

THE SLIPSTREAM

THE NEWSLETTER OF GREEN RIVER EAA CHAPTER 441 KENT, WA

MAY 2020



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PRESIDENTS COLUMN, PIETENPOL UPDATE:

Presidents Column:

Well, the virus has us all still cooped up. Many of us are working from home, at least we can be productive in that way. Others have more time to spend on their projects: and that's a GOOD thing. Flying (solo or with family members) is keeping some in the game.

I heard from friends on the East Coast that since airline traffic is WAY down, some are doing round-robin touch and goes at JFK, LaGuardia, and Newark. Because they can. Just for fun, I called SEATAC to see if that would be allowed here. The answer: yes, but you'll still have to pay the landing fee. How much is that? I could not get a consistent answer, and you're unlikely to find out ahead of time. They will send a bill after they've heard the tower tapes.

What about practice instrument approaches? Same answer: yes depending on traffic, but might still get charged the landing fee, even if you don't touch down.

Latest I've heard is that there is no relief for GA regarding extensions for things like annual extensions or currency requirements. So when you do go back to flying, please make sure you're current and legal to make the flight.

Whatever you do, please stay safe.

Brian

Pietenpol Update:



Jig in Place

Hello 441,

Enjoying the progress on my Pietenpol during these unusual times.

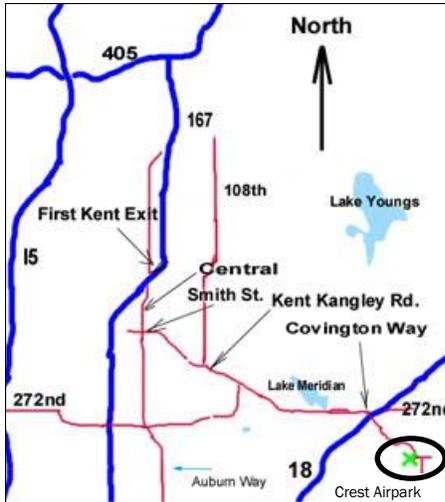
Most of that advance was having Mike from Ready Weld stop by to weld the brake brackets, VHF radio bracket, ground plane rods, and foot step well. I used a plywood disc to simulate the brake disks and it held the caliper assembly in position dur-

SPECIAL POINTS OF INTEREST:

PHYSICAL GATHERINGS TEMPORARILY ON HOLD UNTIL FURTHER NOTICE

WE ARE GOING TO A VIRTUAL GATHERING THIS MONTH

WHERE DO WE MEET THIS MONTH?



Meets 4th Mondays 700 pm
17605 SE 288th PL, Kent
The Mellema Hanger



MAY PROGRAM

Virtual meeting with a round table discussion and sharing of photo's and ideas

Program

Virtual Meeting

2020

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PITENPOL UPDATE CONTINUED, DARINS RV ADVENTURES:



Tack Welded

ing tack welding. This is looking like one of the final bits of welding needed on the fuselage and that's a good feeling...! (I will still need some welding for the wing lift struts and engine mount.)

Having fun and learning a lot...

Jake

Darin's RV Adventures

Front windshield install

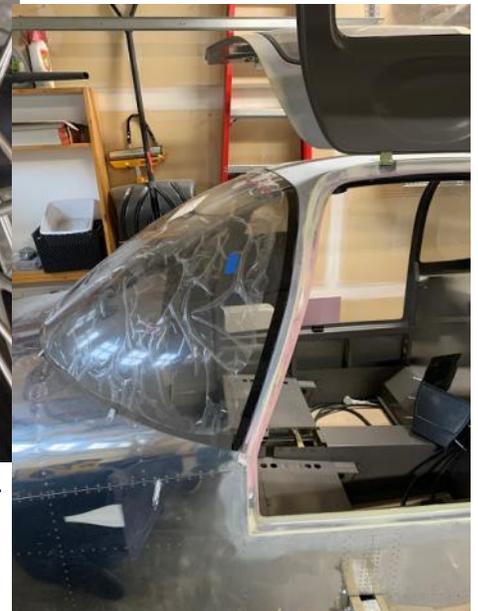


Welded Primed and Assembled

I ran out of some of the wire I needed and it has been really nice out lately so I moved my work efforts back out into the garage. I've been busy installing the windshield using the Silpruf method along the top and side edges and then using the traditional fiberglass fairing on the

front. I know I've mentioned it in the past but I really like the Silpruf method. The install looks so darn professional!

