

THE SLIPSTREAM

THE NEWSLETTER OF GREEN RIVER EAA CHAPTER 441 KENT, WA
NOVEMBER 2020

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SPECIAL POINTS OF INTEREST:

PHYSICAL GATHERINGS TEMPORARILY ON HOLD UNTIL FURTHER NOTICE

WE ARE GOING TO A VIRTUAL GATHERING THIS MONTH

UNFORTUNATELY, THERE WILL NOT BE A CHRISTMAS PARTY THIS YEAR

PRESIDENTS COLUMN, PIETENPOL UPDATE:

Presidents Column:

Well, I guess it's time for my annual SAD column. When daylight savings time ends (now in November), it's a real shock just how early it gets dark around here. And the weather in the past several weeks has not helped.

We're about a month away from the Winter Solstice, and I can hardly wait. I know that between now and then, that is, for about the next month, the days are continuing to get SHORTER, and the darkness lasts longer. Whereas, in summer, when it's still light at 9PM, I kind of enjoy going out, doing things (like maybe, flying) after dinner. This time of year, I find it difficult to be motivated to even leave the house after dinner.

Jake likes to call this "the workshop season". That's as opposed to the other one, which is the "flying season". I should take his advise and use this time to get busy in the shop. It's not like there aren't any number of interesting and fun projects to be working on. And when spring comes around, I'm going to be more interested in flying than building, so why not take advantage of this great time to be creative. Maybe at the meeting on Monday, you can encourage me.

I have it on good authority that April is coming.

Fly safe.

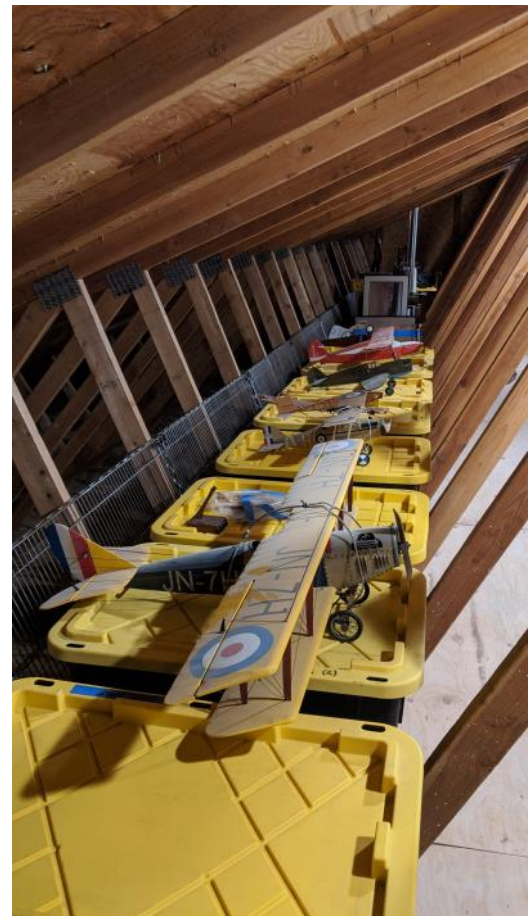
Brian

Another Aviator has gone west:

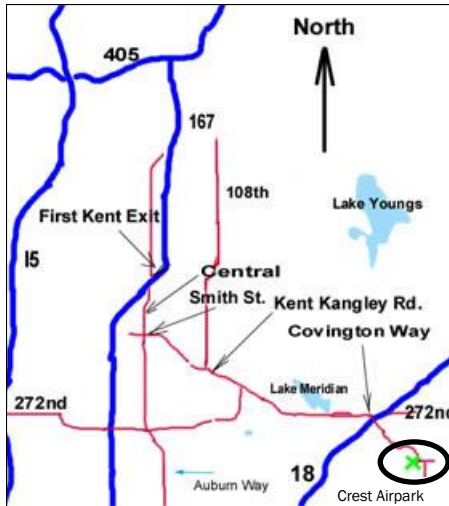
Ron Borovec was killed in a crash last Thursday north of Arlington. He was a member and president of Chapter 26. The investigation is ongoing. He was known by many of our members. Please find time to hold some silence and Ron and his family in your hearts and mind.

Pietenpol Update:

Hello 441,



WHERE DO WE MEET THIS MONTH?



