
Pittsburgh-Butler Region Experimental Aircraft Association - Chapter 857

EAA 857 NEWSLETTER



**Dean Cutshall will bring this rare F-100F Super Saber
back to AirVenture in 2022 to celebrate the
75th Anniversary of the United States Air Force!
This photo was taken at the 2015 AirVenture show.**

Presidents Message

EAA 857 Members,

Great news! Our chapter was selected to receive a Ray Allen aviation scholarship of \$10,000 to be awarded to an aspiring pilot of our choosing! We will nominate a student pilot in the near future, so if you have someone in mind, please let a board member know.

In other news, I hope to have my prop back from the prop shop by the time you read this...fingers crossed. Most of the repairs to my plane are complete, just in time for her annual condition inspection and my BFR. There's a lot more to flying than just hopping in a plane isn't there? I got a call from an officer of EAA Chapter 748 in Clearfield, PA, inviting us to a picnic at KFIG on August 20. I'll have more info as we get closer but wanted to give y'all a heads up. I've also had some calls about our Young Eagles dates. With the lifting of most of the Covid restrictions I'm thinking this might be a busy season for us.

Folks seem to be eager to get out of the house! I know I am and will be hitting the links in Myrtle Beach while Kyle subs for me at the March meeting.

Phil Kriley

EAA Chapter 857 president

Please remember that your 2022 dues are now due! Please mail them to Frank Szczerba, the chapter's treasurer as soon as possible to maintain your active chapter membership.





Pittsburgh-Butler Region Experimental Aircraft Association—Chapter 857 Minutes of February 15, 2022 Regular Chapter Meeting

Opening: President Phil Kriley called the meeting to order at 07:05 P.M. and led the members in the Pledge of Allegiance.

Meeting attendees: 6 members were present; 2 members were viewing from live stream on Google Meet. Therefore there was not a quorum for this meeting at 8 members present. There were 4 visitors: Joe Larson, Chris Wilde, Leah Martin, and Richard Martin.

Previous Meeting Minutes: The minutes of the January 18 meeting were published in the February newsletter. Motion to accept the minutes was by Bob Tedesco and seconded by Dan Hood, with members present voting to approve.

Treasurer's Report: The bank balances were reviewed by the Treasurer. Motion to accept the report was by Marsha Hood and seconded by Ted Merkin, with members present voting to approve.

Newsletter: The newsletter was distributed on 2/13 and uploaded to the chapter website. Thanks go to Chris McGeary and Frank Szczerba for their articles.

Website: Enter <https://chapters.eaa.org/ea857> in your browser to view the site.

Tech Advisor: No report

Next Regular Meeting: Tuesday March 15th, 2022. Kyle Riedel will conduct the meeting in Phil Kriley's absence.

IMC meeting: No meetings currently planned. Potentially the next meeting will be in April.

Young Eagles/Air Academy: Digital signature capability is implemented using the iPad tablet. Ted Merklin to set up a test case for this new process. Leah Martin, present tonight, is registered for the Air Academy. Our other attendee is Robert Brueggemann.

Business: The following items were discussed:

- The airport manager for KBTP Ike Kelly retired in the fall of 2021 and the position is still currently open to fill.
- Current Membership: We have 36 total numbers. 24 members are paid. 12 members are unpaid. Murray Steinberg indicates he is unlikely to renew for 2022.
- A Chapter membership application was added to the "About Us" tab on our website. It is requested that a prospective member download and fill out the form and bring it to the next chapter meeting.
- Ray Aviation Scholarship Chapter Application was submitted on January 24th Application review and approval will be conducted in February.
- Condor Aero Club [Club President Keith McPherson] has a Freedom of Flight scholarship established by Jan Lewis and. June 1 is the application deadline. See this [link](#).
- EAA Post-Secondary Scholarships are available until January 31st 2022.
- The annual Chili Bowl event proposed for this coming weekend, however with little interest, it was decided to cancel it.
- Service awards were presented to Dan Hood as the Eagle Flight Leader.
- Members and Visitors interests and aviation activities were discussed. Mr. Larson is a member of the Condor Club and working towards his instrument rating. Mr. Wilde is a student pilot and starting to work on and RV-14. Leah Martin and her father are Young Eagle and Air Academy participants with our chapter.
- Kyle Riedel gave a presentation on actions we could consider to develop supplemental funding for our scholarship efforts. This might include leveraging our 501C3 status to obtain material donations for our events resulting in an increase in our event income realized.

Closing: The meeting was adjourn at 08:12 P.M. Motion made by Ted Merklin and seconded by Chris McGeary.