I didn't add a bunch of pictures of the process since I have already documented that pretty completely. Here is a picture of the windshield after the Silpruf install.



It looks like carbon fiber but its not. This is several layers of reg-



TECH COUNSELORS AND FLIGHT ADVISORS



Chapter 441 is fortunate to have two tech counselors.

Feel free to call Brian (253)-369-0489 , or Dave Nason any time. You don't need to wait for some significant milestone in your project. Remember, this is not an "inspection".

The shop doesn't need to be cleaned for a visit. All are quite used to looking at pieces, parts, and assorted bits, and will be happy to answer questions, offer advice, and generally talk about projects, building, flying, or whatever.



GUESS THAT AIRPLANE; GUESS THAT INSTRUMENT PANEL

This months entry:

Go to Page 8 for April's airplane

This months entry:

Go to Page 9 for April's Instrument Panel



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PIETENPOL PHOTOS, DARINS RV ADVENTURES CONTINUED:



Pietenpol step

ular fiberglass that has been tinted black. This allows the inside view to be a consistent black trim all around the windshield.



num to a consistent smooth sheen and then clear coat it for protection. So far I like the results.

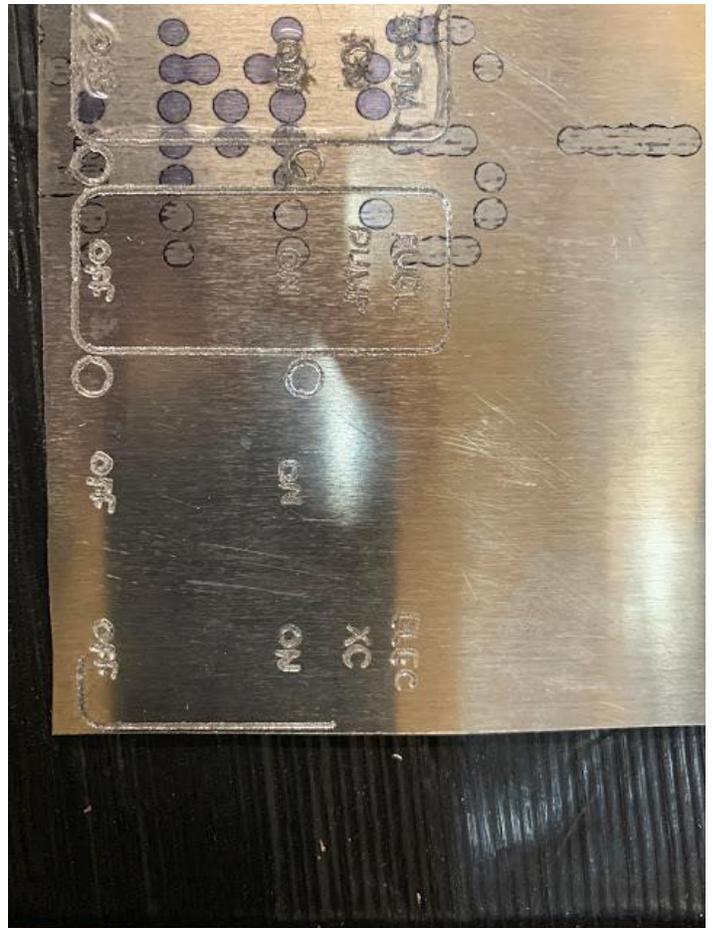
I also decided to try my hand at engraving with the CNC. Theoretically it should work great but in prac-



I moved the primary voltage regulator from behind the sub panel in the middle bay to this location. I was looking in this access hole recently and realized I had the perfect location to install the voltage regulator right here. Easy access for future maintenance.

CNC Panel work

I mentioned a while ago that I had upgraded my CNC a bit and one of the tasks I have been working on in the past week or so has been the design and cut of my instrument panel inserts. I used carbon fiber on the 9A but since the frame is all carbon fiber I decided to try something new. The inserts are .064 aluminum and rather than color them with paint or something I decided to try to go with the brushed aluminum look. The idea is that I "brush" the alumi-



DARINS RV ADVENTURES CONTINUED, EAA NEWS, EDITORS CORNER:

tice it didn't start out so good as you will see in the pictures below. Just for future reference the settings I used for the CNC are 6 IPM at .01 depth for the engraving. The depth number was a bit arbitrary since its really hard to set it exactly. What I ended up doing was to run the depth at .01 and then run the job a second time after lowering the Z0 setting by an appropriate amount to get the letter width I wanted.

