Happy New Year

JANUARY 2023

Home of the "Panhandle Pelicans"

EAA 485

Squawk 485

Next Meeting Saturday, Jan 14th 1000
At Our Clubhouse
IMC/VMC Club Meets at 0830-0930

Details

President
Ralph Moser Contact: Ralph

PRESIDENT'S NOTES

Happy 2023! Just as I suspected, several contributors were left out of my "2022 Recap" at the November chapter meeting. We should thank Gabriel Davenport and his fellow scholarship winners Cody Rhoades, Jacob Abston, and Emily Bond for providing the hamburger lunches after our 2022 meetings. Well done! We obviously want our newest members present at our chapter meetings, so in 2023 I will be asking for a larger pool of chapter volunteers to rotate the work of providing lunch.

Speaking of Cody Rhoades, on Dec. 1st, he took and passed his private pilot check ride with DPE Zack McNeill. Way to go, Cody! He is the first of our summer 2022 chapter scholarship winners to finish. I hope our chapter anonymous donor is smiling....! Then later in December, Emily Bond took and passed her FAA written. Both Jacob and Emily are well on the way to their Private Pilot check rides, as are Will Curd and Gabe Davenport, our two Ray scholars.

We again applied for chapter Gold Status with EAA for our 2022 activities and accomplishments. We should max out their 11-point scoring system. We are expecting good news on that in the next month or two. It's not only a "feather in our hat", but helps get future Ray scholarships, etc.

On Dec. 10th I chaired a Board of Directors meeting of our chapter. We (Mark Rogers, Scott Swanson, John McKiernan, Duane Thiessen and I) covered lots of items, including updating our Bylaws. Minutes of that meeting are included in this newsletter. A copy of the updated Bylaws will be posted on the clubhouse bulletin board.

The main change is that starting Jan. 1st, we will switch to a Jan-Dec dues year. Still $25/year. For those of you paid up through April 2023, you will simply pay $15 in April for the remainder of 2023.

Clubhouse improvements over the holidays:

1. Replaced worn electrical outlet by podium.
2. Bought used file cabinets to organize the storage in the front of the room. This will give us more seating area for our ever-increasing meeting attendance.
3. Re-positioned EAA sign in south window. Applied "WATCH YOUR STEP" decals to the two step-downs, to warn visitors.

As I did a year ago, I reached out to those who have gone delinquent in local dues. Often, members just get busy with other things in their life and forget. Several have elected to pay up and rejoin; fantastic!

Another winter project I'm working on is to get our "members" list on the website more accurate. Many of our 26 new members in 2022 aren't even listed. We'll find a better way to get a copy of our new member application information to our Webmaster so it can get posted in a timely manner.

Lastly, we have an interesting tour planned in conjunction with our January 14th meeting. We'll do VMC/IMC Club 8:30-9:30 as usual. Then we'll hold a shortened general membership meeting 10:00-10:30, followed by a drive over to the Pensacola Airport ATC Facility for a tour of Approach Control and Tower. After that, anyone interested can gather at the Golden Corral Buffet nearby (2260 Langley Avenue) for lunch. See you at the January meetings!

Pensacola FL


RAY AVIATION SCHOLARSHIP UPDATE

Craig Spoke, Chapter 485 Coordinator

Gabriel is working diligently with studying for the written. He is hoping to take it in the next few days/weeks. He is working towards a possible check ride late January, 2023. William has had quite a few setbacks with getting his check ride completed. Some weather cancelations and some for other reasons. He has had to reschedule 5 times in November and 3 canceled in December. He is looking at changing DPEs. He has a family friend in Mississippi who is a DPE. The details are still being worked out.
Our application for the 2023 Ray Aviation Scholarship has been officially submitted. The application window closes January 31 and EAA will start reviewing them at that time. We should hear back sometime mid to late February. If we are selected for another scholarship, interviews will start mid to late March. Applicants are ages 16-19 for powered flight training and should have a strong interest in aviation. Let me know if you have a possible young person who would like to apply for this fantastic opportunity.

Craig

Young Eagles Coordinator

Tanner Matheny

As we close 2022 and head into 2023, we sure ended the year with a fantastic rally in October! With this new year brings many new life events for me. A new child in November and possible career changes in my life are big time suckers so I am turning over the YE coordinator position to one of our members, Eric Goldman.

Our turnover will be this month. It has been a privilege to have been your coordinator over the past year and I hope my goal of spreading the Young Eagles program to the local community was met and will continue to be met. The program will be in good hands and I hope to continue to be a volunteer pilot for rallies in the future.

Expect a spring rally with the possibility of doing a joint rally with Chapter 1265 at Foley April 1st or 8th. Take care, and remember to fly safe and share the passion.

Tanner

EAA Chapter 485 Minutes November 12th, 2022:

General Membership Meeting 1000-1100:
Opened the meeting with the Pledge of Allegiance
Guest introduced themselves: Jason & Joelle from the Canadian Forces, Eric Goldman from PNS ATC, and new members David Meskill and Courtney Wielander.

President, Ralph Moser passed out EAA certificates to the chapter office holders. He announced Craig Spoke and Scott Swanson represented the chapter at the Girls in Aviation event. He showed pictures from Bill Miles birthday celebration.

Vice-president, Mark Rogers reported on a meeting with the Gulf Shores control tower controllers. The tower doesn't have radar and relies on position reports and they reminded pilots to check NOTAMs for R-2508 activity. He announced plans for an Old Buzzards flight.

Secretary/Treasurer, Scott Swanson gave a financial summary.

Chapter 485 Scholarships Update; Cody is doing check ride prep and Emily is doing cross- country training and approaching solo cross country.