Program: Phil Kriley presented a video from his Cozy Mark IV original builder filmed at the Rough River Airport in Kentucky.

Respectfully submitted: Theodore L. Merklin

Mooney Safety Foundation Pilot Proficiency Seminar

Part 3: Home Again

By: Frank Szczerba, Sr

My trip to Wichita for the Mooney Safety Foundation Pilot Proficiency Seminar last October was the first time away from my wife since February of 2020 when I made my last business trip to California. While I used to travel a week or two at a time nearly every month for business, three nights away now seemed like a really long time. I woke before dawn on Sunday to check the weather.

Hazardous weather included a convective SIGMET that was active northeast of a line from Harrisburg to Erie, mountain obscuration in the Alleghenies, and the possibility of moderate icing from 5000' to 13000' over much of eastern Ohio and western Pennsylvania. The icing was a cause for some concern, but the whole route was reporting VFR, with clear skies up to central Ohio, then broken to overcast ceilings of 6000' or more and PIREPs for negative icing below 5000' confirming the forecast freezing level of about 6000' over western PA.

Foreflight suggested a nearly direct route at 17,000' as the best option for both time and fuel burn, which would give me an opportunity to exercise my new portable oxygen system from Mountain High. Winds aloft early in the route were light from the west, only 14kts at 283° at 17,000' over Wichita, strengthening but becoming more northerly as the route progressed to peak at a 70 knot quartering tailwind over KMIE (Delaware County, Indiana). Over the course of the whole 837 nautical mile route I'd average a 17 knot tailwind and burn 48 gallons with a flight time of 4h33m. I planned to avoid the ice by requesting a descent early enough to avoid IMC as I approached Butler and the cloud coverage increased. I filed for a 7:30 AM CDT departure.

Over breakfast I chatted with a few students and instructors. The south Jersey group was planning to also go non-stop in their A36, taking advantage of the strong tailwinds in the later part of the route. I made my goodbyes, checked out of the Doubletree, and got a ride over to Yingling Aviation to load up and preflight just as the sun was beginning to rise.



Already one set of empty chocks



Departure was uneventful – I was cleared as filed and had only a brief hold for release for landing traffic. For such a large and busy airport, located in congested airspace, flying in and out of Wichita was surprisingly easy. It was certainly less stressful with fewer delays than a busy afternoon on a nice Saturday at BTP. The controllers did a magnificent job and were easy to work with.

7DT ready to head for home.

Just five minutes after calling for taxi instructions I was rolling down the runway, right on schedule, then settling into a cruise climb at 500 fpm and about 145 kts all the way to 17,000'. By 8:15 I was level and cruising in smooth air at about 176 kts groundspeed. At this altitude there is very little traffic, just the occasional climbing or descending jet, making for relaxed travel and lots of time to spot landmarks as they flow by under the wing.

The Mountain High O2D2 system worked extremely well, easily keeping my oxygen saturation above 95%. One of the nice features of this system is that you can set it up before starting the engine and it will automatically adjust flow rate based on ambient pressure as you climb. It detects when you inhale and delivers a pulse of oxygen with each breath, allowing you to wear a simple and lightweight cannula while minimizing wasted oxygen (a mask is recommended above 18,000'). Furthermore, it continually monitors the oxygen flow and will sound a loud alarm if your breathing slows or shallows, or if a kink develops in a line.



Crossing the Mississippi just north of St Louis

When you travel by air, it often feels like you, on average, always have a headwind. Part of this is explained by the fact that 100 miles flown into a headwind just takes more time than 100 miles flown with a tailwind, and that this effect is not simply additive. To fly 100 miles at 100 knots with a 10 knot tailwind takes 55 minutes, but with a 10 knot

headwind takes 67 minutes. The headwind costs you 7 minutes while the tailwind saves only 5. Taken to extremes, a 100 knot tailwind cuts that trip in half, while a 100 knot headwind means you'll never arrive!

As bad as this is, even when the wind is coming from behind the wing, it's rarely right on the tail, which means we have to crab into the wind, losing some of the benefit of the tailwind. This was amply demonstrated to me on this trip. Approaching the STATE waypoint, just west of Indianapolis, the winds aloft were forecast at 63 kts from 328°. With my course of 88° this gave me only a 10kt tailwind, with a 16° wind correction angle. As I crossed the waypoint the course turned 6° right and I picked up 10 knots over the ground.



The IFD-550 has a heading input, making the wind correction angle obvious.