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



NOVEMBER

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

Program

Virtual Meeting information:
 Mondays meeting is again on Zoom:
 Here are the details:
 Monday November 23rd 7pm-9pm
 Join Zoom Meeting

Password: 1234

Phone one-tap: US: +12532158782,,98145598289# or +16699006833,,98145598289#

Meeting URL: <https://gettyimages.zoom.us/j/98145598289?pwd=QzQxM0lIQlplbVVRKcFNwTmFBSiFwUT09>

Join by Telephone

For higher quality, dial a number based on your current location.

Dial:

US: +1 253 215 8782 or +1 669 900 6833 or +1 346 248 7799 or +1 312 626 6799 or +1 646 876 9923 or +1 301 715 8592 or 888 788 0099 (Toll Free) or 833 548 0276 (Toll Free) or 833 548 0282 (Toll Free) or 877 853 5247 (Toll Free)

Meeting ID: 981 4559 8289

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PIETENPOL UPDATE, CONTINUED, AVIATION PIONEERS: SIR GEORGE CAYLEY:



I've been working on wood lately but not wood for the Pietenpol directly.

We're building a staircase to access the attic of the hangar and it's nearly done. Denise and I have already stored (in the new upstairs space) much of what we plan to put there - mostly lighter seldom-used or seasonal items. We have



a handyman (Frank) that has been doing most of the work and I help when I can.

Next is the wall to separate the workshop from the garage. I'll soon be in good shape to get back to other projects!

Having fun and learning a lot...!

Jake

Aviation Pioneers:

Sir George Cayley 27 December 1773 - 15 December 1857 Yorkshire England



George Cayley was a member of Parliament for Scarborough (6th Baronet 1832 - 1835) and was an inventor, engineer and aviator. In 1799 he set out the four forces of flight; weight, lift, drag, thrust. He proposed and designed the concept of a fixed wing flying machine with separate systems for lift, propulsion, and control. He constructed a flying model and illustrated the concepts of vertical flight. His wing designs included camber which

most designers at that time ignored.

The Wright Brothers acknowledged the importance of his efforts to manned flight and included them into their designs. Cayley predicted that sustained flight would not happen until a light weight engine with enough power to provide adequate thrust. His design of an internal combustion engine used gun powder and he suggested that a more efficient process would be to use gaseous vapors for the combustion.

Cayley designed and built a working glider that was successfully flown by him in 1804. Sketches in his school notebooks revealed that his interest and experimentation and research in his school days. He developed a cambered airfoil that was efficient, developed the idea of dihedral for lateral stability and contributed to the science of ballistics.

He also developed self righting lifeboats, caterpillar treads, tension spoke wheels, automatic signals for the railway industry, seat belts, contributed to the fields of prosthetics, electricity, theater architecture, optics, and land reclamation. He invented the "hot air" engine in 1807 which is any heat engine that uses the expansion and contraction of air under the influence of a temperature change to convert thermal energy into mechanical work. They can be open cycle (G. Cayley) or closed (John Sterling) and not to be confused with the steam engine or the internal combustion engine.

Cayley also helped found the UK's first Polytechnic Institute,

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.



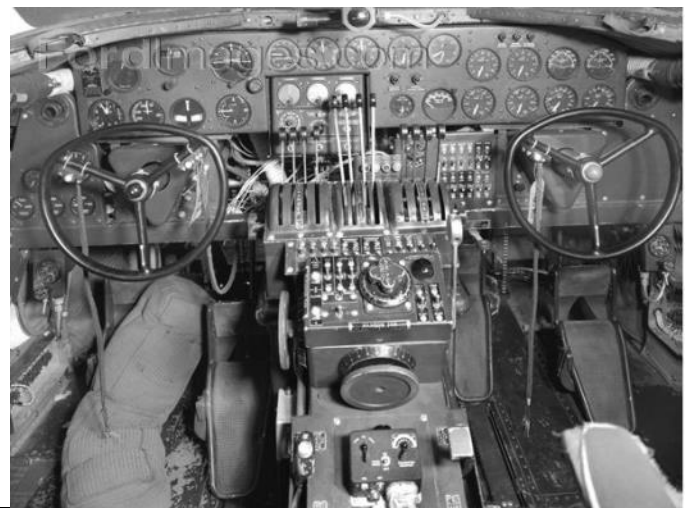
GUESS THAT AIRPLANE; GUESS THAT INSTRUMENT PANEL

This months entry:

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This months entry:

Go to Page 8 for October's Instrument Panel



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SIR GEORGE CAYLEY CONTINUED, EAA NEWS, EDITORS CORNER:

the Royal Polytechnic Institution which is now the University of Westminster.