Ray Scholarships Update; Gabe working on writtens then check ride prep. Will is scheduled for his check ride next Tuesday.

An iPad was offered for use by the Young Eagles.

Member Build Projects Update; Gulf Shore HS RV-12is build was moved to a T-hangar.

FAAST Team briefing by Jordan Shaw was about Plan Continuation Bias (Get There-itis).

Ralph gave a recap of the chapter's 2022 activities.

The meeting adjourned followed by a light lunch, cookies and apple cider.

VMC/IMC Club at 0830-0930

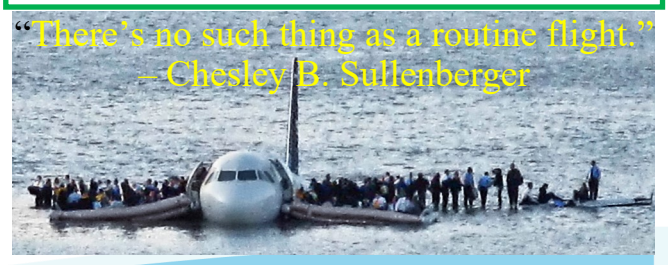
Chart symbols were discussed.

They included the VFR chart airport symbol "L" vs "L*". L* means lighted with limitations such as pilot controlled lighting.

The IFR chart symbol discussed was the route flag symbols with a "X" and "R". The "R" flag is Minimum Reception altitude and the "X" flag indicates Minimum Crossing Altitude.

Scenario that were discussed included pilot controlled lighting not coming on and fog forming at the destination airport after the flight being delayed. Other subjects discussed were props striking people, the FAA Wings Program and self briefing information in AC 91-92.

Submitted by: Scott Swanson Secretary/Treasurer



Aviation Briefs

It's a ... It's a … It's a ……. "Matador"

By Kate O'conner

No, it's the X-37B Orbital Test Vehicle (OTV) set a new endurance record on Saturday, landing at NASA's Kennedy Space Center after spending 908 days in orbit. The uncrewed flight was the sixth for the Boeing-built vehicle, which has now traveled over 1.3 billion miles and logged 3,774 days (*10.3 years*) in space. According to Boeing, the mission hosted a solar energy experiment designed by the Naval Research Lab and multiple NASA experiments including evaluations of the effects of space exposure on various materials and seeds. In addition to the experiments, the X-37B successfully deployed a satellite designed and built by U.S. Air Force Academy cadets in partnership with the Air Force Research Laboratory.

"Since the X-37B's first launch in 2010, it has shattered records and provided our nation with an unrivaled capability to rapidly test and integrate new space technologies," said Jim Chilton, Boeing Space and Launch senior vice president. "With the service module added, this was the most we've ever carried to orbit on the X-37B and we're proud to have been able to prove out this new and flexible capability for the government and its industry partners."

The X-37B program is conducted via a partnership between the U.S Department of the Air Force Rapid Capabilities Office and the U.S. Space Force. Prior to its sixth mission, the longest the vehicle had spent in orbit was 780 days. As previously reported by *AVweb*, the team behind the X-37B was awarded the 2019 Robert J. Collier Trophy.

The officially retired F-117 stealth fighter will fly long into retirement, according to a Request For Information issued by the Air Force and uncovered by msn.com. In the document, the USAF is asking potential contractors to maintain an unspecified number of Nighthawks in stealthy flying condition until at least 2034. The type was retired from frontline service 15 years ago, but it wasn't long before they turned up in fuzzy long-lens images in online forums.

The Air Force is somewhat more open about their use of the aircraft and admits they're helping to train the current generation of fighter pilots in tactics against stealthy adversaries. As such the planes have to be in top flying condition and their radar deflecting and absorbing structures maintained. Since all those processes were and are classified, the field of potential bidders for the contract is likely pretty small. The operational F-117s are based at the Tonopah Test Range, a top-secret facility about 150 miles north of Las Vegas.

MSN says the Air Force has about 45 F-117s (only 59 were built), at least 10 of which are destined for museums. Before they can be donated they have to be stripped of all their military might, and that's part of the contract.

Matco Purchased By NMG Aerospace

Longtime general-aviation wheel and brake provider Matco Manufacturing has been purchased by NMG Aerospace, a large aerospace design and manufacturing conglomerate that builds parts for everything from Airbus A380s to Apache tailwheels. For the immediate future, Matco will remain in Woods Cross, Utah, a suburb of Salt Lake City. George Happ, who had owned Matco until the NMG purchase, will remain in place for a period of time while the company transitions to new management. It's expected that manufacturing will continue in Utah for the foreseeable future.

According to NMG's vice president of business development and engineering Jeremy Earley, "The acquisition of Matco reinforces NMG's commitment to supporting all areas of the aerospace marketplace, particularly in the areas of wheels, brakes, and actuation. It is exciting to

take a core part of our offering at NMG and serve a new, growing market in experimental, light sport, and advanced air mobility sectors."

Washington Renominated For FAA Administrator Post

Russ Niles

As expected, President Joe Biden has renewed the nomination of Phil Washington to head up the FAA. The agency has been without an administrator for almost a year and there were no hearings to confirm him in the last Senate. The new Senate sat on Jan. 2 and Washington was among several second-time nominations put forth by Biden. Despite the Democrats' majority in the Senate, Washington's nomination might be contentious.

Washington has been the CEO of Denver International Airport for more than a year, but that's his first aviation job. Before KDEN, he was CEO of the Los Angeles transit system. He was recently named in a search warrant resulting from a corruption investigation at the City of Los Angeles. Meanwhile, Acting Administrator Billy Nolen has been presiding over a busy time at the agency.

