JULY MEETING CANCELLED

July2020

EAA 485

Home of the "Panhandle Pelicans"

Squawk 485

Next Meeting
Tentatively Scheduled August 8th
Ferguson Clubhouse 1000
VMC/IMC Meeting 0830

President

John McKiernan

John

Cell - (850) 291-4134

Hello Everyone,

Last month we had our first chapter meeting since March. Prior to the meeting our VMC/IMC club members had 11 people in attendance and had a good discussion. Thank You Donna and Dewitt. Following that we had an abbreviated meeting with 16 or so people attending which we easily accommodated in the clubhouse.

July Chapter Meeting Cancelled

Ferguson Pancake Breakfast Cancelled

Chapter Dues $25

As of July 8th we've only had 14 members pay their dues. Please send your checks made out to **EAA 485** To:

Mark Rogers

22959 Carnoustie Dr.
Foley, AL 36535

Newsletter Articles Website Updates

Please send project updates and articles to me for the newsletter. Many of you have interesting tales to share. We need fresh material for our website. Send Doug Francisco pictures of your project. John

The two most useless things in aviation are runway behind you and altitude above you

June 13th Meeting Minutes

1000 Meeting called to order by President John McKiernan

- Pledge of Allegiance
- The 0830 VMC club meeting was well attended, 11 attendees.
- Welcome to Randy Scheiwe a new member since last meeting.

John introduced Ralph Moser to talk about the Young Eagle and Ray Scholarship Programs.

Ralph briefed:

- Young Eagle's activities are on hold until mask and social distancing are no longer a way of life. Hopefully this fall
- This year's 2020 Ray Scholarship winner, Mariah Stebbins, was able to solo on the 10th of June. Scott Swanson, Mariah's instructor was acknowledged for a Job Well Done. Ralph showed a short video of the first solo takeoff and last solo landing.

  Great job Mariah!
- A second solo occurred this week over at the Foley Airport. Club member Steve Foster's wife, Meg, soloed on the 11th of June.
- Ralph had a few short stories of animals that flew as stowaways in aircraft that he was flying. There was a story of squirrels that had a nest in a wing-tip of his private plane. A second story of a sparrow that had a high G flight perched on the dash of the F-15 he was flying.

Pensacola FL

John then made a few last announcements:

- We still want to have a "Fly a Buddy" day for chapter members this fall if conditions allow
- Reminded members that are actively building or restoring an aircraft to send photos to Doug so our EAA Chapter website can be updated. Also make sure to update the Members page with ratings and aircraft info.
- Don't be fooled by emails that appear to be from John. Check the email address. We recently, this past week had an incidence of someone asking for gift cards for Vets. The Chapter will never solicit for money via an email. Doug confirmed that the info was obtained via our website through email address links in the newsletter. The email addresses have been removed and still contain an underlying link. However, the archive of emails still has the information displayed so please remain vigilant of emails with solicitation and remember, **we will never solicit specific individuals for money**.
- Finally, use the chapter resources for Tech Counselors, Maintenance help/advice and flying. We are truly lucky to have many highly experienced people willing to lend a hand. This is truly one of the main functions of the EAA Local Chapters.
- Bobby Hargrave briefed the recent accident in Selma, Alabama that claimed the lives of two Naval Officers, **CDR Josh Fuller** and **Captain Vincent Segars**. At our March meeting we met Josh who was taking over as the Wrong Bros. Chief Pilot from Christian Kidder. Captain Segars was Commander Naval Aviation Schools Command at NAS Pensacola.

The entire Pensacola area is saddened by the loss of these two men. Our thoughts and prayer go out to their family and friends.

RIP

"Fair Winds and Following Seas"

Meeting adjourned at 1040.

The Journey Continues

RAY AVIATION SCHOLARSHIP UPDATE

Ralph Moser, Chapter 485 Coordinator

Part our job with Ray Scholars is to mentor them after they get their license, and find ways to involve them in the chapter. With the current coronavirus pandemic, this has been a challenge. I came up with the idea of having them pursue and sponsor FAA awards for some of our senior members. Specifically, the Wright Brothers Master Pilot Award, and the Charles Taylor Master Mechanic Award. You can read all about these awards at faa.org. For now, Nick and Brian will research who in our chapter qualifies for these awards, and then help process the awards. These will be prestigious events for the individual, and for our chapter. Expect to hear more about this in upcoming meetings.