To Read More:

Wikipedia: [Click Here](#)

History: [Click Here](#)

Yorkshire Air Museum: Click [Here](#)

Flying Machines org: [Click Here](#)

Britannica: [Click Here](#)

Flying Machines: [Click Here](#)



Hot Air Engine: [Click Here](#)

EAA News:

Celebrate the Achievements of the Wright Brothers with Capt. Jim Lovell

Thursday December 10 at 7PM CST (5PM PST)

Live Streamed at EAA.Org/Wright Brothers: [Click Here](#)

EAA and Microsoft teaming together for flight training scholarships

EAA and Microsoft are teaming to provide flight training scholarships and education resources throughout the country in conjunction with the release of the new edition of the legendary Microsoft Flight Simulator software.

EAA and Microsoft have committed to establishing three Microsoft Flight Simulator Scholarships for each of the next three years, giving young aviation

enthusiasts the opportunity to move from virtual flight via simulators to the real thing. In addition, Microsoft will provide copies of its new Flight Simulator to EAA's current youth flight training scholarship recipients, including the Ray Aviation Scholarship students, for the next three years as well as offer a discount on the new edition of Flight Simulator to all EAA members.

To Read More: [Click Here](#)

E-AB Fatal Accident Total Drops Again, Below FAA Not-to-Exceed Goal:

Safety totals for experimental amateur-built aircraft continued the decade-long improvement trend in 2020, as fatal accident totals finished below the FAA not-to-exceed number for the 12 months ending September 30, 2020.

Over the 12-month period from October 1, 2019, through September 30, 2020, which mirrors the federal government fiscal year, total fatal accidents in experimental aircraft dropped more than 15 percent from the previous year, to 44 total fatal accidents including 32 in amateur-built aircraft — an 18 percent drop. The 44 fatal accidents were eight percent below the FAA's not-to-exceed number of 48 for fiscal year 2020.

To Read More: [Click Here](#)

FAA Requests data from private airport owners:

Private airports may be listed as "closed indefinitely" within the FAA's airports database if the agency has not heard from the owner of a private-use facility since January 2018. Airport owners can verify and update their information with the FAA through the Airport Data and Information Portal (ADIP) online, or by reaching out to their FAA regional airports office.

The list of airports that may be closed indefinitely can be found on the ADIP website under quick links as "Private Airport Report."

Airport Data and Information Portal (ADIP): [Click Here](#)

EAA Exploring Simulator Training Sessions Being Conducted Remotely

EAA is investigating the feasibility of allowing remote simulator sessions to satisfy FAA training and currency requirements for training and currency checks normally conducted in person using simulators.

EDITORS CORNER CONTINUED:

The COVID-19 pandemic has accelerated the development of remote training technology in simulators, allowing student and instructor to be physically distant while facilitating the same transfer of knowledge to meet FAA requirements. To Read More: [Click Here](#)

Editors Corner:

I hope you all are doing well. This year is the first year in a long time that we will not have a Christmas Party. We all have enjoyed the "White Elephant" gift exchange and that will be sadly missed along with gathering together to celebrate flight and building.

On a happier note, while I have made no progress what so ever in cleaning up my workspace, I have been sneaking in a vblog of Dennis Tyson building his TeamMini-Max 1100 down in California over the summer. The blog videos are short at about 10 -25 minutes and so far covers about 37 episodes. I am at Episode 31. These episodes cover the building of one of the wings. I have found it useful and plan to continue follow his progress. To visit his vblog site: [Click Here](#)

Another You Tube Channel that I have been viewing is Dwain Marcus's channel. He has a 14 episode vblog on building the Corben Cabin Ace wing ribs, videos of a Pietenpol rebuild as well as his fly-in adventures. You can view his channel by [Clicking Here](#)

Looks like this months Newsletter is a little shorter than normal. I know the dark days and early nights have not been much help after the year we all have been experiencing. It has killed most of my motivation for much of anything. I am looking forward to the days getting longer and warmer and hopefully I can start to make some progress on an airplane.

