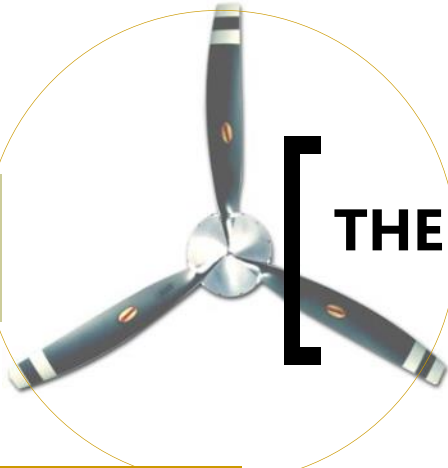


# THE SLIPSTREAM

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



## PRESIDENTS COLUMN:

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### SPECIAL POINTS OF INTEREST:

PHYSICAL GATHERINGS TEMPORARILY ON HOLD UNTIL FURTHER NOTICE

THERE WAS NO CHRISTMAS PARTY THIS YEAR

The February 2021 NW Aviation Trade Show is in a state of flux, so please follow the actual updates at <http://www.washington-aviation.org/>.

### Presidents Column:

Still waiting for the Solstice. This is a real bummer, and now the weather's gone down, too. It's cold, wet, and dark all the time. Humbug!

Like Jake says "This is Workshop Season" (as opposed to flying season). Somehow my rotation got messed up, and I need a flight review this week. Found a willing instructor, just need a break in the weather when our schedules can come together. In the mean time, I'm trying to stay motivated to get some workshop work done.

How about everyone else?

In chapter news, the officers have made a decision: since we have not been able to get together this year, and can't have our usual Christmas party, Chapter 441 dues will be paid for everyone out of the chapter treasury. We do need everyone to officially sign up, however, because we need to keep a "formal" roster for Headquarters. Please send a note to Steve Crider indicating that you want to be considered a member of Chapter 441. We'll do the rest!

Fly safe, and please, stay healthy.

Brian

**FAA news:** I see that the FSDO folks, since their office is closed, but they're still being paid to do something, have found a way to busy themselves. [Note that I did my Flight Instructor Re-Certification this month, but found that there is no

way to meet with an FAA inspector to actually get my certificate renewed. I did speak with one on the phone, but they don't have a way to actually meet with pilots, because their office is closed. So I had to pay a 3rd party agent to process my renewal.]

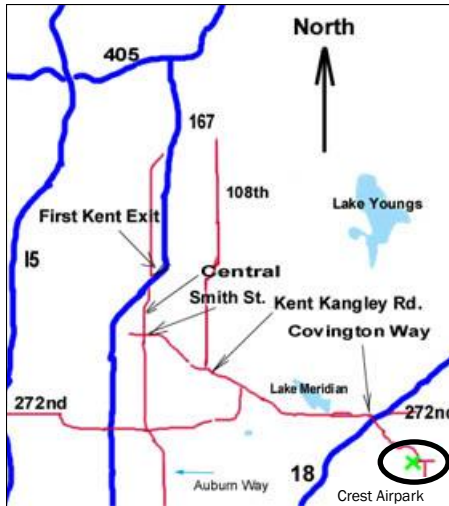
So what are they up to while working from home and not available to actually process certificates? It seems they're busy revising all of the FAA training materials. The term "Student" is not longer appropriate for referring to someone trying to learn a new skill. Seems someone had trouble with confusing a "Student Pilot", which is the name of an FAA certificate with, say, a commercial pilot who wanted to add a seaplane rating (a student for that purpose), or a private pilot wanting to working on an instrument rating (in this case an instrument student). So our friends at the FSDO are busy expunging the term "student" from the FAA training materials to be replaced with the term "learner", which somehow avoids any confusion.

But that's not all: It seems that the term "cockpit" is also going away, and the FAA is replacing all reference to the place where the pilot's control stations are located as "Flight Deck". So take that, Ron: Your Fly Baby now has a "Flight Deck". As does the Cessna 150. Somehow makes Hilmer's Tinkertot seem all grown up.

Brian

**WATCH the ROSE BOWL**

## WHERE DO WE MEET THIS MONTH?



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



## DECEMBER

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 December 28th 7pm-9pm  
 We will have a meeting on Monday December 28th if you have the time to join us.