Ray Scholars #1 Nick Hanssen and #2 Brian Harris continue to fly together to build cross-country and simulated instrument time toward their instrument ratings. Some of you may not realize there is no longer a minimum flight hour requirement for an instrument rating. Just a private license with 50 hours cross-country and 40 hours simulated or actual instrument time. Some of this has to be with a CFII, but much of it can be logged with a safety pilot. So Nick and Brian swap legs, one flying under the hood with the other acting as safety pilot. Sounds like a plan!

On June 24th, we received the following from David Leiting, EAA National Ray Scholarship, coordinator: "I am extremely excited to share a unique opportunity with EAA's Ray Scholars who are also former Young Eagles. Coming up on July 14, twenty Ray Scholars have the opportunity to be featured on NASA's live downlink feed from the International Space Sta-

tion (ISS)! Scholars will be featured asking questions of NASA astronauts Doug Hurley and Bob Behnken, who recently became the first crew to fly in SpaceX's Crew Dragon spacecraft. Scholars will be asked to submit their burning question to EAA no later than June 28, 2020. EAA will pick the top 20 questions, and reach out to those scholars. If contacted, scholars will then be asked to submit a short video of them asking the question, that EAA will submit to NASA to be streamed up to the International Space Station." Well, of course, our Ray Scholars submitted their questions. And Brian Harris was selected as one of the lucky 20 ! Again, from David Leiting July 1st, "Scholars and Coordinators: NASA has confirmed the tentative of the Downlink for your Ray Scholar with the International Space Station. To see yourself/your chapter's scholar, tune into NASA TV or visit NASA.gov/NASATV at 12:10pm Central on July 14. Please note, this time may still change." So if you can, tune in to NASA TV, or watch NASA TV via the internet, to see Brian get his moment of glory! 20 Questions / 20 scholars / 20 minutes, so about a minute each. **Way to go, Brian!**

Ray Scholar #3 Mariah Stebbins: As many of you know, the Ferguson FBO and flight school was closed for two weeks due to a potential COVID-19 exposure (since resolved to be negative). It just reopened July 6th. In Mariah's words, here is her monthly update: "I have been studying for the written and I have a couple more chapters to review. I am waiting for my ground school to send me my written test endorsement and I hope to take the written next week. I have only flown about 5 hours for June since the flight school was closed." Ralph

Chapter Meeting June 13th

My thanks to Ralph Moser, Keith Albee and Jose Martinez for helping clean and sanitize our clubhouse Friday before the meeting. We were surprised how great the room looked after a little TLC of sweeping, vacuuming and wiping down everything. Eventually we'll get around to painting and doing some slight restoration work. We are very fortunate to have this facility for chapter meetings and functions. Thank You Ferguson Airport!

Everyone was comfortable with the spacing and we had the perfect size come to the meetings. Hopefully in the not to distant future we look forward to getting back to normal.

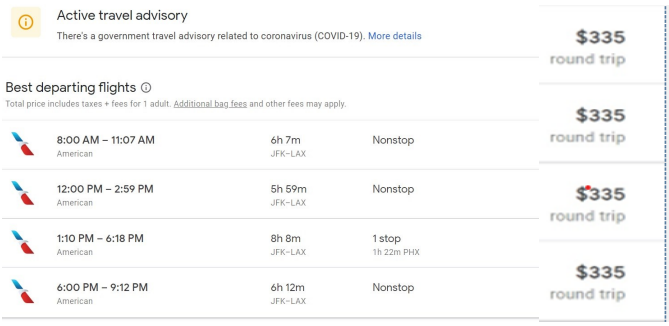
Pensacola FL

Airline Fares (Don't Complain)

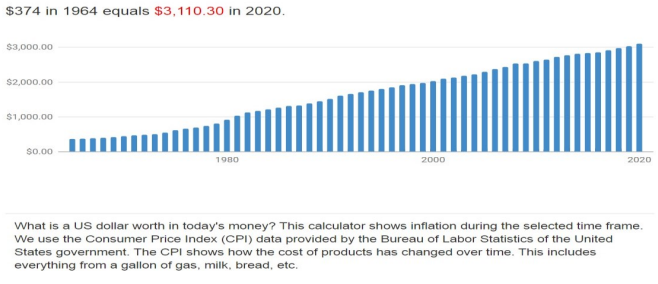
Let's go back, way back. My brother-in-law, Chip sent me an interesting snip from the New York Daily News from 1964. He discovered the paper in his basement. It's an American Airlines advertisement having a sale on airfares.