To Read More: [Click Here](#)



EAA News:

FAA Policy Allows Special Flight Permits for E-ABs Needing Condition Inspections

May 21, 2020 – Following a request from EAA and AOPA, the FAA has released a policy that will make it easier for some owners of experimental aircraft to obtain special flight permits (SFPs) for their airplanes in order to reposition them for condition inspections.

Rather than requiring a full in-person "condition for safe operation" sign-off from an FAA inspector, which was previously required for SFPs, the policy allows DAR-Ts (designated airworthiness representatives supervised by a FSDO) with appropriate function codes to remotely conduct inspections for the certificates.

To Read More: [Click Here](#)

Chapter Member Survey

This page is the dashboard for the annual chapter survey. Moving forward, you will be able to access the current year's survey, as well as historical files.

This will allow your chapter to compare results year over year.

2019 Survey Results

To Read More:

Chapter Member Survey Summary: [Click Here](#)

Individual Chapter Results: [Click Here](#)

Download Excell File, select Enable Editing and select Chapter 441

EAA Learn to Fly Day and Flying Start Updates

Spring is here, and with it the arrival of what should be flying season. I hope most of you are able to still enjoy social distancing from the air, but many chapters have certainly felt the effects of COVID-19 with canceled meetings and events. May was to have seen many observances of Learn to Fly Day by chapters hosting Flying Start events. Obviously, many of these will not be able to take place, but EAA encourages you to try to reschedule your event for a later date rather than outright cancel. Later may of course mean a few months from now, depending on your location and how the virus progresses through different areas. All chapters should follow local guidelines for their area, while also considering what will be best for the general health of the community when deciding when to move forward with any of their events.

To Read More: [Click Here](#):

Aviation Scholarships

EAA invites those who are interested in pursuing flight or a career in aviation or aviation related/STEM fields. We encourage individuals who are well-rounded, involved in their school or community, and interested in the world of aviation to apply for an EAA Scholarship.

To Read More: [Click Here](#)

Editors Corner:

Last month (April 2020) we had our first virtual gathering. It seemed to go really well. I hope that this time, we can get more of our guys to speak up and talk about what they have been doing. I know I was one of the lurkers, and I hope to be more active this time. Our gathering will be tomorrow at the normal time and I hope to see you there.

I have actually started to do some garage clean up

EDITORS CORNER CONTINUED, APRIL'S GATHERING MINUTES

and I can finally see an empty spot on the workbench. Hopefully I can keep the spouse from covering it up with empty boxes and storage containers. I made a can storage cabinet to try to store the canned goods more efficiently now that we are buying ahead on easily storable food. I am trying to do this without becoming a hoarder or breaking my accounts to accomplish it.

Unfortunately, things for me have changed and it is time to let my interest in the Luscombe go. Tom and Mark had scheduled a visit with Norm to look at the Luscombe last Friday, but I was not able to attend. I hope Tom and Mark can give an update on the Luscombe.

As soon as I get the meeting information, I will send out an email. See you at the Gathering

Build Straight
Roger

James H: Presented his Thorp T18 he bought and the issues he is finding. Loose Rivets, Leaky fuel tank, Now has two fuel pumps.

Mark Radio had issues learned how to use a SWR meter to resolve his static issues. Discussion on establishing the ground plane for the antennas and tuning the antenna for the radios. More playing with his CNC router

Brian: Flew Daves Glasair last week Hybrid 12/24 volt system. Had issues with the Glass Cockpit and electrical system. A couple of more weeks and he should be able to re-test. Gear wouldn't go down on this flight. The gear would not retract on the air-



planes first flight. Tinkertot needs to find a hanger. Brian may have found one. Form partnership no more than 5 people. Showed photos of the Tinkertot. Eric has a whole file of photos and wants them scanned to a disk. Anyone know of a high school kid that would be capable of doing it?