The winds continued to build as I flew east, until I saw my peak level ground speed just south of Cleveland at 201 knots. As this was 4:18 into the trip, every knot was appreciated. At this point I was over a solid undercast perhaps 2000' thick, with lots of openings visible ahead. BTP was reporting winds 270 at 12 knots gusting to 29, a little stronger than I'd like, but pretty much right down the runway.

As I started my descent, I saw groundspeeds of 225 knots for the first few minutes, and maintained 200+ knots groundspeed for the 20 minute descent before leveling off at 3500' almost right over my house in Cranberry.

It seemed to take forever to slow below 140 knots indicated to get the gear down, and as I flew the pattern with the airspeed indicating well over my 85 knot downwind target speed my attitude seemed unusually nose-high. At first I wrote this off to the effects of the strong tailwind, but as I turned onto the base leg the stall horn chirped, despite 10° flaps and airspeed showing well in the green. I decided to disregard the airspeed indicator and instead fly my known Power-Attitude-Configuration settings as taught by PPS. I touched down smoothly, one of my best landings to date despite the gusty winds and unreliable airspeed indicator, then taxied to the hangar and shut down, with the airspeed finally showing the 85 knots I was looking for on downwind.



My total time en-route was 4h45m, and block-to-block time was right at 5 hours. While I still had another 2-3 hours of fuel, I was more than happy to get out and stretch. The Mooney seats proved extremely comfortable and the



Mountain High O2D2 had kept me alert. Over the course of the weekend I'd flown 5 flights totaling 15.5 hours, 11 landings, 3.3 hours of instrument experience, including 1.2 actual and 6 approaches, while covering over 1877 nautical miles. Most importantly, I was now comfortable and confident in my new airplane and looking forward to taking some trips with Susan, just as soon as I took care of that airspeed indicator....

What's wrong in this picture?

G100UL Development Update on the Aviation News Talk Podcast

by Frank Szczerba, Sr

I spend a lot of time thinking about aviation, as I'm sure many of you do. When I'm not able to fly or work on a project at the hangar, I often listen to aviation podcasts (ok, I sometimes listen to them when I am flying or working on a project too!). One of the best is Aviation News Talk, a weekly podcast hosted by Max Trescott. Max is a CFII and CSIP (Cirrus Certified Instructor Pilot) and former CFI of the Year, who is perhaps best known as the author of the excellent "Max Trescott's G1000 Glass Cockpit Handbook".

Recently, in episode 222, Max interviewed George Braly of General Aviation Modifications, Inc. (GAMI) about the development of G100UL, the first high-octane unleaded aviation fuel to receive FAA approval. You may recall the announcement at AirVenture last year of two wide-ranging STCs covering a number of common engines and airframes, and subsequent expansion that extended the AML to all but the most detonation-challenged engines in the fleet (which, of course, account for most of the fuel burned).

In the interview George talks about progress on obtaining final approval for a fleet-wide AML, and the extensive audits and reports required of them in the wake of the 737 MAX incidents. He goes into detail about the extensive testing which proved even a min-spec G100UL exceeds all requirements of ASTM D910 100LL, and superior even to the old 115/145 "Purple" avgas used on DC-7's and Constellations.

You can listen to the whole interview at aviationnewstalk.com/222 or search for Aviation News Talk in your favorite podcast app.



Ray Aviation Scholarship

By: Ted Merklin

The Ray Aviation Scholarship is funded to 1.55 million dollars annually by the Ray Foundation and operated for the Foundation by the EAA and within the existing chapter network. As noted in this month's President's Message, Chapter 857 has received authorization to proceed to award up to a \$10,000 scholarship to a prospective student, for the purposes of their pursuit of a pilots certificate. In January, Gary Marsico and the board developed our first application to this program administered for the Ray Scholarship Fund by the EAA. This program has been offered to the chapter network for several years now and has generated numerous new pilots for our community, many from the ranks of the Young Eagles. Some chapters have had multiple pilots earn their certificates through this program.

After our chapter application was submitted in January, the EAA office reviewed it and determined we would be a viable partner to provide this opportunity to a young pilot. This is generally open to individuals who are 16-19 years of age seeking powered flight training. However a 15-19 year old may seek glider training. The funding level depends on whether the candidate seeks a glider rating, sport pilot or private pilot certificate. The EAA made this review of our application in February and notified Chapter 857 of our acceptance into the program. It is now our responsibility to seek the candidate whom we believe has the interest and ability to succeed in this endeavor.