FROM NEW YORK TO	REG. COACH ROUND TRIP	MID-WEEK ROUND TRIP
Los Angeles	$374.00	$281.00
Oakland	$374.00	$281.00
Palm Springs*	$358.00	$268.00
Phoenix*	$326.00	$245.00
Salt Lake City	$308.00	$231.00
San Diego	$374.00	$281.00
San Francisco	$374.00	$281.00
Tucson*	$324.00	$243.00
El Paso	$298.00	$223.00

As you can see the regular coach round trip fare from New York to Los Angeles is $374 but reduced to $281 flying mid-week. I remember in the early 1980's flying on World Airlines from Oakland to Newark for around $300. That was a 50% military standby fare. The article got Chip's curiosity going so he looked up the present day airfares. NY to LA round trip price is $335 round trip including taxes and fees.



Any guesses what $374 in 1964 is worth today? How about a whopping $3,110.34. So you can actually fly for a little more than a 1/10 the equivalent price today. Go figure!

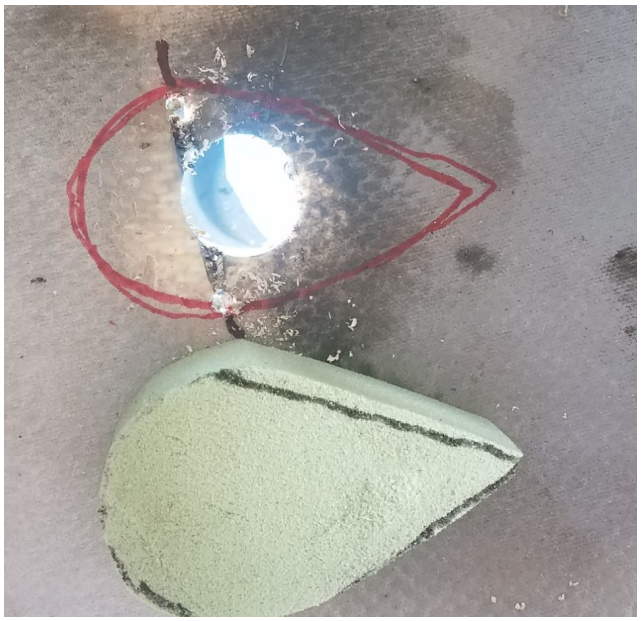


Revisiting the Dark Side

I'm not a fan of working with fiberglass. It's messy, time consuming and for me a painful process. Today there aren't many aircraft that don't have "plastic" pieces. The redeeming attribute is glass is more forgiving to mistakes. I'm no expert in making structural components and use the process for non-structural fluff.

The project was to make a bubble relief on an RV-8A cowling. The inside had thick aluminum foil clad insulation on the lower half that was nasty; oil soaked and detaching in several places. The alternator pulley on the IO-360 engine had been rubbing on the insulation, and eventually opened a slight riff on the cowling. The motor mounts are fine and there is no movement however the alternator pulley appears to be slightly oversized which didn't help any. It's pretty tight in there.

The plan was to make something "aerodynamic" to add space to this area. I turned to some "flower arrangement" foam to make a mold. I used a hole saw to make an opening and stop drilled where the cowling pulley scraped the cowling. Later I relieved the forward area to just shy of the lines. The foam block was initially cut on a band saw and then sanded to final size.