Amazon Prime Air has begun making drone deliveries of packages weighing under 5 pounds in the Lockeford, Calif., and College Station, Texas, markets. The company received Federal Aviation Administration approval for drone use in August, and spokesperson Natalie Banke says it "will gradually expand deliveries to more customers over time."

French Investigators Join NTSB In Criticizing Ethiopian 737 Max Report. France's aviation accident investigation entity, the Bureau d'Enquêtes et d'Analyses (BEA), has joined the U.S. National Transportation Safety Board (NTSB) in critiquing Ethiopia's final report on the infamous 2019 fatal crash of a Boeing Max 8 airliner operated by Ethiopian Airlines.

The official accident report was filed last week by Ethiopia's [Aircraft] Accident Investigation Bureau (EAIB). The BEA had been called in by the EAIB to analyze data from the twinjet's flight data recorder and the cockpit voice recorder, and submitted comments that it judged were underplayed by the Ethiopians.

As did the NTSB, the BEA said its comments regarding human factors were not included in the final EAIB report, which was filed last week, and which focused on the failure of the Boeing's Maneuvering Characteristics Augmentation System (MCAS).

Homebuilders Week – Online Event Starts January 23

An online opportunity to learn about all aspects of building your own aircraft

By Charlie Becker, EAA Homebuilt Community Manager

EAA will be hosting our third annual Homebuilders Week online learning event for aircraft builders: (www.EAA.org/HomebuildersWeek). It will be five straight days of educational forums covering a broad spectrum of aircraft building topics. It will start on Monday, January 23, 2023, and run until Friday, January 27, 2023. The live online presentations will be open to everyone interested in building their own aircraft. Sessions will start at 11:30 a.m. CST and run until 8:30 p.m. CST daily.

This event is an opportunity for a new person to jump in with both feet and learn a lot about the wonderful world of homebuilding. We will cover areas like getting started successfully and techniques when building with sheet metal, composites, steel, and wood. But it won't be just for the newbie; we are offering in-depth talks on panel planning, engine selection, FAA certification, flight testing, and selling a homebuilt aircraft. There will be something for every builder, whether you are just starting out, knee deep in a project, or just received your airworthiness certificate — it is going to be a great learning opportunity.

EAA is working with industry experts, kit manufacturers, and other subject matter experts to provide top-notch material for builders. The sessions will be live and allow time for attendee questions. Recordings will be archived and available to EAA members for review.

EAA Homebuilders Week coincides with the 70th anniversary of the founding of the Experimental Aircraft Association in 1953. Those founding members of EAA lit the fuse on the homebuilt movement that provides affordable access to aircraft ownership and today has spread worldwide.

EAA Homebuilders Week is possible through the generous sponsorships of Aircraft Spruce & Specialty Co., Dynon, Scheme Designers, Inc., and Van's Aircraft, Inc.

Visit EAA.org/HomebuildersWeek to review the schedule and sign up for a session.

Homebuilders Week Schedule
January 23 - 27, 2023
All Time Central
www.EAA.org/HomebuildersWeek

CST	Monday 1/23/2023	Tuesday 1/24/2023	Wednesday 1/25/2023	Thursday 1/26/2023	Friday 1/27/2023
11:30-12:45	Building an Aircraft: What You Need to Know- Charlie Becker	Composite Construction Basics- Mark Forss	Top Five Project Killers- Lisa Turner	EAA's Homebuilt Movement: Past Accomplishments and Future Opportunities -Jack Pelton & Charlie Becker	Amatuer Built Aircraft Certification Process-Joe Norris
1:00-2:15	Wiring Basics - Dick Koehler	Buying a Used Homebuilt- Vic Syracuse	Flight Testing Basics-Gary Baker	Lycoming Engine Installation - Dave Prizio	Working with Wood 101- John Egan
2:30-3:45	TIG Welding-Charlie Becker & Earl Luce	The REAL Culprit in HB Accidents- Ron Wanttaja	Zenith Aircraft Kits & Plans- Sebastien Heintz	Panel Planning-Stein Bruch	Advocacy Update: MOSAIC, Fuels & More - Tom Charpentier & Rob Hackman
4:00-5:15	Sonex Aircraft & AeroConversions Products- Mark Schaible	Fabric Covering Basics - Mark Forss	Advanced Flight Systems- Rob Hickman	Garmin Experimental Avionics Solutions- Brad Brensing	Plans Built Aircraft: The Affordable Option-Tim Hoversten
5:30-6:45	Sheet Metal Basics - Mark Forss	Dynon Avionics-Michael Schofield	Gas Welding -Budd Davisson	Choosing Wheels & Brakes- George Happ	Van's New High-Wing RV-15-Greg Hughes
7:00-8:15	Kit Selection - Paul Dye	Van's RV Aircraft Kits-Greg Hughes	Finding an Engine for Your Homebuilt-Mike Busch	Painting Your Plane: DIY or Use an Expert?-Craig Barnett & Ken Reese	Maintenance Horror Stories - Vic Syracuse

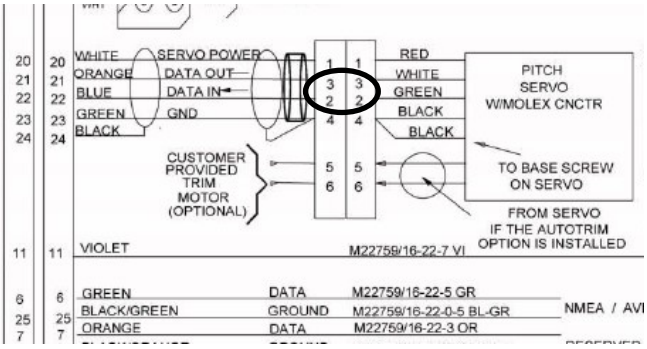
RV-7 Instrument Panel Finishing

Well it's been a long grueling process but I seem to have a functioning instrument panel. Everything appears to be working now but I had to replace my Garmin SL30 for a repeat failure. I'm not happy about that. I picked up a great deal on a yellow tagged one several years ago and that solved my issue. I'm not sure I want to spend the money to repair something inherently wrong with my original SL30 that Garmin can't find.