The 2022 schedule requires that we identify the person to be recommended and have their application submitted no later than October 31. An application submitted in a particular month will be reviewed and approval granted in the succeeding month. The candidate must be able to begin their training the month following their application. When approved, the chapter will make the financial arrangements with the EAA for fund transfers to our bank account. The initial block of funding, 40%, is provided for the phase of training through the students solo to be accomplished within 3 months of them beginning training. Periodic reviews of progress are reported to EAA by our Scholarship Co-ordinator Gary Marsico. When the solo has been achieved an additional 40% grant of funds is transmitted to the chapter to support post solo training. Within 6 months, when the student sits for and passes the written exam, then the balance of the funds are sent to the chapter for supporting the final effort towards passing the check ride which is expected within 12 months. It is understood that the expense of this training may exceed the \$10,000 grant and one of the expectations is that the student will have the means to conclude their training if this should occur. If the student receives their certificate with some funds remaining, they can retain up to \$1500 towards subsequent training. Any further excess funds must be returned to the EAA.

It is also expected of the student that they fully participate with membership in the chapter and in the activities of the chapter with a minimum of 2 hours per month of service to our local activities. These activities would include, our Young Eagles, and Fly-in events, our chapter meetings, maintenance of our website and production of our newsletter, and involvement in any other programs we choose to pursue. The chapter agrees to mentor the student, keeping in close contact with the student documenting their progress to the EAA and paying their bills from our account for aircraft and CFI fees, fuel etc and to promote and acknowledge the students accomplishments.

In succeeding years, there are opportunities for the chapter to actually sponsor multiple scholars per year as the organization gains experience with the processes involved in this program. This year 150 chapters are participating and EAA 857 is among 18 participating for the first time. There are 161 Ray scholarships to be awarded, 32 are via a 50/50 financing with matching funds by a chapter, and 129 are full Ray scholarships. As noted earlier, candidates may pursue a private pilot certificate with \$10k in funding. A sport pilot rating is funded at \$7k and a glider rating is funded at \$5k. The program seeks to meet 80% completion for scholars to achieve certification. In 2019 90 out of 106 scholars received certification; in 2020 73 of 131 have been licensed and 45 are in progress. In 2021, 12 of 195 have achieved their goal and 178 are in progress.

So, lets get started EAA 857 and seek our candidate! A link to the EAA webpage describing the Ray Aviation Scholarship is located [here](#).



Do you shop with Amazon? Did you know your purchases can earn donations for your favorite charity, at no extra cost to you?

AmazonSmile is a simple way for you to support your favorite charitable organization every time you shop, at no cost to you. AmazonSmile is available at smile.amazon.com on your web browser and can be activated in the Amazon Shopping app for iOS and Android phones. When you shop with AmazonSmile, you'll find the exact same low prices, vast selection and convenient shopping experience as Amazon.com, with the added benefit that AmazonSmile will donate 0.5% of your eligible purchases to the charitable organization of your choice. You can choose from over one million organizations to support.

– <https://smile.amazon.com/charity/smile/about>

EAA Chapter 857 is a registered 501c3, and is signed up to receive donations from this program. Just search for "Pittsburgh-Butler Region Experimental Aircraft" on the Amazon Smile organization search page, or go to <https://smile.amazon.com/ch/84-3116746>. Amazon will then donate 0.5% of each purchase you make to the chapter when you shop through smile.amazon.com!



EAA 857 - Chapter Meetings and Events for 2022

Meetings are held on the third Tuesday of the month at 7:00 PM in the Conference Room at the Pittsburgh-Butler Regional Airport.

Chapter Meetings	Tuesdays	January 18 February 15 March 15 April 19 May 17 June 21 July 19 August 16 September 20 October 18 November 15
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IMC Club -	3rd Wednesdays,	To be Announced.
International Young Eagles Day -	Saturday,	June 11
EAA 857 Fly-In and YE -	Sunday,	August 14
EAA 857 Fly-In and YE -	Sunday ,	September 11

2022 National Events

Sun 'n Fun -	April 5 - 10
Sentimental Journey -	June 21 - 25
AirVenture Oshkosh 2022 -	July 25 - 31

EAA 857 Chapter Officers for 2022

Use contact@eaa857.org to email the Chapter President. Your request will be forwarded to the appropriate individual.

President	Phil Kriley	
Vice President	Kyle Riedel	
Treasurer	Frank Szczerba	
Secretary	Josselyn Slagle	
Board Members	Ted Merklin	2022-2024
	Mark Beighey	2022-2023
	Dan Hood	2022
Website / Newsletter	Ted Merklin	