Meeting details:

[https://gettyimages.zoom.us/j/93378774332?](https://gettyimages.zoom.us/j/93378774332?pwd=L1pQSXlzS2M0djE1aRvdkpybnA2Zz09)  
 pwd=L1pQSXlzS2M0djE1aRvdkpybnA2Zz09  
 Join Zoom Meeting  
 Password: 1234

Phone one-tap: US: +12532158782,,93378774332# or +13462487799,,93378774332#

Meeting URL: [https://gettyimages.zoom.us/j/93378774332?](https://gettyimages.zoom.us/j/93378774332?pwd=L1pQSXlzS2M0djE1aRvdkpybnA2Zz09)  
 pwd=L1pQSXlzS2M0djE1aRvdkpybnA2Zz09

Join by Telephone

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

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

### 2020

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**PIETENPOL UPDATE, EAA NEWS:**

Even if you're not into college football, there's good reason to watch at least the opening of the Rose Bowl game this year. Chapter 441 member Mission Commander Captain Jonathan Lee has been selected to lead the pre-game fly-over, currently planned as a 2-ship formation of Boeing-built B-52H's.

Brian

**Pietenpol Update:**

Hello 441,

Hope you are all doing well and find some time over the holidays to get to some projects...!

In Independence we'll be getting the workshop set up in one of the bays of the garage. We built a wall between it and the other part of the garage to be able to contain the sawdust and have a smaller area to heat in the winter.

We're also working on the interior walls of the hangar. In particular Denise's art room is in the corner and we're making it look like a "hangar office" from the exterior - the outside walls of the art room but the whole room is inside the hangar.

Merry Christmas,

Jake and Denise

**EAA News:**



**Wright Brothers Memorial Banquet**

**Now Available On Demand**

As the Apollo 13 crew would say: Okay, Houston we've had a problem here. As some of you may know, the demand for our virtual Wright Brothers Memorial Banquet presentation overwhelmed our website. We knew it would be popular, and we thought our servers were up to the task, but we clearly miscalculated.

We're so sorry to have disappointed so many of you, and so grateful for your patience as our team worked to troubleshoot and overcome the problems with the site.

To view the Banquet: [Click Here](#)

**EAA Aviation Foundation's Day of Flight Raises Funds and Awareness for Education, Safety, and Outreach Programs**

To commemorate the Wright brothers' inaugural powered flight

## 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.



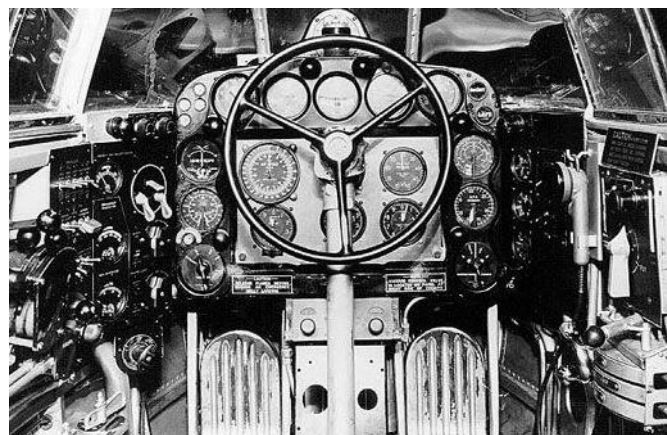
## GUESS THAT AIRPLANE; GUESS THAT INSTRUMENT PANEL

This months entry:

Go to Page 9 for November's airplane

This months entry:

Go to Page 10 for November's Instrument Panel



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**EAA NEWS, CONTINUED:**

on this day in 1903, we're inviting you to mobilize and fuel the future of aviation on EAA's second-annual Day of Flight giving day.

So far today, we have raised over \$3,900 that directly benefit programs supporting EAA's mission of sharing The Spirit of Aviation. When you donate right now, your generous gift will help us reach today's goal of \$10,000 to make these opportunities possible:

To Read More: [Click Here](#)

**EAA Aviation Museum Adds Historic Lark of Duluth to Comprehensive Collection**

The Lark of Duluth — a replica Benoist XIV flying boat — joined the museum's collection this month. The original Lark provided one of the first regular passenger airline services in 1914. The replica was built by a team of EAA members and donated by the Duluth Aviation Institute to commemorate the original aircraft's unique story and role in early aviation history. Museum and Aircraft Maintenance crew will be working over the next two weeks to suspend the aircraft in the Museum.

**EAA Mourns death of Chuck Yeager February 13, 1923 - December 7, 2020**

EAA is mourning the death of Brig. Gen. Chuck Yeager, one of America's preeminent aviators who also supported EAA in a variety of ways over a 30-year period. Yeager died Monday evening in California at age 97.

Gen. Yeager, EAA Lifetime 258188, was best known

as the first man to fly faster than the speed of sound when he flew the Bell X-1 at Mach 1 in October 1947. He also had a decorated military career as an Army Air Forces ace in World War II and flew combat missions in the Korean and Vietnam Wars prior to retiring from the military in 1975.