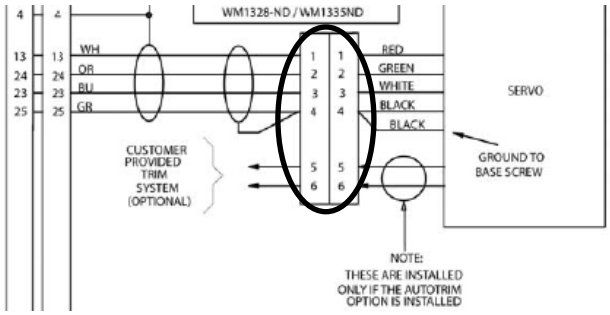
The next failure I had was also a repeat on my Trio altitude autopilot. This may have been my fault. I swapped over from the legacy Trio roll and autopilot control heads to a Trio Pro-Pilot to get full use of my Garmin GNS 480W for coupling precision approaches. I purchased the Pro-Pilot control head and the roll and pitch servos for a great deal a couple years ago used from an RV-10 Pilot in Australia doing a Dynon Upgrade.

When doing the swap I merely installed the new control head in my aircraft and followed the pinning on the big harness since my autopilots were already installed. You would assume that this was merely a new harness pinning out the two external servos and interfacing with the 480 and EFIS but I missed a reverse pinout change at the autopilots themselves. The pin change didn't "hurt" the roll autopilot but may have on the pitch.

I swapped the pins at the roll autopilot and it worked fine but swapping at the pitch didn't get the "box" working. Well I pulled out the other pitch autopilot and looked at the wiring on the plug. Sure enough there were two pins that were swapped from the original Trio installation on my aircraft for 14 years.



Here is what I missed.
They use Molex connectors which I don't care

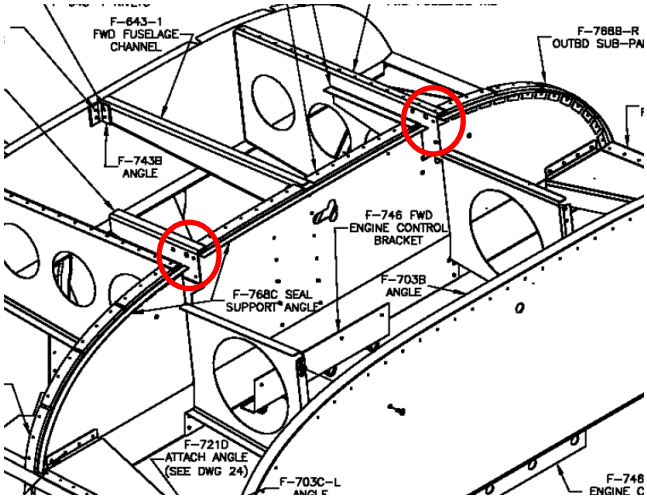


for but why would they swap the physical placement on the connector pins 2 & 3?
Here is the original servo wiring.
It's still my fault but!!!! I'll have to send the unit in for repair and keep as a backup. It tries to engage when selecting pitch but the relay isn't staying engaged.

RV-7 Tip-up Canopy

The titup canopy is great for looking through with absolutely nothing in the view but plexi but you pay a price. These are notorious for leaking due to it's forward hinging and front seal. Even the RV-14 suffers from a similar problem.

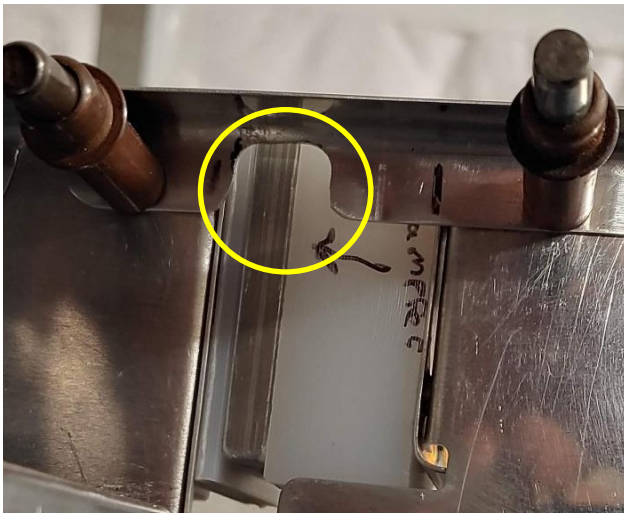
The design was poor and the RV-7 used the same seal mounting flange constructions as the RV-6 which had a straight hinge compared to the RV-7/RV-9 curved hinge. The RV-6 required a clearance slot on each side to allow the straight



hinge to pass through the seal area. On the RV-7 the curved hinge doesn't require those slots but

while building the plans have you terminate the seal flange at the hinge areas which are riveted to 3 separate sub-panels.

I told my son Pat whose building an RV-7 to make the flange in one piece and just remove the lower riveting tab off at the hinge area. That would be my advice to anyone doing a RV7/RV9 tipup.