Once I had a good mold I painted the top with West System epoxy to harden the foam and

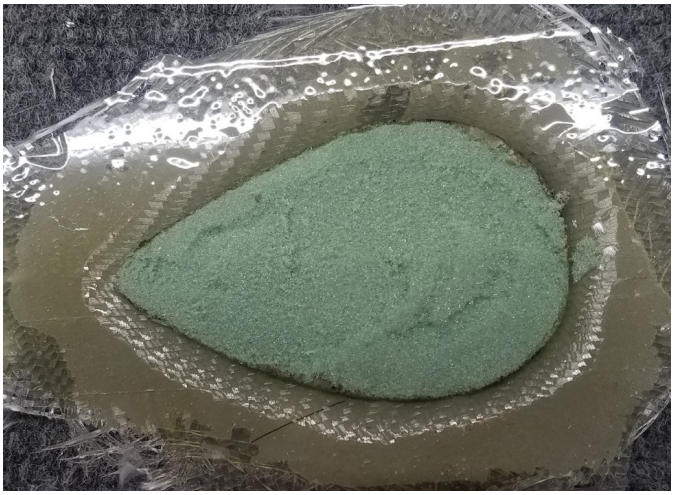
act as a release for the layups to follow. Due to the small shape trying to tape didn't yield a smooth result and the nature of the surface wouldn't allow proper adhesion.

Here is the foam block with 3 plies of my heaviest "bias" fiberglass cloth. I used a scrap piece of aluminum as a base with clear packing tape as a release on the aluminum.

It's important to use "peel ply" on top of the glass layup to absorb excess epoxy resin and to give the surface a little bite for adding additional layers of glass or final prep for painting. My go to product for peel ply material is aircraft fabric. I save scraps from fabric work. You can't beat the Experimental unstamped fabric that is very lightweight. Once cured the peel ply is simply removed by peeling back from the surface.

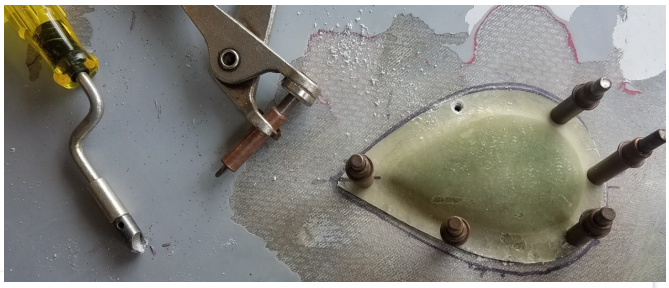
If it wasn't' used there would be very slick places where the epoxy resin came to the surface and sanding would be required to do additional layups.

Here is the foam block still inside the layup.



After trimming. The blister will attach to a non-flat irregular area on the cowl and will require some flexibility. The 3 ply layup will give just

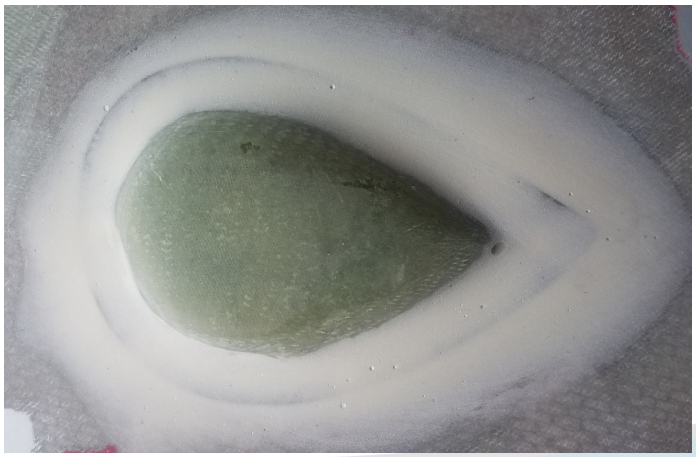
enough yield for attachment. I used 6 #30 holes and hand countersunk to allow flush pull rivets to fasten the blister. The yellow handle countersink is one of my favorite tools! The flange and cowling were roughed with 60 grit paper for the installation to allow the epoxy to bite into both surfaces. Then the flange and cowling was painted



