



January Newsletter 2022

Board Meeting Jan. 13 6:00 PM

Regular Meeting Jan. 13 7:00 PM

Board Meeting Jan. 27 6:00 PM

Earl Grace – Member of the Month



Our Founder, Paul Poberezny, said "EAA is not about airplanes but of People."

Our Member of the Month demonstrates that statement to a "T" He is not a pilot nor has ever owned an airplane. What he is, is an outstanding A&P that has developed

significant knowledge in the maintenance and management of Turbine Class Aircraft Engines.

In Earl's case, he has the ability of catching and maintaining significant Turbine engine technical information at a higher rate than would be normally expected. I asked Earl if he did anything in high School that caused him to enter a highly technical world. The answer was "I did nothing and after graduation, he decided to go join the Air Force and at the time, they were looking for Mechanics. So the first stop was basic training at Lackland AFB. He did well and was accepted training as a Turbine Engine Mechanic. So he spent the next almost four years seeing the far east part of the world as Line and Shop Turbine Engine Mechanic. One of his duties was to place a black blanket in tail cones of jet fighter aircraft with a flashlight Looking for bright marks in the otherwise black soot tail cones and turbine areas. A bright spot was evidence that the airplane swallowed something bad or the engine was breaking up. At times he had to replace hot sections of the engine on the line in bad weather. He spent 3 years in Southeast Asia where it was very hot to work and he had to watch out for VC shooting him. his final year was back in the States as a shift supervisor in a C-130 engine shop. While in the USAF, he worked on several different USAF aircraft but saw a lot of F-100's, F-101's, F-105, and occasionally a C-130. He became quite familiar with J-57 and J-75 engines.

After 4 years of USAF, Earl attended, and received his Bachelor Science Degree in Industrial Technology, and his earned FAA A&P Mechanic's Certificate.

With his practical experience and education, Earl was employed for 45 years by 6 companies, attending 16 Turbine Schools with 5 different Manufacture's, and served in various positions as mechanic, supervision, training instructor, manager, consultant and court expert witness. He usually witnessed against manufacturers and he was on the winning side of three court cases for which he was called to testify.

Earl can entertain a listener with all sorts of stories about the technical capability of various turbine engines.



One was about the General Electric CJ-610 and CF-700 Turbo Jet Engine. These two engines are nearly the same except the CF-700 which has a radial air bypass and has a different combination turbine blade (as shown at the bottom in the picture,) and a compressor blade(as shown at the top). The CJ-610 is rated at 3000 pounds of thrust and the

CF-700 has a rating 4500 pounds of thrust. Another comparison is the ratio of pounds of fuel per pounds of thrust at 3000 pounds of thrust. If the ratio of the CJ-610 is 1.0 the ratio for the CF-700 is 0.64 or a 36 percent savings in fuel with a disadvantage of initial cost and weight. Turbo Jet engines are now manufactured with very high ratios of bypass thrust engines. In other words they are Turbo Prop like engines with ducted multi-blade Propellers.

Well, Earl gave me a book full of all kinds of stories, too many to fit into a newsletter. We will just have to invite Earl to do a regular Meeting Program to personally tell you about the interesting stories about the Turbine aircraft Engine.

January President's Corner

The new year is upon us. With that comes a few challenges, such as getting the proper dates written on your personal checks and other important documents. Making that transition from writing one to the other always brings a few eye rolls and chuckles. It can be quite the challenge sometimes, but very manageable when we think about it.

The New Year for EAA 419 brings changes and challenges too, some new Chapter Officers. As your incoming President I'm honored to get to help bring the Chapter into the New Year. I have already been working on a few things with a little help of our members and I have some exciting things to share with you at our first meeting of the year.

I invite you all to come out for the first meeting and get to know your new officers and share in our plans. I can't wait to see each of you on January 13th at the first meeting of 2021...I mean 2022.