To Read More:

EAA Site: [Click Here](#)

Chuck Yeager Site: [Click Here](#)

**EAA Homebuilders Week Schedule:**

January 26—30

Join us on January 26-30, 2021, for EAA Homebuilders Week! The full schedule of events is detailed below, where you can click the presentation title to register. (Registration is still open)

**EAA NEWS: HOMEBUILDERS WEEK SCHEDULE:****TUESDAY, JANUARY 26, 2021****1 p.m. - 2:15 p.m.****Building An Aircraft – What You Need To Know**

Presenter: Charlie Becker

Company: EAA

To Register: [Click Here](#)**2:30 p.m. - 3:45 p.m. Sheet Metal Basics**

Presenter: Mark Forss

Company: EAA SportAir Workshops

To Register: [Click Here](#)**4 p.m. - 5:15 p.m. Homebuilt Safety**

Presenter: Ron Wanttaja

Company: Aviation Author

To Register: [Click Here](#)**5:30 p.m. - 6:45 p.m. Composite Construction Basics**

Presenter: Mark Forss

Company: EAA SportAir Workshops

To Register: [Click Here](#)**7 p.m. - 8:15 p.m. Kit Selection**

Presenter: Paul Dye

Company: Kitplanes

To Register: [Click Here](#)**WEDNESDAY, JANUARY 27, 2021****1 p.m. - 2:15 p.m.****Panel Planning & Wiring**

Presenter: Marc Ausman

Company: Aviation Author

To Register: [Click Here](#)**2:30 p.m. - 3:45 p.m. Zenith Aircraft Kits & Plans**

Presenter: Sebastien Heintz

Company: Zenith Aircraft

To Register: [Click Here](#)**4 p.m. - 5:15 p.m. Buying A Used Homebuilt**

Presenter: Vic Syracuse

Company: Base Leg Aviation

To Register: [Click Here](#)**5:30 p.m. - 6:45 p.m. Garmin Experimental Avionics Solutions**

Presenter: Brad Brensing

Company: Garmin

To Register: [Click Here](#)**7 p.m. - 8:15 p.m. Engine Selection Basics**

Presenter: Dan Horton

Company: Kitplanes

To Register: [Click Here](#)**THURSDAY, JANUARY 28, 2021****1 p.m. - 2:15 p.m.****RANS Aircraft Kits**

Presenter: Randy Schlitter

Company: RANS Aircraft

To Register: [Click Here](#)**2:30 p.m. - 3:45 p.m. Welding Basics**

Presenter: Earl Luce and Charlie Becker

Company: LuceAir LLC and EAA

To Register: [Click Here](#)**4 p.m. - 5:15 p.m. Sonex Aircraft**

Presenter: John Monnett

Company: Sonex Aircraft

To Register: [Click Here](#)**5:30 p.m. - 6:45 p.m. Dynon & Advanced Flight Systems**

Presenter: Michael Schofield

Company: Dynon

To Register: [Click Here](#)**7 p.m. - 8:15 p.m. Van's RV Aircraft Kits**

Presenter: Greg Hughes

Company: Van's Aircraft

To Register: [Click Here](#)**FRIDAY, JANUARY 29, 2021****1 p.m. - 2:15 p.m.****Plans Built Aircraft: The Affordable Option**

Presenter: Tim Hoversten

Company: EAA

To Register: [Click Here](#)**2:30 p.m. - 3:45 p.m. Working With Wood 101**

Presenter: John Egan

Company: EAA

To Register: [Click Here](#)**4 p.m. - 5:15 p.m. Liability of Selling Your Homebuilt**

Presenter: Pat Phillips

Company: Aviation Attorney

To Register: [Click Here](#)**5:30 p.m. - 6:45 p.m. Considerations in Design and Application of the Perfect Paint Scheme**

Presenters: Craig Barnett and Ken Reese

Companies: Scheme Designers and KD Aviation

## EAA NEWS: HOMEBUILDERS WEEK SCHEDULE, DARINS RV ADVENTURES, EDITORS CORNER:

To Register: [Click Here](#)

### 7 p.m. - 8:15 p.m. Condition Inspections

Presenter: Vic Syracuse  
Company: Base Leg Aviation  
To Register: [Click Here](#)

### SATURDAY, JANUARY 30, 2021

### 1 p.m. - 2:15 p.m. FAA Certification Basics

Presenter: Dave Prizio  
Company: E-AB DAR  
To Register: [Click Here](#)