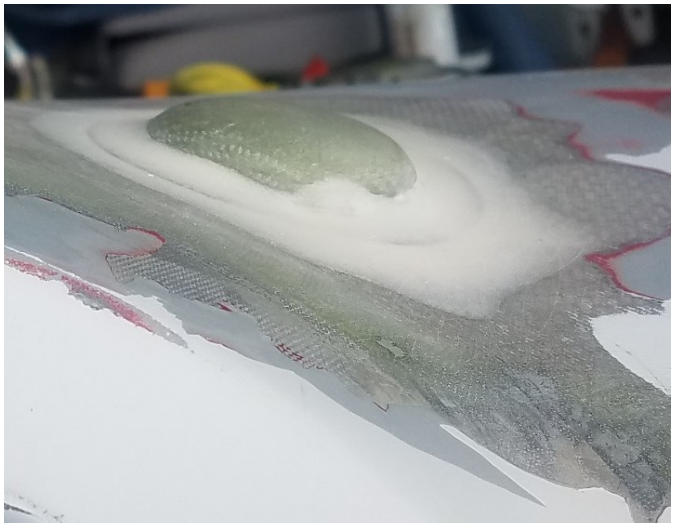
with epoxy, including the top of the flange to seal the rivet holes.

A mixture of flox (ground up cotton), micro-balloons and Cabosil was added around the flange. Cabosil is a product that alters the viscosity of the epoxy eliminating most sagging. I used a lot of the mixture hoping to eliminate multiple applications.

It took about 45 minutes of sanding to get to this result. On a flat surface that would have been cut in half or less but the blister is in an awkward place. I sand down till I see the outline of the outside flange underneath. Looking closely, the arch enemy of fiberglass work, pin-holes, can be seen but only a handful. Last step is to use high quality body filler to finish the surface prior to painting.



You can see the area that the blister is located in. The foreground is the lower propeller face on the cowling . This should work nicely.



Here is a shot of my RV-7 elevator and horizontal stabilizer tips. These were installed using pull rivets and took a bit of work for a novice to get right.

With enough time and patience anyone can do some decent glass work. John

RV-7 Wings

We drove down recently to visit our son Patrick in Palm Bay, FL. Amazingly driving in both directions there were no construction zones and although the traffic was moderate we made great time. On the trip down we noticed a lot of police, probably in excess of 30 State Troopers but never saw anyone pulled over. Strange?

We were not only visiting but it was a working vacation. Patrick needed help in installing the outer lower wing skin, IMO the largest and most

difficult skin on the entire aircraft. This can also be fairly painful as access to bucking rivets sometimes is through very small lightning holes in the ribs. It's very helpful having an accomplice. Pat had a cable rigged above his workbench that is used as a zip line for his air hose. It worked great as we used small bungees connected to the skin wingtip holes and clamped the top using a cleco clamp. This allowed us to quickly get the skin pulled out of the way while we worked our way down the ribs.

Pat likes bucking and I was fine with that. It took about 1 day for each wing but this also included the wingtip installation which can be a little testy. There are 36 nutplates that need to be installed in each and alignment issues abound especially with the trailing edge both in length and straightness.

When I attached my wingtips I had to slice one open on the trailing edge due to a curve. The same condition existed on both of Pat's, however, to a lesser extent. The aileron has a template used to set the bell crank in the wing and the pushrod from the from bell crank to aileron is adjusted to align the aileron to tooling holes on the outer wing rib. The wingtip is installed with reference to the aileron on the trailing edge. We wound up actually clamping an aluminum angle to the aileron and drilling and clecoing the wingtip to the angle to hold alignment. In the end it turned out well and a long sand board on the trailing edge should be all that's needed.

If you look closely you can see the holes in both wingtips from the alignment process. The tips will still require some slight filling of the flange area of the wingtips. Additionally, the nose of each wingtip flange will need a fiberglass layup on the inside to build up the thickness. We had to grind out a significant amount of the flange to get the wingtip seated towards the leading edge. You can see the 1/8" proudness on the wingtip trailing edge with respect to the aileron. The trailing edge joint of the tip is more than 3/8" long which is helpful.

Here is a picture sighting down the right wingtip and its alignment to the spar. Looks good.

I also gave Pat a Flight Review in his Avid Mark IV. With both of us, he's a little bigger than me the 582 ran great and flew just fine. It's the first time I've been in it since his "off field landing" in October 2018 on highway A1A on Melbourne Beach due to an engine failure.

OH! OH!