Our meeting information is:

Join Zoom Meeting

Password: 1234

Phone one-tap: US:
+12532158782,,98145598289# or
+16699006833,,98145598289#

Meeting URL: [https://gettyimages.zoom.us/j/98145598289?](https://gettyimages.zoom.us/j/98145598289?pwd=QzQxM0lIQlplbVRKcFNwTmFBSlFwUT09)
pwd=QzQxM0lIQlplbVRKcFNwTmFBSlFwUT09

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Meeting ID: 981 4559 8289

Build Straight

Roger

Gathering Minutes: 2020/10/27:

Ron: Discussed the Fly straight in if possible, make it possible?

Brian: Asked if and when he flies over the hill at 1500 if Ron gets annoyed. C310 heaters in-operative

Doug Happe: Talked about glasses. Having trouble with Garmin panel: every couple of months, couldn't update the databases. Garmin helped some but recurring issue. Monthly update on panels, gaps, Only 3 times did the updates work simultaneously in 3 years. usb was getting corrupted by the cell phone. Recommends shutting off and reboot the iPad before flying with it. Yesterday his wife did her first roll in his airplane. Doug suggested that we do a vfr meeting suggest a topic.

Andy Karmy: Apple 12 has a big magnet Got out on Saturday, very bumpy and cold. Still has a snowsuit from when he flew an open cockpit, Minimax. Said Jason will learn a lot by doing the rudder first. don't want the whole thing sitting there.

Scott Rinabarger: Busy and out of town Got a motorhome. Wasn't really on his wish list

Tim: Water damage on house needing work.

Steve Crider: Needed tech geek to work with the audio. Son bought a car 37 years ago and decided to put it on the road. Wife went to Az

Jason Fish: Had a deposit on a plane for a couple of years. No go. Ordered the rudder kit for the 750 Cruiser. He is planning to do the build kit by kit. Acknowledges that shipping will be significantly higher, but the KbK works best for him. likes the Rotax 912 .

GUESS THAT AIRPLANE:**SNCAC NC 701 Martinet**

The SNCAC Martinet was a German-designed but French-built twin-engined military trainer and light transport monoplane. It was operated by the French military and in small numbers by French airlines from the late 1940s.

To aid the German war effort the SNCAC factory at Bourges was ordered to produce 455 Siebel Si 204s light transports for the Luftwaffe. Production started in 1942 and 168 had been delivered before the Liberation stopped production. The French decided to continue producing the aircraft and designated the aircraft NC.700. Only a prototype NC.700 was built powered by Renault 12S-00 engines (derived from the German AS-411) although the designation was also used for a small number of aircraft originally intended for the Luftwaffe and diverted to the French Air Force.

The company then produced two variants; the NC.701 Martinet based on the Si 204D with a glazed unstepped nose and powered by two Renault 12S engines, and the NC.702 Martinet with a conventional stepped windscreen nose based on the Si 204A.

To Read More:

Wikipedia: [Click Here](#)

Goodall.com.au: [Click Here](#)

forums.x-plane.org: [Click Here](#)

plane-encyclopedia [Click Here](#) (Si204 original design from which the NC 701 was derived)

General characteristics

Crew: 2

Capacity: 8 pax (NC.702: 5 student navigators)

Length: 12.81 m (42 ft 0 in)

Wingspan: 21.828 m (71 ft 7 in)

Height: 4.4 m (14 ft 5 in)

Wing area: 46 m² (500 sq ft)

Empty weight: 3,965 kg (8,741 lb)

Gross weight: 5,600 kg (12,346 lb)

Fuel capacity:

Main tanks: 800 l (210 US gal; 180 imp gal) fuel in four wing tanks

Long-range tanks: 480 l (130 US gal; 110 imp gal) in two optional long-range tanks

Oil: 120 l (32 US gal; 26 imp gal) oil in engine nacelle tanks



Powerplant: 2 × Renault 12S-00 V-12 inverted air-cooled piston engines, 440 kW (590 hp) each
 Propellers: 3-bladed Ratier, 2.65 m (8 ft 8 in) diameter controllable-pitch airscrews
 Performance