### 2:30 p.m. - 3:45 p.m. Fabric Covering Basics

Presenter: Mark Forss  
Company: EAA SportAir Workshops  
To Register: [Click Here](#)

### 4 p.m. - 5:15 p.m. Flight Testing Basics

Presenter: Gary Baker  
Company: EAA Flight Advisor  
To Register: [Click Here](#)

### 5:30 p.m. - 6:45 p.m. Velocity Kit Aircraft

Presenter: Riley Swing  
Company: Velocity Aircraft  
To Register: [Click Here](#)

### 7 p.m. - 8:15 p.m. Engine Break In

Presenter: Mike Busch  
Company: Savvy Maintenance  
To Register: [Click Here](#)

### Darins RV Adventures:

A million little things

Wow has it really been since October that I last posted an update? Well I haven't been completely idle these past several weeks but I will admit to going through one of those "less inspired" periods that I go through about once a year. Hopefully this one is about over...

Anyway, as the title suggests there has been progress but its in the form of a bunch of little things. Most of the time has been focused on the cowling and getting it properly fitted. Here are a few of the things I've done since the last update:

I beefed up the "flanges" that I created for both the upper cowl to lower cowl seam and the lower scoop seam. Originally I used about 4-5 layers of regular 9oz fiberglass layers but the end result was less sturdy than I wanted. I ended up laying down a layer

of carbon fiber with a layer of 9oz glass over the top. That took a bunch of time because I also had to re-drill the holes for the receptacles.

I primed the two lower cowl halves so that I could rivet the receptacles on.

I adjusted several fastener hole locations to get them to fit better.

I installed the prop and spinner to test the gap and it was good for most of the circumference, but one of the bottom halves still needs work.

I fabricated a bracket and installed the four remaining fastener receptacles on the firewall at the bottom where the lower cowling and the scoop seam meets the firewall. I had purposely held off on that area until the scoop was close enough to completion that I could be assured that the lines would match. Cut the oil door opening and fit the oil door to that opening. Hinge is drilled but still need to work on the latch.

To Read More: [Click Here](#)



### Editors Corner:

Hi all. I hope that you are well and that you are being supported by at least one of your communities during this time. The daylight will be getting longer this week and I am hopeful that we as a diverse and interesting community can walk through this time back into our freedom.

I find Brian's article about the FSDO interesting with the potential for more trouble for pilots and light air-

**EDITORS CORNER CONTINUED, NOVEMBER MEETING MINUTES:**

craft. One of the things I have learned in my studying of multiple languages, is that language and how it is spoken and written defines what happens in a society. What did "Flight Deck" mean to you a year ago?

To me it had meant a very sophisticated aircraft with a lot of capability and multiple crew members to fly it. I know that the typical RV has a glass "Flight Deck" that has more capability than the DC-3 and 1950's vintage propeller driven airliners. Does that mean in a couple of years that we will have to have a co-pilot, a flight deck commander and engineer? What do you think will happen to General aviation?

I haven't cleaned off my workbench yet, but I am really getting annoyed at everything from the house being exiled to it.

We will have a meeting on Monday December 28th. If you have the time please join us.

Meeting details:

[Click here](#) to join the meeting

Join Zoom Meeting

Password: 1234

Phone one-tap: US:  
+12532158782,,93378774332# or  
+13462487799,,93378774332#

Meeting URL: [https://gettyimages.zoom.us/j/93378774332?](https://gettyimages.zoom.us/j/93378774332?pwd=L1pQsXlzS2M0djE1aIRvdkpybnA2Zz09)  
pwd=L1pQsXlzS2M0djE1aIRvdkpybnA2Zz09

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

Meeting ID: 933 7877 4332

**November Meeting Minutes:**

Jason Fish: Made his rudder and found a minor issue with the alignment of the last rivet and the rib, and tip. The Elevator and horizontal due on the 1s of Dec. Zenith 750 Crusier

Ron Wanttaja: About 7:30 got a call from Ron' Borovec's partner concerned that he wasn't home yet. Ron was found around 10:30 at night. Contacted trees in a remote area. He had taken the airplane to have a elt put in. Coming back in the dark and questionable weather. We want to work with Chapter 26 to get memorial block. if you have a friend that is over due and missing. what number do you call?. Ron Wanttaja had the ASDB switched to anonymous mode and returned to the broadcast mode since the Ron Borovec accident.

Mark Owens: Mark shared his new oil cooler plenum. Asked about what the soft connection to account for the shake on start-up and shut-down. needs something pretty significant RV's use a neoprene sleeve (neoprene used in wet suits) Andy shared a video demonstrating the Lycoming shake during startup. .

