is compromised. Keeping a watchful eye on students, aircraft status, and other traffic is an ever expanding and contracting workload that requires non-stop vigilance.

Instructors must know when to intervene and when to cross their arms, lean back, and let the student continue. That takes practice and focus while anticipating the need for lightning-quick reactions. Both students and instructors savor the satisfaction of a lesson well executed and walk away with increased proficiency and new awareness in their toolkits.

CALLBACK highlights some of the challenges and unexpected events that punctuate the chronicles of flight instruction.

Engine-Out Practice for Real

This instructor had to confront a situation thrust upon the crew when the engine that was intentionally shutdown for training subsequently became an unintended problem.

■ I was conducting a training flight with my student, practicing engine failure during flight. I intentionally shut down the right engine and attempted an airstart with the unfeathering accumulator. The engine would not start, and the propeller was still feathered. [Without success], we tried an airstart using the starter. The engine heavily vibrated for 20 seconds, so we shut down and followed the procedure again, but the engine heavily vibrated again for another 30 seconds. We tried to adjust the power, but we had strong vibrations from the engine. After three unsuccessful attempts to airstart the engine per emergency checklist, I decided to shut down and secure the engine and come back...and land. I [requested priority handling], joined left traffic, and performed a one engine inoperative landing. We landed safely, ...were towed back to the ramp, and parked the plane.

The Opposite Direction Takeoff

Quick actions resolved a critical conflict that had no definitive singular cause nor any discernable warning.

■ My student, whom I was instructing at the time, made his departure call from Runway 23 at Monroe. We cleared the runway visually and didn't see anyone. I always look at our oil pressure and temperature and verify 'airspeed alive,' which it was. We rotated at 60 [mph] and began to climb out. At about that time, I saw another small aircraft right in front of us climbing out from the opposite runway. I couldn't believe it! Where...did this aircraft appear from? Evasive action was needed, so I took control and turned to the right with approximately 30 degrees of bank and 40 degrees of [heading] change to avoid collision. I called out frustrated but not mad, "Aircraft departing Monroe opposite direction, didn't you hear us announce departure?" ...They replied, "No we did not." ...I think this situation...developed [from] the light and variable wind we had and the confusion it can create for which runway should be used. Also, my student has a strong accent. Could it be that the...pilots in the other plane didn't understand him? We had completed a radio check on UNICOM and had received a 'loud and clear,' so I know our radios were functioning properly. Another factor may be that our runway is highest in the middle and could have made it harder to see another aircraft coming [from] 7,000 [feet away] at the opposite end.

- **Altitude Deviations and Misperceptions** (from the NASA Aviation Reporting System ‘CALLBACK’ January 2022 Newsletter)

ASRS consistently receives altitude deviation incident reports. Catalysts for an altitude deviation could range from a minor distraction to a major system failure. System failures that corrupt altitude information intended for use by the pilot are potential culprits, as are automation and other systems that affect the movement of the aircraft's flight control surfaces. Frequently, Human Factors play the significant role in the sequence of an altitude deviation incident. Mistakes occur in automation management, instrument interpretation, altimeter settings, communication with controllers and crewmembers, and in situations that call for nearly superhuman skills to combat Human Factors issues.

CALLBACK presents reports in which altitude deviations are triggered by mistakes or misperceptions shaped by Human Factors issues as opposed to deviations stemming from equipment or system failures.

Regular Exercise

After the safety pilot called out the deviation, this AA-5 pilot zeroed in on the cause and alluded to a policy for prevention.

■ I was practicing a partial panel approach and used my backup steam gauges instead of the primary glass display. It has been a while since I used my backup instruments. I misread the altimeter by 1,000 feet and got lower than intended. My safety pilot did not call out the issue until I dropped to around 500 feet. I've only switched to a glass display two years ago. The lesson I learned here is that remaining competent on older backup instruments is a skill that needs to be exercised regularly

Airshow and Fly-in Schedule

- 2022 Airshows / Fly-ins
 - 02-03 Apr – Shaw AFB Thunder Over the Midlands, Shaw AFB (KSSC), Sumter, SC [Thunderbirds]
 - 05-10 Apr – Sun 'n Fun Aerospace Expo, Lakeland Linder International Airport (KLAL), Lakeland, FL [Thunderbirds]
 - 09-10 Apr – JB Charleston Air & Space Expo 2022, JB Charleston (KCHS), Charleston, SC [Blue Angels]
 - [Purchase Online Ticket for JB Charleston 2022 Air Expo \(attendstar.com\)](https://attendstar.com)
 - **To Attend, you MUST have a VEHICLE parking pass. You will only be allowed to get a Vehicle Pass for Saturday OR Sunday, NOT both days. Attendance is FREE. See the link above – Go to the Questions tab at the middle of the page for additional information. NO Parking Pass NO Attendance – The pass is per vehicle with no limit on number of people that can be in the vehicle. There is not going to be any off base parking.**

Photos from February EAA Meeting – You never know what might make a stop at RBW.

Boeing Stearman N2S-5 (PT-13D) Kaydet



Until next month – Blue Skies - Stay Safe and Fly Safe – Happy New Year

Treasurer's Report

Aimee Pereira

Beginning Balance for November:	\$4,746.50	
Expenses	\$0.00	
5Deposits:	\$125.00	2/17 - Dues payment \$25, Tips from meeting \$25 2/25 – Dues payment \$25, Tips from YE Rally \$50
Ending Balance for November :	\$4,871.50	

Note: Total Earmarked for Young Eagles = \$85.00

A reminder that dues for 2022 are \$25.00 as of January 1, 2022. Dues payments may be paid in person at the next meeting or sent to the following address:

Aimee Pereira
107 Timberlake Ct
Summerville, SC 29485

If you are not sure if your dues are paid for 2022 or have any questions, I can be reached via email at: aaa477.treasurer@gmail.com.