Capt. Chris Hardee

Officer 2022-2023 Term

President.....	Chris Hardee	615 482 1592
Vice-President.....	Adam Palermo	615 934 2867
Treasurer.....	Dan Perkey	615 556 7149
Secretary.....	Clifford Richeson	615 631 8953
Eagle/Young Eagle Coordinator	Chris Hardee	615 482 1592
Board (one year)	Jerry Swick	615 7798373
Board (one year)	Robbie Mackie	615 705 1395
Board.....	Chuck Williams	615 519 3680
Board.....	Joe Blanton	586 215 7886
Board.....	Earl Grace	615 357 8811

EAA Memorial Plaque

Those Now Listed

Curtis Collens
Joseph Peebles
Woody Robinson
Thelma Sloan
Barbra Clayton
Col. Jean Jack
Clyde Hinch
Little Tommy Smotherman
Earl Woehniker
Don Mitchell
Jim Egglezos
Lon Nuell
Lt. Col. Bill Pickron
Lee Jones
Loyd Brewer
Charles Sledge

Those Known that Need to be Entered

Gene Sloan
Holmes Ellis
Frank Stephenson
Nevin Wax
Bob Caldwell

The Airport is in the process of selecting a location for the Plaque and will be put up soon.

Please let me know if I have forgotten others that need to be Listed on the Memorial.

David Swinder
arfarceone@comcast.net



A Very Merry Christmas and a **Happy New Year** for All! This has certainly been a very busy time of the year with all of the activities that seem to pop up everywhere.

Wow! What a great EAA Christmas Banquet! We thank all those who made it a wonderful success. The decorations were great, we had a good attendance, exciting door prizes, and as always, Hoot Gibson gave a fantastic picture of what it means to be an Astronaut.

We are now looking forward to a great start in a new year under the leadership of our new President Chris Hardee and officers. Note in the Newsletter Heading the three meetings scheduled for January. Let's have a great attendance for the New Year.



Landing Manually in Zero-Zero Instrument Conditions:

In this busy Christmas Season the Editor ran out of time to create a new great article, so we decided to reach back and pick up an article about a couple of members that have passed on that I am sure would bring back some great memories of great people.

We all have come to know and love Col. William (Bill) Pickron who has recently been inducted into the Tennessee Aviation Hall of Fame and have been able to enjoy hearing of his rich history of aviation in WWII. As you know he was the youngest of Flying Sergeants in early 1941.

One of Bill's more interesting stories is of his accomplishments as an Instrument Pilot. We have all heard of Category III instrument landing capability of large airliners using automated technology. What we did not know was prior to this more recent technology, certain qualified military pilots were given letters of endorsement to land manually in Zero-Zero meteorological conditions. For those in "Rio Linda" that means you can't see anything outside the window and all you can feel are the tires hitting the runway. Bill explained to me how to do it. Bill also said it takes lots of practice.

He said you start off with a normal ILS approach with a 500 ft per minute descent as normal and you set everything up and get everything stable. (This leaves me out right away.) Then when you get to the middle marker you ease up on the power setting just a little and pick up the nose one dot on the attitude indicator. This should establish a 300 ft per minute descent but will hold you on the glide path. You just hold that until you hit the runway. He didn't say this but you then do what Nevin Wax does after he lands. You open the door and reach out with your hand and feel for the edge of the taxiway and follow it in to the terminal! As you know, his macular degeneration has clipped his wings.

What you can learn from the old timers is priceless and we miss these great men!

RV-7 Project For Sale



For those who are not real familiar with the Van's line of Premiere aircraft kits, the RV-7/RV-7A is a slightly larger aircraft as compared to the very popular RV-6/RV-6A. The RV-7 was designed to accommodate 6ft occupants weighing in at the FAA determined weights. They both are two place side by side configured seating and the A suffix is for the tricycle landing gear configuration.

The package is being handled by our member Roy Miles, (615) 347-0112, Roy@TheMilesCo.com. Project consists of the completed Empennage and a started wing package and tooling. Our Joe Blanton has been involved in the construction of RV-6s and RV-8s while living in Detroit as stated above. I am sure Roy would be happy to receive your call to answer any questions you might have.