Steve Crider: Cars taking up a lot of time. Thinks he might have the car running by April.

Brian Lee: Looking for a tail dragger for his BFR. Gave his checklist presentation. Agreed to have a zoom meeting on Dec 28th.

Bruce Finney: the plane is flyable, needs condition inspection to be legal.

Tim working on house and property repairs and getting ready for winter.

Tom Osmundson: Working sleep, changing diapers and work on the house. Has been looking at getting parts for the Luscombe. A run away truck and boat struck a person and smushed two airplanes together. Bruces airplane was missed by the angry truck.

Andy Karmy: Made a Zoom red button that mutes the audio in Zoom

James Huber Showed manometer he used for checking his cooling tubing. The factory for the Zenith is having configuration management issues and the kits are changing so fast that you may not get a kit that actually fits the earlier kit. Has the Thorp Ready to fly. putting heads on the corvair engine for the Zenith. Lives at Skyrise Airpark Found out that Carb Heat is necessary for the engine. Geo Thermal heating does not work on the carb heat. House next door sold.

Norm Paulk has a lot of aluminum suggested that Jason visit to see what he has. Has an electronic workbench. Moving it out of his hanger.



**GUESS THAT AIRPLANE:****Ikarus IK-2**

The Ikarus IK-2 was a 1930s high-wing, single-seat, monoplane fighter aircraft of Yugoslav design built for the Royal Yugoslav Army Air Force. The IK-2 was designed by French-trained engineers Kosta Sivčev and Ljubomir Ilić, who saw the desirability of developing a home-grown aircraft industry. A gull-wing design, it was armed with a hub-firing autocannon and fuselage-mounted synchronized machine guns.

Just 12 production models were built, as the aircraft was obsolescent at the time it was brought into service in 1935, and only eight were serviceable at the time of the German-led Axis invasion of Yugoslavia in April 1941.

After the defeat of Yugoslavia, the remaining four aircraft were taken onto the strength of the air force of the Axis puppet state, the Independent State of Croatia, but none survived the war. (sic.)

**Background:**

In the late 1920s, a scheme promoted by the Royal Yugoslav Army Air Force (Serbo-Croatian: Vazduhoplovstvo vojske Kraljevine Jugoslavije, VVKJ) and the Royal Aero Club of Yugoslavia sent aspiring aeronautical engineers to France to develop their knowledge. It was intended that after this advanced training, they would return to Yugoslavia and be offered specialist roles in the VVKJ or in the aeronautical industry.

Ljubomir Ilić and Kosta Sivčev went through this program, but when they returned to Yugoslavia, both were employed in administrative work. Frustrated by this, in 1931 they decided to design a replacement for the Czechoslovakian-built Avia BH-33E biplane fighter then in service with the VVKJ.

Working in a basement in Belgrade, then in Ilić's apartment in Novi Sad, they devoted their spare time to secretly working on their design. Their original concept was for a low-wing monoplane with a retractable undercarriage, but contemporary thinking led them to modify their initial design into a strut-braced high-wing monoplane armed with a hub-firing autocannon and fuselage-mounted synchronized machine guns. The gull-wing design emphasized power and maneuverability over other characteristics.

**To Read More:**

Plane Encyclopedia: [Click Here](#)

Wikipedia: [Click Here](#)

WWII Aircraft.net: [Click Here](#)

**General characteristics**

Crew: 1  
 Length: 7.88 m (25 ft 10 in)  
 Wingspan: 11.4 m (37 ft 5 in)  
 Height: 3.84 m (12 ft 7 in)  
 Wing area: 18 m<sup>2</sup> (190 sq ft)  
 Empty weight: 1,502 kg (3,311 lb)  
 Gross weight: 1,857 kg (4,094 lb)  
 Fuel capacity: 250 kg (550 lb)  
 Powerplant: 1 × Hispano-Suiza 12Ycrs liquid-cooled V-12 piston engine, 640 kW (860 shp)  
 Propellers: 3-bladed adjustable pitch

**Performance**

Maximum speed: 435 km/h (270 mph, 235 kn) at 5,000 m (16,404 ft)  
 Cruise speed: 250 km/h (160 mph, 130 kn)  
 Range: 700 km (430 mi, 380 nmi)  
 Service ceiling: 12,000 m (39,000 ft)



**GUESS THAT INSTRUMENT PANEL**

**B-24 Instrument Panel:**

The Consolidated B-24 Liberator is an American heavy bomber, designed by Consolidated Aircraft of San Diego, California. It was known within the company as the Model 32, and some initial production aircraft were laid down as export models designated as various LB-30s, in the Land Bomber design category.