Maximum speed: 350 km/h (220 mph, 190 kn) at 3,000 m (9,800 ft)

Cruise speed: 325 km/h (202 mph, 175 kn) at 3,000 m (9,800 ft)

Landing speed: 115 km/h (71 mph; 62 kn)

Range: 810 km (500 mi, 440 nmi) with maximum fuel

Ferry range: 2,000 km (1,200 mi, 1,100 nmi) with long-range tanks

Service ceiling: 7,500 m (24,600 ft)

Wing loading: 122 kg/m² (25 lb/sq ft)

Power/mass: 8.58 kg/kW (14.3 lb/hp)



GUESS THAT INSTRUMENT PANEL

Chance Vought XF5U

The Vought XF5U "Flying Flapjack" was an experimental U.S. Navy fighter aircraft designed by Charles H. Zimmerman for Vought during World War II. This unorthodox design consisted of a flat, somewhat disc-shaped body (hence its name) serving as the lifting surface.[1] Two piston engines buried in the body drove propellers located on the leading edge at the wingtips.

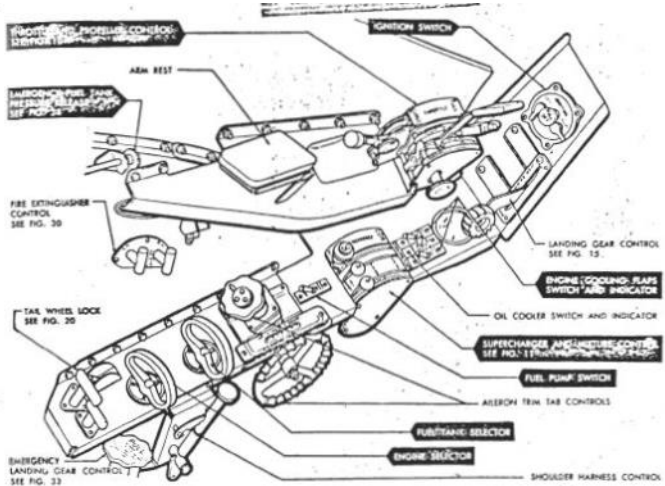
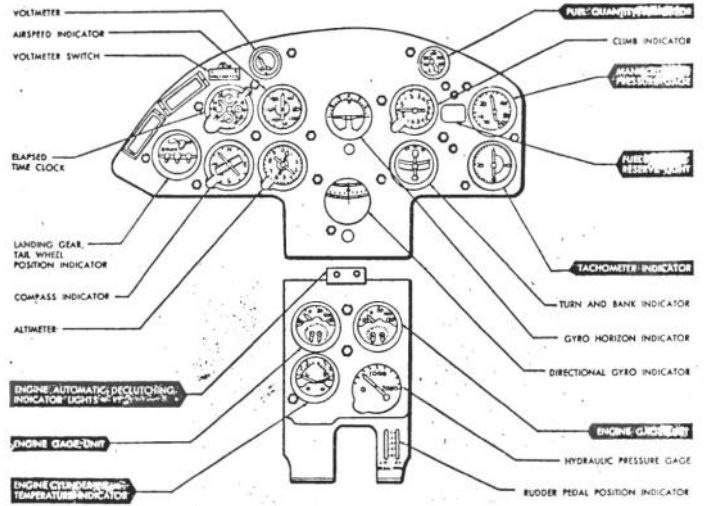


Figure 7 — Cockpit — Left Hand Side

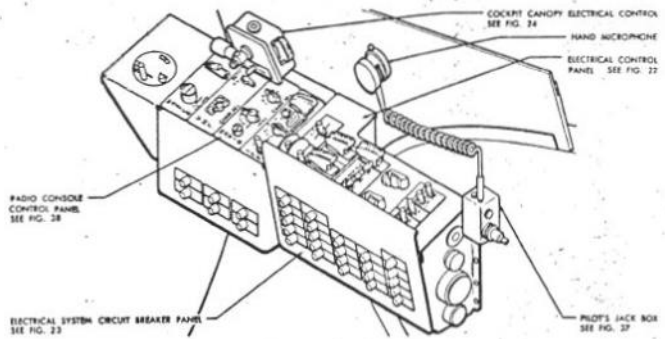


Figure 8 — Cockpit Right Hand Side