Our plan was to fly the RV-7 down for our visit South. 2:40 minutes vice 8 plus hours driving. We made arrangements for our dog to stay with friends and planned accordingly. I flew the plane on Saturday and planned to fuel up on Tuesday for our trip the next day. When I walked into the hangar I smelled avgas. I immediately went to the RV8A which the day before I had fueled following a fuel tank repair several weeks before. The rivets I repaired showed no signs of leakage and I pulled the root fairing to check the tank access cover and fuel probe. No signs of leaks. The smell dissipated with the hangar door open. I worked outside for a while and when I came back inside everything seemed fine. I went into my RV-7 cockpit and it had a faint smell of fuel. Everything in the cockpit was fine so I did an inspection under the fuel tanks removing the left wing fairing I found the leak. It was my fuel sender leaking on the flange. I defueled the tank and got 12 gallons out of the wing. I estimated I had lost nearly 3 gallons of Avgas in less than 24 hours. Luckily I have a small ratchet screwdriver specifically for tight places to remove the 5 screws attaching the probe flange to the tank access cover. Removing the probe I found a silicone gasket that came off in 3 pieces. The normally pliable material was fairly brittle.

I called Ruth and told her we weren't going in the plane. I cleaned everything up and decided that I'd eliminate the gasket and just use fuel tank sealant. This is the most messy stuff I've ever encountered in my life. If you work with ProSeal, Flamemaster or equivalent you need latex or Nitrile gloves and I'm not talking about 2. Depending on how much work I have to do I start with two on each hand and might add another. Even being careful you'll have this all over everything and find it on stuff you didn't touch or even look at, Really! Wearing multiple pairs allows you to start a clean slate so to speak by just pealing off the outer layer.

The fuel sender flange is keyed by the slight variance in screw locations. I marked a screw hole to the access cover before removing. Working on your back and in a narrow place you need all the help you can get. Having marks for alignment makes it easier to get the probe set correctly. You want to get this installed in one shot.

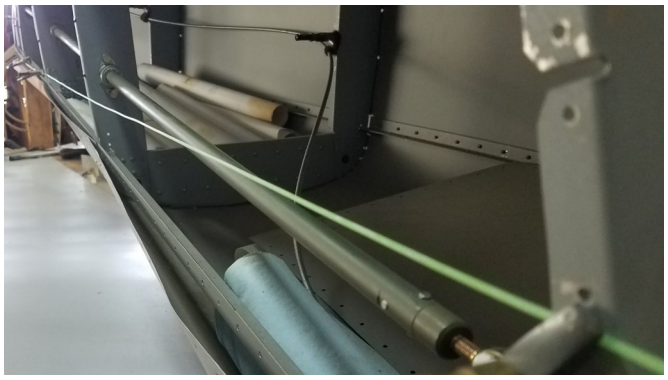
After mixing the sealant I use a popsicle stick to "paint" the flange and access plate. You don't need a lot of material just a thin coating on each. Excess sealant will squeeze out both on the inside and outside. You don't want a glob of this stuff inside your tank. Then carefully place the probe inside the tank. I use a tapered pin in the upper hole to temporarily to hold in position. You now assume the role of a one armed paper hanger. I dip each screw into some sealant and get a screw started and add a screw opposite to that one. At that point I snug the screws and installed the remaining 3 in a crossing pattern just like replacing a tire on your car. Then I torque the screws to their final tightness. Here is the probe after installing After several days I add fuel and wait a couple days making sure the fix is good. The coiled #4 aluminum line is my NON-STD vent system. John

Thatcher

The side panels are finished and we moved on to the rudder pedal cables. There was a mandatory rudder cable replacement on the CX4. Originally the rudder system consisted of a push-pull cable attached on the right rudder pedal. Ultimately, the flexing back at the rudder horn work hardened the cable wires causing them to fail. The solution was to go with a more standard cable attached to each rudder pedal.

We started looking at the routing of the cables. On the left side we have the throttle and elevator trim cable. The right side has the control column elevator horn and the elevator pushrod. For best control and efficiency the routing of the rudder cables should be as close to a straight line between the rudder pedal cable attach point and the attach point on the rudder.