Jake: showed his fuselage and the work he is planning. Ground plane for the radios, step hole. Found a stainless steel bowl for the step that will keep the water out of his tubing

Steve Cameron: Received his kit for the Highlander. Decided to go with poly fiber. Reserved his tail number



Rusty: worked on block wall next to his hanger

Bill: Building the Legal Eagle not the XL. He is planning to copy some of the XL features into his airplane.

Bruce: shared his engraved panel. Used Instrument Flight panel CAD as his front end put it into .DWG format and ran it to his CNC router

Scott Rinabarger: did weight and balanced on the Searay and not going to work for him.

Jason: started saving for a kit few years ago. He bought a kit. Wants to know if we have an idea on where GA is going. GA is fine. just the Puget Sound. Get on the hanger list now. He had been on the list and had to turn it down. Bought the Bushcat from South Africa.

To visit the Bushcat site: [Click Here](#)

GUESS THAT AIRPLANE

AGO C.I

The AGO C.I was a First World War German pusher reconnaissance biplane that used a pod-and-boom configuration.

AGO ("AktienGesellschaft Otto") Flugzeugwerke of the German Empire was founded in Munich during 1911 and managed as existence until the end of World War 2 in 1945. As early as 1913, under the Otto name, the company put forth a pusher biplane. From this work spanned a series of other multi-winged aircraft of similar form and function that would soon be pressed into military service during the fighting of World War 1 (1914-1918).

With the war already underway by January of 1915, many aircraft were trialed and adopted by all sides, as powers looked to gain the advantage through use of these new-fangled aerial devices. In June of 1915, AGO was able to sell a new biplane type to the German Air Service and the Kaiserliche Marine (Navy) - the "AGO C.I".

The C.I utilized a typical biplane winged arrangement in which one primary member sat over the other. Struts were parallel and "bays" were created between these structures supporting the wings. As with other early-form reconnaissance platforms of the war, the C.I relied on a pod-and-boom fuselage arrangement in which the crew, armament, engine, fuel stores, and avionics were held in a centralized pod making up the fuselage while a twin-boom tail arrangement was used to support the tailplanes. The tailbooms connected to the mainplanes at the struts for added support and extended beyond the wing leading edges some. The crew numbered two, pilot and observer, with the observer positioned ahead of the pilot. On some aircraft, the observer was granted use of a single 7.92mm Parabellum air-cooled machine gun set atop a flexible mounting. The ground-running gear was made up of a four-wheeled arrangement for the best possible balance. These legs were interconnected by a network of struts under the aircraft and its lower mainplane member. At least one C.I example was reworked with floats to serve the German Navy in the maritime patrol role as the "C.I-W".

To Read More:

Military Factory: [Click Here](#)

Wikipedia: [Click Here](#)



Wikipedia AGO Flugzeugwerke: [Click Here](#)

Specifications

General characteristics

Crew: two, pilot and observer

Length: 9.0 m (29 ft 6 in)

Wingspan: 15.0 m (49 ft 2 in)

Wing area: 41.5 m² (447 ft²)

Powerplant: 1 × Mercedes D.III, 117 kW (158 hp)

Performance

Maximum speed: 140 km/h (90 mph)

Range: 480 km (300 miles)

Service ceiling: 4,800 m (16,000 ft)

Armament

1 × 7.92 mm Parabellum machine gun

GUESS THAT INSTRUMENT PANEL

P-61 Black Widow

To Read More:

The Mid Atlantic Air Museum: [Click Here](#)

Zenoswarbirdvideos: [Click Here](#)

Lomesentry.com: [Click Here](#)

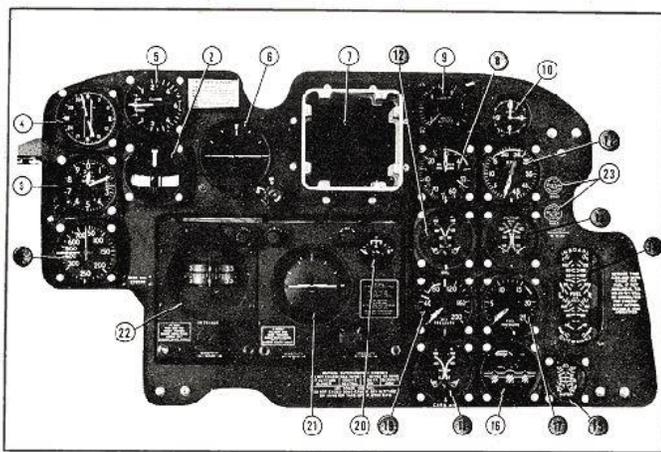


Figure 20 - Pilot's Instrument Panel (P-61B)