Here is the left side of the Seal Flange running continuous through the hinge area in Pat's RV-7. There is a 1/4" thick piece of aluminum in the hinge slot representing the hinge for fitting. This is perfect since there is a slight piece of the actual bend left for support across the opening.

While flying off my initial 40 hours in the summer I noticed some air leaks up front. Later In October at altitude the cold air coming through these slots got my attention. When I took the plane to SERFI and spent the night I never gave much thought that most of the due on the canopy would end up drenching the backside of my instrument panel wiring when the canopy was opened. [I now carry a water absorbing towel in my overnight bag.]

Following SERFI I removed the canopy and JB Welded a piece of aluminum across the gaps and re-glued the seal. This alleviated most of the air leak. Over time the seal loses its adhesive bite and moves around. There are places where it's impossible to get access to reattach.

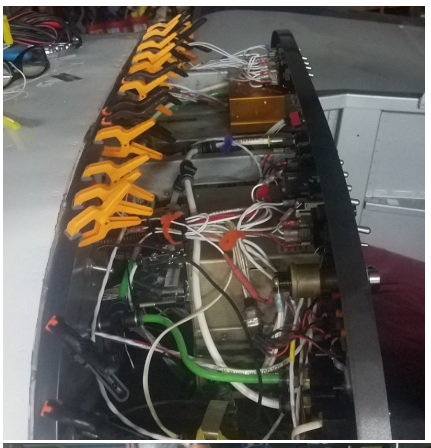
The canopy has been off my aircraft while doing the instrument panel. I removed the seal and JB Weld tabs and cleaned the seal attach flange. I then rivetted in some aluminum across the gaps and used JB Weld to make a smooth transition over the riveted area.

A few years ago I purchased about 100 very small clamps for holding fabric on tubes while doing recovering. They came in handy clamping the seal in place using Gorilla gel. Initially I tried some left over 3M 1/4" double sided tape that also uses a primer. I had enough left over supplies after replacing the aileron gap seals on Ron Lock's Cirrus SR-22. I figured if 170 kts didn't remove them on top of the slick wing the process should hold the rubber to the flange. It didn't work.

During each cycle of the canopy the front seal is rubbed one way and then in opposite direction. The curved hinge articulates the canopy moving it slightly forward during closing and aft during opening. The rear seal has a much gentler cycle merely being squished except for the vertical sides which got torn in the first month of flying. I replaced the lower 3 inches with the soft side of Velcro which seals well and is durable.

Time will tell how long before I get leaks but using Gorilla Gel for now has the seal in place and doing gentle tugs on it around the perimeter haven't dislodged the seal.

The Panel is Done! I just need to get the canopy on and then calibrate both the AFS 4500 and Garmin G5 Magnetometers outside.



Mini-clamps holding the seal in place during curing

Canopy Closure Literally

We took some time out of a build night to get my canopy back on. After messing with it for the best part of an hour we gave up.

Just this past week we had a build night and again at the end attempted to get the canopy on. I just couldn't get the pins to engage on the release mechanism. We left it with the hinges in the slots and the gas struts engaged holding the canopy open. The weird part was I probably put the canopy on 3 or 4 times by myself before.

The next morning I crawled inside the cockpit and wiggled the canopy hinges and got some deployment of the pins so it was close. I then went underneath the panel and took my homemade 90 degree tapered pins and worded on the right side which moved easier and wiggled until I got a pin started from the outside. I crawled back out and then tried the mechanism and then got more movement. Went back under and moved the hinge on the other side until I hung the tool slightly. Moved the handle over half way in and retracted the pins and then re-engaged and the pins went home.

OOPS RIVETS

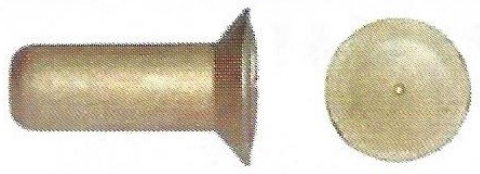
What in the world are OOPS Rivets. Well they're very handy for installing aircraft nutplates and for going up the next size rivet after a mistake or wallowed hole. They have the same nomenclature as a normal rivet with the exception of a smaller diameter head. The real name is NAS 1097 rivets.

Installing nutplates requires using flush rivets and countersinking the hole. Since the heads are smaller diameter it takes less of a countersinking to flush the rivet to the surface. I use a 100 degree hand deburring tool to slightly countersink the skin. Test fit the rivet until they are flush. I've installed nutplates in .016 sheet metal which is about the minimum thickness limit. Anything with less thickness would start to enlarge the hole on the backside which will leave to much wiggle room to properly set a rivet.

Lets say your installing #3 (3/32") rivets and need to drill one out. While getting the old rivet out you manage to increase the hole size. You can then use a #4 (1/8") OOPS rivet after slightly countersinking a little more. The actual #4 oops rivet head diameter is probably close to the middle between a regular #3 and #4 rivet. In an RV aircraft with around 15,000 AN3 flush rivets it's highly unlikely to detect the size difference of a few OOPS rivets. I believe on my RV7 I used 3 and can't remember where. Interestingly enough, there are no Universal (dome head) "soft" #3 rivets on the RV7 only #4s.

Our world in GA is pretty much confined to using **AN3 and AN4** (3/32" and 1/8") rivets. AN5 rivets are too big for our hand squeezer. I have rivetted a few AN5s with a big rivet gun 4x and BIG bucking bar but don't recommend it.

If you're building an aircraft pick yourself up some NAS 1097 OOPS rivets. As I said earlier, my main use for OOPS Rivets is to install nutplates mostly in sheet metal. The can also be used in fiberglass but I take a little off the actual squeeze force so I don't damage the fiberglass.