The right side concerned us more because of the elevator pushrod. It's also where we've left the side panel off till near the end of construction. I used a length of weed eater string and clamped it on the fuselage.



The bulkhead in the foreground is the aft cockpit. It's clear that as we pass through this bulkhead we transition from above to below the elevator control rod. There's a bit more room here to pass the cable without interfering with the elevator control rod.

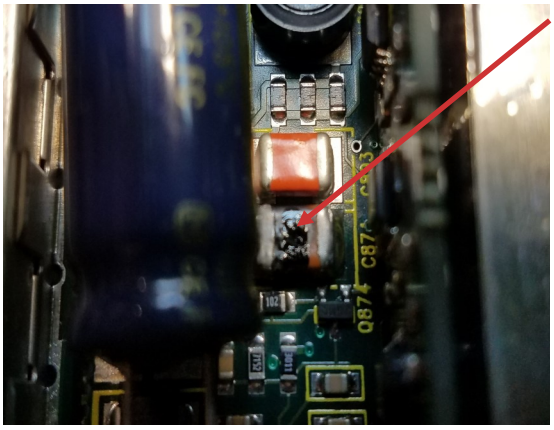
So what's it look like as we move forward to the cockpit area? Not bad. The cable trajectory stays about 1 1/2" above the elevator push rod.

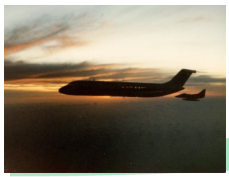
The angle of the dangle should be pretty close on the other side. On the left will be our throttle and trim quadrant and we should have ample clearance to make everything work.

The wings you see through the cockpit is another project waiting. It's an Avid Mark IV Heavy Hauler (STOL), We're looking at having a multi-Saturday hands on wing covering class for those of you interested in learning about the process. John

Garmin SL30 Nav/Com Failure

Last week the Com portion of my SL30 failed. After the flight I turned the radio on again and heard hissing and sizzling coming from the inside of the box. Yikes! No smell. Since it came out of an Experimental aircraft you can send it directly to Garmin and not have to use a Garmin dealer. It's an expensive radio so I bit the bullet and am sending it in for a flat rate repair to the tune of $ 850. Ouch!! I decided to have a peak inside. This is a capacitor that blew. I never smelled any smoke or burning. John





July 2020

EAA 485 news

Got a Headset You're not using?

We're looking for a couple of used headsets to have on hand for our Young Eagles events. If one of our pilots has a headset become inoperative it would be nice to have a spare to keep them flying.

So if you have one laying around collecting dust how about making a donation.
Thanks

Mark & Brenda Rogers RV-14 Build

Forward and aft Fuselage Joined

Who Was That Masked Man?

I'd like to thank him

I actually was thinking of a best mask competition for our June meeting. After seeing this prior to the meeting I scratched it off my list because it would be pointless. Not only was it "freaky" it was functional and funny. The 3 "F's". I managed to stain my mask trying to drink coffee slightly lifting up the mask and making a mess. With the built in straw, No problem.; "Now That's the Ticket".

Another benefit was it had a kind of auto social distancing "built in".

Would you really want to sit next to this guy?

Pensacola FL

July 2020

EAA 485 news

2020 Officers and Committee Chairmen

President/ Newsletter/ Tech Counselor John McKiernan (850) 291-4134

Vice President: Robert Ermer (850) 417-9277

Secretary/Treasurer:

Mark Rogers
22959 Carnoustie Dr.
Foley, AL 36535
(251) 228-0356

Tech Counselor/ Webmaster Doug Francisco (850) 453-5501

Young Eagles/ Ray Scholarship Coordinator

Ralph Moser (847) 736-4603

Flight Advisor: Harry Herman (850) 857-4353

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

Normally meetings will be held at Ferguson 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 Ferguson 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:

John McKiernan 850 291-4134

EAA and Local Chapter Sites

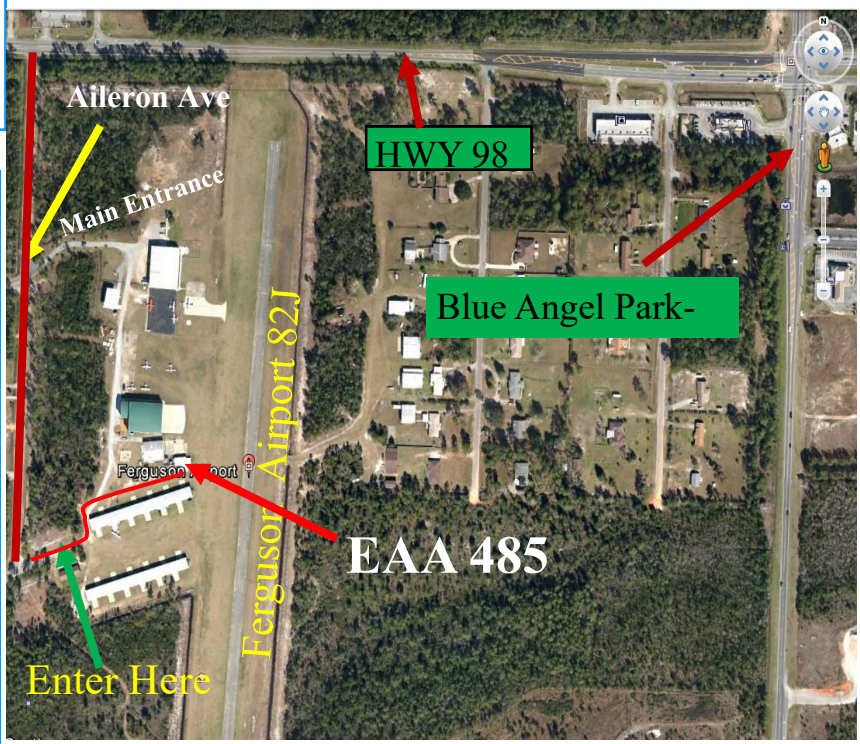
EAA 485 EAA 1265
EAA HDQTRS EAA 108
Lite Blue Angels EAA 105

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

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

Local Aviation Supplies
Johnson Supply Company

50 South E St
Pensacola, FL
850 434-7103
Located on E street just south of Barrancas
Tell them your from EAA 485



Visit our website at eaa485.org

Home Of The
PANHANDLE PELICANS
EAA 485 Pensacola, FL

2020 82J Monthly Pancake Breakfast Schedule
0930-11000 Aug 15, Sep 19, Oct 17, Nov 21.

Excellent King Air Recreation

Check out this recreation of a family of 5 returning from Marco Island, FL to Louisiana in a chartered King Air 200. The pilot collapses and dies shortly after takeoff. A great aviation story. It's long but worth watching. Get a cup of coffee.

https://www.youtube.com/watch?v=aqPvVxxIDr0

Thatcher CX4 Accident

Lost prop in flight and makes it back to the airport. Aircraft stayed together.
http://www.kathrynsreport.com/2020/06/thatcher-cx4-n274dr-accident-occurred.html

Music Trivia:

We all know Paul McCartney as a bass guitar player. Originally he played a 6 string guitar as (second lead) to George in the Beatles early days.

John	George	Pete	Paul	Stuart
Lennon	Harrison	Best	McCartney	Sutcliffe

Paul played bass guitar following Stuart Sutcliffe leaving the band to pursue an artist career and Pete was replaced by Ringo just prior to their first record "Love Me Do" released in October 1962. Ringo wasn't the drummer on the single version. Stuart died of a brain hemorrhage in April 1962 at the age of 21 never knowing the success.

2020 Events Calendar

Chapter Meeting for July 11th Cancelled
Next Meeting August 8th ??

Aviation Briefs

The B-737 MAX is Back in Production Not Flying:
The company has expressed optimism as it restarts its 737 Max line and the FAA undertakes test flights. Click Here

BOOM SUPERSONIC JET READIES FOR ROLLOUT
Boom plans to unveil the scaled prototype of its XB-1 supersonic passenger plane in October.
Click Here

CubCrafters to Certify and Produce Nosewheel XCub Click Here

Calendar

Future Meeting Dates:

Aug	**8th**
Sep	**12th**
Oct	**10th**

Fly Ins

Triple Tree	SC00	Sep 21-27
SERFI	Maybe in October	