- | | | |
|----------------------------------|------------------------------|----------------------------------|
| 1. AIR SPEED INDICATOR | 9. RADIO ALTIMETER | 17. FUEL PRESSURE GAGE |
| 2. TURN AND BANK INDICATOR | 10. CLOCK | 18. CARB. AIR TEMP. GAGE |
| 3. ALTITUDE | 11. TACHOMETER | 19. OIL PRESSURE GAGE |
| 4. RAD O COMPASS | 12. OIL TEMPERATURE GAGE | 20. VACUUM GAGE |
| 5. RATE OF CLIMB INDICATOR | 13. CYLINDER HEAD TEMP. GAGE | 21. BANK AND CLIMB GRD |
| 6. GYRO HORIZON | 14. FUEL LEVEL GAGE | 22. TURN CYRO |
| 7. PILOT'S INDICATOR (SPACE FOR) | 15. WATER QUANTITY GAGE | 23. MANIFOLD PRESSURE GAGE LINES |
| 8. MANIFOLD PRESSURE GAGE | 16. WHEEL AND FLAP POS. IND. | FURGE CONTROLS |

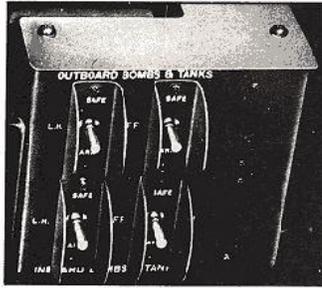


Figure 21 - Bomb Release Controls (Intermediate P-61B)

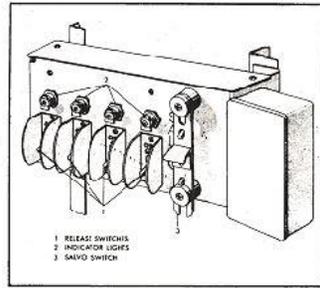
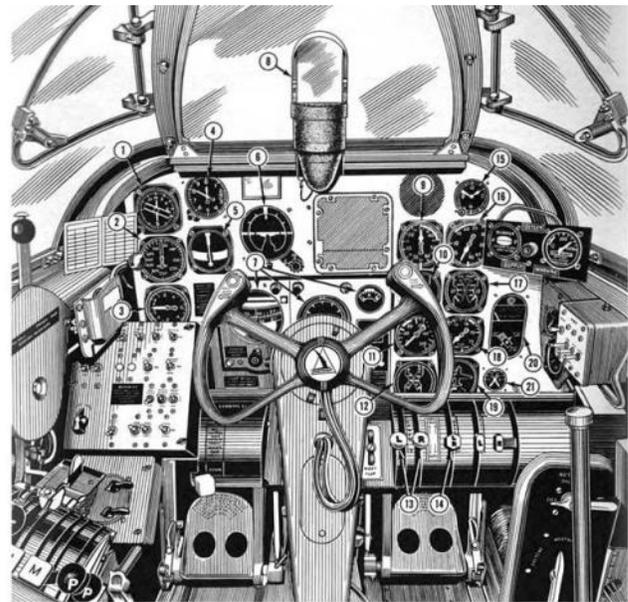


Figure 22 - Bomb Release Controls (Late P-61B)

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Controls, Switches, Instruments (Front Panel)

- | | | |
|-----------------------------|--|---|
| 1. Remote compass | 9. Manifold pressure indicator | 15. Clock |
| 2. Airspeed indicator | 10. Oil temperature indicator | 16. Tachometer |
| 3. Rate of climb indicator | 11. Oil pressure indicator | 17. Cylinder head temperature indicator |
| 4. Altimeter | 12. Carburetor air temperature indicator | 18. Fuel pressure indicator |
| 5. Turn and bank indicator | 13. Lower cowl flaps control valves | 19. Wheel and flap position indicator |
| 6. Gyro horizon | 14. Upper cowl flaps control valve | 20. Fuel gage |
| 7. Dials of automatic pilot | | 21. Oil cooler flap indicator |
| 8. Pilot's gunsight | | |