Thatcher

The CX-4 landing gear has proved a challenge. After initial fitting things needed to be "tweaked". Gear is hanging on the plane.

The spacers setting the wheels on the axles for proper clearance were slightly different lengths. Additionally, both hat sections that contain the disc brake rotors weren't true and required shimming. Paul Thompson and I finally got what we thought was a good compromise. This took a lot of time assembling and disassembling. The most challenging part was drilling the hole through the axles for the cotter pins that would secure the castle axle nuts. This took several clamps on the drill press and some luck. The prep before drilling was to ensure the complete tire assembly was setup correctly including torquing the axle nut. We used a carpenter nail set and hammer to mark on the threads. Then used a fine file on edge on the threads to create a flat spot.

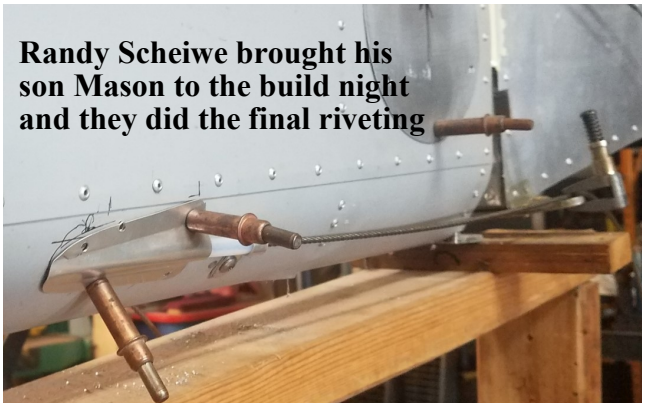
The end of the axle had been factory drilled and tapped for an AN4 bolt to provide fastening of a wheel pant/bracket. This helped a bit since there was a 1/4" void in the middle of the 3/4" diameter axle just past the point where we needed our cotter pin holes. This aided the drill bit entering the void an alignment point inside the concave threaded tapped hole.

Using a #30 drill bit (slightly larger than 1/8") worked great. The holes in both axles lined up perfectly and a #30 drill bit fit in the castle nut perfectly after the torque was set on the wheel. Each axle required a few minutes after drilling for deburring and cleaning.

It's a little nerve racking drilling axles or anything round. Several clamps were used and each axle had to be slightly repositioned as the bit began cutting to maintain a straight hole.


Drilling Axle for Castle Nut Cotter Pin

While we were working in front n Jonathan Nunellee and Keith Albee were making progress at the rudder cable exit points in the tail section. We had previously made some fairing covers for the cable exit points from the fuselage. These were fitted, drilled and clecoed. Since the rudder cable moves slightly left and right as the rudder horn articulates we needed something to protect both the cable and fairings from abrasion. I found some nice tubing around the shop to slip the cables through. This allowed the 1/8" rudder cables to slide easily, protecting both the cable and metal fairing from abrasion.


Randy Scheiwe brought his son Mason to the build night and they did the final riveting

Back up front more gear work. A few months back Jonathan had picked up a pair of CX-4 wheel pants. After looking at them we noticed that the tires were rubbing on the outboard side of the wheel pants. Our axles were 5/8" longer and I estimated it wouldn't be a problem.

When we initially fitted them over our tires they weren't rubbing but we had very slight clearance. We needed spacers. I had several AN4 1/4" diameter fender washers (oversize). By the end of the night we used 4 (1/4") to shim the left side and 6 (3/8") for the right. This gave us adequate clearance. We do have some "wiggle" room that we can gain from the inside wheel pant brackets that still need to be drilled. A small joggle in the brackets could give us some more space. We'll get to that but for now we're happy campers.

The last thing we took care of was some interference in the elevator control linkage. This connection uses a slot cut out of 4130 tubing to capture a 1/4" Heim joint. The tubing .050 wall thickness on a 1/2" diameter tube created an interference capturing the ball and not allowing a bolt to go through. We filed a bit and then decided to drill using the next size up drill bit. This finally worked.

Heim joints are used as hinges on many aircraft flight controls. They articulate and also have about a 14 degree misalignment capability allowing offset and articulation at the same time. They do require cleaning and light lubrication but last a long, long time. They also can be very expensive. John

New Years Reminiscing

Around this time of the year. I find myself reminiscing about years past and also wondering of the future. This past year our oldest member, Bill Miles had his 96th birthday. A few of us got together and celebrated with him.

We also have another member, Ardell Johnson who I believe is also celebrating his 96th birthday in February. Truly unbelievable!

Reminiscing back a decade to Jan 2013, here's what was going on in Chapter 485.

Chapter preliminary Young Eagles Banner

Thatcher Wing Construction in Bob McGoun's Hangar

The Harrison Cousins Pup and Ultra Pup

Pilot Profile

A Brief History of a Republic Airline Pilot's Life and Career

Bill Miles

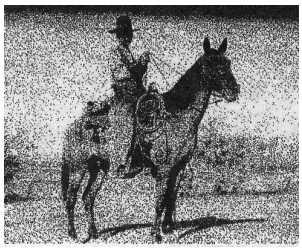
That's me in the center looking directly at the camera. This was taken in Los Angeles when we returned to the States from the Pacific at the end of WWII. I'm with members of my crew and the brother of one of them who was a detective in Los Angeles.

I was on the USS Suwannee CVE 27, a small but very active Carrier. The major battle I was in was Okinawa, one of the fiercest battles in the Pacific because it was so close to Japan, and The Navy lost 186 ships in that one Battle. After Okinawa we went to Dutch Borneo to give air support to the Aussie's invasion, but they didn't encounter much resistance so we returned to Okinawa, and then went to Japan to give air support for our Marines to occupy Nagasaki. There was a prisoner of war camp there, and they wanted to get the prisoners home to the US rapidly. We then participated in the occupation of Japan and then returned home (halleluiah).

I started learning to fly in June 1946, on the GI bill; I was 19. This picture is of me and my Cub (with all the wheels) taken near Grand Canyon, probably 1951. I was flying for the Arizona Game Department Antelope Count. I crop dusted for 5 years in Buckeye, AZ around 1953 in Travel Air biplanes that were manufactured in the mid 1920's. I crop dusted for 2 different Companies and between those jobs I was a motorcycle cop for the Sherriff's Office in Phoenix, AZ., and flew searches for them in a small plane.

I was born on 11-11-1926 in Mother Dana's Maternity Home in Mesa, Arizona. I have a sister in Arizona who is 88 and one in California who will be 94 on 12-12-12.

My father was a Sergeant in the Arizona Rangers, prior to Arizona's statehood. After Arizona became a state and they were disbanded, he became a Cochise County Ranger, and then a Cattle Inspector (the most dangerous job in the Old West) and then Sheriff of Pima County, Tucson, AZ., 1918 - 1922. Later he was a Deputy Sheriff in Pinal County, Casa Grande, AZ for many years. The famous author, Dane Coolidge, wrote many stories about him years ago. Here is a page from California Cowboys and he is mentioned in many other books and articles about law enforcement in the wild-wild West. My father was 62 and my mother was 40 when I was born, so I was a surprise to all, and my dad passed on when I was in my early teens. He was known as Rye Miles, short for Zachary.



I was hired by Capt. Claude Ferguson, Chief Pilot in PHX for Bonanza, in May of 1958, at age 32. He asked me to fill out a new application and I said that I didn't have a college education and wore glasses and if that would keep me from being hired I shouldn't waste his time. He said, "I don't care what your personal problems are - if you can fly an airplane." What a great guy! Paul Beach was Chief in Las Vegas at that time.

The Group (Dec '65) left to right: Capt. Walt and Lee Tubb, Diane and Capt. Chuck Johnson, my sweetie Audrey, our Chief Pilot, Capt. Claude Ferguson and Loretta and standing is Mrs. Capt. Paul Boyer. Most are now

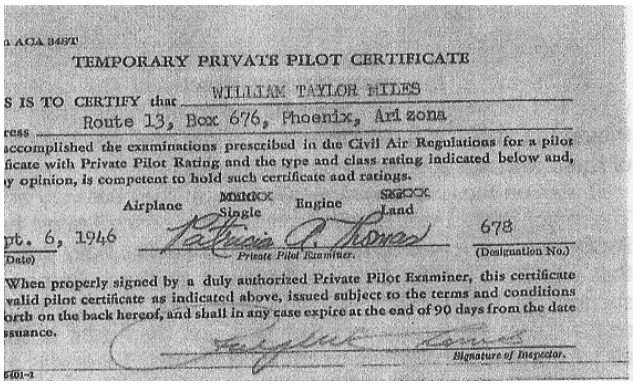
Audrey had a terrible ending in 2007 due to Alzheimer's disease. She was predeceased By three of our sons; only the oldest survives. My 3 Grandchildren are doing well and are in their late 20's and early 30's. I lived in Arizona until I was 59 years young, and then the airline closed the PHX base and we moved to Memphis until I retired at 60. My dear, departed Sweetie had relatives all over Alabama, so we became farmers with small airplanes and lots of trees in Lillian, Alabama, across the bay from Pensacola, Florida, and I have been happy as a clam here. I have the only house for a mile on my side of the road.

Here is a recent picture of me and Ms. Carol Roberts, recently retired Flight Attendant. She flew my last trip prior to my retirement, and the airplane is my old 1946 Taylorcraft.

These days I have a 40 acre pecan orchard that keeps me very busy, and I still own a couple of 1946 Taylorcraft airplanes which I fly every week. I have landed between the trees for years, which drives the natives nuts. I drive to Oshkosh, WI, every summer, to attend the Air Venture fly-in.

I'm lucky to have had a long life with all its sadness and joys, and I'm looking forward to more. I had a great career, and had the pleasure of working with really great airline people who were like family. I just turned 86 on 11-11-12. (Belated Happy 86th Birthday, Bill!!)

The document is my temporary Pilot License also from 1946.



TEMPORARY PRIVATE PILOT CERTIFICATE

S IS TO CERTIFY that WILLIAM TAYLOR MILES

Route 13, Box 676, Phoenix, Arizona

accomplished the examinations prescribed in the Civil Air Regulations for a pilot ficate with Private Pilot Rating and the type and class rating indicated below and, y opinion, is competent to hold such certificate and ratings.

Airplane Single Engine Land

pt. 6, 1946 678

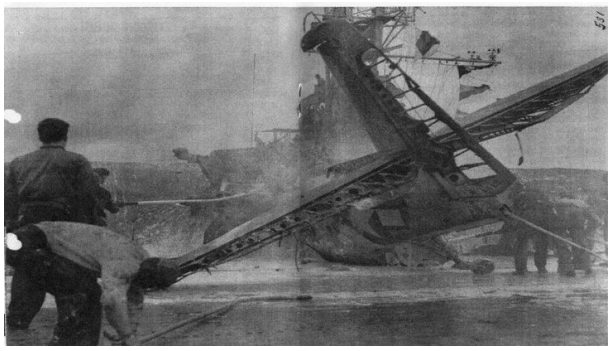
(Date) (Designation No.)

Private Pilot Examiner.

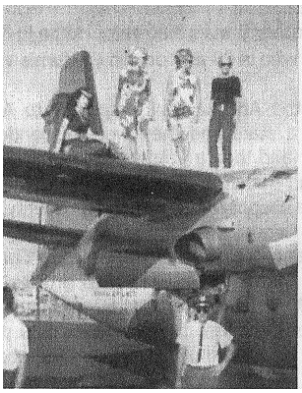
When properly signed by a duly authorized Private Pilot Examiner, this certificate valid pilot certificate as indicated above, issued subject to the terms and conditions orth on the back hereof, and shall in any case expire at the end of 90 days from the date ssuance.

Signature of Inspector.

Aboard the USS Suwanee, CVE 27, during the bombing of Okinawa: A Grumman Avenger landed on the flight deck with a live bomb stuck in its bomb bay doors. The resulting explosion and fire was contained, but the pilot and gunner were killed and the radioman was severely burned when the blast ejected him from the plane. The Tailhook man was blown over the side and fell 60 feet into the sea; he was recovered the next day. All of the flight deck crew sustained some degree of injuries. The hole in the flight deck was quickly repaired, however, and carrier ops resumed; the remainder of the Suwanee's aircraft were brought safely aboard. Bill Miles was one deck below the flight deck on the hanger deck, snoozing on a stack of 5" rockets waiting to rearm the incoming planes. The concussion blew him off the stack and onto the deck unharmed.



(Photo from Bill Miles)



This picture was for a Bonanza ad campaign in the late '60s or early 70s with fashion models including one dressed like I Dream of Jeannie. The occasion was a new nonstop from Santa Ana, CA to Las Vegas. That's my F/O Dave Williams on the ground; I took the picture.

The entire January 2013 newsletter was 7 total pages.

Happy Birthday Capt Bill Miles!

January 2023

EAA 485 news

2022 Officers and Committee Chairmen

President Ralph Moser (847) 736-4603

Vice President: Mark Rogers (251) 228-0356
Tech Counselor
Flight Advisor:

Secretary/Treasurer: Scott Swanson
711 Marlinspike Dr
Pensacola, FL 32507
(309) 267-9710

Ray Scholarship Coordinator
Craig Spoke (251) 550-5795

Young Eagles Coordinator
Tanner Matheny (602) 315-2839

Webmaster Doug Francisco (850) 453-5501
Tech Counselor

VMC Club / Donna and DeWitt Barker
IMC Club (850) 572-0288

Newsletter/ John McKiernan (850) 291-4134
Tech Counselor
Flight Advisor
Thatcher CX4 Build

Normally meetings will be held at Roscoe Field Airport **(82J) (Uni 122.8) on the Second Saturday of each month at 10:00 AM unless otherwise posted. If flying in, check NAS Pensacola (KNPA) NOTAMS for possible TFRs and the Roscoe Field Airport website under the Arrivals tab for important arrival and departure information.**

Driving: From Hwy 98 go past the main airport entrance and take the next left. Go thru the gate and make a left on the gravel road. Make a right past the T hangars you'll see our building down on the left side. Anyone interested in sharing general aviation, aircraft building, maintaining and restoring is welcome.

For more info contact:

Ralph Moser (847) 736-4603

EAA and Local Chapter Sites

EAA 485	EAA 1265
EAA HDQTRS	EAA 108

Interesting Links
Blue Angel 360 Way cool
Making the First Airbus 220 Time Lapse
Jetman Unleashed in Dubai
F-18 Low Level
High Speed Carrier Maneuvering

Miscellaneous
1800wxbrief.com
FAA Notams
Thatcher Build Site
Barnstormers
Skyvector.com Flight Planning, Charts
AirNav.com Airport info, Fuel Prices

Visit our website at eaa485.org

Home Of The
PANHANDLE PELICANS
EAA 485 Pensacola, FL

Get Your Chapter Ballcap

We have ballcaps with chapter logo for sale for $20. Get yours before the price hike. The next batch will be more expensive so don't wait.

Save Your Nylocs

If your bolting pieces together that later need to be disassembled for fitting, deburring, cleanup or painting use castle nuts. Nyloc nuts wear slightly each time they are removed and tightened. They also take a bit of work to cinch up and remove using tools.

Use castle nuts instead until you are ready for final assembly. There also helpful in keeping pieces in place temporarily during assembly since they can be finger tightened initially not requiring tools.

Here I've used them on complying with a Van's RV-10 Service Bulletin changing out the lower rudder hinge/stop to a new improved hinge/rudder stop. Complying with the SB alleviates the requirement for an annual inspection for cracks in the original hinge installation which I felt would require removal of the rudder to comply with.

The hinge is fastened using AN509 8-10 structural flush screws to allow attachment to the fuselage tail post. Instead of using two separate hinges they made a new single very strong hinge and a double piece rudder stop in lieu of a single

John

Chapter Meetings January 14th, 2023 10:00

VMC/IMC Club at 0830-0930.

General Membership Meeting 1000-1030:

- **Pledge**
- **Guests**
- **Officers Reports: President, Vice-President, and Secretary/Treasurer**
- **Chapter 485 Scholarships Update**
- **Ray Scholarships Update**
- **Young Eagles Update**
- **Member Build Projects Update**
- **New Business**
- **Adjourn**

Pensacola Approach &Tower Tour – All interested. Followed by lunch at Golden Corral Buffet.

Future 2023 Meeting Dates:

February - 11th
March - 11th
April - 8th

Upcoming Fly Ins / Airshows / Chapter Events:

Spring Young Eagle Rally – date TBD

Fly-Ins

Air Venture 2023 KOSH July 24 – July 30